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2016-2017 CATALOG

State University of New York at Fredonia

For Undergraduate Admissions, contact:

Office of Admissions

Fenner House

State University of New York at Fredonia

Fredonia, NY 14063

Telephone: (716) 673-3251

(800) 252-1212

FAX: (716) 673-3249

E-mail: admissions@fredonia.edu

To apply online: <http://home.fredonia.edu/admissions/apply>

Homepage: <http://home.fredonia.edu/>

For Graduate Admissions contact:

Office of Graduate Studies

E230A Thompson Hall

State University of New York at Fredonia

Fredonia, NY 14063

Telephone: (716) 673-3808

To apply online: <http://home.fredonia.edu/gradstudies/>

Homepage: <http://home.fredonia.edu/gradstudies/>

All previous catalogs can be found at fredonia.smartcatalogiq.com.

LETTER FROM THE PRESIDENT

Welcome to the State University of New York at Fredonia.

Consistently ranked as one of the finest public universities in the North, Fredonia is recognized as a selective, residential campus with high academic standards, strong graduation rates, and outstanding student services. Fredonia's exceptional academic reputation is generated by a commitment from the entire campus community to prepare you for the opportunities and challenges of the 21st century. The core curriculum immerses you in an understanding of global perspectives and cultures, encourages you to sharpen your communication skills, and allows you to explore academic disciplines with up-to-date applications of emerging technologies. Across campus, faculty and staff work together to have all students demonstrate the qualities of the baccalaureate goals: Fredonia graduates are skilled, creative, connected, and responsible.

Student academic, personal, and professional success has been a hallmark at Fredonia for 190 years, and that success includes engagement with the communities we serve. Students collaborate with faculty and staff in exploring majors, developing a course of study, identifying career opportunities, and sharpening skills such as critical reading, writing, and speaking. Another significant component of your education is the learning that occurs outside the classroom, studio, or laboratory. Intramural and intercollegiate sports teams, internships, student government, residence life, leadership programs, music and theatrical productions, volunteer opportunities, and over 150 student clubs and organizations are important parts of the learning experience at Fredonia.

This catalog is your guidebook to the many opportunities available to you at Fredonia. Use it to make the most of your adventure in higher education.

Virginia S. Horvath, Ph.D.
President

INTRODUCTION

State University of New York at Fredonia offers a variety of undergraduate majors in the arts, humanities, and the natural and social sciences, as well as professional programs, and graduate master's and advanced certificate programs in many areas.

Faculty and professional staff are committed to providing a high quality educational experience through classroom teaching and performance and research opportunities. Small class sizes reflect our dedication to a personal approach in helping you to achieve your educational goals.

Community and Region

State University of New York at Fredonia is located in the heart of northern Chautauqua County at Exit 59 of the New York State Thruway. Students have the advantages of a small campus but are just a short drive away from major metropolitan areas. The neighboring city of Dunkirk is located on the shores of Lake Erie, which along with Chautauqua Lake, offer ideal locations for faculty/student research projects in the natural sciences. Nearby ski centers beckon students during the winter months.

Your Educational Experience

We provide learning opportunities that reflect an educational philosophy based on the evolution of the total student. Fredonia's Honors Program provides unique educational opportunities to highly motivated students. Internships and research opportunities are available and encouraged in several academic areas. You also can participate in study abroad programs conducted by Fredonia and other cooperating colleges and universities.

In Support of Your Education

We believe that for students to achieve success, academic programs require the support of the entire campus community. Our academic and student services are exceptional, and reflect our dedication to your growth and development. State University of New York at Fredonia and the Fredonia College Foundation awarded over a million dollars in scholarships for the most recent academic year. In addition, our Financial Aid Office works diligently to help students to obtain maximum aid through federal and state programs.

Your Life on Campus

A combination of strong educational options combined with a high quality of student life is the right formula for success. Participation in student activities, campus governance, and sports can contribute to a heightened sense of self-awareness and self-assurance. Fredonia's residence halls provide you with a comfortable and secure atmosphere with activities planned by residents. Our University Commons combines a residence hall with the college bookstore, a convenience store, and a Starbucks Coffee shop. In addition to our student newspaper, radio

and television stations, music, dance and theatre activities are open to all students, regardless of major. There are Greek organizations, a Leadership development program, and many intramural and intercollegiate sports teams.

History of the State University of New York at Fredonia

The State University of New York at Fredonia joined the newly-formed State University of New York System in 1948 as one of the 11 teacher's colleges within the university and in 1961 became the State University of New York College at Fredonia with an expanded mission. Its history dates back to its roots as the Fredonia Academy, established in 1826 by the citizens of Fredonia. In 1867 it was named one of the new State Normal Schools.

The 256-acre Fredonia campus is striking in its beauty. A traditional brick perimeter encloses a modern sculptured core. Well-kept lawns and wooded areas enhance the beauty of the campus. Facilities on the university campus reflect its diversity and reputation for excellence.

There are 14 residence halls on campus, including high quality corridor, suite-style and independent living, as well as kitchen suites in some halls. In addition, several lifestyle options are available including residence halls with a Wellness Center, an Aerobics Center, and a Crafts Room. There is high speed Internet access in every room and all residence halls have electronic entry access for added safety and security. Hendrix Hall is also the site of the student-operated television station, WNYF-TV. Residence life offers the added advantage of activities planned by students. The new University Village Townhouses opened in Fall 2014.

Cranston Marché is the main dining facility, supplemented by the Williams Center food services including the Tim Hortons Café & Bake Shop, Centre Pointe lounge and El Diablo Azul Mexican Grill, and cafes in selected buildings including FREDEExpress. University Commons combines Cranston Marché with a residence hall, bookstore, Starbucks coffee shop, and convenience store. Gregory Hall, the first residence hall on the present campus, was named in honor of former university president Dr. Leslie R. Gregory, and also is the home of the Office of Residence Life, the Faculty Student Association, Career Development Office and University Police.

The Williams Center, a circular building appropriately situated at the center of campus which underwent a major renovation during the 2011-2012 academic year, houses the offices of Campus Life, Volunteer and Community Services, the Student Association, and several major student organizations including the student newspaper, *The Leader*. It also contains a variety of dining options,

meeting, activity and recreation spaces, and the Fredonia Ticket Office. Dods Hall, one of two athletic facilities, contains classrooms, gymnasias, the new Blue Devil Fitness Center, a newly-renovated dance studio and racquetball courts. Outside are lighted tennis and basketball courts. Adjacent to Dods is Steele Hall, which contains an indoor ice skating rink, track/basketball arena, and the university's natatorium/swimming and diving facility. A soccer/lacrosse stadium with both natural and artificial turf fields opened in 2007.

Enhancing student and community life is the Michael C. Rockefeller Arts Center, a magnificent performing and visual arts facility. In addition to classrooms, the facility contains the 1,200-seat King Concert Hall, the 400-seat Marvel Theatre, Bartlett Theatre, and two art galleries. Construction began in 2014 on a 40,000-square-foot addition and renovation to the arts center, to be completed in 2016, including among other items a multipurpose room, large art studios and three dance studios. Rockefeller is also the home to the departments of Theatre and Dance, and Visual Arts and New Media, which along with the School of Music are included in Fredonia's College of Visual and Performing Arts.

LoGrasso Hall is the home of the Student Health Center, the Counseling Center, and the Office of International Education. McEwen Hall includes lecture halls, classrooms, a television studio and the student-run Fredonia Radio Systems. Reed Library, named in honor of Daniel A. Reed of Sheridan, plays a key role in the teaching and learning process as students and faculty make heavy use of the 21 million volumes that comprise the holdings of the SUNY libraries. Thousands of periodical titles are available online along with extensive collections of microforms and DVDs. The Music Collection houses thousands of sound recordings, musical scores and performance parts as well as access to streaming music collections. Archives and Special Collections contain extensive holdings including the university archives, local histories, records of the Holland Land Company; books, manuscripts and correspondence of the noted Austrian author Stefan Zweig; the Sigurd Rascher Saxophone Collection, and the archives of the Coalition on West Valley Nuclear Wastes. Online resources and reference help is available 24/7. Reed Library is also the home of the Learning Center, the Office of Disability Support Services for Students, the Office of Academic Advising and Liberal Arts, the Professional Development Center, the Office of Online Learning and the Office of the Registrar. With seating for 500-plus in many different areas, robust wi-fi throughout the building, a 40-station computer labs and study rooms, there is always a place to study in Reed Library.

Maytum Hall is the home of administrative and business offices as well as Academic Affairs, Engagement and Economic Development, Student Affairs, Financial Aid,

Finance and Administration, including Student Accounts, and Administrative Information Technology (AIT).

Fenton Hall, named in honor of Reuben Fenton, governor of New York State from 1865 to 1868, former congressman and U.S. Senator, who attended the Fredonia Academy, is the main humanities, and mathematics and computer science office and classroom building. The University President's office is located in this building as well as the offices of Lifelong Learning, and Institutional Research, Planning and Assessment. Jewett Hall is home to the EC English Language Center. The new \$60 million Science Center, which opened in 2014, and Houghton Hall, are natural and physical sciences buildings containing classrooms and laboratories. A planned renovation of Houghton Hall will create the Fredonia Science Complex to house Science, Technology, Engineering and Mathematics (STEM) programs. The new Science Center is home to the departments of Chemistry and Biochemistry, Biology and other sciences. Thompson Hall was opened in the summer of 1973. In addition to the social science departments, the College of Education, the School of Business, Graduate Studies, the Office of Sponsored Programs, the Henry C. Youngerman Center for Communication Disorders, and the Media Center, are all housed in this building.

Mason Hall, home of Fredonia's School of Music, is named for organist, composer and teacher Lowell Mason, called the "Father of Public School Music in America." Its 500-seat Juliet J. Rosch Recital Hall opened in 2004, named after the 1930 Fredonia alumna. The beautiful new Robert and Marilyn Maytum Music Rehearsal Halls were dedicated in October 2010.

Foundation House, located on Central Avenue near the entrance to the university, is the home of University Advancement, the Fredonia College Foundation, and the Office of Marketing and Communications. Alumni House, located at the Central Avenue entrance to the university, is the home of the Alumni Affairs Office and the Fredonia Alumni Association.

Located about 12 miles from the campus, the Herbert C. Mackie Memorial Camp provides opportunities for year-round educational and recreational activities. A sleeping lodge was completed in 1989.

A formal groundbreaking for a permanent building in the nearby City of Dunkirk to house Fredonia's Technology Incubator was held in Fall 2008 and the completed building was dedicated in December 2009.

Hours when academic buildings are open are published separately.

A Fredonia Timeline

- 1826** The Fredonia Academy opens on October 4 with 15 students

- 1827** The academy enrolls 81 gentlemen and 55 ladies for the fall term.
- 1829** Fredonia is incorporated as a village.
- 1867** The academy closes and the Fredonia Normal School opens.
- 1868** The Fredonia Normal School officially enrolls students in primary, junior and academic departments.
- 1887** Music as a specialty area begins with the appointment of Miss Jessie Hillman to the Fredonia faculty
- 1900** A tragic fire on December 14 kills six students and a janitor, destroying most of the building.
- 1903** The new building, Old Main (now One Temple Square senior citizen housing), is completed.
- 1909** Fredonia is authorized to award teacher certificates in music and art.
- 1931** A four-year course in music is first offered.
- 1933** The state purchases property on Central Avenue to be used for future expansion.
- 1938** A four-year program in elementary education is offered.
- 1939** Construction begins at the new campus.
- 1941** Mason Hall is completed.
- 1942** First baccalaureate in elementary education awarded. Fredonia is now known as Fredonia State Teachers College.
- 1948** SUNY is created. Fredonia is now one of 11 colleges of education in the SUNY system.
- 1951** Gregory Hall, the first dormitory/student union building, is occupied.
- 1953** Fenton Hall is completed.
- 1958** Alumni Hall becomes the second dormitory building on campus.
- 1961** McGinnies dormitory and the first Mason Hall addition completed.
- 1962** I.M. Pei and Partners develops master plan for a new campus.
- 1963** Dods, Nixon, Chautauqua and Jewett halls are completed.
- 1968** Groundbreaking for Williams (Campus) Center.
- 1966-1976** The college experiences rapid growth in programs, academic departments, faculty and students.
- 1967-1971** Maytum Hall and Michael C. Rockefeller Arts Center constructed.
- 1975** Thompson Hall opens.
- 1976-1986** The college initiates programs in cooperative engineering, recombinant gene technology and sound recording technology.
- 1983** Steele Hall is completed.
- 1991** Reed Library addition completed.
- 1998** Enrollment now exceeds 4,500 students.
- 2001** Lake Shore Savings Clock Tower and Carillon dedicated. Swimming and diving complex completed.
- 2004** Juliet J. Rosch Recital Hall dedicated.
- 2006** University Commons completed and opened.
- 2007** New state-of-the-art sound recording studio and control room is dedicated. A new lighted soccer/lacrosse complex dedicated and opened as University Stadium.
- 2008** The Carnahan Jackson Center for Learning and Scholarship is dedicated. Ground breaking is held for the university's Technology Incubator.
- 2009** The Fredonia Technology Incubator dedicated and opened on Central Avenue in Dunkirk, N.Y.
- 2010** Dedication of new Robert and Marilyn Maytum Music Rehearsal Halls.
- 2011** Groundbreaking is held for the university's new Science Center. Williams Center renovation begins.
- 2012** Williams Center and Maytum Hall renovations completed; construction continues on new Science Center.
- 2013** New Blue Devil Fitness Center opens in Dods Hall. Ground broken for new University Village Townhouse complex. Construction continues on new Science Center.
- 2014** Science Center and University Village Townhouse complex open. Ground broken for addition to the Michael C. Rockefeller Arts

Center.

- 2015** Fredonia earns the Community Engagement Classification from the Carnegie Foundation for the Advancement of Teaching.

Fredonia Mission Statement

The State University of New York at Fredonia, a comprehensive institution of higher education, declares as its mission:

Fredonia educates, challenges, and inspires students to become skilled, connected, creative, and responsible global citizens and professionals.

The university enriches the world through scholarship, artistic expression, community engagement, and entrepreneurship.

Accreditation

The State University of New York at Fredonia is fully accredited by: The Board of Regents of the State University of New York.

The Commission on Higher Education of the Middle States Association of Colleges and Schools, 3624 Market St., Philadelphia, PA 19124, Tel. (215) 662-5606. The Commission on Higher Education is an institutional accrediting agency recognized by the U.S. Secretary of Education and the Commission on Recognition of Postsecondary Education.

The College of Education has received national accreditation from the National Council for Accreditation of Teacher Education (NCATE), 2010 Massachusetts Ave. NW, Suite 500, Washington, D.C. 20036, Tel. (202) 466-7496.

The School of Music has received accreditation from the National Association of Schools of Music, 11250 Roger Bacon Drive, Suite 21, Reston, VA 20190, Tel. (730) 437-0700.

Fredonia's graduate program in Speech-Language Pathology is accredited by the Council on Academic Accreditation of the American Speech-Language-Hearing Association, 10801 Rockville Pike, Rockville, MD, 20852, Tel. (301) 897-5700. The program is also licensure-qualified by the New York State Education Department.

The Department of Theatre and Dance is an Accredited Institutional Member of the National Association of Schools of Theatre and adheres to the standards set forth by NAST. The National Association of Schools of Theatre is located at 11250 Roger Bacon Drive, Suite 21, Reston, VA, 20190, Tel. (703) 437-0700.

The Social Work program is accredited by the Council on Social Work Education, 1725 Duke Street, Suite 500, Alexandria, VA 22314-3457, Tel. (703) 683-8080.

The university is also on the approved list of the American Chemical Society. Its A.C.S. Approved Track in Chemistry is reviewed annually by the A.C.S. Committee on Professional Training.

Fredonia Ideals

Fredonia is a community of students, faculty and staff dedicated to the pursuit of excellence through education. In order to accomplish such goals, the campus community must work together to maintain the high standards, values and ideals expected in a community of scholars.

Fredonia Strives to Be:

An Educational Community sharing academic goals, with students, faculty and staff working together to strengthen teaching and learning;

An Ethical Community reflecting honesty, integrity and fairness in both academic and extracurricular pursuits;

An Open Community welcoming new ideas and protecting freedom of thought, belief and expression;

A Safe Community respecting each other's rights, personal safety, privacy and property;

A Civil Community expressing disagreements in rational and non-threatening ways and treating all individuals with consideration, decency and respect;

A Responsible Community accepting obligations under clearly articulated principles designed to support the common good;

A Just Community seeking to resolve conflict and violations of conduct standards fairly and equitably;

A Healthy Community respecting and promoting physical and emotional wellness and avoiding alcohol and drug abuse;

A Diverse Community celebrating diversity and learning from differences;

A Socially Conscious Community seeking to contribute to the betterment of society through service;

A Watchful Community remaining alert and taking steps to eliminate threats posed by hatred, intolerance, racism, sexism, ageism and other injustices.

Adapted from Ernest L. Boyer's, Report on Campus Life, The Carnegie Foundation 1990, the Fredonia Challenge 1995 and from the SUNY Potsdam Pledge 2001.

Endorsed by the Fredonia Student Association, the Task Force on Academic Integrity, the Student Affairs Committee and the College Senate in May 2002.

Affirmative Action Information

Fredonia fully subscribes to the Non-discrimination Policy of the State University of New York. The State University of New York, in accordance with applicable federal and state laws, does not discriminate on the basis of race, sex, ethnicity, national origin, religion, age, disability, marital status, sexual orientation, and arrest and/or conviction record. Further, in accordance with the Vietnam Era Veterans' Readjustment Assistance Acts, disabled and Vietnam Era Veterans are ensured of non-discriminatory treatment.

Any violations of the university's non-discrimination policy should be reported to the Office of Diversity, Equity and Inclusion, 143 Fenton Hall, (716) 673-3358.

A SUNY-wide grievance procedure is available to all students and employees in cases of discrimination. A person, who feels he/she has been a victim of discrimination for any of the above reasons, should feel free to contact the director. Persons who wish to initiate

such a grievance or complaint should also feel free to bring a friend or advisor with them.

Alma Mater

Near the shores of old Lake Erie,
Stands our Alma Mater true.
Fredonia State we proudly honor,
With its colors white and blue.

Sing its glory and its praises
Let them ring forever true -
Beloved is our Alma Mater,
Fredonia State, all hail to you.

Catalog contents

Information in the Fredonia catalog is accurate as of June 4, 2016. However, some information is subject to change per federal, state or SUNY guidelines. Updated information may be obtained from the Office of Curriculum, Assessment, and Academic Support.

ALL PROGRAMS

Listed below are Fredonia's registered degree programs as of June 1, 2016. The program list is consistent with the inventory of registered degree and certificate programs maintained by the New York State Education Department. The chart contains the official approved program title, degree and HEGIS code number. Enrollment in other than registered or otherwise approved programs may jeopardize a student's eligibility for certain student aid awards.

Undergraduate Programs	HEGIS Code	Degree
Accounting (p. 13)	0502	B.S.
Acting (p. 13)	1007	B.F.A.
Applied Mathematics (p. 27)	1703	B.S.
Biochemistry (p. 30)	0414	B.S.
Biology (p. 32)	0401	B.S.
Business Administration	0506	B.S.
Business Admin.: Finance (p. 36)	0506	B.S.
Business Admin.: Management (p. 37)	0506	B.S.
Business Admin.: Marketing (p. 37)	0506	B.S.
Chemistry (p. 39)	1905	B.S.
Childhood Education 1-6, 7-9 Extension (p. 40)	0802	B.S.Ed.
Childhood Inclusive Education 1-6, 7-9 Extension (p. 42)	0808	B.S.Ed.
Communication: Audio/Radio Production (p. 46)	0603	B.S.
Communication: Communication Studies (p. 47)	0601	B.S.
Communication: Journalism (p. 47)	0602	B.A.
Communication: Media Management (p. 48)	0699	B.S.
Communication: Public Relations (p. 49)	0604	B.S.

Communication: Video Production (p. 49)	0605	B.S.
Communication Disorders and Sciences (p. 44)	1220	B.S.
Computer Science (p. 52)	0701	B.S.
Computer Information Systems (p. 51)	0702	B.S.
Cooperative Engineering (p. 95)		
Criminal Justice (p. 55)	2105	B.A.
Dance (p. 58)	1008	B.F.A.
Early Childhood Education (Birth-2) (p. 59)	0823	B.S.Ed.
Early Childhood-Childhood Education (p. 61)	0802	B.S.Ed.
Earth Science (p. 62)	1917	B.A.
Economics (p. 64)	2204	B.A.
English (p. 98)	1501	B.A.
French (p. 106)	1102	B.A.
Geochemistry (p. 106)	1915	B.S.
Geology (p. 108)	1914	B.S.
History (p. 109)	2205	B.A.
Industrial Management (p. 110)	0599	B.S.
Interdisciplinary Studies (p. 111)	4901	B.A./B.S.
Mathematics (p. 146)	1701	B.S.
Mathematics-Physics (p. 148)	1799	B.S.
Medical Technology (p. 149)	1223	B.S.
Middle Childhood Specialist- Mathematics (p. 150)	0804.03	B.S.
Molecular Genetics (p. 178)	0499	B.S.
Music Industry (p. 190)	0599	B.S.
Music-Applied (p. 183)	1004	B.A.
Music Composition (p. 184)	1004	Mus.B.
Music Performance (p. 191)	1004	Mus.B.
Music Education (p. 185)	0832	Mus.B.
Music Therapy (p. 196)	1099	B.S.
Music Therapy (p. 197)	1099	M.M.
Musical Theatre (p. 194)	1004	B.F.A.

Philosophy (p. 200)	1509	B.A.
Physics (p. 201)	1902	B.S.
Political Science (p. 204)	2207	B.A.
Psychology (p. 210)	2001	B.A./B.S.
Public Accountancy (p. 212)	0502	B.S.
Social Work (p. 218)	2104	B.S.
Sociology (p. 218)	2208	B.A.
Sound Recording Technology (p. 221)	1099	B.S.
Spanish (p. 222)	1105	B.A.
Sport Management (p. 224)	0599	B.S.
Theatre Arts (p. 229)	1007	B.A.
Theatrical Production and Design (p. 230)	1007	B.F.A.
Visual Arts and New Media (p. 236)	1002	B.A.
Visual Arts and New Media: Animation and Illustration (p. 236)	1009	B.F.A.
Visual Arts and New Media: Ceramics (p. 237)	1009	B.F.A.
Visual Arts and New Media: Drawing and Painting (p. 237)	1002	B.F.A.
Visual Arts and New Media: Graphic Design (p. 239)	1009	B.F.A.
Visual Arts and New Media: Film & Video Arts (p. 238)	1099	B.F.A.
Visual Arts and New Media: Photography (p. 240)	1011	B.F.A.
Visual Arts and New Media: Sculpture (p. 240)	1002	B.F.A.
Visual Arts: Art History (p. 235)	1003	B.A.

Teacher Certification Areas in Adolescence Education	HEGIS Code	Degree
Adolescence Education: Biology (p. 14)	0401.01	B.S.
Adolescence Education: Chemistry (p. 15)	1905.01	B.S.
Adolescence Education: Earth Science (p. 17)	1917.01	B.S.
Adolescence Education: English (p. 18)	1501.01	B.A.
Adolescence Education: French (p. 20)	1102.01	B.A.
Adolescence Education: Mathematics (p. 21)	1701.01	B.S.
Adolescence Education: Physics (p. 22)	1902.01	B.S.
Adolescence Education: Social Studies (p. 23)	2201.01	B.A.
Adolescence Education: Spanish (p. 20)	1105.01	B.A.
Middle Childhood Specialist-Mathematics (p. 150)	0804.03	B.S.

Graduate Programs	HEGIS Code	Degree
Adolescence Science Education (p. 214)	0834	M.A.T.
Biology (p. 33)	0401	M.S.
Chemistry	1905	M.S.
Curriculum & Instruction in Inclusive Education (p. 56)	0829	M.S.Ed.
English (p. 103)	1501	M.A.
English 7-12 (p. 105)	1501.01	M.A.
Interdisciplinary Studies (p. 114)	4901	M.A./M.S.
Language and Learning (p. 88)	0899	M.A.
Literacy Education (Birth-Grade 12) (p. 143)	0830	M.S.Ed.
Literacy Education (Grades 5-12) (p. 144)	0830	M.S.Ed.
Mathematics 7-12 (p. 147)	1701.01	M.S.Ed
Music Education K-12 (p. 189)	0832	M.M.
Music Performance (p. 193)	1004	M.M.
Music Theory-Composition (p. 195)	1004.10	M.M.
Music Therapy (p. 197)	1099	M.M.
Natural Science 7-12 (p. 199)	0834	M.S.Ed.
Professional Writing (p. 207)	1599	Adv.Cert.
School Building Leadership (p. 212)	0828	Adv.Cert.
School District Leadership (p. 213)	0827	Adv.Cert.
School District Leadership (Non-Cert) (p. 213)	0827	Adv.Cert
Science Learning (p. 217)	4902	M.S.
Speech Language Pathology (p. 222)	1220	M.S.
TESOL (p. 81)	1508	M.S.Ed.
TESOL (p. 92)	1508	Adv.Cert.

ACCOUNTING BACHELOR OF SCIENCE**REQUIREMENTS FOR THE BACHELOR OF SCIENCE DEGREE IN ACCOUNTING:****A. General Course Requirements (45 credit hours):****Supporting Courses:**

MATH 120	Survey of Calculus I and	3
CSIT 104	Introduction to Microcomputer Software	3
CSIT 151	or Introduction to Information Systems and	3
CSIT 251	Information Systems Structures	3
Subtotal: 9		

Lower Level Business Core Courses:

ECON 200	Fundamentals of Statistics for Business Administration and Economics	3
ACCT 201	Principles of Financial Accounting	3
ACCT 202	Principles of Managerial Accounting	3
ECON 201	Principles of Macroeconomics	3
ECON 202	Principles of Microeconomics	3
Subtotal: 15		

Upper Level Business Core Courses:

BUAD 300	Statistical Analysis	3
ACCT 311	Business Law I	3
BUAD 320	Managerial Finance	3
BUAD 323	Organizational Behavior	3
BUAD 327	Operations Management I	3
BUAD 328	Marketing Foundations	3
BUAD 499	Strategic Management	3
Subtotal: 21		

B. Major Course Requirements (25 credit hours):

ACCT 301	Intermediate Accounting I	3
ACCT 302	Intermediate Accounting II	3
ACCT 303	Cost Management	3
ACCT 304	Taxation I	3
ACCT 305	Taxation II	3
ACCT 307	Accounting Information Systems I	3
ACCT 405	Auditing	3
ACCT 407	Accounting Information Systems II	3
ACCT 480	Internship	1-9
Subtotal: 25		

NOTE: ACCT 480 is a variable 1-9 credit hour course. Students need to complete the course for at least one credit to satisfy the degree requirements.

C. Accounting majors must complete at least 66 credit hours of non-ACCT/BUAD prefixed courses.

D. All Accounting majors must complete every one of the Supporting Courses, Lower Level Business Core Courses, Upper Level Business Core Courses, and Major Specific Courses with a minimum grade of C-.

E. Accounting majors are allowed to repeat a failed major course no more than two times.

TOTAL CREDIT HOURS: 70

ACTING BACHELOR OF FINE ARTS**DEGREE REQUIREMENTS FOR BACHELOR OF FINE ARTS IN ACTING****Required Courses**

THEA 100	Theatre Majors Seminar	1
THEA 101	Theatre and Dance Productions	1
THEA 102	Theatre and Dance Productions	1
THEA 121	Introduction to Technical Theatre	3
THEA 131	Acting Studio: Acting I	3
THEA 132	Acting Studio: Acting II	3
THEA 201	Theatre and Dance Productions	1
THEA 202	Theatre and Dance Productions	1
THEA 220	Makeup	1
THEA 231	Acting Studio: Scene Study I	3
THEA 232	Acting Studio: Scene Study II	3
THEA 233	Acting Lab I	1
THEA 234	Acting Lab II	1
THEA 242	Acting Studio: Introduction to Voice and Movement I	3
THEA 243	Acting Studio: Introduction to Voice and Movement II	3
THEA 301	Theatre and Dance Productions	1
THEA 302	Theatre and Dance Productions	1
THEA 341	Acting Studio: Shakespeare	3
THEA 345	Acting Studio: Voice and Movement III	3
THEA 346	Acting Studio: Voice and Movement IV	3
THEA 401	Theatre and Dance Productions	1
THEA 402	Theatre and Dance Productions	1
THEA 424	Acting Studio: Audition Techniques	3
THEA 441	Directing I	3
THEA 451	History of the Theatre I	3
THEA 452	History of the Theatre II	3
THEA 499	Performance/Production Seminar	3
ENGL 412	Early Shakespeare	3
	or	
ENGL 414	Later Shakespeare	3
Subtotal: 60		

Plus 6 credit hours from the following:

THEA 331	Acting Studio: Styles	3
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THEA 359	Commedia dell'Arte	3
THEA 382	Musical Theatre Styles I	3
THEA 383	Acting Studio: Theatre Games	3
THEA 410	Acting for Media	3
THEA 423	Acting Studio: Alternative Acting Styles	3
THEA 432	Musical Theatre Styles	3
THEA 468	Devising Theatre	3

Subtotal: 6**Plus two elective courses chosen from the following (4-6 credit hours):**

THEA 353	History of Musical Theatre	3
DANC 100	Introduction to Dance	3
DANC 111	Modern Technique I	2
DANC 112	Ballet I	2
DANC 113	Jazz Dance I	2
DANC 114	Tap Dance I	2
ARTH 101	Art in Culture from Prehistory to 1400	3
ARTH 102	Art in Culture from 1400 to the Present	3
ENGL 207	Drama and Film	3
ENGL 319	Modern Drama	3
ENGL 321	Contemporary Drama	3
ENGL 405	Page and Stage	1.5-6
ENGL 412	Early Shakespeare	3
ENGL 414	Later Shakespeare	3
ENGL 416	Elizabethan Drama	3
ENGL 418	Restoration/18th Century Drama	3
HIST 115	Western Civilization I	3
HIST 116	Western Civilization II	3
MUS 263	Music History in Western Civilization I	3
MUS 264	Music History in Western Civilization II	3

Subtotal: 4-6

In addition to the specific and individual courses, periodic assessments are conducted for all candidates with the purpose of determining advancement or retention. The Acting program requires an acting jury at the conclusion of each semester. An acting jury is conducted at the conclusion of the fourth semester to determine continuance in the program. A public senior recital is presented in the fourth year. Students on academic probation will not be permitted to participate in public performances.

Acting majors are required to complete Theatre and Dance Productions obligations every semester, which are practical extensions of the classroom. Theatre and Dance Productions credits do not count toward the total number of credits required in the Acting major. Acting majors must successfully complete a minimum of 30 upper level credit hours. Further details and requirements are contained in the Student Handbook for the Department of Theatre and Dance.

TOTAL CREDIT HOURS: 70-72

ADOLESCENCE EDUCATION: BIOLOGY BACHELOR OF SCIENCE

Department of Biology
Office: 221 Science Center
(716) 673-3282

Patricia Smith Astry, *Department Chairperson***William D. Brown**, *Program Coordinator*Email: biology@fredonia.eduWebsite: <http://home.fredonia.edu/biology>

Students who wish to teach biology may obtain initial certification by completing the Biology Adolescence Education program and the required courses in Professional Education.

REQUIREMENTS FOR THE BACHELOR OF SCIENCE DEGREE IN BIOLOGY ADOLESCENCE EDUCATION

Core Program (37 credit hours)

BIOL 131	Introductory Ecology and Evolution	3
BIOL 132	Introductory Ecology and Evolution Laboratory	1
BIOL 133	Introductory Cell and Molecular Biology	3
BIOL 134	Introductory Cell and Molecular Biology Laboratory	1
BIOL 237	Genetics	3
BIOL 238	Genetics Laboratory	1
BIOL 243	Organismal Biology	3
BIOL 244	Organismal Biology Laboratory	1
BIOL 330	Ecology	3
BIOL 331	Ecology Laboratory	1
BIOL 333	Biochemistry	3
BIOL 334	Biochemistry Laboratory	1
BIOL 421	Biological Conservation	3
BIOL 431	Senior Seminar	1
	Nine additional credit hours of biology electives at the 300 to 400 level	9

Subtotal: 37**Required supporting course work (27-29 credit hours)**

CHEM 115	General Chemistry Lecture I	3
CHEM 125	General Chemistry Laboratory I	1
CHEM 116	General Chemistry Lecture II	3
CHEM 126	General Chemistry Laboratory II	1
CHEM 215	Organic Chemistry Lecture I	3
CHEM 225	Organic Chemistry Laboratory I	1
CHEM 216	Organic Chemistry Lecture II	3
CHEM 226	Organic Chemistry Laboratory II	1
STAT 250	Statistics for Scientists	3
PHYS 121	College Physics I	3

PHYS 123	College Physics Lab I and	1
PHYS 122	College Physics II	3
PHYS 124	College Physics II Lab or	1
PHYS 230	University Physics I	4
PHYS 232	University Physics I Lab and	1
PHYS 231	University Physics II	4
PHYS 233	University Physics II Lab	1

Subtotal: 27-29

Required education course work (39 credit hours)

SCED 105	Nature of Science and Science Education and	3
SCED 106	Nature of Science Education Field Experience	
EDU 224	Adolescent Development	3
EDU 250	Introduction to the Exceptional Learner and	3
EDU 251	Practicum in Inclusive Education II	
SCED 276	Literacy and Technology for Science and Mathematics	3
EDU 301	Safe Schools/Healthy Students: Child Abuse and Child Abduction	1
EDU 302	Safe Schools/Healthy Students: Alcohol, Tobacco and Other Drug Abuse	1
EDU 303	Safe Schools/Healthy Students-DASA: Safety Education/Fire and Arson/School Violence	1
SCED 303	Assessment for Inquiry-Based Science	3
SCED 305	Diversity in the Teaching of Science and Mathematics and	3
SCED 313	Diversity in Teaching Math and Science Field Experience	
EDU 349	Educational Psychology	3
SCED 419	Adolescence Science Methods	3
EDU 430	Student Teaching in the Secondary School	15

Subtotal: 42

TOTAL CREDIT HOURS: 103-105

Students should refer to the Education (p. 67) section of this catalog for a description of the certification requirements for this degree. Students must also maintain a minimum 2.75 GPA overall and in the major to be admitted into the senior SCED 419 Adolescence Science Methods and EDU 430 Student Teaching (Capstone experience) in the Secondary School. Upon completion of

this program the student will be recommended for the initial certificate to teach in N.Y. State public schools.

Students who wish to teach biology may obtain initial certification by completing the Biology Adolescence Education program and the required courses in Professional Education. New York State mandates that Adolescence Education majors demonstrate competence in a foreign language. This requirement must be satisfied in any one of the following ways:

- Score of 85 percent or higher on New York State Regents Exam or New York State High School Equivalent Exam*: Requirement is fulfilled.
- Scores of 65 percent - 84 percent on New York State Regents Exam or New York State High School Equivalent Exam*: Student needs to take an Elementary I level course or an Elementary II level course of a language or equivalent course(s), or successfully complete an equivalent Fredonia proficiency exam.
- Scores below 65 percent on New York State Regents Exam or New York State High School Equivalent Exam*: Student needs to take an Elementary I level course and an Elementary II level course or equivalent course(s) of the same language.
- If student did not take a New York State Regents Exam or New York State High School Equivalent Exam*: Student needs to take an Elementary I level course and an Elementary II level course or equivalent course(s) of the same language

NOTE: The General Education foreign language requirement differs from the certification requirement and must be satisfied for degree conferral.

* *High School Equivalent Exam refers to a New York State Local School District Exam or Regional Exam in a Foreign Language.*

As of December 31, 2013, candidates in all education programs are required to complete training under the Dignity for All Students Act (DASA). Beginning in the Fall 2013 semester, the training required under the Dignity for All Student Act (DASA) will be included in EDU 303 at SUNY Fredonia. Undergraduate candidates planning to graduate after Fall 2013 who have already completed EDU 303 on campus or taken a workshop as a substitution for EDU 303 must also complete the EDU DASA workshop prior to graduation.

ADOLESCENCE EDUCATION: CHEMISTRY BACHELOR OF SCIENCE

Teacher Certification: Students wishing to teach chemistry in the secondary schools can obtain provisional certification by completing the requirements below. The procedure to be followed for admission to the professional

sequence of courses is described in the Education section of the catalog.

Candidates in all education programs are required to demonstrate competence in a foreign language. This requirement must be satisfied in any one of the following ways:

- Score of 85 percent or higher on New York State Regents Exam or New York State High School Equivalent Exam*: Requirement is fulfilled.
- Scores of 65 percent - 84 percent on New York State Regents Exam or New York State High School Equivalent Exam*: Student needs to take an Elementary I level course or an Elementary II level course of a language or equivalent course(s), or successfully complete an equivalent Fredonia proficiency exam.
- Scores below 65 percent on New York State Regents Exam or New York State High School Equivalent Exam*: Student needs to take an Elementary I level course and an Elementary II level course or equivalent course(s) of the same language.
- If student did not take a New York State Regents Exam or New York State High School Equivalent Exam*: Student needs to take an Elementary I level course and an Elementary II level course or equivalent course(s) of the same language.

NOTE: The General Education foreign language requirement differs from the certification requirement and must be satisfied for degree conferral.

** High School Equivalent Exam refers to a New York State Local School District Exam or Regional Exam in a Foreign Language.*

As of December 31, 2013, candidates in all education programs are required to complete training under the Dignity for All Students Act (DASA). Beginning in the Fall 2013 semester, the training required under the Dignity for All Student Act (DASA) will be included in EDU 303 at Fredonia. Undergraduate candidates planning to graduate after Fall 2013 who have already completed EDU 303 on campus or taken a workshop as a substitution for EDU 303 must also complete the EDU DASA workshop prior to graduation.

REQUIREMENTS FOR THE BACHELOR OF SCIENCE DEGREE IN CHEMISTRY ADOLESCENCE EDUCATION

Core requirements (41 credit hours):

CHEM 115	General Chemistry Lecture I	3
CHEM 116	General Chemistry Lecture II	3
CHEM 125	General Chemistry Laboratory I	1
CHEM 126	General Chemistry Laboratory II	1
	or	

CHEM 130	Honors General Chemistry Laboratory	1
CHEM 215	Organic Chemistry Lecture I	3
CHEM 216	Organic Chemistry Lecture II	3
CHEM 225	Organic Chemistry Laboratory I	1
CHEM 226	Organic Chemistry Laboratory II	1
	or	
CHEM 230	Advanced Organic Laboratory	1
CHEM 295	Introduction to Research	1
CHEM 315	Introduction to Physical Chemistry	3
CHEM 316	Advanced Physical Chemistry	3
CHEM 325	Physical Chemistry Laboratory I	1
CHEM 326	Physical Chemistry Laboratory II	1
CHEM 317	Analytical Chemistry, Quantitative Analysis	3
CHEM 318	Analytical Chemistry, Instrumental Analysis	3
CHEM 327	Analytical Chemistry I Laboratory	1
CHEM 328	Analytical Chemistry II Laboratory	2
CHEM 495	Seminar: Advances in Chemistry	1
CHEM 496	Seminar: Advances in Chemistry	1
CHEM 391	Independent Lab Research	1-3
	or	
CHEM 392	Independent Lab Research	1-3
	or	
CHEM 491	Independent Laboratory Research	1-3
	or	
CHEM 492	Independent Laboratory Research	1-3
	or	
	Chemistry Elective	3
	Chemistry Elective	3

Subtotal: 41

Cognates (21 credit hours):

PHYS 230	University Physics I	4
PHYS 231	University Physics II	4
PHYS 232	University Physics I Lab	1
PHYS 233	University Physics II Lab	1
MATH 122	University Calculus I	4
MATH 123	University Calculus II	4
CSIT 104	Introduction to Microcomputer Software	3

Subtotal: 21

Education Foundations (27 credit hours):

EDU 224	Adolescent Development	3
EDU 250	Introduction to the Exceptional Learner	3
EDU 251	Practicum in Inclusive Education II	
EDU 301	Safe Schools/Healthy Students: Child Abuse and Child Abduction	1
EDU 302	Safe Schools/Healthy Students: Alcohol, Tobacco and Other Drug Abuse	1

EDU 303	Safe Schools/Healthy Students-DASA: Safety Education/Fire and Arson/School Violence	1
EDU 349	Educational Psychology	3
EDU 430	Student Teaching in the Secondary School	15
Subtotal: 27		

NOTE: EDU 251 is a field course.

Science Education (15 credit hours):

SCED 105	Nature of Science and Science Education	3
SCED 106	Nature of Science Education Field Experience	
SCED 276	Literacy and Technology for Science and Mathematics	3
SCED 303	Assessment for Inquiry-Based Science	3
SCED 305	Diversity in the Teaching of Science and Mathematics	3
SCED 313	Diversity in Teaching Math and Science Field Experience	
SCED 419	Adolescence Science Methods	3
Subtotal: 15		

NOTE: SCED 106 and SCED 313 are field courses.

TOTAL CREDIT HOURS: 104

ADOLESCENCE EDUCATION: EARTH SCIENCE BACHELOR OF SCIENCE

REQUIREMENTS FOR THE BACHELOR OF SCIENCE DEGREE IN EARTH SCIENCE ADOLESCENCE EDUCATION

Core Program:

34 credit hours in geosciences; 42 credit hours in education; 25 to 29 credit hours in related disciplines

GEO 102	Freshman Seminar	1
GEO 150	Moons and Planets	3
GEO 160	Oceanography	3
GEO 165	Geology I	3
GEO 169	General Geology Lab	1
GEO 210	Geology II	3
GEO 215	Minerals and Rocks	4
GEO 311	Global Climate	3
GEO 330	Geomorphology	4
GEO 459	Seminar in Geosciences	1
Subtotal: 26		

Required Supporting Coursework

GEO 335	Geophysics	4
GEO 370	Structural Geology	4
GEO 400	Stratigraphy	4

	One additional course with lab in Geology at the 300-level or 400-level	
SCED 105	Nature of Science and Science Education and	3
SCED 106	Nature of Science Education Field Experience	
EDU 224	Adolescent Development	3
EDU 250	Introduction to the Exceptional Learner and	3
EDU 251	Practicum in Inclusive Education II	
SCED 276	Literacy and Technology for Science and Mathematics	3
SCED 303	Assessment for Inquiry-Based Science	3
SCED 305	Diversity in the Teaching of Science and Mathematics	3
SCED 313	Diversity in Teaching Math and Science Field Experience	
EDU 349	Educational Psychology	3
SCED 419	Adolescence Science Methods	3
EDU 430	Student Teaching in the Secondary School	15
EDU 301	Safe Schools/Healthy Students: Child Abuse and Child Abduction	1
EDU 302	Safe Schools/Healthy Students: Alcohol, Tobacco and Other Drug Abuse	1
EDU 303	Safe Schools/Healthy Students-DASA: Safety Education/Fire and Arson/School Violence	1
CHEM 115	General Chemistry Lecture I	3
CHEM 116	General Chemistry Lecture II	3
PHYS 230	University Physics I and	4
PHYS 231	University Physics II or	4
PHYS 121	College Physics I and	3
PHYS 122	College Physics II	3
Subtotal: 66-68		

Calculus sequence:

MATH 120	Survey of Calculus I	3
MATH 121	Survey of Calculus II or	3
MATH 122	University Calculus I	4
MATH 123	University Calculus II	4
	A course in Statistics at the 200-level or higher or	
	A course in Computer Science	

Subtotal: 6-8

NOTE: B.S. Earth Science Adolescence Education students must attain a minimum grade of C in all Geosciences courses, and attain a 2.5 GPA or higher to graduate. In addition, all students in this program must complete the foreign language requirement as stated by the New York State Education Department. This requirement must be satisfied in any one of the following ways:
Subtotal: 98-102

- Score of 85 percent or higher on New York State Regents Exam or New York State High School Equivalent Exam*: Requirement is fulfilled.
- Scores of 65 percent – 84 percent on New York State Regents Exam or New York State High School Equivalent Exam*: Student needs to take an Elementary I level course or an Elementary II level course of a language or equivalent course(s), or successfully complete an equivalent Fredonia proficiency exam.
- Scores below 65 percent on New York State Regents Exam or New York State High School Equivalent Exam*: Student needs to take an Elementary I level course and an Elementary II level course or equivalent course(s) of the same language.
- If student did not take a New York State Regents Exam or New York State High School Equivalent Exam*: Student needs to take an Elementary I level course and an Elementary II level course or equivalent course(s) of the same language.

Note: The General Education foreign language requirement differs from the certification requirement and must be satisfied for degree conferral.

* *High School Equivalent Exam refers to a New York State Local School District Exam or Regional Exam in a Foreign Language.*

As of December 31, 2013, candidates in all education programs are required to complete training under the Dignity for All Students Act (DASA). Beginning in the Fall 2013 semester, the training required under the Dignity for All Student Act (DASA) will be included in EDU 303 at Fredonia. Undergraduate candidates planning to graduate after Fall 2013 who have already completed EDU 303 on campus or taken a workshop as a substitution for EDU 303 must also complete the EDU DASA workshop prior to graduation.

For certification requirements, please refer to the Education section (p. 64) of the catalog.

TOTAL CREDIT HOURS: 98-102

ADOLESCENCE EDUCATION: ENGLISH BACHELOR OF ARTS

REQUIREMENTS FOR THE BACHELOR OF ARTS IN ENGLISH ADOLESCENCE EDUCATION

Students interested in English Adolescence Education may enter the major upon acceptance into Fredonia either as first year or transfers from other colleges. Once specific program requirements (listed below) have been met, students will be eligible for a screening interview. Screening occurs during the spring of a student's third year after approximately 75 credit hours have been earned. Upon successful completion of screening, students will become "candidates" and admitted into the professional year. The professional year is comprised of five English Education courses available only to those who have become candidates. These are also described below.

English Adolescence Education majors are required to earn at least a C+ in each required English course, and to maintain an overall GPA of 3.0. In addition to the English courses listed below, Adolescence Education majors must also take the following courses, achieving an average of 2.5: EDU 224, EDU 250, EDU 251, EDU 301, EDU 302, EDU 303, and EDU 349.

English Adolescence Education majors are required to demonstrate competence in a foreign language. This requirement must be satisfied in any one of the following ways:

- Score of 85 percent or higher on New York State Regents Exam or New York State High School Equivalent Exam*: Requirement is fulfilled.
- Scores of 65 percent - 84 percent on New York State Regents Exam or New York State High School Equivalent Exam*: Student needs to take an Elementary I level course or an Elementary II level course of a language or equivalent course(s), or successfully complete an equivalent Fredonia proficiency exam.
- Scores below 65 percent on New York State Regents Exam or New York State High School Equivalent Exam*: Student needs to take an Elementary I level course and an Elementary II level course or equivalent course(s) of the same language.
- If student did not take a New York State Regents Exam or New York State High School Equivalent Exam*: Student needs to take an Elementary I level course and an Elementary II level course or equivalent course(s) of the same language.

NOTE: The General Education foreign language requirement differs from the certification requirement and must be satisfied for degree conferral.

* *High School Equivalent Exam refers to a New York State Local School District Exam or Regional Exam in a Foreign Language.*

Candidates in English Adolescence Education must complete at least 66 credit hours outside the major in order to graduate. Credits earned for ENGL 100 (English Composition) do not count toward the major, but do count as hours outside the major. Credits earned as ENED count toward the 66 credit hours outside the major. Credits transferred as ENGL 099 do not count toward the major, but do count as ENGL hours outside the major area.

Acceptance into the professional year (and to become an official English Adolescence Education "candidate") is contingent upon a successful screening interview given by a panel of English Adolescence Education faculty. Screening interviews allow students to demonstrate their mastery of key pedagogical, content, and disposition issues related to the English Adolescence Education major. To be eligible for screening, a student must have:

1. at least junior-level standing (approximately 75 earned credit hours);
2. an overall GPA of 3.0;
3. successful completion (C+ or higher) in at least two of the following courses: ENED 250 Literacy and Technology, ENED 355 Adolescent Literature, ENED 356 Teaching Writing in the Secondary School, and ENED 357 Literacy, Language, Learning Theory.

Students will be notified in writing within two weeks after their screening whether they passed or failed. Those who pass become "candidates" and are eligible to enroll in ENED 450 Senior Seminar and ENED 451 Methods for English Education during fall of their senior year, and ENED 452 Inquiries in Student Teaching, ENED 454 Student Teaching in the Secondary School - English High School (Student Teaching), and ENED 455 Student Teaching in the Secondary School - English Middle School (Student Teaching) during the spring of their senior year. Students who do not pass screening are given several options that may allow them to attempt screening the following year. Students who fail screening are not eligible to enroll in ENED 450, ENED 451, ENED 452, ENED 454, or ENED 455.

Candidates are expected to demonstrate professional dispositions as part of their program requirements. Students should see the English department website for more information regarding dispositions for the English Adolescence Education program.

English Adolescence Education majors are exempt from the minor requirement.

Program Outline:

36 credit hours from the following core courses:

Three of the following core courses (9 credit hours)

ENGL 205	Epic and Romance	3
ENGL 207	Drama and Film	3
ENGL 209	Novels and Tales	3

ENGL 211	World Poetry	3
Subtotal: 9		

Plus 27 credit hours, as follows:

ENGL 301	American Literary Landmarks	3
ENGL 302	British Literary Landmarks	3
ENGL 373	English Grammar for Everyone	3
ENGL 401	Portfolio Completion	
	Literary Period Course	3
	Major Author Course	3
	One 300-level or above writing course	3
	Three English electives	9
Subtotal: 27		

NOTE: Literary Period Course and Major Author Course: For lists of appropriate readings, please see the English Department website, <http://home.fredonia.edu/english>. Students are encouraged to take no more than 6 elective credit hours at the 200 level.

The following English pedagogy courses (36 credit hours):

Candidates in the English Adolescence Education program count the following courses as part of the 66 credit hours outside their major discipline:

ENED 101	Introduction to English Adolescence Education	1.5
ENED 103	Readings and Observation in English Adolescence Education	1.5
ENED 250	Literacy and Technology	3
ENED 355	Adolescent Literature	3
ENED 356	Teaching Writing in the Secondary School	3
ENED 357	Literacy/Language/Learning Theory	3
ENED 450	Seminar for Teachers of English	3
ENED 451	Methods for English Education	3
ENED 452	Inquiries in Student Teaching	3
ENED 454	Student Teaching in the Secondary School – English High School	6
ENED 455	Student Teaching in the Secondary School – English Middle School	6

Subtotal: 36.0

NOTE: ENED 450: Seniors only. ENED 454 and ENED 455: Capstone experiences.

The following education courses (12 credit hours):

EDU 224	Adolescent Development	3
EDU 250	Introduction to the Exceptional Learner	3
EDU 251	Practicum in Inclusive Education II	
EDU 301	Safe Schools/Healthy Students: Child Abuse and Child Abduction	1

EDU 302	Safe Schools/Healthy Students: Alcohol, Tobacco and Other Drug Abuse	1
EDU 303	Safe Schools/Healthy Students- DASA: Safety Education/Fire and Arson/School Violence	1
EDU 349	Educational Psychology	3
Subtotal: 12		

As of December 31st, 2013, candidates in all education programs are required to complete training under the Dignity for All Students Act (DASA). Beginning in the Fall 2013 semester, the training required under the Dignity for All Students Act (DASA) will be included in EDU 303 at Fredonia. Undergraduate candidates planning to graduate after Fall 2013 who have already completed EDU 303 on campus or taken a workshop as a substitution for EDU 303 must also complete the EDU DASA workshop prior to graduation.

Note: New York State Regents' revisions of programs in Adolescence Education may result in changes in the above requirements, and these changes may affect current as well as future English Adolescence Education majors.

See Education (p. 64) for certification information.

TOTAL CREDIT HOURS: 84

ADOLESCENCE EDUCATION: FRENCH OR SPANISH BACHELOR OF ARTS

REQUIREMENTS FOR THE BACHELOR OF ARTS IN ADOLESCENCE EDUCATION: FRENCH OR SPANISH

Students who desire to teach French or Spanish at the secondary (adolescence) level may obtain Initial Certification in New York State by completing the coursework required for a major in French or Spanish, plus the following courses:

Required Courses

EDU 105	Introduction to Contemporary Inclusive Education and	3
EDU 106	Practicum in Inclusive Education I	
EDU 224	Adolescent Development	3
EDU 250	Introduction to the Exceptional Learner and	3
EDU 251	Practicum in Inclusive Education II	
EDU 276	Literacy and Technology in Inclusive Educational Settings	3
EDU 301	Safe Schools/Healthy Students: Child Abuse and Child Abduction	1

EDU 302	Safe Schools/Healthy Students: Alcohol, Tobacco and Other Drug Abuse	1
EDU 303	Safe Schools/Healthy Students- DASA: Safety Education/Fire and Arson/School Violence	1
EDU 305	Cultural and Linguistic Diversity in the Classroom and	3
EDU 313	Practicum in Inclusive Education III	
EDU 349	Educational Psychology	3
EDU 419	Secondary School (Adolescence) Methods	3
EDU 430	Student Teaching in the Secondary School	15

TOTAL CREDIT HOURS: 39

NOTE: EDU 105, EDU 250, EDU 305, EDU 419: Field Experiences. EDU 419: Fall Semester Only. EDU 430: Spring Semester Only.

The procedure to be followed for admission to the professional sequence of courses is as follows:

In their first year in the program, students should begin working concurrently on their education and language course requirements. In education, students should complete EDU 105/106 with a B- or better. If desired, they may also enroll in EDU 224. In language, students who are not ready to enroll directly in 300-level language courses should complete FREN/SPAN 215 and/or 216 with a grade of B or better. By April 1 of the first year, students will formally apply to the program through a departmental application. Students must have an overall GPA of 3.0 or better at the time of application and must not have had any professional dispositions issues in the first year.

Candidates wishing to continue in the program must attend a departmental orientation and complete a departmental application, both in the Fall semester of the year before their participation in Secondary School (Adolescence) Methods (the year before they wish to student teach). To be eligible for the departmental screening process, candidates must meet the minimum criteria of at least a 3.0 GPA in their Education courses and a minimum 3.0 GPA in their major language courses at the 300 level and above. In addition, at the time of screening, usually in February of the year before student teaching, candidates must have completed at least 21 credit hours in the language with an overall GPA of 3.0 or better in the major. Courses in progress do not count. As a result of the screening process, the department will recommend those candidates who demonstrate superior competency in the language, responsibility, dependability, maturity, and a clear grasp of the realities of the teaching profession.

The Secondary School (Adolescence) Methods course will be taken in the Fall semester immediately preceding

student teaching. Admission is limited to those candidates who have been accepted into the program after the screening process and who plan to follow the course with a semester of student teaching.

In order to continue in the program, candidates must earn a minimum grade of "B" in Secondary School (Adolescence) Methods and must continue to have an overall GPA of 3.0 in all language courses.

All Modern Languages Adolescence Education majors are required to take the Official ACTFL Oral Proficiency Interview (OPI) and achieve a rating of Advanced Low or higher in order to student teach. By May of their junior year, candidates should have taken the OPI and achieved Advanced Low or higher. Students who score below that rating must enroll in FREN/SPAN 415 during the fall of their senior year and will have the opportunity to retake the OPI. Students who do not achieve the minimum rating after this course will not be able to student teach but will be able to graduate with a Bachelor of Arts in French/Spanish and should meet with their advisor before the fall semester is over to discuss their courses for the following spring. Candidates are responsible for the cost of this proficiency exam.

The Modern Languages Program Coordinator will work with the Office of Field Experiences to determine a student teaching assignment for each candidate. During the first weeks of student teaching, candidates will enter into an individually designed agreement with the university supervisor and cooperating teacher concerning their work in the assignment.

As of December 31, 2013, candidates in all education programs are required to complete training under the Dignity for All Students Act (DASA). Beginning in the Fall 2013 semester, the training required under the Dignity for All Student Act (DASA) will be included in EDU 303 at Fredonia. Undergraduate candidates planning to graduate after Fall 2013 who have already completed EDU 303 on campus or taken a workshop as a substitution for EDU 303 must also complete the EDU DASA workshop prior to graduation.

For certification information, please see the Education (p. 64) section of the catalog.

ADOLESCENCE EDUCATION: MATHEMATICS BACHELOR OF SCIENCE

REQUIREMENTS FOR THE BACHELOR OF SCIENCE DEGREE IN MATHEMATICS ADOLESCENCE EDUCATION

Required Courses

MATH 122	University Calculus I	4
MATH 123	University Calculus II	4
MATH 210	Mathematical Structures and Proof	4

MATH 223	University Calculus III	4
MATH 231	Linear Algebra	4
MAED 310	Reading and Writing Mathematics	3
MATH 323	Introductory Real Analysis	3
MATH 331	Abstract Algebra I	3
MATH 341	Geometry	3
MATH 381	History of Mathematics	3
MATH 405	Senior Seminar	1
	or	
MAED 410	Seminar: Mathematics for High School Teachers	3
STAT 350	Probability and Statistics	3
	One additional MATH or STAT course numbered 311 or higher	3
MAED 105	Introduction to Contemporary Mathematics Education and	3
MAED 106	Contemporary Mathematics Education - Field Experience	
EDU 224	Adolescent Development	3
EDU 250	Introduction to the Exceptional Learner and	3
EDU 251	Practicum in Inclusive Education II	
MAED 276	Literacy and Technology for Science and Mathematics	3
EDU 301	Safe Schools/Healthy Students: Child Abuse and Child Abduction	1
EDU 302	Safe Schools/Healthy Students: Alcohol, Tobacco and Other Drug Abuse	1
EDU 303	Safe Schools/Healthy Students-DASA: Safety Education/Fire and Arson/School Violence	1
MAED 305	Diversity in the Teaching of Science and Mathematics and	3
MAED 313	Diversity in the Teaching of Science and Mathematics Field Experience	
EDU 349	Educational Psychology	3
MAED 419	Secondary School (Grades 7-12) Methods in Mathematics	3
MAED 416	Math Student Teaching Seminar	3
MAED 430	Student Teaching for Mathematics/Adolescence Education: Grades 7-9 Placement	6
MAED 431	Student Teaching for Mathematics/Adolescence Education: Grades 10-12 Placement	6

All mathematics majors must complete a science course and its laboratory selected from the following:**Chemistry:**

CHEM 115	General Chemistry Lecture I and	3
CHEM 125	General Chemistry Laboratory I	1

Physics:

PHYS 230	University Physics I and	4
PHYS 232	University Physics I Lab	1

Candidates in all education programs are required to demonstrate competence in a foreign language. This requirement must be satisfied in any one of the following ways:

- Score of 85 percent or higher on New York State Regents Exam or New York State High School Equivalent Exam*: Requirement is fulfilled.
- Scores of 65 percent - 84 percent on New York State Regents Exam or New York State High School Equivalent Exam*: Student needs to take an Elementary I level course or an Elementary II level course of a language or equivalent course(s), or successfully complete an equivalent Fredonia proficiency exam.
- Scores below 65 percent on New York State Regents Exam or New York State High School Equivalent Exam*: Student needs to take an Elementary I level course and an Elementary II level course or equivalent course(s) of the same language.
- If student did not take a New York State Regents Exam or New York State High School Equivalent Exam*: Student needs to take an Elementary I level course and an Elementary II level course or equivalent course(s) of the same language.

Note: The General Education foreign language requirement differs from the certification requirement and must be satisfied for degree conferral.

* *High School Equivalent Exam refers to a New York State Local School District Exam or Regional Exam in a Foreign Language.*

As of December 31, 2013, candidates in all education programs are required to complete training under the Dignity for All Students Act (DASA). Beginning in the Fall 2013 semester, the training required under the Dignity for All Student Act (DASA) will be included in EDU 303 at Fredonia. Undergraduate candidates planning to graduate after Fall 2013 who have already completed EDU 303 on campus or taken a workshop as a substitution for EDU 303 must also complete the EDU DASA workshop prior to graduation.

Students may double major in Mathematics Adolescence Education and Mathematics, or in Mathematics Adolescence Education and Applied Mathematics by completing all of the requirements for both majors.

For more information on the education requirements, please consult the Education (p. 64) section of the catalog.

TOTAL CREDIT HOURS: 85-88

ADOLESCENCE EDUCATION: PHYSICS BACHELOR OF SCIENCE

REQUIREMENTS FOR THE BACHELOR OF SCIENCE DEGREE IN PHYSICS ADOLESCENCE (SECONDARY) EDUCATION

Core requirements:

PHYS 230	University Physics I	4
PHYS 232	University Physics I Lab	1
PHYS 231	University Physics II	4
PHYS 233	University Physics II Lab	1
PHYS 234	Modern Physics	4
PHYS 330	Thermodynamics	3
PHYS 331	Theoretical Mechanics	3
	or	
PHYS 333	Electricity and Magnetism	3
PHYS 340	Optics	3
PHYS 341	Optics Laboratory	1
PHYS 400	Undergraduate Seminar	1
PHYS 425	Mathematical Physics I	3
PHYS 431	Introduction to Quantum Mechanics	3

Subtotal: 31

Supporting MATH/CSIT courses:

MATH 122	University Calculus I	4
MATH 123	University Calculus II	4
MATH 223	University Calculus III	4
MATH 224	Differential Equations	3
CSIT 106	Scientific Programming Using C/C++	3
	or	
CSIT 121	Computer Science I	3

Subtotal: 18

Plus the following courses:

CHEM 115	General Chemistry Lecture I	3
CHEM 125	General Chemistry Laboratory I	1
CHEM 116	General Chemistry Lecture II	3
CHEM 126	General Chemistry Laboratory II	1
SCED 105	Nature of Science and Science Education and	3
	and	
SCED 106	Nature of Science Education Field Experience	
EDU 224	Adolescent Development	3

EDU 250	Introduction to the Exceptional Learner and	3
EDU 251	Practicum in Inclusive Education II	
SCED 276	Literacy and Technology for Science and Mathematics	3
SCED 303	Assessment for Inquiry-Based Science	3
SCED 305	Diversity in the Teaching of Science and Mathematics	3
SCED 313	Diversity in Teaching Math and Science Field Experience	
EDU 349	Educational Psychology	3
SCED 419	Adolescence Science Methods	3
EDU 301	Safe Schools/Healthy Students: Child Abuse and Child Abduction	1
EDU 302	Safe Schools/Healthy Students: Alcohol, Tobacco and Other Drug Abuse	1
EDU 303	Safe Schools/Healthy Students-DASA: Safety Education/Fire and Arson/School Violence	1
EDU 430	Student Teaching in the Secondary School	15
Subtotal: 50		
Required Physics electives:		
	Six (6) credit hours of Physics at the upper level (upon advisement)	6
Subtotal: 6		
TOTAL CREDIT HOURS: 105		

ADOLESCENCE EDUCATION: SOCIAL STUDIES BACHELOR OF ARTS

REQUIREMENTS FOR THE BACHELOR OF ARTS IN SOCIAL STUDIES ADOLESCENCE EDUCATION (LEADING TO INITIAL CERTIFICATION)

Responsibility for the B.A. in Social Studies Adolescence Education is shared by the College of Education and the Department of History. Students are encouraged to double major in History (or another field) in order to enhance their understanding of the discipline and their future employment opportunities. Requirements beyond those of the College Core Curriculum include:

I. Professional Education Courses (39 credit hours required)

EDU 105	Introduction to Contemporary Inclusive Education and	3
EDU 106	Practicum in Inclusive Education I	
EDU 224	Adolescent Development	3

EDU 250	Introduction to the Exceptional Learner and	3
EDU 251	Practicum in Inclusive Education II	
EDU 276	Literacy and Technology in Inclusive Educational Settings	3
EDU 301	Safe Schools/Healthy Students: Child Abuse and Child Abduction	1
EDU 302	Safe Schools/Healthy Students: Alcohol, Tobacco and Other Drug Abuse	1
EDU 303	Safe Schools/Healthy Students-DASA: Safety Education/Fire and Arson/School Violence	1
EDU 305	Cultural and Linguistic Diversity in the Classroom	3
EDU 313	Practicum in Inclusive Education III	
EDU 349	Educational Psychology	3
SSED 419	Secondary (Adolescence) Social Studies Teaching Methods	3
SSED 420	Student Teaching Colloquium	3
SSED 430	Student Teaching for Social Studies/Adolescence Education - Grades 7-9 Placement	6
SSED 431	Student Teaching for Social Studies/Adolescence Education – Grades 10-12 Placement	6
Subtotal: 39		

NOTE: EDU 105: recommended for freshmen. EDU 250: recommended for sophomores. EDU 305 and EDU 349: recommended for juniors. SSED 419: senior year/offered fall semester only. SSED 420, SSED 430, SSED 431: senior year/generally offered Spring semester only (Capstone experience).

II. Social Studies Course Work (51 credit hours required)

Subtotal: 55

Group I: Basic Knowledge (all courses required, 21 credit hours)

HIST 101	World History I	3
HIST 102	World History II	3
HIST 105	United States History I	3
HIST 106	United States History II	3
HIST 115	Western Civilization I	3
	or	
HIST 116	Western Civilization II	3
POLI 120	American Politics	3
SOC 116	Introductory Sociology	3
	or	
PSY 129	Introduction to Psychology	3
	or	
ANTH 115	Introductory Anthropology	3

Subtotal: 21		
Group II: Methodologies (10 credit hours)		
HIST 100	History Introductory Seminar	1
HIST 201	Doing History	3
SSED 205	Economics for Social Studies Educators	3
	or	
ECON 201	Principles of Macroeconomics	3
SSED 204	World Regional Geography	3
	or	
POLI 352	World Political Geography	3
Subtotal: 10		

NOTE: HIST 201: normally taken during the sophomore year.

Group III: Cultures and Civilizations (9 credit hours)
Subtotal: 9

A. American Minorities

Any one of the following:

HIST 206	Introduction to African American Studies	3
HIST 359	Ethnicity and Race	3
HIST 333	African American History to 1877	3
HIST 334	African American History Since 1877	3
HIST 336	African American Black Women's History	3
HIST 343	Civil Rights Movement	3
HIST 345	Asian American History	3
HIST 356	American Indian History	3
HIST 357	Indians and Europeans in Early America	3
SOC 316	Minority Groups	3

NOTE: Students seeking a double major in Social Studies and History should take a history course in this category.

B. World Regional Civilizations

Two 200-level world regional civilization courses in Asian, African, Atlantic World, Latin American, or Middle Eastern history. These courses must cover different regions.

Group IV: Building Knowledge, Connections, and Arguments (15 credit hours)

Five courses at the 300-level or above: four History courses, including two with focus on U.S. History (one pre-1877, one post-1877); one focusing on European History; and one on global/non-western history; one course in a social studies field other than History (ANTH, ECON, POLI, PSY, SOC).

Subtotal: 15

Foreign Language 0-6 credit hours

Candidates in all education programs are required to demonstrate competence in a foreign language. This

requirement must be satisfied in any one of the following ways:

- Score of 85 percent or higher on New York State Regents Exam or New York State High School Equivalent Exam*: Requirement is fulfilled.
- Scores of 65 percent - 84 percent on New York State Regents Exam or New York State High School Equivalent Exam*: Student needs to take an Elementary I level course or an Elementary II level course of a language or equivalent course(s), or successfully complete an equivalent Fredonia proficiency exam.
- Scores below 65 percent on New York State Regents Exam or New York State High School Equivalent Exam*: Student needs to take an Elementary I level course and an Elementary II level course or equivalent course(s) of the same language.
- If student did not take a New York State Regents Exam or New York State High School Equivalent Exam*: Student needs to take an Elementary I level course and an Elementary II level course or equivalent course(s) of the same language.

NOTE: The General Education foreign language requirement differs from the certification requirement and must be satisfied for degree conferral.

** High School Equivalent Exam refers to a New York State Local School District Exam or Regional Exam in a Foreign Language.*

Subtotal: 94

OTHER REQUIREMENTS

All majors must fulfill all testing and assessment requirements set by the Department of History. At present, these include gated assessment requirements. Grades must be C+ or better in all required courses in the Social Studies program. The Written Communication requirement under the General Education Program must be passed with a C or better. Students are encouraged to complete one course in statistics as part of the General Education Program. Enrolled students and transfer students wishing to declare the Social Studies Adolescence Education major must have an overall GPA of 3.0. Social Studies Adolescence Education majors must maintain a 3.0 GPA in order to remain in the program. The grade point requirements for entering the professional year are: overall GPA of 3.0, in Professional Education courses 3.0, and in the Social Studies content component 3.0. Acceptance into the senior professional year is also contingent upon a personal interview and review by the Social Studies screening committee composed of Department of History. A copy of the criteria used by the screening committee may be obtained in the history department. Acceptance into

student teaching also requires approval by the Dean of the College of Education.

SSED 419 can be taken only in the fall semester of the senior year. SSED 420, SSED 430, and SSED 431 require the entire spring semester as a full course load.

REQUIREMENTS FOR TRANSFER CREDIT

Students transferring credits to Fredonia should normally expect no more than 27 credit hours earned elsewhere to apply to the Social Studies course requirements. (Special consideration can be given to students who have earned a B.A. degree in one of the social sciences.) As a rule, the department will not accept as equivalents to advanced social studies courses credits earned at two-year colleges. HIST 201 must be completed at Fredonia. All requirements for SSED 419, SSED 420, SSED 430, and SSED 431 must be completed under Fredonia supervision. To be applied to the requirements of the Social Studies Adolescence Education program, transferred courses must have been completed with a grade of C+ or better.

ADDITIONAL REQUIREMENTS FOR CERTIFICATION

The New York State Education Department also requires fingerprinting and a background check for all applicants for initial certification. In addition, students seeking initial certification must pass appropriate New York State Teacher Certification Examinations. Students are strongly advised to pursue a second major in History or one of the other social science disciplines (economics, political science, psychology or sociology/anthropology) and may count appropriate courses taken for the Social Studies Adolescence Education major and the General Education Program requirements towards such a second major.

As of December 31, 2013, candidates in all education programs are required to complete training under the Dignity for All Students Act (DASA). Beginning in the Fall 2013 semester, the training required under the Dignity for All Student Act (DASA) will be included in EDU 303 at Fredonia. Undergraduate candidates planning to graduate after Fall 2013 who have already completed EDU 303 on campus or taken a workshop as a substitution for EDU 303 must also complete the EDU DASA workshop prior to graduation.

For certification information, please consult the Education section of the catalog.

TOTAL CREDIT HOURS: 94

ADOLESCENCE SCIENCE EDUCATION MASTER OF ARTS IN TEACHING

Office: Science Center 221E/318
(716) 673-3285

Holly Jon Lawson, *Project Coordinator, Fredonia Science Center*

Email: holly.lawson@fredonia.edu

Website: <http://home.fredonia.edu/scienceeducation>

Program Purpose

This master's program is intended for students who have earned a bachelor's degree in biology, chemistry, geosciences, or physics (or equivalent) and who wish to earn a certificate to teach in grades 7-12 in N.Y.S. public schools. This accelerated (15 month) program will provide all of the required course work, field experiences and student teaching as well as selected courses in the content areas so that graduates will be eligible for both initial and professional certification in the science disciplines in their first degree, as well as General Science 7-12 and science in grades 5-6. This provides an opportunity to fulfill a regional need for qualified science teachers from nontraditional sources such as content majors or individuals considering a second career.

Program Structure and Content

The academic content contains a pedagogical core, literacy and language acquisition courses, method courses specific to the teaching of science, use of technology to enhance learning and assist student with special needs, assessment, teaching scholarship and science content courses.

PROGRAM REQUIREMENTS FOR THE ADOLESCENCE SCIENCE EDUCATION MASTER OF ARTS IN TEACHING DEGREE (44 CREDIT HOURS)

Pedagogical Core:

EDU 502	Psychology of Adolescence	3
EDU 508	Teaching Exceptional Learners in Inclusive Settings	3
EDU 301	Safe Schools/Healthy Students: Child Abuse and Child Abduction	1
EDU 302	Safe Schools/Healthy Students: Alcohol, Tobacco and Other Drug Abuse	1
EDU 303	Safe Schools/Healthy Students-DASA: Safety Education/Fire and Arson/School Violence	1

Subtotal: 9

Literacy:

EDU 528	Technology in the Schools	3
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Subtotal: 6

Plus one course from the following:

EDU 506	Introduction to Literacy Instruction	3
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EDU 589	Writing in the Middle and Secondary Schools	3
Subtotal: 3		
Methods:		
SCED 560	Foundations of Teaching Science to Adolescent Learners	3
SCED 660	Developing Expertise in Science Teaching	3
SCED 680	Inquiry into Science Teaching in Context	3
Subtotal: 9		
Content:		
	BIOL, CHEM, GEO, PHY, SCI, SCED: 6 cr hrs of electives, upon advisement	6
Subtotal: 6		
Supervised Teaching:		
SCED 670	Student Teaching - Middle School Science	6
SCED 671	Student Teaching - Secondary School Science	6
Subtotal: 12		
Required course for 5-6 extension:		
EDU 321	Teaching in the Middle School	3
Subtotal: 3		

Additional requirements for General Science 7-12 extension:

Candidates are required to have completed at least 18 credit hours of study in two sciences outside the area of initial certification.

As of December 31st, 2013, candidates in all education programs are required to complete training under the Dignity for All Students Act (DASA). Beginning in the Fall 2013 semester, the training required under the Dignity for All Students Act (DASA) will be included in EDU 303 at Fredonia. Candidates planning to graduate after Fall 2013 who have already completed EDU 303 on campus or taken a workshop as a substitution for EDU 303 must also complete the EDU DASA workshop prior to graduation.
Subtotal: 45

Criteria and Procedures for Admission

Candidates must possess a bachelor's degree in Biology, Chemistry, Geosciences, or Physics or the equivalent and have an overall GPA of 3.00 in their undergraduate program; two recent (within last six months) letters of recommendation are required. General admission requirements can be found at the Application Procedures section of the Graduate Studies website (<http://www.fredonia.edu/gradstudies>). In general, students are expected to apply by January 15 to begin the program the next summer. The program is designed for students to take a sequence of courses starting one summer and

through to the end of the next summer. Some allowance, upon advisement, may be given for certain courses to be taken out of sequence or on a part time bases. Students will be admitted to the program based on the assessment of GPA and letters of recommendation by the Science Education Partnership (SEP) Graduate Committee. A transcript screen tool will be employed to determine content course deficiencies and requirements for any dual certifications or the general science 7-12 extension.

Admission to the Program

- B.S. degree in Biology, Chemistry, Earth Science, Physics, or equivalent; 3.00 GPA overall and in the discipline. Evaluation of transcript by the M.A.T. Coordinator to identify the certification area(s) and any deficiencies that must be addressed through further course work. Identified deficiencies will be outlined in a contract along with a timeline for their completion.
- Passage of the Content Specialty Test (CST) in the disciplinary area. If candidate has not taken/passed the CST, then candidate must pass exam and have results in hand during the fall semester. Students should see the following for links to certification examinations (http://www.nystce.nesinc.com/NY_viewSG_opener.asp).
- Evidence of completing the GRE general exam.
- Evaluation by the M.A.T. Coordinator of knowledge of research and investigation in science. Candidate must demonstrate knowledge in this area by one of the following four methods:
 1. Candidate has taken a graded course that addresses the competencies required:
 - a. Statement of research problem
 - b. Literature review
 - c. Experimental design
 - d. Data Collection and organization
 - e. Analysis and Interpretation of data
 - f. Final Conclusions
 - g. Discussion
 - h. Report

(For instance, Fredonia B.S. science majors often participate in undergraduate research experiences that gives them experiences that meet the knowledge of research competencies.)
 2. Candidate describes in detail ONE research project where all of the requirements (A-H above) were addressed. Candidate will provide evidence (e.g. a research report, notebook, published paper, etc.) in support of meeting this requirement.

3. If candidate's current occupation involves experiences that address the requirements (A-H above), then the candidate provides a narrative explaining how s/he has met those requirements. At least one writer of a letter of recommendation should address this explicitly in their reference letter.
4. If no experience/course meets this requirement then candidate will be required to take a research course/experience as part of their curriculum in the M.A.T.

Candidates in all education programs are required to demonstrate competence in a foreign language. This requirement must be satisfied in any one of the following ways:

- Score of 85 percent or higher on New York State Regents Exam or New York State High School Equivalent Exam*: Requirement is fulfilled.
- Scores of 65 percent - 84 percent on New York State Regents Exam or New York State High School Equivalent Exam*: Student needs to take an Elementary I level course or an Elementary II level course of a language or equivalent course(s), or successfully complete an equivalent Fredonia proficiency exam.
- Scores below 65 percent on New York State Regents Exam or New York State High School Equivalent Exam*: Student needs to take an Elementary I level course and an Elementary II level course or equivalent course(s) of the same language.
- If student did not take a New York State Regents Exam or New York State High School Equivalent Exam*: Student needs to take an Elementary I level course and an Elementary II level course or equivalent course(s) of the same language. Note: The General Education foreign language requirement differs from the certification requirement and must be satisfied for degree conferral.

* *High School Equivalent Exam refers to a New York State Local School District Exam or Regional Exam in a Foreign Language.*

TOTAL CREDIT HOURS: 45

APPLIED MATHEMATICS BACHELOR OF SCIENCE

REQUIREMENTS FOR THE BACHELOR OF SCIENCE DEGREE IN APPLIED MATHEMATICS

Applied Mathematics includes three tracks, all of which require the following Applied Mathematics Core:

CSIT 121	Computer Science I	3
MATH 122	University Calculus I	4

MATH 123	University Calculus II	4
MATH 210	Mathematical Structures and Proof	4
MATH 223	University Calculus III	4
MATH 224	Differential Equations	3
MATH 231	Linear Algebra	4
MATH 329	Mathematical Modeling	3
MATH 405	Senior Seminar	1
STAT 350	Probability and Statistics	3

Subtotal: 33

All mathematics majors must complete a science course and its laboratory selected from the following:

Chemistry:

CHEM 115	General Chemistry Lecture I and	3
CHEM 125	General Chemistry Laboratory I	1

Subtotal: 4

Physics:

PHYS 230	University Physics I and	4
PHYS 232	University Physics I Lab	1

Subtotal: 5

Applied Mathematics/Finance and Economics Track:

This track requires the Applied Mathematics Core (33 credit hours) and the following courses:

ACCT 201	Principles of Financial Accounting	3
ACCT 202	Principles of Managerial Accounting	3
ECON 201	Principles of Macroeconomics	3
ECON 202	Principles of Microeconomics	3
MATH 365	Financial Mathematics	3
	or	
MATH 369	Interest Theory	3
	One additional MATH or STAT course numbered 311 or higher	3

Subtotal: 18

Plus four courses chosen from the following as advised:

ACCT 250	Accounting Processes	3
ACCT 301	Intermediate Accounting I	3
ACCT 302	Intermediate Accounting II	3
ACCT 303	Cost Management	3
BUAD 320	Managerial Finance	3
BUAD 372	Financial Investments	3
BUAD 416	Portfolio Management	3
BUAD 417	Corporate Finance I	3
BUAD 418	Corporate Finance II	3
BUAD 472	International Finance	3
ECON 300	Statistical Analysis	3
ECON 305	Intermediate Microeconomic Theory	3
ECON 310	Intermediate Macroeconomic Theory	3

ECON 315	Money/Banking/Monetary Economics	3
ECON 350	Managerial Economics	3
ECON 400	Econometrics and Business Applications	3
ECON 410	Mathematical Economics	3
Subtotal: 12		

Applied Mathematics/Statistics Track:

This track requires the Applied Mathematics Core (33 credit hours), a minor in a field to which statistics or operations research can be applied, and the following courses:

STAT 355	Mathematical Statistics	3
Subtotal: 3		

Two of the following four courses:

MATH 359	Probability Models in Operations Research	3
STAT 351	Regression and Analysis of Variance	3
STAT 352	Categorical Data Analysis	3
STAT 408	Special Topics	3
Subtotal: 6		

NOTE: PLUS A MINOR.

Applied Mathematics/Physics Track:

The option requires the Applied Mathematics Core (33 credit hours) and the following courses:

PHYS 230	University Physics I	4
PHYS 231	University Physics II	4
PHYS 232	University Physics I Lab	1
PHYS 233	University Physics II Lab	1
PHYS 234	Modern Physics	4
PHYS 331	Theoretical Mechanics	3
or		
PHYS 333	Electricity and Magnetism	3
PHYS 425	Mathematical Physics I	3
PHYS 426	Mathematical Physics II	3
Two additional MATH or STAT courses numbered 311 or higher		6
Subtotal: 29		

Two MATH or STAT courses numbered 311 or higher: Cooperative Engineering students on the 3-2 plan may count PHYS 324 Circuit Analysis II as the 300 level elective.

Note: In satisfying the requirements of the above track, the student will earn a minor in Physics. This minor must be declared.

Mathematics majors are encouraged to take additional courses in computer science consistent with their career and educational goals.

Students may double major in Applied Mathematics and Mathematics, in Applied Mathematics and

Mathematics Adolescence Education, or in Applied Mathematics and Mathematics-Middle Childhood Education Specialist by completing all requirements for both majors.

Applied Professional Studies

The Department of Applied Professional Studies is housed within the School of Business.

Office: E336 Thompson Hall
(716) 673-4959

Reneta Barneva, Chairperson

Email: sport-exercise.studies@fredonia.edu

Website: <http://www.fredonia.edu/business/aps/>

The Department of Applied Professional Studies hosts two major undergraduate programs leading to baccalaureate degrees - Sport Management and Music Industry - as well as two minors - Athletic Coaching and Sport Management.

The programs emphasize on applied fields of study with a strong interdisciplinary component and practical experience. All of our students are required to take an internship.

Sport Management focuses on lifetime wellness, personal health and well-being. Wellness courses are offered to enhance the quality of life of students and to develop skills in physical activities that can be continued for a lifetime. Health enhancement courses such as "Stress Management, Fitness and Nutrition," and "Wellness and Health Promotion" encourage students to take an active responsibility in managing their health.

The Music Industry major is for students interested in a comprehensive exploration of the various facets of the music industry including: contracts, publishing (copyrights, dissemination of the intellectual property licensing, music books, exploitation of catalog), the record business (recording, artist management, licensing, record distribution), tour management, self-employment business basics, marketing, business and legal affairs, public relations, promotion, sales and distribution, merchandising, and artist relations and ethics in the music industry.

The department also offers a number of physical education courses such as aqua-aerobic, lifeguard training, yoga, zumba, body sculpturing, ice-skating, self-defense, and others, which introduce students to strength and weight training, body toning, power-lifting, agility, rhythmic movement, balance, and aerobic exercise.

The following programs are included within the Department of Applied Professional Studies:

- Sport Management Bachelor of Science (p. 224)
- Music Industry Bachelor of Science (p. 190)
- Minor in Athletic Coaching
- Minor in Sport Management

BILINGUAL EDUCATION CERTIFICATE OF ADVANCED STUDY (CAS)

Total Credit Hours for Program Completion: 18

This eighteen (18) credit hour program leads to a recommendation for an extension to a NYS base certificate in order to become a Bilingual Educator. The NYS required twelve (12) credit hours of Language other than English (LOTE) are in addition to the 18 credit hours listed below for program completion.

Requirements for Admission to the Program without Deficiencies

- Completion of a baccalaureate degree in an area of arts, science, or education
- Undergraduate GPA of 3.00 or above
- Evidence of having taken the GRE*
- Evidence of New York State DASA Training
- Current NYS Teaching Certificate (*other than ESOL*)
- Completed Graduate Application submitted to the Office of Graduate Studies including:
 - (a) two current (within six months) letters of recommendation which include contact information as the TESOL Program Coordinator has the option of contacting anyone who has submitted a letter on your behalf; and
 - (b) official academic transcripts from all prior undergraduate and graduate institutions (except SUNY Fredonia).
- Language Proficiency Requirements:
 - for Native Speakers of English:
 - A statement of your background and goals in addition to a resume (maximum 3 pages)
 - A graduate-level 800-1,200 word short essay in English which addresses the following question: “Describe your reasons for pursuing a graduate program in Bilingual Education and support your rationale with specific information pertinent to your desired degree.”
 - 12 post-secondary credit hours in a Language Other than English (LOTE), or an approved equivalency, in a single language. Candidates may be accepted conditionally into the Bilingual Education program without the LOTE credits fulfilled. Matriculation into the program is contingent upon the satisfactory completion of this requirement.
 - A satisfactory intermediate-level 800-1,200 word short essay in a language other than English (LOTE). Candidates may be accepted

conditionally into the Bilingual Education program without the LOTE essay. Matriculation into the program is contingent upon the satisfactory evaluation of this essay.

- for Non-Native Speakers of English:

- A statement of your background and goals in addition to a resume
- A graduate-level 800-1,200 word short essay in English which addresses the following question: “Describe your reasons for pursuing a graduate program in Bilingual Education and support your rationale with specific information pertinent to your desired degree.”
- A graduate level 800-1,200 word short essay in the candidate's native language. This can be any academic paper (e.g., a paper from a college course).
- Further stipulations as listed below under “Additional requirements for non-native speakers of English to the Bilingual Education program”

*It is possible to be conditionally accepted if GRE scores are pending.

Additional Requirements for Non-Native Speakers of English to the Bilingual Education Program (any aspect):

- a. The program requires that non-native speakers of English show evidence of English proficiency by providing scores which are different from those required of the Graduate College. Proof of proficiency may be shown by achieving the following test scores:
 - i. TOEFL: 550 (paper), 213 (computer), or 79 (internet)
 - ii. IELTS (with no subsection below 6.0): 6.5

Fredonia's school code for reporting the TOEFL and IELTS scores electronically is 2539. International students who have been awarded a prior degree from the U.S., U.K./Ireland, Australia, Anglophone Canada, New Zealand, Anglophone Africa, Singapore, and the Commonwealth Caribbean prior to applying to SUNY Fredonia are not required to submit TOEFL or IELTS.
- b. International applicants must provide official copies of all previous degrees/diplomas and transcripts issued in the original language with a literal English translation of each. Proof of an official certification of the award of any and all degrees must be provided. Include documentation describing in

which language the courses were taught. The latter can be included in a separate document as a chart or statement.

- c. International applicants must also have transcripts translated and evaluated by WES (www.wes.org) or a similar agency against the American 4.0 standard.

Additionally, all International applicants must meet the requirements outlined by the Graduate Studies website.

PROGRAM COMPLETION REQUIREMENTS

Required Courses

EDU 518	Second Language Acquisition and Development	3
EDU 540	Content Area English as a Second Language	3
EDU 541	Practicum in TESOL II	
EDU 555	Methods of Bilingual Education	3
EDU 567	Practicum in TESOL, III	
EDU 568	Foundations of Bilingual Education	3
EDU 569	Assessment and Evaluation of English Language Learners (ELLs)	3
EDU 674	Bilingual Education (BE) Practicum & Supervision- 20 Day	3

Subtotal: 18

As of December 31, 2013, candidates in all education programs are required to complete training under the Dignity for All Students Act (DASA). The training required under the Dignity for All Student Act (DASA) will be included in EDU 303 at Fredonia. Graduate candidates who may have completed EDU 303 on campus prior to Spring 2014 must complete the EDU DASA workshop prior to full admission.

BIOCHEMISTRY BACHELOR OF SCIENCE

Office: 311 Science Center
(716) 673-3287

Dr. Matthew A. Fountain, Chairperson

Email: biochemistry.program@fredonia.edu

Website: <http://home.fredonia.edu/biochemistry>

Biochemistry is at the core of modern science, enabling fundamental advances in medicine, agriculture, industry and basic science. Indeed, biochemists conduct some of the most exciting research in science, and careers in biochemistry rank among the highest on almost every published list of "Best Careers." Fredonia's Bachelor of Science degree program in Biochemistry is administered jointly by the Department of Biology and the Department of Chemistry and Biochemistry. With its emphasis on mastery of technical and analytical skills in biochemistry, Fredonia's program is designed to prepare students for graduate school, medical school, or careers in biochemical

research. It also provides a broad foundation in the liberal arts, enhancing graduates' abilities to meet challenges in a shifting social climate. Fredonia's program offers a unique flexibility in that students can choose between two tracks: one with a chemical emphasis for studying molecular structure and function, and one which enables students to apply a biochemical perspective to physiological problems. Course requirements of the degree program are listed below. Although not required, participation in undergraduate research in either biology or chemistry is encouraged.

Students who choose to double major in Biology and Biochemistry or Chemistry and Biochemistry must take the chemical track and biological track respectively. In addition, upper level electives cannot be counted for both majors. Students must earn a C- or higher in all Chemistry and Biology courses.

For course descriptions, students should see the listings under the appropriate departments; Biology and Chemistry.

REQUIREMENTS FOR THE BACHELOR OF SCIENCE DEGREE IN BIOCHEMISTRY (78-83 CREDIT HOURS)

Core Program (49 credit hours)

BIOL 131	Introductory Ecology and Evolution	3
BIOL 132	Introductory Ecology and Evolution Laboratory	1
BIOL 133	Introductory Cell and Molecular Biology	3
BIOL 134	Introductory Cell and Molecular Biology Laboratory	1
CHEM 115	General Chemistry Lecture I	3
CHEM 125	General Chemistry Laboratory I	1
CHEM 116	General Chemistry Lecture II	3
CHEM 126	General Chemistry Laboratory II	1
BIOL 237	Genetics	3
BIOL 238	Genetics Laboratory	1
CHEM 215	Organic Chemistry Lecture I	3
CHEM 225	Organic Chemistry Laboratory I	1
CHEM 216	Organic Chemistry Lecture II	3
CHEM 226	Organic Chemistry Laboratory II	1
	or	
CHEM 230	Advanced Organic Laboratory	1
BIOL 333	Biochemistry	3
BIOL 334	Biochemistry Laboratory	1
CHEM 317	Analytical Chemistry, Quantitative Analysis	3
CHEM 327	Analytical Chemistry I Laboratory	1
BIOL 397	Biochemistry Seminar I	1
CHEM 465	Advanced Experimental Biochemistry	2
CHEM 475	Advanced Biochemistry	3
CHEM 497	Biochemistry Seminar II	1

Subtotal: 43

Track I - Chemical Emphasis (32 credit hours)

MATH 122	University Calculus I	4
MATH 123	University Calculus II	4
PHYS 230	University Physics I	4
PHYS 232	University Physics I Lab	1
PHYS 231	University Physics II	4
PHYS 233	University Physics II Lab	1
CHEM 315	Introduction to Physical Chemistry	3
CHEM 325	Physical Chemistry Laboratory I	1
CHEM 316	Advanced Physical Chemistry	3
CHEM 326	Physical Chemistry Laboratory II	1
	Upper-Level Electives in Biology or Chemistry (approved by advisement)	6

Subtotal: 26**Track II - Biological Emphasis (29-34 credit hours)**

MATH 120	Survey of Calculus I	3
MATH 121	Survey of Calculus II	3
	or	
MATH 122	University Calculus I	4
MATH 123	University Calculus II	4
PHYS 121	College Physics I	3
PHYS 123	College Physics Lab I	1
	and	
PHYS 122	College Physics II	3
PHYS 124	College Physics II Lab	1
	or	
PHYS 230	University Physics I	4
PHYS 232	University Physics I Lab	1
	and	
PHYS 231	University Physics II	4
PHYS 233	University Physics II Lab	1
CHEM 318	Analytical Chemistry, Instrumental Analysis	3
BIOL 336	Mammalian Physiology	3
BIOL 337	Mammalian Physiology Lab	1
CHEM 315	Introduction to Physical Chemistry	3
	Upper-Level Electives in Biology or Chemistry (approved by advisement)	6

Subtotal: 30-32

NOTE: Three of the six approved upper-level electives must be Chemistry electives.

Approved Chemistry Electives

CHEM 318	Analytical Chemistry, Instrumental Analysis	3
CHEM 328	Analytical Chemistry II Laboratory	2
CHEM 391	Independent Lab Research	1-3
CHEM 407	Organometallics	3
CHEM 412	Advanced Organic Chemistry	3
CHEM 417	Polymer Chemistry	3
CHEM 462	Inorganic Chemistry	3
CHEM 473	Environmental Aquatic Chemistry	3

CHEM 481	Special Topics in Chemistry	1-3
Subtotal: 22-26		

NOTE: CHEM 481 must be approved by coordinator

Approved Biology Electives

BIOL 336	Mammalian Physiology	3
BIOL 338	Microbiology	3
BIOL 419	Genes and Genomes	3
BIOL 435	Developmental Biology	3
BIOL 440	Undergraduate Research	1-3
BIOL 443	Plant Physiology	3
	and	

Subtotal: 16-18**BIOL 450 - BIOL 451 Special topics courses:**

Molecular Basis for Disease
 Biomembranes
 Eukaryotic Gene Expression
 Hormone Mechanisms
 Microbial Genetics
 Radiation Biology

NOTE: No more than 3 credit hours of BIOL 440 or CHEM 391/CHEM 491 can be used to satisfy BIOL/CHEM electives.

TOTAL CREDIT HOURS: 137-145**Biology**

(See also Biology Adolescence Education (p. 14), Exercise Science (p. 119), Medical Technology (p. 148), Molecular Genetics (p. 178), and Pre-Medicine (p. 206))
 Office: 221 Science Center
 (716) 673-3282

Patricia Smith Astry, *Department Chairperson*

Email: biology@fredonia.edu

Website: <http://home.fredonia.edu/biology>

The Department of Biology offers a strong and flexible program designed to meet the career goals of students with widely varied interests. Graduates of the program are well prepared to enter graduate school in many areas of biological science, or professional programs (such as medical, dental, veterinary, physician's assistant, etc.), become research technicians, secondary school teachers, or enter direct employment. To meet these varied interests, the department offers a wide variety of courses ranging from the molecular or physiological aspects of biology to ecology, field and environmental biology. Students interested in pre-medicine, pre-veterinary and pre-dental programs are strongly urged to register with the Health Professions Advising Committee for individual advising about specific types of professional schools. The department is also involved with two combined degree programs leading to professional degrees in dentistry and optometry. Further details of these programs are listed under Pre-Medicine and Allied Areas.

The Department of Biology offers Bachelor of Science degrees in Biology (p. 32), Molecular Genetics (p. 178), Medical Technology (p. 148), Interdisciplinary Studies: Exercise Science (p. 119), and Biology Adolescence Education (p. 14), as well as Master of Science (p. 33) degree programs to students who have already obtained a B.S. in Biology. The department also participates in the Biochemistry (p. 30), Cooperative Engineering, and the Environmental Sciences (p. 118) programs. Some biology department faculty have been awarded the Chancellor's Award for Excellence in Teaching and the President's Award for Excellence in Teaching in recognition of their outstanding instructional activities and accomplishments.

The Department of Biology is particularly proud of its undergraduate research opportunities. Junior and senior undergraduate students have the opportunity to work closely with faculty members on original research projects (for example, see BIOL 440). Students annually present their research results at the university-wide Student Research and Creativity Exposition and at regional and national meetings. Students have been co-authors of papers published in scientific journals. A wide range of research projects is available in molecular or cellular biology, biochemistry, physiology, behavior, aquatic biology and ecology.

Summer Research Fellowships are sponsored in biology each summer. Each sophomore or junior awarded a prestigious fellowship will work on a specific project designed in collaboration with a faculty sponsor. The fellowships have been previously supported by the Constantine Barker Memorial Endowment, the Biology Endowment, the Holmberg Foundation, Merck/A.A.A.S. and the McNair Scholars program. Each award provides the student with a generous stipend and a supplies budget. For more information, interested students should contact a faculty sponsor in the department.

Each student will perform a capstone experience in their senior year. The experience can take the form of research, an internship or course, and will provide significant learning experiences in problem solving and written and oral communication.

Many students also enjoy the activities of the student-run Biology Club that invites all biology students to join them. The club organizes many activities including faculty seminars on graduate school applications, careers in the Biological Sciences, and participating in undergraduate research, as well as social activities.

Biology Honors Program

This program provides talented Biology department majors the opportunity to perform research at the graduate level. Honors students will perform a minimum of two semesters of research, produce a formal thesis and offer a lecture to the campus and a private thesis defense to the faculty. Honors students will be recognized with a biology cord at graduation and the statement, Honors Biology Major on

the student's transcript. The program is open to Biology students of sophomore standing or higher who have maintained a 3.5 GPA in stipulated courses.

Requirements for Transfer Credit

The degrees offered by the biology department require that students complete between 37 and 60 credit hours of biology core and elective courses (Biology and Adolescence Education, 37 credits; Molecular Genetics, 40 credits; Medical Technology 60 credits) chosen under the careful process of advisement. Students are expected to complete at least half of the biology courses at Fredonia. Additional credit hours transferred may be used as general electives toward graduation.

Students wishing to minor in Biology must complete at least 9 credit hours of biology courses at Fredonia. As a rule the department will not accept as equivalent for upper level courses credit earned at two-year colleges.

Biology Graduate Program

Office: 221 Science Center
(716) 673-3282

Dr. Patricia Smith Astry, *Department Chairperson*

Dr. Karry Kazial, *Graduate Coordinator*

Email: biology@fredonia.edu

Website: <http://home.fredonia.edu/biology/grad>

The Department of Biology offers the Master of Science degree in Biology. Students interested in graduate teaching assistantships should indicate their interest on the Graduate Application and apply in writing to the department chairperson. Faculty research interests include developmental biology, microbiology, molecular biology, animal behavior, terrestrial ecology, trophic interactions, fisheries, physiological ecology, animal physiology, and cell membrane biochemistry. Students completing the M.S. degree at Fredonia often go on to Ph.D. programs at major research universities or obtain positions in industry or government.

BIOLOGY BACHELOR OF SCIENCE

REQUIREMENTS FOR THE BACHELOR OF SCIENCE DEGREE IN BIOLOGY

Core Program (36-42 credit hours)

BIOL 131	Introductory Ecology and Evolution	3
BIOL 132	Introductory Ecology and Evolution Laboratory	1
BIOL 133	Introductory Cell and Molecular Biology	3
BIOL 134	Introductory Cell and Molecular Biology Laboratory	1
BIOL 237	Genetics	3
BIOL 238	Genetics Laboratory	1
BIOL 243	Organismal Biology	3

BIOL 244	Organismal Biology Laboratory	1
BIOL 330	Ecology	3
BIOL 331	Ecology Laboratory	1
BIOL 333	Biochemistry	3
BIOL 334	Biochemistry Laboratory	1
BIOL 491	Senior Capstone - Research	1-6
	or	
BIOL 492	Senior Capstone - Internship	1-6
	or	
BIOL 493	Senior Capstone - Course	0-6
	Twelve additional credit hours of	12
	300-400 level Biology electives,	
	including one upper level course	
	from the following biological sub-	
	disciplines: Cell/Molecular	
	Biology; Organismal Biology;	
	Ecology.	

Subtotal: 36-42**Required supporting course work (27 credit hours):**

CHEM 115	General Chemistry Lecture I	3
CHEM 125	General Chemistry Laboratory I	1
	and	
CHEM 116	General Chemistry Lecture II	3
CHEM 126	General Chemistry Laboratory II	1
CHEM 215	Organic Chemistry Lecture I	3
CHEM 225	Organic Chemistry Laboratory I	1
	and	
CHEM 216	Organic Chemistry Lecture II	3
CHEM 226	Organic Chemistry Laboratory II	1
STAT 250	Statistics for Scientists	3
PHYS 121	College Physics I	3
PHYS 123	College Physics Lab I	1
	and	
PHYS 122	College Physics II	3
PHYS 124	College Physics II Lab	1
	or	
PHYS 230	University Physics I	4
PHYS 232	University Physics I Lab	1
	and	
PHYS 231	University Physics II	4
PHYS 233	University Physics II Lab	1

Subtotal: 27

NOTE: One (1)-credit laboratory work normally includes three clock hours in laboratory per week.

TOTAL CREDIT HOURS: 63-69**BIOLOGY MASTER OF SCIENCE****Departmental Requirements for Admission to the Program without Deficiencies**

Applicants should have completed an undergraduate degree in the Life Sciences earning a 3.0 grade point average (on a 4.0 scale) or above and

demonstrate the requisite evidence of training and the motivation necessary to succeed in graduate study. Supporting science background includes physics, statistics or calculus, and organic chemistry.

At least two current (within the last 6 months) letters of recommendation from individuals qualified to assess the applicant's academic background in Life Sciences is required.

Program Requirements

The Master of Science degree has both a thesis option program and a non-thesis option. Appropriate courses are chosen after consultation with the student's advisor and graduate committee. For Thesis students, the Department of Biology recommends in-depth study in the student's thesis area. For Non-Thesis students, the Department of Biology recommends broad training in biology including cell and molecular, ecology and evolution, organismal and population biology coursework.

A. Thesis Option

A minimum of 30 semester hours is required, as follows:

Seminar (three semesters)
Biology courses (at least 21 credit hours)
Written Proposal and Proposal Defense
Thesis Research
Written Thesis and Thesis Defense

Total Credit Hours for Program Completion: 30**B. Non-Thesis Option**

A minimum of 30 semester hours is required, as follows:

Seminar (three semesters)
Biology courses*
Electives (any department)
Final Comprehensive Exam

Total Credit Hours for Program Completion: 30

NOTE: *BIOL 690-BIOL 691 may not be used toward the Non-Thesis Option.

Business, School of

Office: Maytum Hall 709
(716) 673-4813

Dr. Russell P. Boisjoly, *Founding Dean of the School of Business*

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Website: <http://home.fredonia.edu/business>

Department of Applied Professional Studies

Office: Thompson Hall E336D
(716) 673-4959

Dr. Reneta Barneva, *Chair*

Department of Business Administration

Office: Thompson Hall E336B

(716) 673-3505

Dr. Mojtaba Seyedian, Chair

Department of Economics

Office: Thompson Hall E336E

(716) 673-3509

Dr. Peter Reinelt, Chair

The School of Business includes three departments: Department of Business Administration which offers undergraduate degrees in Accounting (p. 13), Public Accountancy (p. 212), Finance (p. 36), Management (p. 37), and Marketing (p. 37); Department of Applied Professional Studies which offers undergraduate degrees in Music Industry (p. 190) and Sport Management (p. 224); and the Department of Economics which offers a B.S. in Economics (p. 64).

The Mission of the School of Business has five elements. They are:

In consonance with the Mission (p. 8) and Baccalaureate Goals (p. 247) of the University, the faculty and stakeholders of the School of Business at the State University of New York at Fredonia declare the following:

Our mission is to integrate excellence in instruction, relevant faculty scholarship, and proactive community service to prepare students from differing backgrounds to be successful, ethical, and globally aware business professionals. We accomplish this mission by:

- Providing students with high quality educational opportunities by engaging them with faculty, local business, regional community, and university organizations.
- Continuously improving a challenging curriculum through ongoing outcomes assessments.
- Supporting scholarly, professional, and pedagogical research that sustains intellectual vitality and enriches student learning.
- Providing collaborative research efforts with the more capable students so as to develop their latent talents and advance their career opportunities.
- Providing the region, university, and broader professional community with the expertise that further strengthens the academic currency of the Faculty, and that adds value to these communities.

In support of this mission, the curriculum in the Business School's majors of accounting, finance, management, and marketing will include strong components in critical thinking, oral and written communication, ethical awareness, leadership, and international awareness. Each of these skill areas are assessed and are part of our continuous improvement program.

The School of Business Department of Business

Administration currently is a candidate for accreditation by the Association to Advance Collegiate Schools of Business (AACSB)- International. AACSB candidacy involves only Accounting, Public Accountancy, Finance, Management, and Marketing degree programs.

Business Administration

Office: E336 Thompson Hall

(716) 673-3505

Dr. Mojtaba Seyedian, ChairpersonEmail: business.administration@fredonia.edu

Website:

<http://www.fredonia.edu/business/businessadministration/>

The Department of Business Administration provides its majors with a contemporary, quality education in Accounting and Business Administration. The students in the department gain an awareness of their individual strengths and vocational interests in order to make appropriate career decisions. The department offers a rigorous, up-to-date curriculum that prepares students for imaginative and responsible citizenship and for domestic and international leadership roles in business management. While the programs offered are career-oriented, the department realizes that successful business professionals must bring a broad and varied perspective to their crafts. Accordingly, the department requires that its majors take at least 66 of the total credit hours needed for a degree outside the department, with particular emphasis given to the development of written and oral communication skills and the acquisition of the ability to think creatively and critically.

The following programs are included within the Department of Business Administration:

- Accounting Bachelor of Science (p. 13) (120-Hour Program)
- Public Accountancy Bachelor of Science (p. 212) (150-Hour CPA Program)
- Business Administration – Finance Bachelor of Science (p. 36)
- Business Administration – Management Bachelor of Science (p. 37)
- Business Administration – Marketing Bachelor of Science (p. 37)
- Entrepreneurial Studies Certificate (p. 36)
- Accounting minor (p. 151)
- Business Administration minor (p. 155)
- Accelerated Master of Business Administration

Career Options

The department's programs are designed to provide the knowledge and skills required for success in the job market and in graduate programs. Students who major in Business Administration are prepared for a cross-section of opportunities. Recent graduates have embarked on careers with small businesses, large corporations, and public entities. The banking and investment fields have interested many graduates. Others have entered fields such as sales promotion and personnel management.

The 120- credit hour Accounting program prepares students for the Certified Management Accountant examination (CMA). The 150-credit hour program qualifies graduates to take both the CMA and CPA (Certified Public Accounting) examinations. There are three major areas of employment for accounting graduates. Public accounting firms provide clients with a wide variety of services, including auditing and tax consulting. Management accountants are employed by companies to perform various activities such as cost accounting and budgeting. Governmental accountants have the responsibility to monitor the revenues and expenditures of the public sector.

Student Clubs and Activities

Students majoring in Business Administration or Accounting can participate in a number of clubs and activities that are designed to supplement classroom work. The student clubs include the National Honor Society in Business Administration, Delta Mu Delta; the Business Club; the Financial Management Association; the American Marketing Association; the Financial Management Association National Honor Society; the Enactus; the American Society for Quality; and the Accounting Society. Moreover, students are always encouraged to actively participate in the affairs of the department through serving on various committees, being a member of the Chair's Student Council, and attending departmental functions.

Delta Mu Delta and the Financial Management Association National Honor Society honor students who meet high scholarship standards and who perform important community service. The Business Club conducts various entrepreneurial activities and organizes the annual "Business Person of the Year Award" banquet, honoring an outstanding community business leader. The American Society for Quality tours manufacturing plants and holds educational workshops. The Enactus Team competes in national academic competitions, offers consulting services to regional businesses, and conducts a wide variety of important community service.

The Accounting Society conducts the Volunteer Income Tax Assistance Program under the auspices of the Internal Revenue Service, and brings professional guest speakers to campus to offer career development information. Students in the Financial Management Association play the stock

market through simulation games and attend the Redefining Investment Strategy Education Conference every April. The American Marketing Association conducts various fundraising activities to finance their annual trip to the AMA International Collegiate Conference.

Internship Opportunities

In addition to its regular course offerings, the department has an active internship program. Internships are work experiences for which students receive academic credit. Having an internship experience is a graduation requirement for students majoring in Business Administration, Accounting, and Public Accountancy. Out of the minimum 120 credits needed for a B.S. degree, interested students are allowed up to 24 credits of internship. The department offers many internship opportunities with various local and regional firms and organizations such as Fredonia Technology Incubator, Key Bank, Buffalo Sabres, Paychex, Inc., Chautauqua Institute, Disney World, Dresser Rand, Freed Maxick, LLC, and United Way.

Honors and Awards

Students who excel in their studies are eligible for recognition through membership in the campus chapters of Delta Mu Delta and Financial Management Association national honor societies. Initiation is competitive and highly selective. In addition to these honor societies, each year the faculty presents a number of awards/scholarships to students for outstanding scholastic and/or extra-curricular achievements:

- the M. R. Poummit Achievement Award to the graduating senior with the highest grade point average;
- the New York State Society of CPAs Awards, given to outstanding students in accounting;
- the Donald C. Brandt Memorial Scholarship to an outstanding sophomore;
- the Students In Free Enterprise Scholarships to outstanding Enactus members;
- the Alumni Scholarships, given to students with outstanding records of academic achievements;
- the Franklin B. Krohn Memorial Scholarship to a junior with outstanding academic and extra-curricular accomplishments;
- the Stephen and Carol (Eck) Ward Scholarship, given to a student with an outstanding record of scholastic and extra-curricular achievements;
- the Bennett Accounting Scholarship to an outstanding junior-level transfer student majoring in accounting;
- the Morris and Marian Poumitt Scholarship, given to an outstanding freshman, sophomore, or junior;

- the Gary M. Tripp Memorial Scholarship to a junior finance major with outstanding scholastics;
- the Mancuso Family Scholarship, given to an outstanding local student majoring in finance;
- the Business Club Scholarship to an outstanding Business Club member; and
- the Morton and Barbara Cherney Scholarship, given to a junior with a high grade point average in the major courses.

ACCELERATED MASTER OF BUSINESS ADMINISTRATION DEGREE

The department has several formal agreements with other universities that allow students to matriculate into accelerated B.S./M.B.A. programs. All such agreements reduce by one the number of years it takes a full-time student to complete a B.S. and M.B.A. The department has 4+1 arrangements, involving four years of study at Fredonia and one at the other school, with Alfred University, Canisius College, Clarkson University, Long Island University, Niagara University, Rochester Institute of Technology, St. Bonaventure University, and Syracuse University. Students who are interested in any of these accelerated programs should see their academic advisor early in their junior year.

ENTREPRENEURIAL STUDIES CERTIFICATE

As an option to students majoring in any degree program, the department awards the Certificate in Entrepreneurial Studies upon completion of the following courses:

Required Courses:

BUAD 335	Business Consulting	3
BUAD 354	Entrepreneurship	3
BUAD 374	Small Business Finance	3

Subtotal: 9

TOTAL CREDIT HOURS: 9

BUSINESS ADMINISTRATION: FINANCE BACHELOR OF SCIENCE

REQUIREMENTS FOR THE BACHELOR OF SCIENCE DEGREE IN BUSINESS ADMINISTRATION - FINANCE (58 CREDIT HOURS)

A. General Course Requirements (45 credit hours):

Supporting Courses:

MATH 120	Survey of Calculus I and	3
CSIT 104	Introduction to Microcomputer Software	3

CSIT 151	or Introduction to Information Systems and	3
CSIT 251	Information Systems Structures	3
		Subtotal: 9

Lower Level Business Core Courses:

ECON 200	Fundamentals of Statistics for Business Administration and Economics	3
ACCT 201	Principles of Financial Accounting	3
ACCT 202	Principles of Managerial Accounting	3
ECON 201	Principles of Macroeconomics	3
ECON 202	Principles of Microeconomics	3

Subtotal: 15

Upper Level Business Core Courses:

BUAD 300	Statistical Analysis	3
BUAD 310	Legal Environment of Business or	3
ACCT 311	Business Law I	3
BUAD 320	Managerial Finance	3
BUAD 323	Organizational Behavior	3
BUAD 327	Operations Management I	3
BUAD 328	Marketing Foundations	3
BUAD 499	Strategic Management	3

Subtotal: 21

B. Major Course Requirements for Finance

Concentration (13 credit hours):

BUAD 372	Financial Investments	3
BUAD 417	Corporate Finance I and	3
BUAD 416	Portfolio Management or	3
BUAD 418	Corporate Finance II or	3
BUAD 474	Financial Intermediaries Management and	3
BUAD 480	Internship	1-9

Subtotal: 10

NOTE: BUAD 480 is a variable 1-9 credit course. Students need to complete the course for at least one credit to satisfy the degree requirements.

Plus 3 credit hours from the following:

BUAD 315	Principles of Business Finance	3
ECON 315	Money/Banking/Monetary Economics	3
BUAD 374	Small Business Finance	3
BUAD 378	Business and Ethics	3
BUAD 416	Portfolio Management	3
BUAD 472	International Finance	3

Subtotal: 3

C. All Business Administration majors must complete at least 66 credit hours of non-ACCT/BUAD prefixed courses.

D. All Business Administration majors must complete every one of the Supporting Courses, Lower Level Business Core Courses, Upper Level Business Core Courses, and Major Specific Courses with a minimum grade of C-.

E. All Business Administration majors are allowed to repeat a failed major course no more than two times.

TOTAL CREDIT HOURS: 58

BUSINESS ADMINISTRATION: MANAGEMENT BACHELOR OF SCIENCE

REQUIREMENTS FOR THE BACHELOR OF SCIENCE DEGREE IN BUSINESS ADMINISTRATION - MANAGEMENT (58 CREDIT HOURS)

A. General Course Requirements (45 credit hours):

Supporting Courses:

MATH 120	Survey of Calculus I and	3
CSIT 104	Introduction to Microcomputer Software or	3
CSIT 151	Introduction to Information Systems and	3
CSIT 251	Information Systems Structures	3
Subtotal: 9		

Lower Level Business Core Courses:

ECON 200	Fundamentals of Statistics for Business Administration and Economics	3
ACCT 201	Principles of Financial Accounting	3
ACCT 202	Principles of Managerial Accounting	3
ECON 201	Principles of Macroeconomics	3
ECON 202	Principles of Microeconomics	3
Subtotal: 15		

Upper Level Business Core Courses:

BUAD 300	Statistical Analysis and	3
BUAD 310	Legal Environment of Business or	3
ACCT 311	Business Law I and	3
BUAD 320	Managerial Finance	3
BUAD 323	Organizational Behavior	3
BUAD 327	Operations Management I	3
BUAD 328	Marketing Foundations	3

BUAD 499	Strategic Management	3
Subtotal: 21		

B. Major Course Requirements (13 credit hours)

Management Concentration Requirements:

BUAD 330	Human Resource Management	3
BUAD 427	Operations Management II	3
BUAD 480	Internship	1-9
Subtotal: 7		

NOTE: BUAD 480 is a variable 1-9 credit course. Students need to complete the course for at least one credit to satisfy the degree requirements.

Plus 6 more credit hours from the following:

BUAD 321	Management and Organizational Behavior	3
BUAD 335	Business Consulting	3
BUAD 354	Entrepreneurship	3
BUAD 378	Business and Ethics	3
BUAD 417	Corporate Finance I	3
BUAD 450	Senior Seminar	1-3
Subtotal: 6		

NOTE: BUAD 450 is a variable 1-3 credit hour course. Students need to complete the course for at least three credits to satisfy the degree requirements.

C. All Business Administration majors must complete at least 66 credit hours of non-ACCT/BUAD prefixed courses

D. All Business Administration majors must complete every one of the Supporting Courses, Lower Level Business Core Courses, Upper Level Business Core Courses, and Major Specific Courses with a minimum grade of C-.

E. All Business Administration majors are allowed to repeat a failed major course no more than two times

Individualized Specialization: With the approval of his or her advisor and the chair of the department, a student may develop his or her own specialization in lieu of the above specific major. Such specializations must consist of (as listed above) the Supporting Courses, the Lower Level Business Core, the Upper Level Business Core, and at least five additional upper-level courses in a cohesive subject-area germane to business. Currently popular individualized specializations include but are not limited to Sport Management, Pharmaceutical Sales, Corporate Law, and International Business. Other specializations are possible and encouraged as long as they satisfy the department's conditions for rigor and substance.

TOTAL CREDIT: 58

BUSINESS ADMINISTRATION: MARKETING BACHELOR OF SCIENCE

REQUIREMENTS FOR THE BACHELOR OF SCIENCE DEGREE IN BUSINESS ADMINISTRATION - MARKETING (58 CREDIT HOURS)

A. General Course Requirements (45 credit hours)

Supporting Courses:

MATH 120	Survey of Calculus I and	3
CSIT 104	Introduction to Microcomputer Software	3
CSIT 151	or Introduction to Information Systems and	3
CSIT 251	Information Systems Structures	3
Subtotal: 9		

Lower Level Business Core Courses:

ECON 200	Fundamentals of Statistics for Business Administration and Economics	3
ACCT 201	Principles of Financial Accounting	3
ACCT 202	Principles of Managerial Accounting	3
ECON 201	Principles of Macroeconomics	3
ECON 202	Principles of Microeconomics	3
Subtotal: 15		

Upper Level Business Core Courses:

BUAD 300	Statistical Analysis	3
BUAD 310	Legal Environment of Business or	3
ACCT 311	Business Law I	3
BUAD 320	Managerial Finance	3
BUAD 323	Organizational Behavior	3
BUAD 327	Operations Management I	3
BUAD 328	Marketing Foundations	3
BUAD 499	Strategic Management	3
Subtotal: 21		

B. Major Course Requirements for Marketing

Concentration (13 credit hours)

BUAD 340	Marketing Research	3
BUAD 342	Consumer Behavior	3
BUAD 411	Marketing Management	3
BUAD 445	Integrated Marketing Communications	3
BUAD 480	Internship	1-9
Subtotal: 13		

NOTE: BUAD 480 is a variable, 1-9 credit hour course. Students need to complete the course for at least one credit to satisfy the degree requirements.

C. All Business Administration majors must complete at least 66 credit hours of non-ACCT/BUAD prefixed courses.

D. All Business Administration majors must complete every one of the Supporting Courses, Lower Level Business Core Courses, Upper Level Business Core Courses, and Major Specific Courses with a minimum grade of C-.

E. All Business Administration majors are allowed to repeat a failed major course no more than two times.

Total Credit Hours: 58

Chemistry and Biochemistry

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Email: chemistry.department@fredonia.edu

Website: <http://home.fredonia.edu/chemistry>

The goals of the Department of Chemistry and Biochemistry are to prepare its majors for advanced study in chemistry, chemical engineering, related disciplines or professional programs; or careers in industrial, environmental, and governmental laboratories; or for careers in teaching. The department strongly believes in the value of rigorous course work combined with practical experience. Thus, students spend much of their time in the department participating in undergraduate research; this has led to an informal atmosphere with considerable student-faculty interaction. Often the results of such research are presented at conferences or published in chemistry journals. The Chemistry Club is very active and includes in its activities an outreach program to local schools. Departmental honors and scholarships include the Kaminski, Moos, Keller, Thumm, Marletta, Costanza, Maytum, Supple, Borriello, and Dingley awards. The department offers two tracks, each leading to a B.S. in Chemistry degree. Track I, the Standard Major, is often chosen by students having second majors or minors in related disciplines. Track II satisfies the curriculum requirements of the American Chemical Society (A.C.S.) and is recommended for students interested in graduate or professional schools. Each track requires the completion of a Core Program plus additional course work. The Department of Chemistry and Biochemistry also administers a major in Biochemistry.

Grading Standards: A minimum C- grade is necessary for all required chemistry courses counted toward the major or minor; a collective minimum 2.00 grade point average is necessary for all required mathematics/computer science, and physics courses.

Prerequisites/Co-requisites for Laboratory Courses:

Laboratory and lecture courses are separately enrolled and graded. As a result, there are some general requirements

for laboratory courses: (1) CHEM 126 or CHEM 130 is a prerequisite for any laboratory course at a higher level; (2) for all laboratory courses the corresponding lecture course is a pre- or co-requisite; (3) if a student drops or withdraws from a lecture course, he/she may be required to withdraw from the corresponding laboratory course.

Cooperative Engineering: The Department of Chemistry and Biochemistry participates in the Cooperative Engineering program. For more information on the Cooperative Engineering program, please consult the Cooperative Engineering section of the catalog.

B.S. degree in Geochemistry, an interdisciplinary program with the Geosciences department: For more information on the Geochemistry program, please consult the Geosciences section (p. 107) of the catalog.

Teacher Certification: Students wishing to teach chemistry in the secondary schools can obtain provisional certification by completing either of the tracks described below and the required courses in Professional Education. The procedure to be followed for admission to the professional sequence of courses is described in the Education section (p. 64) of the catalog.

Candidates in all education programs are required to demonstrate competence in a foreign language. This requirement must be satisfied in any one of the following ways:

- Score of 85 percent or higher on New York State Regents Exam or New York State High School Equivalent Exam*: Requirement is fulfilled.
- Scores of 65 percent - 84 percent on New York State Regents Exam or New York State High School Equivalent Exam*: Student needs to take an Elementary I level course or an Elementary II level course of a language or equivalent course(s), or successfully complete an equivalent Fredonia proficiency exam.
- Scores below 65 percent on New York State Regents Exam or New York State High School Equivalent Exam*: Student needs to take an Elementary I level course and an Elementary II level course or equivalent course(s) of the same language.
- If student did not take a New York State Regents Exam or New York State High School Equivalent Exam*: Student needs to take an Elementary I level course and an Elementary II level course or equivalent course(s) of the same language

NOTE: The General Education foreign language requirement differs from the certification requirement and must be satisfied for degree conferral.

* High School Equivalent Exam refers to a New York State Local School District Exam or Regional Exam in a Foreign Language.

As of December 31, 2013, candidates in all education programs are required to complete training under the Dignity for All Students Act (DASA). Beginning in the Fall 2013 semester, the training required under the Dignity for All Student Act (DASA) will be included in EDU 303 at Fredonia. Undergraduate candidates planning to graduate after Fall 2013 who have already completed EDU 303 on campus or taken a workshop as a substitution for EDU 303 must also complete the EDU DASA workshop prior to graduation.

A.C.S. Approved Track: The curriculum for the A.C.S. Approved Track is reviewed annually by the A.C.S. Committee on Professional Training. If, because of this review, it becomes necessary to modify the curriculum requirements, revisions will be on file with both the Dean of the College of Liberal Arts and Sciences, and the Provost and Vice President for Academic Affairs. Such revisions would be in effect for students who had completed less than 60 credit hours at the time of the revision.

Other programs of interest: Prospective students who are interested in working with environmental science-related fields should check the Interdisciplinary Studies - Environmental Science program in the catalog. Students who are interested in the interdisciplinary Environmental Studies minor should check the Interdisciplinary Studies section of the catalog. Students who have a Bachelor's degree in Chemistry and are interested in becoming a high school Chemistry teacher might wish to examine the Adolescence Science Education Master of Arts in Teaching (MAT) (p. 25).

Chemistry/Biochemistry (Chemistry Track) Honors Program

This program provides talented majors significant research experience that cumulates in a senior thesis and a presentation at an external conference. Our Honor Students will be recognized with a chemistry cord at graduation and the statement, Honors Chemistry Major (or Honors Biochemistry Major) on the student's transcript. This program is open to all Chemistry and Biochemistry (Chemical Track) majors who maintain a GPA of 3.3 and complete the research requirement of the program. Students are invited into the program in their sophomore year.

CHEMISTRY BACHELOR OF SCIENCE

REQUIREMENTS FOR THE BACHELOR OF SCIENCE DEGREE IN CHEMISTRY

Core Program (36 credit hours in chemistry):

CHEM 115	General Chemistry Lecture I	3
CHEM 116	General Chemistry Lecture II	3
CHEM 125	General Chemistry Laboratory I	1
CHEM 126	General Chemistry Laboratory II	1

	or		
CHEM 130	Honors General Chemistry Laboratory	1	
CHEM 215	Organic Chemistry Lecture I	3	
CHEM 225	Organic Chemistry Laboratory I	1	
CHEM 216	Organic Chemistry Lecture II	3	
CHEM 226	Organic Chemistry Laboratory II	1	
	or		
CHEM 230	Advanced Organic Laboratory	1	
CHEM 315	Introduction to Physical Chemistry	3	
CHEM 316	Advanced Physical Chemistry	3	
CHEM 317	Analytical Chemistry, Quantitative Analysis	3	
CHEM 318	Analytical Chemistry, Instrumental Analysis	3	
CHEM 325	Physical Chemistry Laboratory I	1	
CHEM 326	Physical Chemistry Laboratory II	1	
CHEM 327	Analytical Chemistry I Laboratory	1	
CHEM 328	Analytical Chemistry II Laboratory	2	
CHEM 462	Inorganic Chemistry	3	
CHEM 495	Seminar: Advances in Chemistry	1	
CHEM 496	Seminar: Advances in Chemistry	1	

Subtotal: 38**Plus Related Disciplines (16 credit hours):**

PHYS 230	University Physics I	4	
PHYS 232	University Physics I Lab	1	
PHYS 231	University Physics II	4	
PHYS 233	University Physics II Lab	1	
MATH 122	University Calculus I	4	
MATH 123	University Calculus II	4	

Subtotal: 18**Additional Requirements - Track I (Standard Major)**

	Independent Lab research	3	
	or		
CHEM 4XX	Advanced lecture elective (400 level)	3	

Subtotal: 3**Additional Requirements - Track II (A.C.S. Approved Major)**

BIOL 333	Biochemistry	3	
	or		
CHEM 333	Biochemistry	3	
	Independent Lab research	3	

Subtotal: 6**ACS-certified graduates must have at least one of the following lab courses:**

CHEM 472	Inorganic Chemistry Laboratory	1	
	or		
CHEM 334	Biochemistry Laboratory	1	
	or		
CHEM 465	Advanced Experimental Biochemistry	2	

Subtotal: 1-2**TOTAL CREDIT HOURS: 66-67****Chemistry Graduate Program****(Note: This program is currently not accepting students.)**Office: 221 Science Center
(716) 673-3281**Thomas S. Janik**, *Chairperson***Holly J. Lawson**, *Graduate Coordinator*

Email: chemistry.department@fredonia.edu

Website: <http://home.fredonia.edu/chemistry>

The Department of Chemistry currently offers a research-based degree, the Master of Science in Chemistry.

Master of Science: Chemistry**Requirements for Admission to the Program without Deficiencies:**

An undergraduate major in Chemistry with courses equivalent to those required for a Bachelor of Science degree in Chemistry at Fredonia.

Program Requirements

A minimum of 30 semester hours as follows:

- Graduate-level courses in chemistry, which can include up to 12 credit hours in courses from related fields (e.g., biology, geosciences, mathematics, and physics). Must be approved in advance by the advisor and the Graduate Study Committee in the Department of Chemistry.
- Research course sequence
- Research Proposal
- Seminar (One seminar/year is expected)
- Written Thesis
- Final Comprehensive Oral Examination

Total Credit Hours for Program Completion: 30

For certification information, see Graduate Certification Information (p. 279).

**CHILDHOOD EDUCATION (GRADES 1-6)
BACHELOR OF SCIENCE IN EDUCATION****Department of Curriculum and Instruction**Office: E268 Thompson Hall
(716) 673-3701**Robert L. Dahlgren**, *Chairperson*

Email: ci@fredonia.edu

Website: <https://home.fredonia.edu/coe/ci>

The Bachelor of Science in Education in Childhood Education prepares teacher candidates for certification in Childhood Education (Grades 1 to 6).

PROGRAM REQUIREMENTS:

Required Courses

EDU 105	Introduction to Contemporary Inclusive Education	3
EDU 106	Practicum in Inclusive Education I	
EDU 225	Child Development	3
EDU 250	Introduction to the Exceptional Learner	3
EDU 251	Practicum in Inclusive Education II	
EDU 276	Literacy and Technology in Inclusive Educational Settings	3
EDU 295	Introduction to Educational Assessment	3
EDU 305	Cultural and Linguistic Diversity in the Classroom	3
EDU 313	Practicum in Inclusive Education III	
EDU 349	Educational Psychology	3
EDU 301	Safe Schools/Healthy Students: Child Abuse and Child Abduction	1
EDU 302	Safe Schools/Healthy Students: Alcohol, Tobacco and Other Drug Abuse	1
EDU 303	Safe Schools/Healthy Students-DASA: Safety Education/Fire and Arson/School Violence	1
MAED 301	Mathematics for School Teachers I	3
MAED 302	Mathematics for School Teachers II	3
SCI 301	Essential Science I	3
SCI 302	Essential Science Lab	1
SCI 303	Essential Science II	3

Subtotal: 37

EDU 105, EDU 250, and EDU 305: courses that have a field experience component

*EDU 295 - Effective Fall 2014, course required for ALL incoming students. Course available in Spring 2015 for education majors with sophomore level standing.

Grades of "B" or better in EDU 105 and EDU 225 are required for all students entering this major in Fall 2015 or later. Please note that "B-" is not an adequate grade. Click here (p. 65) for more information.

Transfer students should consult with their academic advisor regarding Natural Science requirements.

Methods of Instruction:

EDU 402	Teaching Mathematics in Inclusive Educational Settings	3
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EDU 403	Teaching Science in Inclusive Educational Settings	3
EDU 404	Teaching Social Studies in Inclusive Educational Settings	3
EDU 405	Teaching Literacy in Inclusive Educational Settings	3
EDU 406	Literacy and Assessment in Inclusive Educational Settings	3

Subtotal: 15

Capstone Experience – Student Teaching:

EDU 416	Capstone Seminar - Advanced Study in Classroom Organization, Management, and Instruction	3
EDU 420	Student Teaching in the Elementary School - Primary	6
EDU 422	Student Teaching in the Elementary School - Intermediate	6

Subtotal: 15

Plus Foreign Language Requirement:

Candidates in all education programs are required to demonstrate competence in a foreign language. This requirement must be satisfied in any one of the following ways:

- Score of 85 percent or higher on New York State Regents Exam or New York State High School Equivalent Exam*: Requirement is fulfilled.
- Scores of 65 percent - 84 percent on New York State Regents Exam or New York State High School Equivalent Exam*: Student needs to take an Elementary I level course or an Elementary II level course of a language or equivalent course(s), or successfully complete an equivalent Fredonia proficiency exam.
- Scores below 65 percent on New York State Regents Exam or New York State High School Equivalent Exam*: Student needs to take an Elementary I level course and an Elementary II level course or equivalent course(s) of the same language.
- If student did not take a New York State Regents Exam or New York State High School Equivalent Exam*: Student needs to take an Elementary I level course and an Elementary II level course or equivalent course(s) of the same language.
- Note: The General Education foreign language requirement differs from the certification requirement and must be satisfied for degree conferral.
* *High School Equivalent Exam refers to a New York State Local School District Exam or Regional Exam in a Foreign Language.*

Plus an area of concentration: 30-37 credit hours. Students should see Areas of Concentration in the Education section of the catalog (p. 71).

(Note: SCI courses are considered multi-disciplinary and will meet SUNY General Education requirement for Natural Science.)

For certification information, please see the Office of Student Services webpage.

Advisement forms may be downloaded at <http://www.fredonia.edu/coe/undergradadvise.asp>

As of December 31, 2013, candidates in all education programs are required to complete training under the Dignity for All Students Act (DASA). The training required under the Dignity for All Student Act (DASA) will be included in EDU 303 at Fredonia. Undergraduate candidates planning to graduate after Fall 2013 who have already completed EDU 303 on campus or taken a workshop as a substitution for EDU 303 must also complete the EDU DASA workshop prior to graduation.

TOTAL CREDIT HOURS: 67

CHILDHOOD INCLUSIVE EDUCATION BACHELOR OF SCIENCE IN EDUCATION

Department of Curriculum and Instruction

Office: E268 Thompson Hall
(716) 673-3701

Dr. Robert L. Dahlgren, *Chairperson*

Email: ci@fredonia.edu

Website: <http://home.fredonia.edu/coe/ci>

The Bachelor of Science of Education in Education in Childhood Inclusive Education prepares teacher candidates for dual certification in Childhood Education (Grades 1-6) and Students with Disabilities (Grades 1-6).

PROGRAM REQUIREMENTS:

Required Courses

EDU 105	Introduction to Contemporary Inclusive Education	3
EDU 106	Practicum in Inclusive Education I	
EDU 225	Child Development	3
EDU 250	Introduction to the Exceptional Learner	3
EDU 251	Practicum in Inclusive Education II	
EDU 276	Literacy and Technology in Inclusive Educational Settings	3
EDU 295	Introduction to Educational Assessment	3
EDU 305	Cultural and Linguistic Diversity in the Classroom	3
EDU 313	Practicum in Inclusive Education III	
EDU 349	Educational Psychology	3
EDU 355	Assessment & Instruction of Students with Learning &	3

	Behavior Disorders in Inclusive Ed Settings	
EDU 356	Practicum in Inclusive Education IV	
EDU 301	Safe Schools/Healthy Students: Child Abuse and Child Abduction	1
EDU 302	Safe Schools/Healthy Students: Alcohol, Tobacco and Other Drug Abuse	1
EDU 303	Safe Schools/Healthy Students-DASA: Safety Education/Fire and Arson/School Violence	1
MAED 301	Mathematics for School Teachers I	3
MAED 302	Mathematics for School Teachers II	3
SCI 301	Essential Science I	3
SCI 302	Essential Science Lab	1
SCI 303	Essential Science II	3

Subtotal: 40

NOTE:

- EDU 105, EDU 250, EDU 305, and EDU 355: courses that have a field experience component.
- Grades of "B" or better in EDU 105 and EDU 225 are required for all students entering this major in Fall 2015 or later. Please note that "B-" is not an adequate grade. Click here (p. 65) for more information.
- Transfer students should consult with their academic advisor regarding Natural Science requirements. EDU 295 - Effective Fall 2014, course required for ALL incoming students. Course available in Spring 2015 for education majors with sophomore level standing.

Methods of Instruction:

EDU 402	Teaching Mathematics in Inclusive Educational Settings	3
EDU 403	Teaching Science in Inclusive Educational Settings	3
EDU 404	Teaching Social Studies in Inclusive Educational Settings	3
EDU 405	Teaching Literacy in Inclusive Educational Settings	3
EDU 406	Literacy and Assessment in Inclusive Educational Settings	3

Subtotal: 15

Capstone Experience – Student Teaching:

EDU 416	Capstone Seminar - Advanced Study in Classroom Organization, Management, and Instruction	3
EDU 440	Student Teaching Inclusive Education - Primary	6
EDU 441	Student Teaching Inclusive Education - Intermediate	6

Subtotal: 15

Plus Foreign Language Requirement:

Candidates in all education programs are required to demonstrate competence in a foreign language. This requirement must be satisfied in any one of the following ways:

- Score of 85 percent or higher on New York State Regents Exam or New York State High School Equivalent Exam*: Requirement is fulfilled.
- Scores of 65 percent - 84 percent on New York State Regents Exam or New York State High School Equivalent Exam*: Student needs to take an Elementary I level course or an Elementary II level course of a language or equivalent course(s), or successfully complete an equivalent Fredonia proficiency exam.
- Scores below 65 percent on New York State Regents Exam or New York State High School Equivalent Exam*: Student needs to take an Elementary I level course and an Elementary II level course or equivalent course(s) of the same language.
- If student did not take a New York State Regents Exam or New York State High School Equivalent Exam*: Student needs to take an Elementary I level course and an Elementary II level course or equivalent course(s) of the same language.
- Note: The General Education foreign language requirement differs from the certification requirement and must be satisfied for degree conferral.
* *High School Equivalent Exam refers to a New York State Local School District Exam or Regional Exam in a Foreign Language.*

Plus an area of concentration: 30-37 credit hours. Students should see Areas of Concentration (p. 71) in the Education section of the catalog.

(Note: SCI courses are considered multi-disciplinary and will meet SUNY General Education requirement for Natural Science.)

For certification information, please see the Office of Student Services webpage.

Advisement forms may be downloaded at <http://www.fredonia.edu/coe/undergradadvise.asp>

As of December 31, 2013, candidates in all education programs are required to complete training under the Dignity for All Students Act (DASA). The training required under the Dignity for All Student Act (DASA) will be included in EDU 303 at Fredonia. Undergraduate candidates planning to graduate after Fall 2013 who have already completed EDU 303 on campus or taken a workshop as a substitution for EDU 303 must also complete the EDU DASA workshop prior to graduation.

TOTAL CREDIT HOURS: 70**Communication Disorders and Sciences**

Office: W123 Thompson Hall
(716) 673-3202

Dr. Kim Tillery, Chairperson

Email: communicationdisorders.sciences@fredonia.edu

Website: <http://home.fredonia.edu/commdisorders>

Important Notification to All Communication Disorders and Sciences Majors

All programs and degree options are held accountable to national standards of the American Speech-Language-Hearing Association (ASHA) with the Council on Academic Accreditation (CAA) in Speech-Language Pathology and Audiology.

Any changes made by New York State Board of Regents, CAA, and ASHA have the potential to impact the requirements of the program.

Individuals qualified as Speech-Language Pathologists are in demand in a variety of educational, medical and therapeutic settings. Upon completion of a master's degree, the graduate will complete a Clinical Fellowship (CF) in order to meet ASHA certification and state licensing requirements. Graduates may elect to work in school settings, hospitals, medical practice groups, nursing homes, and rehabilitation agencies or in private practice.

At Fredonia, the M.S. in Speech-Language Pathology (p. 222) includes clinical practice, housed in the Henry C. Youngerman Center for Communication Disorders and at 80 possible medical and clinical placements.

Students, faculty, staff, and persons served in the program's clinics are treated in a nondiscriminatory manner—that is, without regard to race, color, religion, sex, national or ethnic origin, disability, age, sexual orientation, genetic information, citizenship, or status as a covered veteran. The institution and program comply with all applicable laws, regulations, and executive orders pertaining thereto.

Students desiring to obtain a terminal degree (clinical doctorate) in audiology are individually advised during their junior or senior years in the B.S. program to receive audiology clinic and course work that would prepare them for admission to a Clinical Doctorate in Audiology (AuD.) program.

The graduate program in Speech-Language Pathology is accredited by the Council on Academic Accreditation (CAA) of the American Speech-Language-Hearing Association (ASHA). The graduate program is designed to enable students to meet the: 1) New York State Department of Education academic and practicum requirements for Initial and Professional Certification as a Teacher of Students with Speech and Language

Disabilities (TSSLD), 2) New York State Department of Education academic and clinical requirements for New York State licensure in Speech Pathology, and 3) American Speech-Language and Hearing Association (ASHA) academic and clinical practicum requirements for the Certification of Clinical Competency in Speech-Language Pathology (CCC-SLP).

Scholarships

The following scholarships are awarded by the Department of Communication Disorders and Sciences: the Esau A. and Susan S. Sam Scholarship, the Schaffer Family Scholarship, the Rebecca Snyder Memorial Scholarship, the Lt. Gen. Louis E. Woods Scholarship, the Henry C. and Ida H. Youngerman Scholarship, Gustave and Geraldine Werner Foundation scholarships, Kristen M. Luther Memorial Scholarship, Constantine Barker Endowment and the Alan Nichter and Annmarie Woloszyn Nichter Scholarship.

Requirements for all Academic Majors

Students must hold a minimum GPA of 3.0 to transfer into the program. Students who are at or above 60 credit hours will be advised that a minimum 3.0 GPA is usually required for successful acceptance into a Speech-Language Pathology graduate program (p. 222).

COMMUNICATION DISORDERS AND SCIENCES BACHELOR OF SCIENCE

REQUIREMENTS FOR THE BACHELOR OF SCIENCE IN COMMUNICATION DISORDERS AND SCIENCES:

Required Courses

CDS 250	Speech and Language Development	3
CDS 268	Phonetics	3
CDS 280	Speech-Language Pathology I	3
CDS 310	Speech and Hearing Mechanism	3
CDS 316	Speech Science	3
CDS 322	Hearing Problems and Tests	3
CDS 323	Speech Sound and Language Disorders	3
CDS 398	Clinical Methods in Evaluation	3
CDS 399	Clinical Methods in Intervention	3
CDS 410	Clinical Procedures: Observation and Analysis	3
CDS 418	Speech-Language Pathology II	3
CDS 419	Aural Habilitation and Rehabilitation	3

Subtotal: 36

NOTE: Other course content (usually taken in an undergraduate program) required for application for ASHA certification: biology, physical science, statistics, social science or psychology.

Other course content required for application for New York State Department of Education initial certification for TSSLD certificate:

Literacy, a foreign language other than English, language acquisition, and in learning processes of motivation, communication and classroom management of students with disabilities and autism. Seminars in 1) child abuse reporting and abduction prevention, 2) alcohol, tobacco and drug abuse prevention, 3) fire safety and 4) school violence protection.

A College Core Curriculum (CCC) foreign language requirement for a B.S. program is a three credit course or passing with an 85 percent on a New York State regents exam. Departmental recommendation is for students to complete a minimum of three credits of a foreign language course to meet the TSSLD certificate requirement.

Students must earn a minimum grade of C- in the following prerequisite courses to continue with the sequence of course work: CDS 250, CDS 268, CDS 310.

A course within the program (other than the above three prerequisite courses) is allowed to be retaken under the following conditions:

1. A student earned a D+ or lower grade and must have permission of the course instructor;
2. A student may retake the class one time only.

TOTAL CREDIT HOURS: 36

Communication

Office: 326 McEwen Hall
(716) 673-3410

Dr. Mark Kiyak, Chairperson

Email: communication.department@fredonia.edu

Website: <http://home.fredonia.edu/communication>

Communication relates to how individuals, groups, organizations, societies, and cultures may establish humane and productive relationships in expressing needs, mediating problems, and pursuing goals. It is one of the oldest areas of academic study and, because of the transformation of personal and social life by the growth of media technologies, a central discipline. Students approach processes, practices and distortions involved in human communication from a critical perspective, and integrate application and theory throughout the curriculum.

The Department of Communication offers majors in Audio Production, Communication Studies, Journalism, Media Management, Public Relations, and Video Production. The department also offers a minors in Communication and Non-Fiction Video Production.

Graduates of the program have successful careers in corporate and public settings and working in media at all levels. Communication students have also continued their

education in graduate programs and law schools around the country. Students are encouraged to supplement their academic work with participation in applied activities, including the Sheldon Multimedia Computer Lab, the campus radio stations (WCVF FM and WDVL Cable/FM), the campus television station (WNYF-TV), the campus newspaper (The Leader), the Applied Communication Association (ACA) which provides communication services to the community, the Public Relations Student Society of America (PRSSA), and off-campus internships.

The department offers several awards and scholarships including the Louis C. and S. David Adler Scholarship, the Anne Bernstein Memorial Award, the Edward S. Edelman Scholarship, the Anthony J. Ellis Scholarship, the Arthur R. Maytum Scholarship, the Dan Berggren Excellence in Audio/Radio Scholarship, the Arlie Muller Parks Scholarship and the Richard G. and Pamela C. Ryan Endowment Scholarship Fund.

Internal Transfers: Students seeking to transfer into the Department of Communication from another department must have a 2.5 or above cumulative grade point average (GPA) to be eligible. If the student's GPA is 3.0 or greater, he/she will be automatically admitted. If the GPA is below 3.0 (but 2.5 or higher), the student must successfully complete a minimum of six credits of Fredonia Communication course work in their desired major. Grades in each COMM course must be C or above and the cumulative GPA in COMM courses must be above 2.5. Unless taken at another university, COMM 101-Fundamentals of Communication must be one of the above courses completed. An internal application form (available from the department office) must be completed and returned to the office in order for the application request to be processed.

Requirements for the Bachelor's Degree in Communication

Major Requirements: Students in the department may obtain a bachelor's degree in one of the following majors:

- Audio/Radio Production – Bachelor of Science - B.S. (p. 46)
- Communication Studies – Bachelor of Science - B.S. (p. 47)
- Communication: Journalism – Bachelor of Arts - B.A. (p. 47)
- Communication: Media Management – Bachelor of Science - B.S. (p. 48)
- Communication: Public Relations – Bachelor of Science - B.S. (p. 49)
- Communication: Video Production – Bachelor of Science - B.S. (p. 49)

A major program in the Department of Communication requires 40 to 45 credit hours of study including 7 credit hours of core courses required by every student in the

department and 33 to 38 credit hours of courses in the individual major. Students must complete at least 66 credit hours of course work from disciplines other than communication. This may include non-communication courses taken from other universities.

Department of Communication Minimum Standards Policy

Students in any of the communication majors must earn at least a C grade in all courses in the major. This includes all courses taken as part of the major including those in the department core (101, 105, 199).

A student who receives a grade below C in a course may repeat that course only once. If a student does not achieve a C or better the second time, he/she will be required to change to a major outside of the Department of Communication.

If a course in the major is a prerequisite for another course in the major, the student will not be allowed to enroll in the second course if the grade in the prerequisite was less than a C. In addition, students must have, in order to graduate, a least a 2.5 average in the departmental core and in the rest of the courses in their chosen major. This does not include courses taken in the Department of Communication that do not apply to the student's major.

Any student whose cumulative average in the major falls below 2.3 for three consecutive semesters in the department will be required to change to a major outside of the Department of Communication.

Double Major: Any student wishing to take a double major with both majors inside the Communication department must complete all requirements for both majors. Students should be aware that they may have to take more than 120 credit hours in order to accumulate the required 66 credit hours outside the department to graduate. At least 15 credits in the second major must not be used in the first major.

In addition, the department requires all students to declare and complete a minor or a semester studying abroad. The minor must be officially recognized by the offering department and be chosen in consultation with a Communication advisor. Students electing the study abroad option are required to complete a complimentary course at Fredonia chosen in consultation with their advisor.

Students who have dual majors with both majors inside the Communication department are still required to have a minor outside the department or meet the criteria for the study abroad option. A second major outside the Communication department will also satisfy this requirement.

On the occasion that the requirements for an outside major are the same as the CORE courses for a major within the Department of Communication (e.g. Arts Administration), students must complete all requirements for both majors.

Students may "double-dip" one course that is required for both majors. If there is more than one duplicate course required, students must take one approved elective from the Communication major per each additional course required by the outside major. One or more of the electives must be 300/400 level.

Applies to all students admitted to the program after November 1, 2002.

Minor: The department requires all students to declare and complete a minor outside the communication department or a 15 credit hour semester study abroad. The minor must be officially recognized by the offering department (including Interdisciplinary Studies minors) and be chosen in consultation with a Department of Communication advisor. A second major outside the communication department will also satisfy the minor requirement. Students electing the study abroad option are required to complete a complementary 3 credit hour course at Fredonia and should consult the department's policies on appropriate overseas course work. International students, by virtue of studying at Fredonia, have already completed the study abroad/minor requirement.

Cross-using Courses for Minors: Certain minors include some communication courses that may fulfill course requirements for that minor. Students may use (double-dip) only one COMM course (maximum 4 credit hours) required for the Communication major to fulfill course requirements for the minor.

Substitutions in requirements for majors may be made only by approval of faculty members designated for the specific majors. Special topics classes used to fulfill the requirements for majors must be approved by faculty members designated for the specific majors.

Course offerings and requirements for the majors may be changed. Students are urged to see the department for the latest requirements.

COMMUNICATION: AUDIO/RADIO PRODUCTION BACHELOR OF SCIENCE

Development of conceptual, aesthetic, and technical skills in audio production for radio and other media. Focus is on listening and the creative use of sound to engage an audience through the selection and use of voice, music, and ambiance. Applications to commercial and public service announcements, news, documentary, drama, music programming, audio art, and audio for television, theater and film.

REQUIREMENTS FOR COMMUNICATION: AUDIO/RADIO PRODUCTION

(41 credit hours, including core requirements of 7 credit hours; at least 12 credit hours must be taken at Fredonia)

Communication Core (7 credit hours):

COMM 101	Fundamentals of Communication	3
COMM 105	Public Speaking	3
COMM 199	Communication Orientation	1

Subtotal: 7

GROUP A (25 CREDIT HOURS):

Major Core (18 credit hours)

COMM 102	Mass Media and Society	3
COMM 155	Rhetoric of Vision and Sound	3
COMM 251	Audio Production I	3
COMM 253	Digital Audio Production	3
COMM 351	Audio Production II	3
COMM 420	Communication Law and Ethics	3

Subtotal: 18

One of the following:

COMM 200	Electronic Media Writing	3
	or	
COMM 361	Script Writing Video/Film/Radio	3

Subtotal: 3

Capstone (4 credit hours):

COMM 395	Radio News and Podcasting	4
COMM 451	Audio Documentaries/Soundscapes	4
COMM 456	Radio Programming/Production	4
COMM 466	Sound Design	4

Subtotal: 4

GROUP B

Major Electives, choose from the following (9 credit hours):

COMM 111	Web Design	1
COMM 112	Desktop Video	1
COMM 113	Flash	1
COMM 114	Electronic Darkroom	1
COMM 115	Advanced Electronic Darkroom	1
COMM 116	Desktop Publishing	1
COMM 118	Desktop Audio	1
COMM 130	Foundations in Journalism	3
COMM 221	Interpersonal Communication	3
COMM 222	Principles of Public Relations	3
COMM 244	Introduction to Social Media	3
COMM 302	Rhetoric and Criticism	3
COMM 312	Multimedia Integration	3
COMM 313	Political Communication	3
COMM 350	Telecommunication Technology	3
COMM 375	Mass Media Theory	3
COMM 385	International Media	3
COMM 386	International Films	3
COMM 400	Telecommunications Management	3

Subtotal: 9

NOTE: COMM 111-116, only three credit hours may be from the one-credit mini-courses.

TOTAL CREDIT HOURS: 41

COMMUNICATION: COMMUNICATION STUDIES BACHELOR OF SCIENCE

Emphasizes the study of human interaction in both mediated and non-mediated communication. Courses will cover theories and skills regarding relational development, group decision-making, public speaking, communication ethics, research and evaluation, and organizational communication. The goal of the major is to develop the student's ability to understand and apply theories and skills in communication performance, message construction, and communication analysis and evaluation across social and professional settings.

REQUIREMENTS FOR COMMUNICATION: COMMUNICATION STUDIES

(40 credit hours, which includes core requirements; at least 12 credit hours must be taken at Fredonia)

Communication Core (7 credit hours):

COMM 101	Fundamentals of Communication	3
COMM 105	Public Speaking	3
COMM 199	Communication Orientation	1

Subtotal: 7

Group A - Major Core (18 credit hours):

COMM 102	Mass Media and Society	3
	or	
COMM 155	Rhetoric of Vision and Sound	3
COMM 221	Interpersonal Communication	3
COMM 295	Research Methods	3
COMM 302	Rhetoric and Criticism	3
COMM 430	Communication Theory	3
COMM 465	Intercultural Communication	3

Subtotal: 18

Group B - Major Electives (15 credit hours):

COMM 222	Principles of Public Relations	3
COMM 301	Group Communication	3
COMM 303	Health Communication	3
COMM 313	Political Communication	3
COMM 321	Environmental Communication	3
COMM 259	Special Topics in Communication	1-3
COMM 359	Special Topics in Communication	1-3
COMM 459	Special Topics in Communication	1-3
COMM 373	Gender and Communication	3
COMM 379	Persuasion	3
COMM 460	Organizational Communication	3

Subtotal: 15

TOTAL CREDIT HOURS: 40

COMMUNICATION: JOURNALISM BACHELOR OF ARTS

Emphasizes the theory and practice of all forms of journalism including print, electronic, and Internet. An interdisciplinary approach will prepare critical thinkers and reflective practitioners. Research, writing, production, and analysis are all stressed. The program balances the teaching and learning of the practical skills needed in the profession with intellectual, historical, theoretical, and analytic foundations necessary for good journalists.

REQUIREMENTS FOR COMMUNICATION: JOURNALISM

(44-45 credit hours, which includes core requirements of 7 credit hours; at least 12 credit hours must be taken at Fredonia)

Communication Core (7 credit hours):

COMM 101	Fundamentals of Communication	3
COMM 105	Public Speaking	3
COMM 199	Communication Orientation	1

Subtotal: 7

Group A - Major Core (18 credit hours):

COMM 130	Foundations in Journalism	3
COMM 230	News Gathering	3
COMM 231	Storytelling: Words, Images, Sound	3
COMM 232	Critical Analysis of Journalism	3
COMM 420	Communication Law and Ethics	3
COMM 440	Journalism Convergence Capstone	3

Subtotal: 18

Group B (6-7 credit hours, choose one of the following two-course sequences):

COMM 346	Print/Digital Editing and Design	3
COMM 347	Print/Digital Narrative	3
	or	
COMM 395	Radio News and Podcasting	4
COMM 345	Broadcast Writing and Presentation	3

Subtotal: 6-7

Group C (9 credit hours, one course from each of the following three categories):

C1 Experiential Courses (1 credit hour from one of the following courses):

	Short-term study abroad	
COMM 480	Communication Internship	1-15
COMM 470	Fredonia Radio Systems/WNYF/Leader Practicum	3

Subtotal: 1

C2 Theory Courses (3 credit hours):

COMM 102	Mass Media and Society	3
COMM 221	Interpersonal Communication	3
COMM 222	Principles of Public Relations	3
COMM 295	Research Methods	3
COMM 301	Group Communication	3
COMM 302	Rhetoric and Criticism	3
COMM 313	Political Communication	3
COMM 359	Special Topics in Communication	1-3
COMM 385	International Media	3
COMM 460	Organizational Communication	3
COMM 465	Intercultural Communication	3

Subtotal: 3**C3 Skills Courses (9 credit hours):****C3A (6 credit hours):**

COMM 315	Selected Topics in Journalism	3
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Subtotal: 6

NOTE: COMM 315 is to be taken twice, with different topics, for a total of 6 credit hours. Specialty topics will include Governmental Affairs Reporting, Arts Journalism, Sports Journalism, Investigative Journalism, and others depending on demand and availability of staff.

C3B (3 credit hours from one of the following non-Journalism courses):

COMM 110	Desktop Motion	1
COMM 111	Web Design	1
COMM 112	Desktop Video	1
COMM 113	Flash	1
COMM 114	Electronic Darkroom	1
COMM 115	Advanced Electronic Darkroom	1
COMM 116	Desktop Publishing	1
COMM 118	Desktop Audio	1
COMM 244	Introduction to Social Media	3
COMM 251	Audio Production I	3
COMM 254	Video Field Production	3
COMM 255	Studio Production	3
COMM 312	Multimedia Integration	3
ENGL 366	Opinion in Journalism	3
COMM 459	Special Topics in Communication	1-3

Subtotal: 3

NOTE: COMM 110-116 and COMM 118: 3 mini courses. Only three credit hours may be from the one-credit mini-courses (COMM 111-116).

TOTAL CREDIT HOURS: 44-45

COMMUNICATION: MEDIA MANAGEMENT BACHELOR OF SCIENCE

For students interested in non-production areas of electronic media. Includes sales, management, regulation, promotion, and research in broadcast and other electronic media such as cable television, telephone, and satellites.

REQUIREMENTS FOR COMMUNICATION: MEDIA MANAGEMENT

(43 credit hours, including core requirements of 7 credit hours; at least 12 credit hours must be taken at Fredonia)

Communication Core (7 credit hours):

COMM 101	Fundamentals of Communication	3
COMM 105	Public Speaking	3
COMM 199	Communication Orientation	1

Subtotal: 7**Group A - Major Core (21 credit hours, choose seven from among the following):**

COMM 102	Mass Media and Society	3
COMM 222	Principles of Public Relations	3
COMM 295	Research Methods	3
COMM 350	Telecommunication Technology	3
COMM 385	International Media	3
COMM 400	Telecommunications Management	3
COMM 460	Organizational Communication	3

Subtotal: 21**Any three of the 1 credit hour computer courses**

COMM 110	Desktop Motion	1
COMM 111	Web Design	1
COMM 112	Desktop Video	1
COMM 113	Flash	1
COMM 114	Electronic Darkroom	1
COMM 115	Advanced Electronic Darkroom	1
COMM 116	Desktop Publishing	1
COMM 118	Desktop Audio	1

Subtotal: 3**Group B - Major Electives (12 credit hours, choose four from among the following, at least two at 300-400 level):**

COMM 130	Foundations in Journalism	3
COMM 155	Rhetoric of Vision and Sound	3
COMM 221	Interpersonal Communication	3
COMM 235	Introduction to Business Communication	3
COMM 244	Introduction to Social Media	3
COMM 301	Group Communication	3
COMM 302	Rhetoric and Criticism	3
COMM 312	Multimedia Integration	3
COMM 313	Political Communication	3
COMM 375	Mass Media Theory	3
COMM 379	Persuasion	3
COMM 386	International Films	3
COMM 420	Communication Law and Ethics	3
COMM 430	Communication Theory	3
COMM 465	Intercultural Communication	3

Subtotal: 12

TOTAL CREDIT HOURS: 43**COMMUNICATION: PUBLIC RELATIONS
BACHELOR OF SCIENCE**

Focuses on the theoretical constructs and professional skills necessary to effectively mediate the goals and obligations of an organization and the needs and concerns of the public. The emphasis on ethics, campaign design and management and the production of messages for targeted audiences prepares students to serve as communication advocates in a variety of professional and civic settings.

**REQUIREMENTS FOR COMMUNICATION:
PUBLIC RELATIONS**

(40 credit hours, including core requirements of 7 credit hours; at least 12 credit hours must be taken at Fredonia)

Communication Core (7 credit hours):

COMM 101	Fundamentals of Communication	3
COMM 105	Public Speaking	3
COMM 199	Communication Orientation	1

Subtotal: 7**Group A - Major Core (21 credit hours):**

COMM 222	Principles of Public Relations	3
COMM 244	Introduction to Social Media	3
COMM 295	Research Methods	3
COMM 322	Public Relations Writing	3
COMM 344	Public Relations Case Analysis	3
COMM 422	Public Relations Campaigns	3
COMM 424	International Public Relations	3

Subtotal: 21

NOTE: COMM 422 (p. 336) serves as Capstone experience and must be taken at Fredonia.

Group B - Major Electives (12 credit hours, 6 credit hours at 300 or above level from the following):

COMM 102	Mass Media and Society	3
COMM 111	Web Design	1
COMM 112	Desktop Video	1
COMM 113	Flash	1
COMM 114	Electronic Darkroom	1
COMM 115	Advanced Electronic Darkroom	1
COMM 116	Desktop Publishing	1
COMM 118	Desktop Audio	1
COMM 130	Foundations in Journalism	3
COMM 155	Rhetoric of Vision and Sound	3
COMM 221	Interpersonal Communication	3
COMM 235	Introduction to Business Communication	3
COMM 251	Audio Production I	3
COMM 255	Studio Production	3
COMM 301	Group Communication	3
COMM 302	Rhetoric and Criticism	3

COMM 303	Health Communication	3
COMM 312	Multimedia Integration	3
COMM 313	Political Communication	3
COMM 379	Persuasion	3
COMM 460	Organizational Communication	3
COMM 465	Intercultural Communication	3

Subtotal: 12

NOTE: COMM 111-116, COMM 118: Computer mini courses (1 credit hour each). *Only three credit hours may be from the one-credit mini-courses (COMM 111-118).*

TOTAL CREDIT HOURS: 40**COMMUNICATION: VIDEO PRODUCTION
BACHELOR OF SCIENCE**

Focuses on the theoretical, technical, and practical issues of television and digital film production. Hands-on project-based major with emphasis on pre-production, production, post-production and distribution. Students gain experience in multi-camera studio production, electronic news gathering, field production, documentary, and narrative. Topics covered include: concept development, visualization, writing, aesthetics, ethics, shooting and editing techniques, and sound design.

**REQUIREMENTS FOR COMMUNICATION:
VIDEO PRODUCTION**

(45 credit hours, includes core requirements of 7 credit hours; at least 18 credit hours and capstone classes must be taken at Fredonia)

Communication Core (7 credit hours):

COMM 101	Fundamentals of Communication	3
COMM 105	Public Speaking	3
COMM 199	Communication Orientation	1

Subtotal: 7**Group A - Major Core (21 credit hours):**

COMM 102	Mass Media and Society	3
COMM 155	Rhetoric of Vision and Sound	3
COMM 251	Audio Production I	3
COMM 255	Studio Production	3
COMM 254	Video Field Production	3
COMM 366	Postproduction	3
COMM 420	Communication Law and Ethics	3

Subtotal: 21**Group B**

One of the following four course sequences must be taken at Fredonia. The documentary and drama classes must be taken in consecutive semesters.

	Narrative Fiction Track	
COMM 309	Film Analysis	3
COMM 361	Script Writing Video/Film/Radio	3
COMM 454	Fiction I	4

COMM 464	Fiction II	4
	or	
	Documentary Track	
COMM 200	Electronic Media Writing	3
COMM 308	Documentary History and Criticism	3
COMM 452	Documentary I	4
COMM 462	Documentary II	4
	or	
	Broadcast Track	
COMM 200		3
COMM 307	History of Television	3
COMM 358	Television News	4
COMM 401	Television Studio Production II	4

Subtotal: 14**Group C - Electives (3 credit hours):**

ARTS 155	Introduction to Film Photography	3
COMM 312	Multimedia Integration	3
COMM 358	Television News	4
COMM 466	Sound Design	4
COMM 368	Video Camera and Lighting Techniques	3
THEA 130	Acting for Non-Majors	3
COMM 400	Telecommunications Management	3

Subtotal: 3

NOTES: ARTS 155 is not an elective for the Broadcast Track. COMM 400 is only for the Broadcast Track.

TOTAL CREDIT HOURS: 45

Computer and Information Sciences

Office: 2148 Fenton Hall
(716) 673-4820

Dr. Ziya Arnavut, *Chairperson*

Email: csit@fredonia.edu

Website: <http://home.fredonia.edu/cis>

The Department of Computer and Information Sciences provides its majors with contemporary quality education in computer science and computer information systems with an assortment of scientific and business applications including many courses in information technology. The department offers two Bachelor of Science degrees. One degree is in Computer Science (p. 52) (CS) with three study options: Advanced Computing, Software Development, and a General Track. The other degree is in Computer Information Systems (p. 51) (CIS) with two study options: Systems Development and Systems Management. A minor in Computer Science (p. 156), a minor in Computer Information Systems (p. 156), and a minor in Web Programming (p. 176) are also available which are useful in enhancing the marketability of students.

The Computer Science degree focuses on a traditional computer science discipline with applications in scientific

problem-solving and software development. The Computer Information Systems degree is geared toward commercial computer-based information processing, management and administrative applications. The CS and CIS degrees together with their study options prepare students for the future by providing a study of the current state of computers and information sciences embedded within a well-rounded liberal arts education. As a Computer Science or a Computer Information Systems major at Fredonia, a student may select a program that suits his/her career objectives and academic goals. The graduates of these programs gain competence in current hardware, software and computing applications in various segments of the industry.

The department has extensive experience in offering online courses. Many of these courses are offered during summer and inter-sessions and students may take them while they are working or have returned home for the holidays. For additional information, students should contact the chairperson of the department.

Scholarships available to students in Computer and Information Sciences include the John Beck Scholarship, Arthur R. Maytum, Debbie J. Joy and the Feng Chiang Scholarships. The scholarships are awarded annually on the recommendation of the computer and information sciences faculty.

Double Major

It is possible for a student to double major in Computer Science and Computer Information systems. To do this, the student is required to take at least 15 additional credit hours in the second major (that is, credit hours from courses within the list of courses of the second major not used to satisfy requirements in the first major).

Internships and Employment Opportunities

Experiential learning is encouraged through internships. Internships are designed as a way to develop knowledge and gain experience with computers and information technology in a job setting. Recently, students have successfully completed internships at NASA, SellingHive, AL Tech Specialty Steel, Chemical Process Corporation, Cliffstar, Buffalo General Hospital, Cummins Engine, M&T Bank, and the Dunkirk and Fredonia Telephone Company. Several internships pay honoraria or wages. Every semester the department hires at least 10 laboratory proctors to manage its Computer Science (CS) Lab. Many other opportunities exist across campus for students to earn money as tutors, work study, or computer laboratory assistants.

Computer Laboratories and Equipment

The department manages its own open access laboratory (CS Lab) and has classes scheduled in three other laboratories in Fenton Hall and one in Thompson Hall. The CS Lab is maintained by a systems administrator and a

staff of student proctors from the Computer and Information Sciences Department. The main equipment in the lab consists of several workstations running Unix, together with a cluster of 23 Intel-based workstations running Windows and Linux. A Linux-based cluster of servers connected to a high-speed network provides Internet access. Popular software development tools such as Alice, C, C++, Java, Python, Visual BASIC, ARTIS, Open GL and other utilities are available, in addition to standard Microsoft software packages such as Office and Visual Studio. The computers in the laboratory are accessible from various locations across the campus, including the dormitories. Another laboratory that is used by the department is primarily an instructional laboratory and houses a network of 30 Intel-based workstations that run under Windows. Both of these facilities are dedicated to supporting instruction in the Computer and Information Sciences programs. There are also several other microcomputer laboratories on campus. The department upgrades its laboratory equipment every three years.

Faculty and Student Research and Scholarship

The Computer and Information Sciences faculty and majors are actively involved in various research activities such as participating in international, national, and regional conferences, workshops and seminars, and publishing their work in well-known journals and proceedings. With the cooperation of the Computer Science Club, the department frequently runs joint faculty and student colloquia. Several students have won research paper competitions, and teams have successfully competed in regional programming competitions. Current areas of faculty and student research are computer architecture, networking, image processing, pattern recognition, bioinformatics, knowledge engineering, computer graphics, data compression, multimedia, performance analysis and bench-marking, automated performance tuning, theoretical computer science, remote sensing, natural languages, embedded processor applications, computer science education, and interdisciplinary applications.

Computer and Information Sciences Programs

The department offers two degrees, a B.S. in Computer Science and a B.S. in Computer Information Systems. Two minor programs in Computer Science and Computer Information Systems are also offered. A dual-diploma, joint degree program in Computer Information Sciences with Izmir University of Economics, Izmir, Turkey are available as well. The department also participates in the Cooperative Engineering program. Many service level courses in subjects such as Microsoft Office, web programming and Java are also offered. Currently, the primary languages of computing instruction are Visual BASIC, C and C++ in the MS Windows, Mac OS, and Unix environments. For further details about the programs in computer and information sciences, interested persons should contact the chairperson of the Department of

Computer and Information Sciences at (716) 673-4820 or email csit@fredonia.edu.

COMPUTER INFORMATION SYSTEMS BACHELOR OF SCIENCE

The Bachelor of Science in Computer Information Systems (CIS) degree is available with two options (tracks):

- Systems Development (SD)
- Systems Management (SM)

Both options contain a common core of fundamental courses in computer information systems with essential emphasis on business systems development, practice, and applications. Further, courses in the SD track prepare graduates for careers in information systems design and development for typical businesses and commercial computing sectors. The SM track prepares graduates for management and utilization of information systems and technology.

REQUIREMENTS FOR THE BACHELOR OF SCIENCE IN COMPUTER INFORMATION SYSTEMS (CIS) (63 CREDIT HOURS)

The degree program prepares graduates for careers in two major areas: systems development and systems management. The major in Computer Information Systems helps students acquire knowledge and gain expertise in all important aspects of the development, use, and management of (business) information systems. As part of the program, majors learn about: computer hardware, software, and information technology (IT) tools; information systems analysis and design methodologies; data and telecommunications technologies; information (systems and projects) management.

Computer Information Systems (CIS) Core (24 credit hours):

CSIT 107	Web Programming I	3
CSIT 151	Introduction to Information Systems	3
CSIT 105	Visual BASIC I	3
	or	
CSIT 121	Computer Science I	3
CSIT 205	Visual BASIC II	3
	or	
CSIT 221	Computer Science II	3
CSIT 207	Web Programming II	3
CSIT 251	Information Systems Structures	3
CSIT 312	Computer Structures	3
CSIT 351	Business Systems Development	3
		Subtotal: 24

Business and Mathematics Core (24 credit hours)

MATH 108	Prize-Winning Mathematics	3
	or	
MATH 120	Survey of Calculus I	3

ACCT 201	Principles of Financial Accounting	3
ECON 202	Principles of Microeconomics	3
STAT 200	Statistical Methods I	3
	or	
ECON 200	Fundamentals of Statistics for Business Administration and Economics	3
		Subtotal: 12
Two courses chosen from:		
CSIT 241	Discrete Mathematics for Computer Science I	3
CSIT 242	Discrete Mathematics for Computer Science II	3
MATH 121	Survey of Calculus II	3
ACCT 202	Principles of Managerial Accounting	3
STAT 300	Statistical Methods II	3
	or	
ECON 300	Statistical Analysis	3
		Subtotal: 6

NOTE: Any two (BUAD courses or ECON 201) by advisement. At least one of the courses must be at 300 level or above. The courses on statistics are excluded from this list.

TRACK REQUIREMENTS - 9 CREDIT HOURS:

Systems Development Track:

Three courses chosen from:

CSIT 201	Computer Security and Ethics	3
CSIT 341	Data Structures	3
CSIT 425	Software Engineering	3
CSIT 455	Relational and Object Databases	3
CSIT 456	Information and Decision Support Systems	3
CSIT 462	Computer Graphics	3
CSIT 473	Data Warehousing and Mining	3
		Subtotal: 9

Systems Management Track:

Three courses chosen from:

CSIT 203	Multimedia Systems	3
CSIT 335	Data Communication and Networks I	3
CSIT 425	Software Engineering	3
CSIT 471	Information Systems Management	3
CSIT 473	Data Warehousing and Mining	3
CSIT 475	Electronic Commerce	3
		Subtotal: 9

Electives - 6 credit hours (at least one course should be at the 300-400 level):

Two additional courses chosen from:

CSIT 201	Computer Security and Ethics	3
CSIT 203	Multimedia Systems	3

CSIT 208	Computer Game Design and Implementation	3
CSIT 241	Discrete Mathematics for Computer Science I	3
CSIT 291	Special Topics	0-3
CSIT 300	Internship	1-12
CSIT 333	Mobile Applications Development	3
CSIT 335	Data Communication and Networks I	3
CSIT 341	Data Structures	3
CSIT 390	Directed Study	1-3
CSIT 400	Directed Independent Study	1-3
CSIT 425	Software Engineering	3
CSIT 435	Data Communication and Networks II	3
CSIT 455	Relational and Object Databases	3
CSIT 456	Information and Decision Support Systems	3
CSIT 461	Introduction to AI and Knowledge Engineering	3
CSIT 462	Computer Graphics	3
CSIT 463	Introduction to Digital Image Processing and Computer Vision	3
CSIT 471	Information Systems Management	3
CSIT 473	Data Warehousing and Mining	3
CSIT 475	Electronic Commerce	3
CSIT 490	Seminar on Selected Topics	1-3
CSIT 496	Special Topics	1-3
CSIT 497	Thesis	3
CSIT 499	Senior Project	3
		Subtotal: 6

NOTE: CSIT 490, CSIT 496, and CSIT 497: Only one course numbered 490 or above is allowed.

Even though Internship credit is from 1-12 credit hours, 3 credit hours will satisfy the degree requirements.

Students may double major in Computer Science and Computer Information Systems by completing all requirements for both majors (credit hours from courses within the list of courses of the second major not used to satisfy requirements in the first major).

TOTAL CREDIT HOURS: 66

COMPUTER SCIENCE BACHELOR OF SCIENCE

The Bachelor of Science in Computer Science (CS) degree is available with three options (tracks):

- Advanced Computing (AC)
- Software Development (SD)
- General Track (GT)

All three options contain a common core of fundamental courses in the science of computing, with essential emphasis on theory, practice and applications. Further, courses in the AC track prepare graduates for post-graduate education in computer science and careers in the scientific computing sectors. The SD track prepares graduates for systems level software design and development, as well as for computer networking. The GT option is a general track and allows students more breadth in the choice of 400-level courses in meeting the CS requirements.

REQUIREMENTS FOR THE BACHELOR OF SCIENCE DEGREE IN COMPUTER SCIENCE

The Bachelor of Science degree in Computer Science is built on a required core of course work in computer science, to which are added the requirements in the student's selected track.

Computer Sciences Core (33-34 credit hours):

CSIT 121	Computer Science I	3
CSIT 221	Computer Science II	3
CSIT 224	Problem Solving Using Objects	3
CSIT 231	Systems Programming	3
CSIT 241	Discrete Mathematics for Computer Science I or	3
MATH 231	Linear Algebra	4
CSIT 311	Assembly Language and Computer Organizations	3
CSIT 321	Paradigms of Programming Languages	3
CSIT 341	Data Structures	3
CSIT 425	Software Engineering	3
CSIT 431	Introduction to Operating Systems	3
CSIT 455	Relational and Object Databases	3

Subtotal: 33-34

A. ADVANCED COMPUTING (AC) TRACK - 56 CREDIT HOURS:

This track is designed for students who intend to pursue graduate education in computer science or who seek careers in scientific computing and want to have solid foundations in the ever-lasting principles of the discipline combined with current techniques and tools.

The AC track requires the CS Core, plus:

MATH 122	University Calculus I	4
MATH 123	University Calculus II	4
CSIT 242	Discrete Mathematics for Computer Science II	3
CSIT 441	Analysis and Design of Algorithms	3

Subtotal: 14

Three additional computer science courses must be taken.

At least two courses must be at the 400 level:

CSIT 307	Web and Mobile App Design	3
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CSIT 333	Mobile Applications Development	3
CSIT 335	Data Communication and Networks I	3
CSIT 411	Programming for Embedded Microcontrollers	3
CSIT 413	Computer Architecture	3
CSIT 433	Compiler Construction	3
CSIT 435	Data Communication and Networks II	3
CSIT 443	Theory of Computation	3
CSIT 456	Information and Decision Support Systems	3
CSIT 461	Introduction to AI and Knowledge Engineering	3
CSIT 462	Computer Graphics	3
CSIT 463	Introduction to Digital Image Processing and Computer Vision	3
CSIT 473	Data Warehousing and Mining	3
CSIT 475	Electronic Commerce	3

Subtotal: 9

One course from the following list may be taken as an elective:

CSIT 201	Computer Security and Ethics	3
CSIT 291	Special Topics	0-3
CSIT 300	Internship	1-12
CSIT 390	Directed Study	1-3
CSIT 400	Directed Independent Study	1-3
CSIT 490	Seminar on Selected Topics	1-3
CSIT 496	Special Topics	1-3
CSIT 497	Thesis	3
CSIT 499	Senior Project	3

Additional Requirements

Students must complete a minimum of 30 credit hours in Natural Sciences (BIOL, CHEM, GEO, PHYS) and Mathematics/Statistics (MATH/STAT). Of these, at least 3 credit hours must be in Mathematics/Statistics (in addition to CSIT 241 or MATH 231, CSIT 242, MATH 122, and MATH 123) and must come from the following list, by advisement:

CSIT 241	Discrete Mathematics for Computer Science I	3
MATH 223	University Calculus III	4
MATH 231	Linear Algebra	4
MATH 325	Numerical Analysis	3
MATH 335	Number Theory	3
MATH 337	Combinatorics	3
MATH 341	Geometry	3
STAT 250	Statistics for Scientists	3
STAT 350	Probability and Statistics	3

Subtotal: 29

NOTE: At least 7 credit hours must be in Biology, Chemistry, Geosciences, or Physics, and at least one of these 7 credit hours must be a laboratory course.

(The above requirements may also be used to fulfill general education requirements, or requirements for a minor or second major.)

Students must complete at least 66 credit hours of non-CSIT courses.

Subtotal: 56

B. SOFTWARE DEVELOPMENT (SD) TRACK (54-56 CREDIT HOURS):

This track emphasizes computer systems development, design and architecture. It prepares graduates for systems-level programming, and for careers in system design, ensembles, architecture, and networking. The majority of course work is in the area of Computer Systems Software.

The SD Track requires the CS Core, plus:

MATH 120	Survey of Calculus I	3
	or	
MATH 122	University Calculus I	4
MATH 121	Survey of Calculus II	3
	or	
MATH 123	University Calculus II	4
CSIT 201	Computer Security and Ethics	3
CSIT 242	Discrete Mathematics for Computer Science II	3

Subtotal: 13

Three additional computer science courses must be taken.

At least two courses must be at the 400 level:

CSIT 307	Web and Mobile App Design	3
CSIT 333	Mobile Applications Development	3
CSIT 335	Data Communication and Networks I	3
CSIT 411	Programming for Embedded Microcontrollers	3
CSIT 413	Computer Architecture	3
CSIT 433	Compiler Construction	3
CSIT 435	Data Communication and Networks II	3
CSIT 437	Advanced Operating Systems	3
CSIT 441	Analysis and Design of Algorithms	3
CSIT 443	Theory of Computation	3
CSIT 456	Information and Decision Support Systems	3
CSIT 461	Introduction to AI and Knowledge Engineering	3
CSIT 462	Computer Graphics	3
CSIT 463	Introduction to Digital Image Processing and Computer Vision	3
CSIT 473	Data Warehousing and Mining	3
CSIT 475	Electronic Commerce	3

Subtotal: 9

A maximum of two courses from the following list may be taken as CS electives:

CSIT 291	Special Topics	0-3
CSIT 300	Internship	1-12
CSIT 390	Directed Study	1-3
CSIT 400	Directed Independent Study	1-3
CSIT 490	Seminar on Selected Topics	1-3
CSIT 496	Special Topics	1-3
CSIT 497	Thesis	3
CSIT 499	Senior Project	3

Subtotal: 22-34

C. GENERAL TRACK (GT) - 54-56 CREDIT HOURS:

This track is designed to provide students with exposure to a significant range of topics within the computer science field, while at the same time ensuring their ability to select those courses that most interest them.

Specifically, the GT track requires the CS Core, plus:

MATH 120	Survey of Calculus I	3
	or	
MATH 122	University Calculus I	4
MATH 121	Survey of Calculus II	3
	or	
MATH 123	University Calculus II	4

Subtotal: 6-8

Five additional electives must be taken from the list below.

At least three courses must be at the 400 level:

CSIT 307	Web and Mobile App Design	3
CSIT 333	Mobile Applications Development	3
CSIT 335	Data Communication and Networks I	3
CSIT 411	Programming for Embedded Microcontrollers	3
CSIT 413	Computer Architecture	3
CSIT 433	Compiler Construction	3
CSIT 435	Data Communication and Networks II	3
CSIT 437	Advanced Operating Systems	3
CSIT 441	Analysis and Design of Algorithms	3
CSIT 443	Theory of Computation	3
CSIT 456	Information and Decision Support Systems	3
CSIT 461	Introduction to AI and Knowledge Engineering	3
CSIT 462	Computer Graphics	3
CSIT 463	Introduction to Digital Image Processing and Computer Vision	3
CSIT 473	Data Warehousing and Mining	3
CSIT 475	Electronic Commerce	3

Subtotal: 15

Courses from the following list may be taken as CS electives:

CSIT 490	Seminar on Selected Topics	1-3
CSIT 496	Special Topics	1-3
CSIT 497	Thesis	3
CSIT 499	Senior Project	3
CSIT 300	Internship	1-12
CSIT 291	Special Topics	0-3
CSIT 201	Computer Security and Ethics	3
CSIT 390	Directed Study	1-3
CSIT 400	Directed Independent Study	1-3

NOTE: In order to fulfill the elective requirements, the courses CSIT 291, 300, 390, 400, 490, 496, 497, and 499 must be at least 3 credit hours.

Subtotal: 54-56

Students may double major in Computer Science and Computer Information Systems by completing all requirements for both majors; the student is required to take at least 15 additional credit hours in the second major (credit hours from courses within the list of courses of the second major not used to satisfy requirements in the first major).

TOTAL CREDIT HOURS: 95-109

CRIMINAL JUSTICE BACHELOR OF ARTS

Office: W363 Thompson Hall
(716) 673-3205

Dr. Daniela Peterka-Benton, Program Director

Email: criminal.justice@fredonia.edu

Website: <http://www.fredonia.edu/criminaljustice>

The Bachelor of Arts program in Criminal Justice is an interdisciplinary curriculum that offers broad based knowledge of crime and delinquency, criminal law and procedure, police science and security, and the juvenile justice system. The curriculum includes courses in criminal law and procedure, crime theory, human deviant behavior, police science, security, corrections, statistics and research methods. Graduates will be prepared for careers in the field of juvenile justice, court system administration, law enforcement, adult corrections, rehabilitation, crime data analysis and security at the city, county, state and federal level. Internships are highly recommended. Participating internship sponsors include local police and sheriff departments, the county district attorney's office, Department of Probation, New York State Department of Corrections, Chautauqua County Jail, and the Chautauqua County Victim/Witness program. In addition to the Core Curriculum and elective requirements listed below, students are strongly urged to include elective courses that will help develop effectiveness in speaking and in writing. Familiarity with bibliographic and data search routines is strongly encouraged.

Students are strongly advised to complete a minor in a related discipline given the interdisciplinary characteristics of the Criminal Justice major.

REQUIREMENTS FOR THE BACHELOR OF ARTS IN CRIMINAL JUSTICE

Completion of a minimum of 42 credit hours of course work comprised of 18 credit hours of core requirements, 6 credit hours of a statistics-research methods sequence, and 18 credit hours of elective credit.

A minimum of 27 credit hours must be taken at 300-level or above.

Core courses include (18 credit hours):

CRMJ 100	Introduction to Criminal Justice	3
CRMJ 230	Criminal Law	3
CRMJ 240	Law Enforcement Policy and Practice	3
CRMJ 340	Introduction to Corrections	3
CRMJ 370	Criminology	3
CRMJ 400	Senior Seminar	3

Subtotal: 18

NOTE: Minimum grade of C- required in each course.

Statistics-Research Methods sequence (6 credit hours):

SOC 200	Social Statistics	3
	or	
	Any other 200-level introduction to statistics course and	
SOC 300	Research Methods	3
	or	
PSY 200	Statistics	3
	and	
PSY 210	Research Methods	4

Subtotal: 6

NOTE: PSY 200 (p. 515) and PSY 210 (p. 515): Sequence should be taken by Psychology/Criminal Justice double majors only

Criminal Justice Electives (9 credit hours from among the following courses):

CRMJ 331	Criminal Procedure	3
CRMJ 332	Homeland Security	3
CRMJ 333	Criminal Investigations	3
CRMJ 350	Special Topics	3
CRMJ 355	Organized Crime	3
CRMJ 360	Criminal Justice Ethics	3
CRMJ 361	Capital Punishment	3
CRMJ 375	Serial and Mass Murder in the U.S.	3
CRMJ 380	Transnational Crime	3
CRMJ 440	Corrections Administration	3
CRMJ 441	Police Administration	3

CRMJ 470	Criminal Justice Internship	1-15
		Subtotal: 9
Interdisciplinary Electives (9 credit hours from among the following courses):		
PHIL 303	Crime and Punishment	3
PHIL 362	Philosophy of Law	3
CSIT 201	Computer Security and Ethics	3
POLI 276	Law and Society	3
POLI 277	Introduction to Law	3
POLI 311	Fundamentals of Public Administration	3
POLI 370	American Constitutional Law	3
POLI 371	Civil Rights and Liberties	3
POLI 383	Courts and Social Policy	3
PSY 245	Social Psychology	3
PSY 246	Personality	3
PSY 356	Abnormal Psychology	3
PSY 358	Psychology and the Law	3
SOC 201	Social Problems	3
SOC 218	Introduction to Social Work	3
SOC 303	Social Class and Inequality	3
SOC 310	Sociology of Deviant Behavior	3
SOC 311	Sociology of Addiction	3
SOC 316	Minority Groups	3
SOC 350	Special Topics	1-3
SOC 363	Victimology	3
SOC 364	Juvenile Delinquency	3
SOC 365	Family Violence	3
		Subtotal: 9

NOTE: SOC 350 (p. 526) Special Topics (as advised).
Subtotal: 42

Policy on Transfer Credit into the Major

Transfer students will be required to complete a minimum of 24 (up to 42) credit hours of course work in the Criminal Justice major. A maximum of 18 credit hours of course work completed elsewhere that are similar to classes in the major offered at Fredonia will be accepted toward completion of the B.A. degree in Criminal Justice. The student must have completed this course work with a grade of C or better to have it applied to the major.

Steven C. Croglia Scholarship

An annual scholarship given to a Senior Criminal Justice major exhibiting academic excellence and commitment to a career in law enforcement. This honor carries a financial award to be applied toward senior year tuition.

University Police Scholarship

The endowment for this scholarship began at the behest of members of our University Police force, to recognize students in the Criminal Justice major. The financial award is given to an exceptional junior student, for assistance in his or her senior year.

TOTAL CREDIT HOURS: 42

CURRICULUM AND INSTRUCTION IN INCLUSIVE EDUCATION MASTER OF SCIENCE IN EDUCATION

Department of Curriculum and Instruction

Office: E270 Thompson Hall
(716) 673-3701

Dr. Robert Dahlgren, Chairperson, Department of Curriculum and Instruction

Dr. Ana Maria Klein, Program Coordinator

Email: ci@fredonia.edu

Website: <http://home.fredonia.edu/coe/ci>

The College of Education at the State University of New York at Fredonia prepares early childhood, childhood, middle childhood, and adolescence educators for the significant instructional challenges that await them. The general philosophy underlying the Responsive Educator Program is an organized, yet complex model, which correlates with the themes that characterize current educational research. That is, we believe that all children can learn, and that they can learn best by teachers who are responsive.

The Curriculum and Instruction in Inclusive Education program is open to educators who possess initial certification in one or more of the following:

- Early Childhood Education
- Childhood Education (formerly Elementary Education)
- Adolescence or Middle Childhood Education in English, French, Mathematics, Social Studies, Spanish, or the Sciences
- Students with Disabilities

This program requires a minimum of 36 credit hours of graduate level courses.

This program includes a capstone experience and specific exit requirements. These are currently under review and subject to change. They are intended to be rigorous and to provide evidence that each degree candidate is worthy of a master's degree. The following are the current exit requirements for the Master of Science in Education in Curriculum and Instruction in Inclusive Education program.

1. Performance-based evidence of impact on p-12 student learning through a structured field experience (currently in EDU 514)
2. Performance-based evidence of technology use in being an effective teacher and professional colleague via portfolio assignment (see program coordinator for this assignment)

3. Performance-based evidence of cultural responsiveness as an educator via portfolio assignment (see program coordinator for this assignment)
4. Thesis/Project (as culminating experience in EDU 690)

Special Note: Several Courses are offered each semester during the academic year. Candidates are advised not to rely exclusively on summer offerings to meet graduation goals.

Requirements for Admission to the Program without Deficiencies:

- Initial certification to teach early childhood, childhood, middle childhood, adolescence education, or students with disabilities in the public schools of New York State or equivalent.
- Prior (undergraduate) GPA of 3.00 or above.
- Completed Graduate Application submitted to the Office of Graduate Studies, including two current (within six months) letters of recommendation, formal GRE scores, evidence of completion of DASA training, and official academic transcripts from all prior undergraduate and graduate institutions (except Fredonia).
- Applicants whose native language is not English must also submit proof of demonstrated English proficiency as measured by TOEFL iBT score of 78 (or equivalent) or better.

CURRICULUM AND INSTRUCTION IN INCLUSIVE EDUCATION (INITIAL CERTIFICATIONS EARLY CHILDHOOD TO CHILDHOOD - GENERALIST OR STUDENTS WITH DISABILITIES)

Minimum number of credit hours required for program completion: 36

Research (6 required credit hours)

EDU 570	Using Educational Research to Improve Instruction	3
EDU 660	Conducting Educational Research	3

Subtotal: 6

EDU 570: Should be completed within the first semester

EDU 660: Must have completed EDU 570 with a B grade or better and 24 credit hours of graduate work

Inclusive Education Core (12 required credit hours)

EDU 508	Teaching Exceptional Learners in Inclusive Settings	3
EDU 514	Assessment and Instruction of Diverse Learners I	3
EDU 529	Proactive Approaches to Classroom Management in Inclusive Settings	3

EDU 530	Assessment and Instruction of Diverse Learners II	3
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Linking Content and Pedagogy (12 required credit hours)

Choose 12 credits from the following:

Literacy/Language Arts

EDU 506	Introduction to Literacy Instruction	3
EDU 536	Adolescent Literacies, Literature and Technology	3
EDU 605	Issues, Trends, and Research in Elementary (Childhood) Language	3
ENGL 5XX	By advisement or	
ENGL 6XX	By advisement	
EDU 591	Special Topics: Curriculum and Instruction	3

EDU 591: Candidates may take no more than 6 credit hours of EDU 591 courses.

Any graduate course not used to satisfy other requirements; advisor approval required.

Capstone (Must have completed EDU 660 with a B grade or better and 30 credit hours of graduate work)

Social Studies

EDU 635	Curriculum Development in Social Studies Education	3
EDU 636	Issues, Trends, and Research in Elementary School Social Studies	3
HIST 5XX	By advisement or	
HIST 6XX	By advisement	
POLI 5XX	By advisement or	
POLI 6XX	By advisement	
EDU 591	Special Topics: Curriculum and Instruction	3

EDU 591: Candidates may take no more than 6 credit hours of EDU 591 courses.

Mathematics/Science/Technology

EDU 603	Issues, Trends, and Research in Elementary (Childhood) Science	3
EDU 640	Issues, Trends, and Research in Elementary (Childhood) Mathematics	3
EDU 642	Activity-Oriented Elementary Mathematics	3
EDU 643	Math Assessment in Support of All Learners	3
MAED 5XX	By advisement or	

MAED 6XX	By advisement	
SCED 5XX		
	or	
SCED 6XX	By advisement	
EDU 591	Special Topics: Curriculum and Instruction	3

EDU 591: Candidates may take no more than 6 credit hours of EDU 591 courses.

Interdisciplinary

EDU 520	Curriculum Framework Theory/Development	3
EDU 525	Curriculum Framework Integration/Innovation	3
EDU 528	Technology in the Schools	3
EDU 543	Education for Gifted and Talented Students	3
EDU 562	Infant Development and Education	3
EDU 625	Early Childhood Curriculum	3
EDU 629	Issues, Trends, and Research in Early Childhood Education	3

Any graduate course not used to satisfy other requirements; advisor approval required.

Electives (3 credit hours)

Any graduate course not used to satisfy other requirements; advisor approval required.

Capstone (3 credit hours)

Must have completed EDU 660 with a B grade or better and 30 credit hours of graduate work

EDU 690	Master's Thesis/Project	3-6
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CURRICULUM AND INSTRUCTION IN INCLUSIVE EDUCATION (INITIAL CERTIFICATIONS MIDDLE TO ADOLESCENCE - GENERALIST OR STUDENTS WITH DISABILITIES)

Minimum number of credit hours required for program completion: 36

Research (6 required credit hours)

A minimum of 6 credit hours, not counting the Capstone requirement (see below). Note: At least one course that meets this requirement is offered each semester during the academic year.

EDU 570	Using Educational Research to Improve Instruction	3
EDU 660	Conducting Educational Research	3

EDU 570: Should be completed within the first semester

EDU 660: Must have completed EDU 570 with a B grade or better and 24 credit hours of graduate work

Inclusive Education Core (12 required credit hours)

EDU 508	Teaching Exceptional Learners in Inclusive Settings	3
EDU 514	Assessment and Instruction of Diverse Learners I	3
EDU 529	Proactive Approaches to Classroom Management in Inclusive Settings	3
EDU 530	Assessment and Instruction of Diverse Learners II	3

Linking Content and Pedagogy (12 required credit hours)

To meet the requirements of the program and NYS regulations, candidates need 12 credit hours of courses that link pedagogy with the content area of their initial certificate. Courses are offered both through the College of Education and the content departments in the College of Liberal Arts & Sciences.

Candidates should select 12 credit hours of course work in consultation with the C&I Program Coordinator and the appropriate department from the College of Liberal Arts & Sciences.

Electives (3 credit hours)

Any graduate course not used to satisfy other requirements; advisor approval required.

Capstone (3 credit hours)

Must have completed EDU 660 with a B grade or better and 30 credit hours of graduate work

EDU 690	Master's Thesis/Project	3-6
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As of December 31, 2013, candidates in all education programs are required to complete training under the Dignity for All Students Act (DASA). The training required under the Dignity for All Student Act (DASA) will be included in EDU 303 at Fredonia. Graduate candidates who may have completed EDU 303 on campus prior to Spring 2014 must complete the EDU DASA workshop prior to full admission.

DANCE BACHELOR OF FINE ARTS

The B.F.A. in Dance provides training for future dance professionals in the context of a Liberal Arts education. In addition to intensive technical training in various styles of dance, additional studies in choreography, repertory, dance history, kinesiology, music, theatre, and physical education are required. The Dance program's curriculum is consistent with the guidelines developed by the National Association of Schools of Dance.

An audition is required for acceptance into the Dance major. Please contact the Department of Theatre & Dance for audition dates and criteria.

REQUIREMENTS FOR THE BFA DEGREE IN DANCE (91 CREDIT HOURS)

Required Technique Courses (30 credit hours):

DANC 111	Modern Technique I	2
DANC 111	Modern Technique I	2
DANC 112	Ballet I	2
DANC 112	Ballet I	2
DANC 113	Jazz Dance I	2
DANC 113	Jazz Dance I	2
DANC 114	Tap Dance I	2
	or	
DANC 214	Tap Dance II	2
DANC 211	Modern Technique II	2
DANC 212	Ballet II	2
DANC 213	Jazz Dance II	2

Subtotal: 20

Upon completion of the courses listed above

Students must take an additional 10 credit hours at the 200 or 300 level (DANCE 211, 212, 213, 214, 311, 312, 313).

At least 4 of these credit hours must be at the 300 level.

Subtotal: 10

Dance Electives (10 credit hours):

Students must take an additional 10 credit hours of DANC electives. These electives are usually satisfied through repetition of DANC 211-311 (Modern Technique II-III), DANC 212-312 (Ballet II-III), DANC 213-313 (Jazz II-III), and DANC 341 (Special Topics), each of which may be taken three times for credit. Additional elective options include DANC 214 (Tap II - if not used as a required technique course), and DANC 370 (Dance Studio Management).

Subtotal: 10

Additional Required Courses (43 credit hours):

THEA 100	Theatre Majors Seminar	1
DANC 101	Theatre and Dance Productions	1
DANC 102	Theatre and Dance Productions	1
DANC 241	Dance Improvisation	2
DANC 260	Dance Kinesiology	3
DANC 264	Choreography I	3
DANC 341	Selected Topics in Dance	1-3
DANC 353	Western Dance History	3
DANC 364	Choreography II	3
DANC 460	Senior Project	1
DANC 460	Senior Project	1
DANC 250	Dance Ensemble	1
	or	
DANC 251	Dance Repertory	1
THEA 121	Introduction to Technical Theatre	3
THEA 130	Acting for Non-Majors	3
	or	
THEA 133	Introduction to Acting	3
MUS 101	Beginning Music Theory I	3
MUS 115	Music Appreciation	3

PHED 126	Body Sculpting (Women)	2
	or	
PHED 139	Weight Training	2
HLTH 303	Fitness and Wellness	3

Subtotal: 43

NOTE:

- The DANC 250/251 requirement may be satisfied by any combination of DANC 250 and DANC 251, as long as the total number of credit hours equals 6 credit hours (included in total above).
- DANC 341 is a variable 1-3 credit course which students are to complete for at least one (1) credit hour to satisfy the degree requirements.

General Electives Outside the Major (8 credit hours):

In addition to the requirements listed above, all BFA Dance majors must take a minimum of eight (8) general elective credits outside the major, above and beyond the College Core Curriculum requirements. This requirement can be fulfilled by courses in any subject other than DANC, including courses taken as part of a second major or minor.

Subtotal: 8

Subtotal: 91

TOTAL CREDIT HOURS: 121

EARLY CHILDHOOD EDUCATION BACHELOR OF SCIENCE IN EDUCATION

Department of Curriculum and Instruction

Office: E268 Thompson Hall

(716) 673-3701

Dr. Robert L. Dahlgren, Chairperson

Email: ci@fredonia.edu

Website: <http://home.fredonia.edu/coe/early-childhood>

The Bachelor of Science in Education in Early Childhood Education prepares teacher candidates for certification in Early Childhood Education (Birth through Grade 2).

PROGRAM REQUIREMENTS:

Required Courses

EDU 105	Introduction to Contemporary Inclusive Education	3
EDU 106	Practicum in Inclusive Education I	
EDU 214	Introduction to Children's Literature	3
EDU 221	Introduction to Early Childhood Education	3
EDU 225	Child Development	3
EDU 250	Introduction to the Exceptional Learner	3
EDU 251	Practicum in Inclusive Education II	

EDU 276	Literacy and Technology in Inclusive Educational Settings	3
EDU 295	Introduction to Educational Assessment	3
EDU 305	Cultural and Linguistic Diversity in the Classroom	3
EDU 313	Practicum in Inclusive Education III	
EDU 315	Early Childhood Curriculum Development	3
EDU 349	Educational Psychology	3
EDU 301	Safe Schools/Healthy Students: Child Abuse and Child Abduction	1
EDU 302	Safe Schools/Healthy Students: Alcohol, Tobacco and Other Drug Abuse	1
EDU 303	Safe Schools/Healthy Students-DASA: Safety Education/Fire and Arson/School Violence	1
MUED 315	Music, Play, and Self	3
MAED 301	Mathematics for School Teachers I	3
MAED 302	Mathematics for School Teachers II	3
SCI 301	Essential Science I	3
SCI 302	Essential Science Lab	1
SCI 303	Essential Science II	3

Subtotal: 49

EDU 105, EDU 221, EDU 250, and EDU 305: courses that have a field experience component

*EDU 295 - Effective Fall 2014, course required for ALL incoming students. Course available in Spring 2015 for education majors with sophomore level standing.

Grades of "B" or better in EDU 105 and EDU 225 are required for all students entering this major in Fall 2015 or later. Please note that "B-" is not an adequate grade. Click here (p. 65) for more information.

Transfer students should consult with their academic advisor regarding Natural Science requirements.

Methods of Instruction:

EDU 402	Teaching Mathematics in Inclusive Educational Settings	3
EDU 405	Teaching Literacy in Inclusive Educational Settings	3
EDU 406	Literacy and Assessment in Inclusive Educational Settings	3
EDU 412	Integrated Methods for Early Childhood Education	3
EDU 432	Home/School Partnerships in a Diverse Society	1.5-3

Subtotal: 13.5-15**Capstone Experience – Student Teaching**

EDU 416	Capstone Seminar - Advanced Study in Classroom Organization, Management, and Instruction	3
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Subtotal: 3**Plus two of the following:**

EDU 421	Student Teaching in Early Childhood Education - Pre-Kindergarten	6
EDU 423	Student Teaching in Early Childhood Education - Kindergarten	6
EDU 425	Student Teaching in Early Childhood Education - Grades 1 or 2	6

Subtotal: 12**Plus Foreign Language Requirement:**

Candidates in all education programs are required to demonstrate competence in a foreign language. This requirement must be satisfied in any one of the following ways:

- Score of 85 percent or higher on New York State Regents Exam or New York State High School Equivalent Exam*: Requirement is fulfilled.
- Scores of 65 percent - 84 percent on New York State Regents Exam or New York State High School Equivalent Exam*: Student needs to take an Elementary I level course or an Elementary II level course of a language or equivalent course(s), or successfully complete an equivalent Fredonia proficiency exam.
- Scores below 65 percent on New York State Regents Exam or New York State High School Equivalent Exam*: Student needs to take an Elementary I level course and an Elementary II level course or equivalent course(s) of the same language.
- If student did not take a New York State Regents Exam or New York State High School Equivalent Exam*: Student needs to take an Elementary I level course and an Elementary II level course or equivalent course(s) of the same language.
- Note: The General Education foreign language requirement differs from the certification requirement and must be satisfied for degree conferral.
* *High School Equivalent Exam refers to a New York State Local School District Exam or Regional Exam in a Foreign Language.*

Plus an area of concentration: 30-37 credit hours. Students should see Areas of Concentration (p. 71) in the Education section of the catalog.

(Note: SCI courses are considered multi-disciplinary and will meet SUNY General Education requirement for Natural Science.)

For certification information, please see the Office of Student Services webpage.

Advisement forms may be downloaded at <http://www.fredonia.edu/coe/undergradadvise.asp>

As of December 31, 2013, candidates in all education programs are required to complete training under the Dignity for All Students Act (DASA). The training required under the Dignity for All Student Act (DASA) will be included in EDU 303 at Fredonia. Undergraduate candidates planning to graduate after Fall 2013 who have already completed EDU 303 on campus or taken a workshop as a substitution for EDU 303 must also complete the EDU DASA workshop prior to graduation.

TOTAL CREDIT HOURS: 77.5-79

EARLY CHILDHOOD-CHILDHOOD EDUCATION BACHELOR OF SCIENCE IN EDUCATION

Department of Curriculum and Instruction

Office: E268 Thompson Hall
(716) 673-3701

Dr. Robert L. Dahlgren, *Chairperson*

Email: ci@fredonia.edu

Website: <http://home.fredonia.edu/coe/ec-ce>

The Bachelor of Science in Early Childhood/Childhood Education prepares teacher candidates for dual certification in Early Childhood Education (Birth-Grade 2) and Childhood Education (Grades 1-6).

PROGRAM REQUIREMENTS:

Courses for this major include:

EDU 105	Introduction to Contemporary Inclusive Education	3
EDU 106	Practicum in Inclusive Education I	
EDU 214	Introduction to Children's Literature	3
EDU 221	Introduction to Early Childhood Education	3
EDU 225	Child Development	3
EDU 250	Introduction to the Exceptional Learner	3
EDU 251	Practicum in Inclusive Education II	
EDU 276	Literacy and Technology in Inclusive Educational Settings	3
EDU 295	Introduction to Educational Assessment	3
EDU 305	Cultural and Linguistic Diversity in the Classroom	3

EDU 313	Practicum in Inclusive Education III	
EDU 315	Early Childhood Curriculum Development	3
EDU 349	Educational Psychology	3
EDU 301	Safe Schools/Healthy Students: Child Abuse and Child Abduction	1
EDU 302	Safe Schools/Healthy Students: Alcohol, Tobacco and Other Drug Abuse	1
EDU 303	Safe Schools/Healthy Students-DASA: Safety Education/Fire and Arson/School Violence	1
MUED 315	Music, Play, and Self	3
MAED 301	Mathematics for School Teachers I	3
MAED 302	Mathematics for School Teachers II	3
SCI 301	Essential Science I	3
SCI 302	Essential Science Lab	1
SCI 303	Essential Science II	3

Subtotal: 49

NOTE: EDU 105, EDU 221, EDU 250, and EDU 305: courses that have a field experience component

EDU 295 - Effective Fall 2014, course required for ALL incoming students. Course available in Spring 2015 for education majors with sophomore level standing.

Grades of "B" or better in EDU 105 and EDU 225 are required for all students entering this major in Fall 2015 or later. Please note that "B-" is not an adequate grade. Click here (p. 65) for more information.

Transfer students should consult with their academic advisor regarding Natural Science requirements.

Methods of Instruction:

EDU 402	Teaching Mathematics in Inclusive Educational Settings	3
EDU 403	Teaching Science in Inclusive Educational Settings	3
EDU 404	Teaching Social Studies in Inclusive Educational Settings	3
EDU 405	Teaching Literacy in Inclusive Educational Settings	3
EDU 406	Literacy and Assessment in Inclusive Educational Settings	3
EDU 412	Integrated Methods for Early Childhood Education	3
EDU 432	Home/School Partnerships in a Diverse Society	1.5-3
EDU 416	Capstone Seminar - Advanced Study in Classroom Organization, Management, and Instruction	3
EDU 435	Student Teaching: Pre-K/Kindergarten	3-6
EDU 436	Student Teaching: Grades 1-3	3-6

EDU 437 Student Teaching: Grades 4-6 3-6
Subtotal: 31.5-42

Plus Foreign Language Requirement:

Candidates in all education programs are required to demonstrate competence in a foreign language. This requirement must be satisfied in any one of the following ways:

- Score of 85 percent or higher on New York State Regents Exam or New York State High School Equivalent Exam*: Requirement is fulfilled.
- Scores of 65 percent - 84 percent on New York State Regents Exam or New York State High School Equivalent Exam*: Student needs to take an Elementary I level course or an Elementary II level course of a language or equivalent course(s), or successfully complete an equivalent Fredonia proficiency exam.
- Scores below 65 percent on New York State Regents Exam or New York State High School Equivalent Exam*: Student needs to take an Elementary I level course and an Elementary II level course or equivalent course(s) of the same language.
- If student did not take a New York State Regents Exam or New York State High School Equivalent Exam*: Student needs to take an Elementary I level course and an Elementary II level course or equivalent course(s) of the same language.
- Note: The General Education foreign language requirement differs from the certification requirement and must be satisfied for degree conferral.
** High School Equivalent Exam refers to a New York State Local School District Exam or Regional Exam in a Foreign Language.*

Plus an area of concentration: 30-37 credit hours. Students should see Areas of Concentration (p. 71) in the Education section of the catalog.

(Note: SCI courses are considered multi-disciplinary and will meet SUNY General Education requirement for Natural Science.)

For certification information, please see the Office of Student Services webpage.

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As of December 31, 2013, candidates in all education programs are required to complete training under the Dignity for All Students Act (DASA). The training required under the Dignity for All Student Act (DASA) will be included in EDU 303 at Fredonia. Undergraduate candidates planning to graduate after Fall 2013 who have already completed EDU 303 on campus or taken a workshop as a substitution for EDU 303 must also complete the EDU DASA workshop prior to graduation.

TOTAL CREDIT HOURS: 80.5-91

EARTH SCIENCE BACHELOR OF ARTS

REQUIREMENTS FOR THE BACHELOR OF ARTS DEGREE IN EARTH SCIENCE

Core Program:

33 to 35 credit hours in geosciences; 25 to 29 credit hours in related disciplines

GEO 102	Freshman Seminar	1
GEO 165	Geology I	3
GEO 169	General Geology Lab	1
GEO 210	Geology II	3
GEO 215	Minerals and Rocks	4
GEO 370	Structural Geology	4
GEO 459	Seminar in Geosciences	1

Subtotal: 17

Two of the following four courses:

GEO 150	Moons and Planets	3
GEO 160	Oceanography	3
GEO 311	Global Climate	3
GEO 341	Stars and Galaxies	3

Subtotal: 6

An additional writing-intensive course, chosen from

GEO 330	Geomorphology	4
GEO 335	Geophysics	4
GEO 400	Stratigraphy	4
	One additional course with lab in Geology at the 300-level or 400-level	
	A course in Geographic Information Systems	
CHEM 115	General Chemistry Lecture I	3
CHEM 116	General Chemistry Lecture II	3
MATH 120	Survey of Calculus I	3
	or	
MATH 122	University Calculus I	4
PHYS 230	University Physics I	4
	and	
PHYS 231	University Physics II	4
	or	
PHYS 121	College Physics I	3
	and	
PHYS 122	College Physics II	3
	An additional course in Mathematics	
	A course in Statistics at the 200-level or higher	
	or	
	A course in computer programming	

Subtotal: 3-4

TOTAL CREDIT HOURS: 26-27**Economics****The Department of Economics is housed within the School of Business.**

Office: E336 Thompson Hall
(716) 673-3509

Dr. Peter Reinelt, Chairperson

Email: economics.department@fredonia.edu

Website: <http://home.fredonia.edu/economics>

Economics provides an understanding of how economic systems function and offers insight into the nature of real-world economic events, issues and problems while teaching the student a way of thinking that is clear, logical, analytical and rigorous. The study of economics encompasses a wide range of human behavior and experiences. Therefore, it has come to be widely recognized as a solid preparation for many professional careers in business, finance, non-profit organizations, and government. Courses in economics that emphasize the relevance of economic principles to areas in business, finance, quantitative and computer applications, public administration or industrial relations, provide the student with an excellent background for a variety of jobs and professions. The study of economics also provides an excellent preparation for graduate study in such professional areas as law, industrial relations, business and public administration.

Economics majors have the opportunity to participate in Omicron Delta Epsilon, the International Honor Society in Economics. Annually, the Maytum scholarships and Hart-Gorman Economic Awards go to the outstanding majors and double majors in Economics.

Economics as Preparation for Master of Business Administration Degree (M.B.A.)

Most graduate schools of business prefer their students to have a broad, liberal arts background. Since economics is more closely related to business administration than many other liberal arts areas, it is an ideal preparation for study toward the Master of Business Administration degree. According to a study conducted by the American Assembly of Collegiate Schools of Business (AACSB), graduate business school professors stress economics as the most important undergraduate preparation.

Economics Major as Pre-Law Study

There are no precisely prescribed pre-law programs or undergraduate courses. However, according to the Chronicle of Higher Education, many law schools believe that economics is one of the best preparations for the study of law. A recent study found that among the 14 majors that had more than 2,000 students taking the Law School Admission Test (LSAT), Economics majors received the highest average test scores in recent years.

MAJOR, MINOR IN ECONOMICS AND CERTIFICATE IN INTERNATIONAL ECONOMIC STUDIES

The department offers a major in Economics (B.A. degree) with designed fields in Business and Financial Economics; Data Analysis and Computer Applications; and Public Policy and Economics. Alternatively, with consultation and approval of the faculty advisor, the student may develop his/her own field of specialization. Thirty-six (36) credit hours of course work are required for a major in Economics. A minor, which requires 24 credit hours in economics, is also available. As an option to students majoring in Economics, the department issues a letter certifying the completion of International Economic Studies to those who complete 15 credit hours of designated course work. Students who are contemplating graduate study in Economics should consider taking the following as part of their specialization field:

Recommended Courses

ECON 400	Econometrics and Business Applications	3
MATH 122	University Calculus I	4
MATH 123	University Calculus II	4
MATH 231	Linear Algebra	4

Subtotal: 15

NOTE: The department strongly recommends that Economics majors take additional courses in accounting, computer science and calculus.

INTERNATIONAL ECONOMIC STUDIES CERTIFICATE**REQUIREMENTS FOR THE CERTIFICATE IN INTERNATIONAL ECONOMIC STUDIES**

As an option to students majoring in Economics, the department awards a certificate documenting the completion of International Economic Studies to Economics majors who complete the following 15 credit hours of course work:

Two of the following courses:

ECON 320	International Trade/Finance	3
ECON 345	Comparative Economic Systems	3
ECON 335	Economic Development	3
ECON 395	Comparative Human Resources and Foreign area study and/or international/comparative study	9

Subtotal: 15

NOTE: A maximum of 6 credit hours of a foreign language may be counted for the International Economic Studies option.

ECONOMICS BACHELOR OF ARTS**REQUIREMENTS FOR THE BACHELOR OF ARTS DEGREE IN ECONOMICS (36-37 CREDIT HOURS)****Supporting Course:**

MATH 120	Survey of Calculus I	3
	or	
MATH 122	University Calculus I	4
Subtotal: 3-4		

NOTE: MATH 120: also required for accounting and business degrees.

Lower Level Economics Core Courses:

ECON 200	Fundamentals of Statistics for Business Administration and Economics	3
ECON 201	Principles of Macroeconomics	3
ECON 202	Principles of Microeconomics	3
Subtotal: 9		

NOTE: ECON 200 (p. 352), ECON 201 (p. 353), and ECON 202 (p. 353): also required for accounting and business degrees.

Upper Level Economics Core Courses:

ECON 300	Statistical Analysis	3
ECON 305	Intermediate Microeconomic Theory	3
ECON 310	Intermediate Macroeconomic Theory	3
ECON 450	Senior Seminar	3
Subtotal: 12		

NOTE: ECON 300 (p. 353): also required for accounting and business degrees.

Elective Course requirements:

	Any four Economics courses outside the core at 300 level or above	12
Subtotal: 12		

TOTAL CREDIT HOURS: 36-37

Popular courses are in the following suggested areas of study:

- Business and Financial Economics
- Public Policy and Economics
- Data Analysis and Computer Applications
- Human Resources
- International Economics
- Environmental and Natural Resource Economics

Education**College of Education - Professional Education Unit**

Office: 705 Maytum Hall
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Dr. Christine Givner, *Dean and Chief Certification Officer for Fredonia*

Email: christine.givner@fredonia.edu

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Dr. Barbara Nolan, *Associate Dean and Accreditation Coordinator*

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Department of Curriculum and Instruction

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Dr. Robert L. Dahlgren, *Chairperson*

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Department of Language, Learning and Leadership

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Dr. Cindy Bird, *Chairperson*

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Office of Field Experiences

Office: W249 Thompson Hall
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Ms. Debra Karpinske-Keyser, *Assistant Director of Field Experiences*

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Office of Student Services

Office: E259 Thompson Hall
(716) 673-4768

Ms. Nicole Hohenstein, *Coordinator*

Email: edu@fredonia.edu

Website: <http://home.fredonia.edu/coe/student-services>

This section of the catalog provides information about the College of Education - Professional Education Unit at Fredonia, including but not limited to:

- education program links within catalog
- certification information
- advisement
- department office addresses

- pre-student teaching requirements
- accreditation
- areas of concentration & middle school extensions
- overview of adolescence education courses
- eligibility requirements for student teaching
- education grant programs
- education partnerships
- student teaching experiences in Australia, New York City and Hamburg, NY
- College of Education honors and awards

COLLEGE OF EDUCATION - PROFESSIONAL EDUCATION UNIT INFORMATION

Important Notification to All Education Majors

All programs and degree options in the College of Education lead to New York State Certification and are subject to the guidelines and mandates established by New York State.

Additionally, all programs and degree options are held accountable to the Council for the Accreditation of Educator Preparation (CAEP) standards. As such, any changes made by the New York State Board of Regents or CAEP have the potential to impact the requirements of the program. Undergraduate programs are reviewed each semester to check compliance with state certification and national accreditation requirements.

Candidates should meet with their faculty advisors and attend all advisement sessions for up-to-date information on current programs and certification requirements.

New Teacher Education Admission Requirements as of Fall 2015

In response to a State University of New York Board of Trustees mandate, Fredonia has adopted new admission requirements for all new students beginning Fall 2015.

Undergraduate Admission Requirements

For Freshmen interested in Early Childhood Education, Early Childhood/Childhood Education, Childhood Education, and Childhood Inclusive Education Programs:

Beginning Fall 2015, students entering as freshmen to Fredonia who are interested in becoming teachers may declare and explore the education major of their choice through designated initial courses. At the end of freshman year, students will need to apply to the College of Education and be formally admitted as a candidate of that program. The core program, including student teaching, will be restricted to teacher candidates only. Applicants for Teacher Candidacy must meet the following requirements:

- Grades of "B" or better in EDU 105/106 and EDU 225
- Reported scores on SAT/ACT
- Overall GPA of 3.0 or better
- Record of Positive Professional Dispositions

Applicants should visit <http://www.fredonia.edu/coe> for specific application procedures. Each program maintains requirements for continuing in the program including overall GPA, minimum course grade requirements, and maintaining appropriate professional dispositions.

For Freshmen interested in Adolescence Education and Music Education Programs:

Interested applicants should refer to the specific content departments or the School of Music sections of this catalog for admission requirements and application procedures of those programs.

For Transfer and Current Fredonia Students interested in any Education Programs:

Beginning Fall 2015, prospective transfer students or current Fredonia students in other majors outside of Education, wishing to enter a teacher certification program will need to apply and be formally admitted as a candidate of that program. The core program, including student teaching, will be restricted to teacher candidates only. Applicants for Teacher Candidacy must meet the following requirements:

- Reported scores on SAT/ACT (prospective transfer students may choose to submit SAT, ACT, or GRE scores)
- Overall GPA of 3.0 or better
- Any additional program requirements

Applicants should visit <http://home.fredonia.edu/coe/deans-office> for specific application procedures and requirements. Each program maintains requirements for continuing in the program including overall GPA, minimum course grade requirements, and maintaining appropriate professional dispositions.

Graduate Admission Requirements

For all Education Programs:

Beginning Fall 2015, new graduate students applying for acceptance into education programs must meet the following requirements:

- An undergraduate minimum overall GPA of 3.0
- Unless applying to a program leading to a recommendation for a first initial teaching certificate, applicants must provide proof of an initial certificate

- Reported scores on the GRE
- Any additional program requirements

Applicants should contact the Graduate Admissions Office for application procedures. Each program maintains requirements for continuing in the program including overall GPA and minimum course grade requirements and maintaining appropriate professional dispositions.

Council for the Accreditation of Educator Preparation (CAEP)

Fredonia is fully accredited by the National Council for the Accreditation of Teacher Education (NCATE), which has merged with the Teacher Education Accreditation Council (TEAC) to become CAEP, a partnership of national and international professional organizations to advance excellent educator preparation through evidence-based accreditation that assures quality and supports continuous improvement to strengthen P-12 student learning. CAEP standards expect the College of Education-Professional Education Unit to base its programs on content and teaching standards set by professional associations in each content area. CAEP accreditation adds both credibility and national transportability to Fredonia certification programs.

Program Philosophy and Conceptual Framework for All Certification Programs

The College of Education believes that all children can learn and that they learn best when taught by reflective and responsive educators who carefully assess their instructional competence via reflections upon pupil performance. Responsive educators make informed decisions based on these reflections and adjust instruction to enhance pupil progress. All candidates in the College of Education - Professional Education Unit complete a series of four field-based experiences in local schools. Each field-based experience is taught in conjunction with a required education course to clearly connect educational theory and practice. Each of the field experiences is highly structured, well supervised, and intended to provide multiple opportunities for candidates to Plan, Instruct, Reflect, and Respond with school children in classroom settings. Candidates also enroll in course work related to child and adolescent development, applications of psychology in the classroom, and pedagogical strategies as well as liberal arts and discipline-specific content courses. All of the courses work together to strengthen the candidates' Four Pillars of Understanding — Knowledge, Pedagogy, Diversity, and Professionalism — which in turn support the process of effective planning, instructing, reflecting, and responding. Course work and instruction are rooted in a strong foundation of research-based practices and strategies, contextual factors that influence instruction, and standards for teaching and learning.

Candidate Organizations for All Certification Programs

Within the College of Education, a dynamic and active Teacher Education Club offers activities that provide an

array of opportunities for academic, personal, and professional growth, as well as community service. The College of Education also houses the Zeta Upsilon Chapter of the International Honor Society in Education, Kappa Delta Pi. This invitation-only, service-orientated organization provides multiple opportunities for professional growth. In addition, the College of Education sponsors a chapter of the Golden Key International Honour Society.

International Exchange Program

Upon completion of degree requirements, the College of Education provides opportunities for graduate degree candidates to study in the United Kingdom. Through cooperative efforts with the University of Plymouth in Plymouth, England, students are afforded the opportunity to engage in a five-week international teaching practicum. This five-week internship (May-June) includes classroom experience in the United Kingdom, organized cultural excursions, and free travel time for individual development. Candidates earn 3 hours of graduate credit that can be used to meet the Social Foundations requirement in the Curriculum and Instruction master's degree program or as an elective in programs with elective options (with advisors approval). As a result of reciprocal agreements between The State University of New York at Fredonia and this British institution, students from England visit the Fredonia campus and area schools at selected times each year. Students can also apply to student teach in Australia through a partnership with University of Sunshine Coast.

LINKS TO THE VARIOUS EDUCATION PROGRAMS

Undergraduate Programs Leading to New York State Certification

The College of Education offers opportunity for initial certification in the following areas:

Childhood Education *Bachelor of Science in Education:* Preparation to teach elementary school (B.S. in Ed. degree: Certification Grades 1 to 6). This program resides in the Department of Curriculum and Instruction. See the Childhood Education section (p. 40) of the catalog. Guangyu Tan, program coordinator. Email: Guangyu.Tan@fredonia.edu.

Childhood Inclusive Education *Bachelor of Science in Education:* Preparation to teach elementary school and special education (B.S. Ed. degree: Certifications Grades 1-6 in general and special education). See the Childhood Inclusive Education section (p. 42) of the catalog. This program resides in the Department of Curriculum and Instruction. Laura Geraci, program coordinator. Email: Laura.Geraci@fredonia.edu.

Early Childhood Education Bachelor of Science in Education: Preparation to teach very young children, birth through age 8 (B.S. in Ed. degree: Certification Birth through Grade 2). This program resides in the Department of Curriculum and Instruction. See the Early Childhood Education section (p. 59) of the catalog.

Early Childhood-Childhood Education Bachelor of Science in Education: Preparation to teach very young children through elementary school (B.S. in Ed. degree: Certification Birth through Grade 6). This program resides in the Department of Curriculum and Instruction. See the Early Childhood/Childhood Education section (p. 61) of the catalog. Guangyu Tan, program coordinator. Email: Guangyu.Tan@fredonia.edu.

Middle Childhood Specialist Bachelor of Science: Mathematics Specialist: Preparation to teach middle school mathematics (B.S. degree: Certification in Mathematics Grades 5 to 9). Core education courses for the degree are taught in both the College of Education and the Department of Mathematical Sciences. Candidates in the degree program will be assigned an academic advisor from the Department of Mathematical Sciences. For information on the program, students should see the Mathematics-Middle Childhood Specialist section (p. 150) of the catalog.

Middle School Extension: Majors in Childhood and Childhood Inclusive Education may also obtain a certificate extension to teach a specific discipline in the Middle School grades. The Middle School Extension requirements are determined by the faculty in the Department of Curriculum & Instruction and the faculty in the various disciplines. See the Middle School Extension section (p. 73) of the catalog for more information and details of the discipline requirements.

Music Education: The School of Music offers a Bachelor of Music in Music Education. Please see the Music Education section (p. 185) of the catalog for more information.

Adolescence Education: Preparation to teach biology, chemistry, earth science, English, French, mathematics, physics, social studies or Spanish (B.A. or B.S. degree: Certification Grades 7 to 12). Core education courses for these degrees are taught in both the College of Education and the academic departments. Candidates in these degree programs major in the academic discipline and will be assigned an academic advisor from the appropriate academic department. Students are encouraged to declare their intent in an adolescence certification curriculum upon entering the university. However, this may be done later by meeting with the department chair. It is recommended that this change be made no later than Nov. 1 of the year in which the student will have earned 60 credit hours. However, declaration of an adolescence curriculum code does not guarantee admission to methods and student teaching. For more information on Adolescence Education

programs, students should refer to the appropriate academic department in the catalog:

To teach high school English, English Adolescence Education (p. 18)

To teach high school Earth Science, Earth Science Adolescence Education (p. 17)

To teach high school Biology, Biology Adolescence Education (p. 14)

To teach high school Mathematics, Mathematics Adolescence Education (p. 21)

To teach high school Chemistry, Chemistry Adolescence Education (p. 38)

To teach high school Social Studies, Social Studies Adolescence Education (p. 23)

To teach high school French or Spanish, French Adolescence Education (p. 20) or Spanish Adolescence Education (p. 20)

To teach high school physics, Physics Adolescence Education (p. 201)

Graduate Programs in Education: For information on graduate programs in Education, please see either the Education Graduate Program (p. 77) or the Graduate Teacher Education Certification section (p. 279) of the catalog; for graduate Music Education programs, please see the Music Graduate Program section (p. **Error! Bookmark not defined.**); for Speech Language Pathology, please see the Communication Disorders & Sciences Graduate Program section (p. 222) of the catalog.

TEACHER CERTIFICATION INFORMATION AND EDUCATION ADVISEMENT

Office of Student Services

Office: E259 Thompson Hall
(716) 673-4768

Ms. Nicole Hohenstein, Coordinator

Email: education.college@fredonia.edu

The Office of Student Services provides undergraduate academic student services for the College of Education. This office strives to offer a user-friendly, all-purpose student response structure that guides Fredonia's New York State Certification candidates along the path to becoming responsive, well-rounded, and marketable educators.

For more information on the Office of Student Services, please see their web page at <http://home.fredonia.edu/coe/student-services>.

Certification Information (based on New York State Department of Education requirements)

Requirements for All Certification Programs

Candidates in the College of Education - Professional Education Unit are regularly monitored and evaluated throughout the program via program-specific Assessment Models. The Assessment Models present an organized series of performance based checkpoints, or transition points, that document candidates' competencies and positive impact on learners. Specific requirements, deadlines, and minimal satisfactory performance levels (including grade point average requirements) are detailed in the models. All candidates should obtain a copy of the appropriate Assessment Model from an academic advisor and become familiar with the requirements established therein.

NOTE: Candidates transferring into a certification program (both internally and externally) must pass through each of the aforementioned transition points regardless of the candidate's academic standing at the time of transfer.

Professional Dispositions for All Certification Programs

Candidates in professional education are expected to demonstrate a set of values and attitudes consistent with the highest professional standards. These values and attitudes must be demonstrated in concrete ways in candidates' interactions with members of the faculty, school personnel, and with students. Information regarding the professional dispositions is available from academic advisors from the College of Education Office of Student Services, and online, through the College of Education website. Inappropriate behavior may warrant remediation, probation, or dismissal from the program.

Special Requirements for All Certification Programs

In light of the statutory requirements found in the Commissioner's Regulations subdivision 52.21(b), ALL candidates for New York State certification must complete required training in Child Abuse Detection and Reporting; Abduction Prevention; Alcohol, Tobacco and Drug Abuse Prevention; Fire Safety; Schools Against Violence in Education (SAVE); and Dignity for All Students Act (DASA) legislation. In the College of Education, candidates participate in a series of three 1-credit-hour courses (EDU 301, EDU 302, EDU 303) to fulfill these New York State requirements. In addition, New York State legislation effective July 1, 2001, requires that all applicants for initial certification and all new school employees be cleared through FBI fingerprinting and criminal background check. The candidate incurs the costs for the fingerprinting and the background check. Current forms and regulations are available at <http://www.highered.nysed.gov/tcert/>. Candidates for Initial teacher certification on or after May 1, 2014 must successfully complete the following New York State Teacher Certification Examinations: the Academic Literacy Skills Test (ALST), the Educating All Students Test (EAS), the appropriate Content Area Specialty Test

for the area of certification, and the Education Teacher Performance Assessment (edTPA) for the area of certification. These certification exams must be completed successfully in order to obtain New York State certification. Further information on New York State Teacher Examinations is available at <http://www.nystce.nesinc.com> and at <http://www.edtpa.com>.

Foreign Language requirement

Candidates in all education programs are required to demonstrate competence in a foreign language. This requirement must be satisfied in any one of the following ways:

- Score of 85 percent or higher on New York State Regents Exam or New York State High School Equivalent Exam*: Requirement is fulfilled.
- Scores of 65 percent - 84 percent on New York State Regents Exam or New York State High School Equivalent Exam*: Student needs to take an Elementary I level course or an Elementary II level course of a language or equivalent course(s), or successfully complete an equivalent Fredonia proficiency exam.
- Scores below 65 percent on New York State Regents Exam or New York State High School Equivalent Exam*: Student needs to take an Elementary I level course and an Elementary II level course or equivalent course(s) of the same language.
- If student did not take a New York State Regents Exam or New York State High School Equivalent Exam*: Student needs to take an Elementary I level course and an Elementary II level course or equivalent course(s) of the same language.
- NOTE: The General Education foreign language requirement differs from the certification requirement and must be satisfied for degree conferral.
* *High School Equivalent Exam refers to a New York State Local School District Exam or Regional Exam in a Foreign Language.*

PRE-STUDENT TEACHING FIELD EXPERIENCES

Students planning to become teachers in New York State are required to complete 100 hours of early and continuous pre-student teaching field experiences in public schools and other educational settings. At Fredonia all candidates complete at least 3 field-based pre-student teaching experiences in a school with a Cooperating Teacher. Each field-based experience is taught in conjunction with a required education course to better establish the link between theory and practice.

The Office of Field Experiences is responsible for arranging placements that provide the candidates with a minimum of 4 hours per week for approximately nine weeks in a classroom.

EDUCATION GRANTS AND PARTNERSHIPS

The College of Education has direct implications for change and innovation in teacher education. The campus-wide nature of the school involves the integration of early childhood, childhood, middle childhood and adolescence education components as well as the initiation of a comprehensive field-based approach to educational studies. In addition, the school assumes responsibility for supporting teaching effectiveness, educational research, child studies, development of grant proposals, and international education programs. The Institute for Research in Science Teaching is one example of outreach. This center focuses on the improvement of science education through research-based methods and instructional technology. Education has many partnerships with the public schools in the Fredonia service area, such as the Fredonia-Hamburg Teacher Education Center.

The college offers international programs for education majors. Through cooperative efforts with the University of Plymouth in Plymouth, England, students are afforded the opportunity to engage in a five-week international teaching practicum. As a result of reciprocal agreements between Fredonia and this British institution, students from England visit the Fredonia campus and area schools at selected times each year. Students can also apply to student teach in Australia through a partnership with University of Sunshine Coast.

For more information, please consult the College of Education web page on Community Partnerships, Education Grant Programs, and Special Projects.

ELIGIBILITY FOR METHODS AND STUDENT TEACHING

Office of Field Experiences

Office: W249 Thompson Hall
(716) 673-3443

Ms. Ann Marie Loughlin, Director

Email: annmarie.loughlin@fredonia.edu

Office: W249 Thompson Hall
(716) 673-3443

Ms. Debra L. Karpinske-Keyser, Assistant Director

Email: field.experiences@fredonia.edu

The Office of Field Experiences

The Office of Field Experiences places over 500 student teachers each academic year. This includes Childhood, Early Childhood, Childhood Inclusive Education

(childhood and special education), Music, Speech Pathology and Audiology, plus those students seeking Adolescence certification in English, Social Studies, Mathematics, Biology, Earth Science, Chemistry, Physics, French and Spanish. In addition candidates participate in at least 100 pre-service clock hours of supervised Early Field Experiences. All monitoring of placements and placement requests is done in the Office of Field Experiences. For more information on the Office of Field Experiences, please consult the web page at <http://home.fredonia.edu/coe/field-experiences-office>.

Eligibility for Methods and Student Teaching - Adolescence Education & Middle Childhood Mathematics

Students in the various adolescence education programs are responsible for contacting the Office of Field Experiences during the first week of classes in the spring semester of the year prior to the Student Teaching Year. They are to apply for student teaching during the spring semester. Applications for student teaching must be submitted by the deadline.

Students should refer to the departmental Assessment Model for specific criteria regarding entrance into student teaching.

Eligibility for Student Teaching Childhood, Childhood Inclusive, Early Childhood, and Childhood/Early Childhood Education

Student Teaching is a full time, semester long experience under the supervision of a mentor teacher and a college supervisor which can take place in the fall or spring semester. To be eligible to student teach, candidates must successfully complete all Professional Education courses, maintain the required 2.75 minimum cumulative grade point average (GPA), and apply by the deadline stipulated each year by the Office of Field Experiences. Candidates are responsible for contacting the Office of Field Experiences early in the semester BEFORE participating in Methods of Instruction courses.

Student teachers are expected to observe the calendars, regulations, and philosophies of the schools in which they are placed. The Office of Field Experiences, in collaboration with the participating schools, determines the beginning and ending dates for student teaching placements. Student teaching placements involve full-day (8:00 a.m. – 4:00 p.m.), Monday through Friday involvement for 15 weeks, and prospective student teachers are advised to plan their extracurricular schedules accordingly.

Placements of all candidates in all certification areas is at the discretion of the Office of Field Experiences, based upon factors including candidates' content area qualifications, availability of college supervisors, willingness of schools to accept student teachers, and the College of Education's commitment to serve schools equally. The College of Education - Professional

Education Unit reserves the right to remove any student teacher from any student teaching placement at any time for inadequate performance or inappropriate behavior. Prospective candidates are advised that student teaching placements are currently limited to Chautauqua County, Erie (N.Y.) County, Cattaraugus County, New York City, and the City of Elmira, N.Y.

COLLEGE OF EDUCATION HONORS AND AWARDS

Excellence in Student Teaching Awards

Open to all students who complete the student teaching practicum. The college supervisors will submit nominations of student teachers at the conclusion of each student teaching experience. To receive the Certificate of Excellence, a student must receive two nominations and demonstrate "exceptional promise" of continued growth as a future classroom teacher.

Professionalism Awards

Open to all students at any level in any education program, including graduate students. Each faculty member may nominate up to four students each semester. To receive the Professionalism Award, a student must demonstrate a set of values and attitudes consistent with the highest professional standards. The values and attitudes must be demonstrated in concrete ways in their interactions with members of the faculty, school personnel, and P-12 pupils.

Scholarships and Awards

Each May, the College of Education hosts an Awards Celebration for education student who receive a scholarship or award. Monetary values of awards may vary from year to year, but the eligibility criteria remains unchanged. The application process is fully electronic. The submission period is usually in March of each year and usually includes the university Spring break to allow students time to complete their application forms. Some award recipients are determined by faculty nomination. Students should consult the College of Education website for application forms and details of awards.

College of Education scholarships and awards are open to all education majors unless the award itself carries specific criteria. For the purposes of these awards and scholarships:

- "graduating senior" means any student successfully completing an education program in December, May or August of the award year,
- "senior" is any student with 89+ credit hours at the time of application,
- "junior" is any student with 57-88 credit hours at the time of application,
- "sophomore" is any student with 24-56 credit hours at the time of application,
- "freshman" is any student with fewer than 24 credit hours at the time of application,
- "education major" means any student enrolled in any first time Initial Certification, Teacher Education program at any level (freshman, sophomore, junior, senior).

This excludes students in programs requiring an initial certification for entrance, but includes the following Programs as identified on the COE webpage:

- Early Childhood Education (p. 59) (ECE)
- Childhood Education (CE) (p. 40)
- Childhood Inclusive Education (CIE) (p. 42)
- Early Childhood/Childhood Education (EC/CH) (p. 61)
- Music Education K-12 (p. 185)
- Teaching English to Speakers of Other Languages (TESOL K-12) (p. 82)
- Adolescence Education: (p. 71) Biology, Chemistry, Earth Science, English, French, Spanish, Physics, Social Studies, Math & Middle Childhood Math, and Adolescence Science Education (MAT).

NOTE: Adolescence education majors should also consult their discipline departments for discipline-specific awards.

Current Scholarships include:

- Baross-Clothier Scholarship
- Faith Elizabeth Bean Memorial Scholarship
- Thelma Brynolfson Scholarship
- Winifred Budd Scholarship
- Helen Buderkin Award
- James D. Burdick Memorial Scholarship
- Chautauqua County Retired Teachers Award
- Class of 1953 Neil Postman Memorial Award
- Class of 1954 Award
- Class of 1955 Award [alternates yearly with Music Dept.]
- Class of 1965 Reunion Endowment [alternates yearly with Music Dept.]
- Clifton Scholarship Fund
- Anthony Deulio Scholarship
- College of Education Endowment Scholarship
- Anthony J. Ellis Memorial Scholarship
- Charles and Shirley Erbsmehl Scholarship
- Dr. Arthur & Katherine Kaiser Scholarship

Philip Kochman Scholarship
 Helen Kelly Lillie Memorial Award
 Richard & Arlene LoGuidice Award
 Lucille Ellis Mack Scholarship
 Floyd & Mabel Melvin Scholarship
 Carol Scrace Pierce Award
 Louis E. Rath's Scholarship
 Margaret Sawkins-Hastie Award
 Marjorie E. Woods Scholarship
 Sanford and Lillian Zeman Award

FREDONIA/HAMBURG CONNECTION

The College of Education and the Hamburg (N.Y.) Central School District have cooperated in developing an innovative teacher education program for Childhood and Childhood Inclusive Education that combines the Professional Methods Semester course work and the student teaching experience during a full year internship at the Fredonia/Hamburg Teacher Education Center. The program received the Distinguished Program Award in 1985 from the National Association of Teacher Educators. Further information concerning the program can be obtained from the Dean of the College of Education and/or the Director of the Office of Field Experiences.

SUNY URBAN TEACHER EDUCATION CENTER (SUTEC)

The Office of Field Experiences works closely with the SUNY Urban Teacher Education Center (SUTEC), under the direction of the New York City Department of Education. SUTEC's primary mission is to assist the 17 SUNY campuses that offer teacher education programs in the placement of student teacher candidates in New York City public schools. These experiences prepare candidates for teacher certification to become competent and confident education professionals in urban, multicultural environments. SUTEC also facilitates the recruitment of SUNY teacher education graduates for New York City schools and provides an academic center for research and scholarship in urban education.

AREAS OF CONCENTRATION FOR CHILDHOOD, CHILDHOOD INCLUSIVE, EARLY CHILDHOOD AND EARLY CHILDHOOD/CHILDHOOD MAJORS

Candidates registered in the Childhood Education, Childhood Inclusive, Early Childhood or Early Childhood/Childhood programs must select one of the

approved concentrations listed below. Childhood and Childhood Inclusive majors may select a Middle School Extension. The requirements are included in the Middle School Extension section of the catalog. Downloadable forms may be found at <http://www.fredonia.edu/coe/undergradadvise.asp>.

CONCENTRATIONS

Biology Concentration (33 credit hours)

BIOL 110	Human Biology	3
BIOL 131	Introductory Ecology and Evolution	3
BIOL 132	Introductory Ecology and Evolution Laboratory	1
BIOL 133	Introductory Cell and Molecular Biology	3
BIOL 134	Introductory Cell and Molecular Biology Laboratory	1
BIOL 243	Organismal Biology	3
BIOL 244	Organismal Biology Laboratory	1

Plus 6 elective credit hours in Biology at the 300 and/or 400 level by advisement

SCI 301	Essential Science I	3
SCI 302	Essential Science Lab	1
SCI 303	Essential Science II	3
SCI 325	Science Teaching Assistantship	1-2
EDU 403	Teaching Science in Inclusive Educational Settings	3

Chemistry Concentration (34 credit hours)

CHEM 115	General Chemistry Lecture I	3
CHEM 125	General Chemistry Laboratory I	1
CHEM 116	General Chemistry Lecture II	3
CHEM 126	General Chemistry Laboratory II	1
CHEM 215	Organic Chemistry Lecture I	3
CHEM 225	Organic Chemistry Laboratory I	1
CHEM 216	Organic Chemistry Lecture II	3
CHEM 226	Organic Chemistry Laboratory II	1

Plus 6 elective credit hours in Chemistry at the 300 and/or 400 level by advisement

SCI 301	Essential Science I	3
SCI 302	Essential Science Lab	1
SCI 303	Essential Science II	3
SCI 325	Science Teaching Assistantship	1-2
EDU 403	Teaching Science in Inclusive Educational Settings	3

Earth Science Concentration (32-33 credit hours)

GEO 160	Oceanography	3
GEO 165	Geology I	3
GEO 169	General Geology Lab	1
GEO 210	Geology II	3
GEO 215	Minerals and Rocks	4
GEO 311	Global Climate	3

Plus 3-4 elective credit hours in Geology at the 300 and/or 400 level by advisement

SCI 301	Essential Science I	3
SCI 302	Essential Science Lab	1
SCI 303	Essential Science II	3
SCI 325	Science Teaching Assistantship	1-2
EDU 403	Teaching Science in Inclusive Educational Settings	3

English Concentration (30 credit hours)

ENED 357	Literacy/Language/Learning Theory	3
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Plus one to three of the following will be required based on your major:

ENED 352	Teaching Writing in the Primary Grades	3
ENED 354	Literature for Intermediate Grades	3
ENED 358	Teaching Writing in the Intermediate Grades	3

Plus one of the following:

ENGL 205	Epic and Romance	3
ENGL 207	Drama and Film	3
ENGL 209	Novels and Tales	3
ENGL 211	World Poetry	3

Plus elective credit hours in the following categories (credits vary based on the student's major):

6-9 credit hours of ENGL at the 200-level or above (national or world literature surveys highly recommended)

9-12 credit hours of ENGL or ENED at the 300 and/or 400 level (ENED 359 Teaching Poetry in Elementary and Middle School and ENED 353 Reading and Writing Children's Literature are highly recommended)

French Concentration (30 credit hours)

FREN 215	Intermediate French I	3
FREN 216	Intermediate French II	3
FREN 308	Advanced French Phonetics and Diction	3
FREN 317	French Conversation	3
FREN 318	French Composition	3
FREN 319	Survey of French Literature I	3

One of the following:

FREN 315	French Masterpieces	3
FREN 316	French Plays and Prose	3

Plus 9 elective credit hours in French at the 300 and/or 400 level or above by advisement

Mathematics Concentration (34-36 credit hours)

MATH 210	Mathematical Structures and Proof	4
MAED 301	Mathematics for School Teachers I	3
MAED 302	Mathematics for School Teachers II	3
MAED 303	Mathematics for School Teachers III	3

MAED 310	Reading and Writing Mathematics	3
MAED 325	Technology Integration in Mathematics Education	3
EDU 402	Teaching Mathematics in Inclusive Educational Settings	3

One of the following:

MATH 108	Prize-Winning Mathematics	3
MATH 110	Mathematics in Action	3
MATH 117	Why Mathematics?	3

One of the following sequences:

MATH 120	Survey of Calculus I and	3
MATH 121	Survey of Calculus II or	3
MATH 122	University Calculus I and	4
MATH 123	University Calculus II	4

One of the following:

STAT 150	Statistical Ideas	3
STAT 350	Probability and Statistics	3
MAED 240	Statistics for School Teachers	3

Music Concentration (34 credit hours)

MUS 121	Aural Skills I	2
MUS 122	Aural Skills II	2
MUS 123	Music Theory I	3
MUS 124	Music Theory II	3
MUED 315	Music, Play, and Self	3
MUS 450	Directed Studies	2
MUS 451	Directed Studies	2

Plus one of the following:

MUS 263	Music History in Western Civilization I	3
MUS 264	Music History in Western Civilization II	3

Plus one of the following:

MUS 265	History of Jazz	3
MUS 267	African American Music	3
MUS 270	The History of American Popular Music, 1900-1963	3

Plus any three of the following:

MUS 118	Piano Class, Elementary	2
MUS 217	Piano Class, Intermediate	1
MUS 218	Piano Class, Intermediate	1
MUS 317	Piano Class	1
MUS 318	Piano Class	1

Plus one of the following:

MUED 210	Guitar Class and	1
MUED 211	Guitar Class or	1
MUTY 240	Music for Children with Disabilities	1

Plus 6 elective credit hours in Music History at the 300 and/or 400 level by advisement.

Physics Concentration (35-37 credit hours)

PHYS 101	Contemporary Physics for Non-Science Majors	3
PHYS 121	College Physics I	3
PHYS 123	College Physics Lab I	1
PHYS 122	College Physics II	3
PHYS 124	College Physics II Lab	1
PHYS 311	Acoustics I	3
PHYS 318	Basic Electronics	3

One of the following sequences:

MATH 120	Survey of Calculus I and	3
MATH 121	Survey of Calculus II or	3
MATH 122	University Calculus I and	4
MATH 123	University Calculus II	4
SCI 301	Essential Science I	3
SCI 302	Essential Science Lab	1
SCI 303	Essential Science II	3
SCI 325	Science Teaching Assistantship	1-2
EDU 403	Teaching Science in Inclusive Educational Settings	3

Social Studies Concentration (33 credit hours)

HIST 105	United States History I	3
HIST 106	United States History II	3

Plus one of the following:

POLI 120	American Politics	3
POLI 150	U.S. and World Affairs	3

Plus one of the following sequences:

HIST 115	Western Civilization I and	3
HIST 102	World History II or	3
HIST 116	Western Civilization II and	3
HIST 101	World History I	3

Plus one of the following:

POLI 321	Political Parties and Interest Groups	3
POLI 323	Elections in America	3
POLI 324	President and Congress	3
POLI 356	U.S. Foreign Policy	3
POLI 370	American Constitutional Law	3
POLI 371	Civil Rights and Liberties	3

Plus each of the following at the 300 and/or 400 level as advised:

One course in American Minority Studies
One course in Non-Western Studies

One course in European Studies

One course in U.S. History

EDU 404	Teaching Social Studies in Inclusive Educational Settings	3
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Spanish Concentration (30 credit hours)

SPAN 215	Intermediate Spanish I	3
SPAN 216	Intermediate Spanish II	3
SPAN 313	Spanish Conversation	3
SPAN 314	Spanish Composition	3
SPAN 315	Introduction to Readings in Hispanic Literature	3

Plus 15 elective credit hours of Spanish at the 300 and/or 400 level by advisement.

MIDDLE SCHOOL EXTENSIONS

REQUIREMENTS FOR CHILDHOOD EDUCATION (GRADES 1-6) AND CHILDHOOD INCLUSIVE EDUCATION (GRADES 1-6) PLUS MIDDLE SCHOOL EXTENSION (GRADES 7-9)

Candidates registered in the Childhood Education and the Childhood Inclusive Education program can extend their certification via the Middle School Extension by completing (A) two additional courses in professional education and (B) one of the enhanced concentrations below (instead of the previously delineated concentrations).

A. Additional Education Course Work for Middle School Extensions:

EDU 224	Adolescent Development	3
EDU 321	Teaching in the Middle School	3

B. Enhanced Concentrations for Childhood Education with Middle School Extension (select one):

Biology Middle School Extension

Biology Core (25 credit hours)

BIOL 131	Introductory Ecology and Evolution	3
BIOL 132	Introductory Ecology and Evolution Laboratory	1
BIOL 133	Introductory Cell and Molecular Biology	3
BIOL 134	Introductory Cell and Molecular Biology Laboratory	1
BIOL 237	Genetics	3
BIOL 238	Genetics Laboratory	1
BIOL 243	Organismal Biology	3
BIOL 244	Organismal Biology Laboratory	1
BIOL 245	Human Anatomy and Physiology I	4
BIOL 330	Ecology	3
BIOL 331	Ecology Laboratory	1

Also one additional BIOL credit from the following: 105, 440, 450, 490.

Required Cognates (25 credit hours)

CHEM 115	General Chemistry Lecture I	3
CHEM 125	General Chemistry Laboratory I	1
CHEM 116	General Chemistry Lecture II	3
CHEM 126	General Chemistry Laboratory II	1
GEO 165	Geology I	3
GEO 311	Global Climate	3
PHYS 121	College Physics I	3
PHYS 123	College Physics Lab I	1
PHYS 122	College Physics II	3
PHYS 124	College Physics II Lab	1

Also GEO 150 or PHYS 118 - each 3 credit hours.

Chemistry Middle School Extension

Chemistry Core (24 credit hours)

CHEM 100	Chemistry Freshmen Seminar	1
CHEM 115	General Chemistry Lecture I	3
CHEM 125	General Chemistry Laboratory I	1
CHEM 116	General Chemistry Lecture II	3
CHEM 126	General Chemistry Laboratory II	1
CHEM 215	Organic Chemistry Lecture I	3
CHEM 225	Organic Chemistry Laboratory I	1
CHEM 216	Organic Chemistry Lecture II	3
CHEM 226	Organic Chemistry Laboratory II	1

7 credit hours of recommended electives

CHEM 302	Chemistry in Today's Society	3
CHEM 305	Laboratory Supervision in Chemistry	1-2
CHEM 317	Analytical Chemistry, Quantitative Analysis	3
CHEM 391	Independent Lab Research	1-3
CHEM 412	Advanced Organic Chemistry	3
CHEM 417	Polymer Chemistry	3
CHEM 473	Environmental Aquatic Chemistry	3
CHEM 481	Special Topics in Chemistry	1-3

(select any 7 elective credit hours, by advisement)

Required Cognates (23 credit hours)

BIOL 131	Introductory Ecology and Evolution	3
BIOL 133	Introductory Cell and Molecular Biology	3
GEO 165	Geology I	3
GEO 311	Global Climate	3
PHYS 121	College Physics I	3
PHYS 123	College Physics Lab I	1
PHYS 122	College Physics II	3
PHYS 124	College Physics II Lab	1

Also GEO 150 or PHYS 118 - each 3 credit hours.

Earth Science Middle School Extension

Earth Science core (24 credit hours)

GEO 150	Moons and Planets	3
GEO 160	Oceanography	3
GEO 165	Geology I	3
GEO 169	General Geology Lab	1
GEO 311	Global Climate	3
GEO 330	Geomorphology	4
GEO 215	Minerals and Rocks	4

3-7 credit hours of recommended electives

GEO 210	Geology II	3
GEO 301	Cartography	4
GEO 359	Vanishing Earth Resources	3
GEO 370	Structural Geology	4
GEO 400	Stratigraphy	4

Required Cognates (23 credit hours)

PHYS 121	College Physics I	3
PHYS 123	College Physics Lab I	1
PHYS 122	College Physics II	3
PHYS 124	College Physics II Lab	1
BIOL 131	Introductory Ecology and Evolution	3
BIOL 133	Introductory Cell and Molecular Biology	3
CHEM 115	General Chemistry Lecture I	3
CHEM 125	General Chemistry Laboratory I	1
CHEM 116	General Chemistry Lecture II	3
CHEM 126	General Chemistry Laboratory II	1

English Middle School Extension (36 credit hours)

ENED 354	Literature for Intermediate Grades	3
ENED 355	Adolescent Literature	3
ENED 356	Teaching Writing in the Secondary School	3
ENED 357	Literacy/Language/Learning Theory	3
ENED 358	Teaching Writing in the Intermediate Grades	3
ENED 359	Teaching Poetry in Elementary and Middle School	3

Plus one of the following:

ENGL 205	Epic and Romance	3
ENGL 207	Drama and Film	3
ENGL 209	Novels and Tales	3
ENGL 211	World Poetry	3

Plus:

English at the 200 level or above in National or World Literature by advisement	9
English at the 300 and/or 400 level by advisement. Must have "literary period" in the Course Attribute or "Literature" in the Course Title	6

French Middle School Extension (36 credit hours)

FREN 215	Intermediate French I	3
FREN 216	Intermediate French II	3
FREN 308	Advanced French Phonetics and Diction	3
FREN 317	French Conversation	3
FREN 318	French Composition	3
FREN 319	Survey of French Literature I	3

Plus one of the following:

FREN 315	French Masterpieces	3
FREN 316	French Plays and Prose	3

Plus:

French at the 300 and/or 400 level by advisement	15
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Mathematics Middle School Extension (41-43 credit hours)

MATH 210	Mathematical Structures and Proof	4
MATH 231	Linear Algebra	4
MATH 341	Geometry	3
MATH 381	History of Mathematics	3
MAED 301	Mathematics for School Teachers I	3
MAED 302	Mathematics for School Teachers II	3
MAED 303	Mathematics for School Teachers III	3
MAED 310	Reading and Writing Mathematics	3
EDU 402	Teaching Mathematics in Inclusive Educational Settings	3

One of the following sequences:

MATH 120	Survey of Calculus I and	3
MATH 121	Survey of Calculus II or	3
MATH 122	University Calculus I and	4
MATH 123	University Calculus II	4

One of the following:

STAT 150	Statistical Ideas	3
MAED 240	Statistics for School Teachers	3
STAT 350	Probability and Statistics	3

Plus:

MATH or STAT at the 300 or 400 level by advisement	3
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Physics Middle School Extension**Physics core (24 credit hours)**

PHYS 230	University Physics I	4
PHYS 232	University Physics I Lab	1
PHYS 231	University Physics II	4
PHYS 233	University Physics II Lab	1
PHYS 234	Modern Physics	4
PHYS 330	Thermodynamics	3
PHYS 340	Optics	3

PHYS 341	Optics Laboratory	1
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3 credit hours from the following:

PHYS 311	Acoustics I	3
PHYS 321-479		

Required Cognates (23 credit hours)

BIOL 131	Introductory Ecology and Evolution	3
BIOL 133	Introductory Cell and Molecular Biology	3
CHEM 115	General Chemistry Lecture I	3
CHEM 125	General Chemistry Laboratory I	1
CHEM 116	General Chemistry Lecture II	3
CHEM 126	General Chemistry Laboratory II	1
GEO 165	Geology I	3
GEO 311	Global Climate	3
GEO 150	Moons and Planets	3

Social Studies Middle School Extension (45 credit hours)

Note: A minimum grade of C+ is required for this extension.

HIST 105	United States History I	3
HIST 106	United States History II	3
POLI 120	American Politics	3
HIST 101	World History I	3
HIST 116	Western Civilization II	3
HIST 201	Doing History	3
SSED 204	World Regional Geography	3

Plus one of the following:

ECON 201	Principles of Macroeconomics	3
SSED 205	Economics for Social Studies Educators	3

Plus one of the following:

HIST 250	Introduction to Russia, Eastern Europe & Eurasia, 1789-Present	3
HIST 261	Islamic Civilization	3
HIST 264	East Asian Civilizations	3
HIST 265	Pre-modern East Asia	3
HIST 266	Modern East Asia	3
HIST 268	History of South Asia	3
HIST 272	Africa to 1800	3
HIST 273	Africa From the 1800s	3
HIST 282	Pre-Columbian and Colonial Latin America	3
HIST 283	Latin America: Revolution and Reform	3
HIST 288	The Atlantic World, 1500-1820	3

Plus one of the following:

POLI 321	Political Parties and Interest Groups	3
POLI 323	Elections in America	3
POLI 324	President and Congress	3
POLI 356	U.S. Foreign Policy	3

POLI 370	American Constitutional Law	3
POLI 371	Civil Rights and Liberties	3

Plus each of the following at the 300 and/or 400 level by advisement:

	One course in American Minority Studies	
	One course in Non-Western Studies	
	One course in U.S. History	
	One course in any History	
EDU 404	Teaching Social Studies in Inclusive Educational Settings	3

Spanish Middle School Extension (36 credit hours)

SPAN 215	Intermediate Spanish I	3
SPAN 216	Intermediate Spanish II	3
SPAN 313	Spanish Conversation	3
SPAN 314	Spanish Composition	3
SPAN 315	Introduction to Readings in Hispanic Literature	3

Plus:

Spanish at the 300 and/or 400 level by advisement	21
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Overview of Program Requirements for Adolescence Education, Middle Childhood Education, and Music Education K-12

Each of these education programs is housed in an appropriate academic department, where students take the various content courses for the degree. Students should check the department information in the catalog and on the web, for information on the content courses for the teaching of high school Biology, Chemistry, Earth Science, Physics, English, French, Spanish, Social Studies, and Mathematics, as well as for the teaching of Middle School Mathematics and for the teaching of K-12 Music. In addition to the content courses, students are expected to complete a series of pedagogical content courses and professional education courses as well as early field experiences and student teaching. Some of these courses will be offered through the College of Education, whereas others will be offered through the content department.

Required Professional Education Courses Include:

- EDU 105 (or Departmental Equivalent MAED 105, SCED 105, ENED 101, etc.) with field experience
- EDU 224 Adolescent Development
- EDU 250 Introduction to the Exceptional Learner
- EDU 251 Practicum in Inclusive Education II
- EDU 276 (or Departmental Equivalent MAED 276, SCED 276, etc.)
- EDU 301, EDU 302, and EDU 303

EDU 305 (or Departmental Equivalent MAED 305, SCED 305, etc.) with field experience

EDU 349 Educational Psychology

Methods and Student Teaching

In addition, as of December 31, 2013, candidates in all education programs are required to complete training under the Dignity for All Students Act (DASA). Beginning in the Fall 2013 semester, the training required under the Dignity for All Student Act (DASA) was included in EDU 303 at Fredonia.

Program Contact

Adolescence Education - Biology

This program is housed within the Department of Biology. For more information, please contact the department:
Office: 221 Science Center
(716) 673-3282

Dr. Patricia Astry, Chairperson

Email: biology@fredonia.edu

Website: <http://home.fredonia.edu/biology>

Adolescence Education - Chemistry

This program is housed within the Department of Chemistry & Biochemistry. For more information, please contact the department:
Office: 221 Science Center
(716) 673-3281

Dr. Thomas S. Janik, Chairperson

Email: chemistry.department@fredonia.edu

Website: <http://home.fredonia.edu/chemistry>

Adolescence Education – Earth Science

This program is housed within the Department of Geology and Environmental Sciences. For more information, please contact the department:
Office: 221 Science Center
(716) 673-3303

Dr. Sherri Mason, Chairperson

Email: geosciences.department@fredonia.edu

Website: <http://home.fredonia.edu/geosciences>

Adolescence Education - Physics

This program is housed within the Department of Physics. For more information, please contact the department:
Office: 221 Science Center
(716) 673-3301

Dr. Justin Conroy, Chairperson

Email: physics.department@fredonia.edu

Website: <http://home.fredonia.edu/physics>

Adolescence Education – French or Spanish

These programs are housed within the Department of World Languages and Cultures (formerly Modern Languages and Literature). For more information, please contact the department:
Office: 2113 Fenton Hall
(716) 673-3380

Dr. Juan De Urda Anguita, ChairpersonEmail: modern.languages@fredonia.eduWebsite: <http://home.fredonia.edu/worldlanguages>**Adolescence Education – Social Studies**

This program is housed within the Department of History.

For more information, please contact the department:

Office: E332 Thompson Hall

(716) 673-3277

Dr. Mary Beth Sievens, ChairpersonEmail: history.department@fredonia.eduWebsite: <http://home.fredonia.edu/history>**Adolescence Education – English**

This program is housed within the Department of English.

For more information, please contact the department:

Office: 277 Fenton Hall

(716) 673-3125

Dr. Bruce Simon, ChairpersonEmail: Ann.Siegledegre@fredonia.eduWebsite: <http://home.fredonia.edu/english>**Adolescence Education – Mathematics or Middle Childhood Mathematics**

These programs are housed within the Department of Mathematical Sciences. For more information, please contact the department:

Office: 223 Fenton Hall

(716) 673-3243

Dr. Julia Wilson, Chairperson**Dr. Keary Howard, Mathematics Education Coordinator**Email: mathematics.department@fredonia.eduWebsite: <http://home.fredonia.edu/math>**Music Education**

This program is housed within the School of Music. For

more information, please contact the School of Music:

Office: 1140 Mason Hall

(716) 673-3151

Dr. Katherine M. Levy, Program CoordinatorEmail: music@fredonia.eduWebsite: <http://home.fredonia.edu/music/music-education>**Education Graduate Programs****College of Education - Professional Education Unit**

Office: 705 Maytum Hall

(716) 673-3311

Dr. Christine Givner, Dean of the College of Education and Chief Certification OfficerEmail: christine.givner@fredonia.edu**Dr. Barbara Nolan, Associate Dean of the College of Education**Email: barbara.nolan@fredonia.eduWebsite: <http://home.fredonia.edu/coe>**Department of Curriculum and Instruction**

Office: E268 Thompson Hall

(716) 673-3701

Dr. Robert L. Dahlgren, ChairpersonEmail: ci@fredonia.eduWebsite: <https://home.fredonia.edu/coe/ci>**Department of Language, Learning and Leadership**

Office: E262 Thompson Hall

(716) 673-3702

Dr. Cindy Bird, ChairpersonEmail: lll@fredonia.eduWebsite: <https://home.fredonia.edu/coe/lll>**Graduate Assistant Criteria, Processes, Deadlines**

Students wishing to be considered for a graduate assistantship in the College of Education should check the appropriate box on the graduate application form. Upon approval of the applicant's acceptance into one of the graduate programs, the Office of the Dean of the College of Education will contact the applicant, asking the applicant to submit a College of Education Graduate Assistantship Application. The dean and the two department chairs (Curriculum and Instruction, and Language, Learning and Leadership) will review the applications and conduct interviews with all finalists to determine the final list of graduate assistants for the fall semester. Criteria for selection as a graduate assistant within the College of Education include: availability for work assignment during regular office hours, Monday through Friday; intellectual potential to support appropriate research and program evaluation activities of the unit; appropriate written and oral communication skills; and appropriate scholarly and professional dispositions. Applications received by March 15 will be given priority.

Program Philosophy and Conceptual Framework for All Certification Programs

The College of Education believes that all children can learn and that they learn best when taught by reflective and responsive educators who carefully assess their instructional competence via reflections upon pupil performance. Responsive educators act upon information gleaned from their professional reflections; they make informed decisions and adjust instruction to enhance pupil progress.

Candidates enroll in course work related to child/adolescent development, educational foundations, and pedagogical strategies, as well as discipline-specific content courses. All of the courses strengthen the candidates Four Pillars of Understanding, Knowledge, Pedagogy, Diversity, and Professionalism which in turn support the process of effective planning, instructing, reflecting, and responding. Course work and instruction are rooted in a strong foundation of research-based practices and strategies, contextual factors that influence instruction, and standards for teaching and learning. Graduate programs provide a variety of gateways to advanced certification, further professional development, prepare students for doctoral programs, and act as a stepping-stone to lifelong learning.

Council for the Accreditation of Educator Preparation (CAEP)

Fredonia is fully accredited by CAEP, the national accreditation organization. CAEP advances excellent educator preparation through evidence-based accreditation that assures quality and supports continuous improvement to strengthen P-12 student learning. CAEP standards expect the College of Education-Professional Education Unit to base its programs on content and teaching standards set by professional associations in each content area. CAEP accreditation adds both credibility and national transportability to Fredonia certification programs.

Office of Student Services

The Office of Student Services in E259 Thompson Hall provides information for candidates and potential candidates (in all certification programs) in the areas of

advisement, New York State testing requirements, fingerprinting requirements, application for teacher certification using the online TEACH website, course selection and registration information, professional development opportunities, and more. The office telephone number is (716) 673-4768.

Teacher Education Certification

The Dean of the College of Education serves as Fredonia's Chief Certification Officer and instructional leader for the graduate programs in education. The dean is responsible for oversight of all applications for certification for compliance with institutional and New York State requirements. Any questions or concerns related to the process of acquiring certification should be directed to Dean Christine Givner, 704 Maytum Hall, (716) 673-3311.

GRADUATE PROGRAMS LEADING TO NEW YORK STATE CERTIFICATION

Graduation and Certification Requirements

Before graduation, all students must complete an Application for Degree form in the Office of the Registrar. Students seeking certification must also fill out a Graduate Recommendation Release Form, also available in the Office of the Registrar, and online at <http://www.fredonia.edu/COE/teachwaivers.asp> in order for Fredonia to release academic and Social Security number information to the New York State Education Department.

Graduate students enrolled in one of the degree programs below are required to apply for their appropriate teacher certification online at <http://www.highered.nysed.gov/tcert/teach/>. It is the candidate's responsibility to apply for the appropriate New York State certificate.

Graduate students should check with the Office of Student Services for specific directions related to applying for teacher certification.

Upon a successful review of the graduation application, Fredonia will recommend candidates for the appropriate certification, also listed below. When the recommendation is for Professional certification, the candidate will be recommended for Professional certification in his/her area of initial certification.

Master's Degrees Offered	HEGIS CODES	Certification Recommended
Master of Arts in Teaching Adolescence Science Education (p. 25)	0834	Initial/Professional
Bilingual Education Extension (p. 84)	0899.60	Extension
Master of Science in Education Curriculum and Instruction in Inclusive Education (p. 56)	0829	Professional
Master of Arts in English 7-12 (p. 105)	1501	Professional
Master of Science in Education Literacy Education (Birth-12) (p. 56)	0830	Initial/Professional ***
Master of Science in Education Literacy Education (Grades 5-12) (p. 144)	0830	Initial/Professional ***
Master of Science in Education Mathematics 7-12 (p. 147)	1701.01	Professional
Master of Music in Music Education K-12 (p. 189)	0832	Professional
Advanced Certificate School Building Leadership (p. 212)	0828	Initial/Professional
Advanced Certificate School District Leadership (p. 213)	0827	Initial/Professional
Master of Science in Speech-Language Pathology (p. 222)	1220	Initial/Professional *****
Master of Science in Education TESOL (p. 80)	1508	Initial/Professional ***

Advanced Certificate TESOL (p. 92)		Initial/Professional
Master of Science in Education Natural Sciences (p. 199)	0834	Professional

***After completing one of these degree programs in Literacy Education and TESOL, candidates may also be eligible to apply for Professional certification in her/his area of provisional/initial certification after appropriate teaching experience has been completed.

****Leads to certification for Teachers of Students with Speech and Language Disabilities K-12.

Important Notification to All Certification Candidates

All programs and degree options in the College of Education lead to New York State Certification and are subject to the guidelines and mandates established by New York State. Additionally, all programs and degree options are held accountable to the Council for the Accreditation of Educator Preparation (CAEP) standards. As such, any changes made by the New York State Board of Regents or CAEP have the potential to impact the requirements of the program. Graduate programs are reviewed each semester to verify compliance with state certification and national accreditation requirements. Candidates should meet with their faculty advisors and attend any group advisement sessions that may be offered to secure up-to-date information on current programs and certification requirements.

Ongoing Assessment for All Certification Programs

Candidates in all certification programs are regularly monitored and evaluated throughout their programs via degree-specific Assessment Models. Each model includes a series of transition points that must be successfully passed through in order for a candidate to remain in good standing in the program. Specific requirements and deadlines, minimal satisfactory performance levels (including grade point average requirements), and remediation plans are detailed in these models. All candidates should obtain a copy of the appropriate Assessment Model from their academic advisors and become familiar with the requirements established therein.

Candidates in graduate programs leading to recommendations for professional certifications/teacher licensure have the following additional requirements:

- Present performance-based evidence of impact on student learning through engagement in a Structured Field Experience – Structured Field Experiences can be part of required coursework. Courses in which this occurs will vary from program to program. Consult your program advisor for the appropriate means for completing this requirement.
- Present performance-based evidence of technology use in being an effective teacher and professional colleague. Consult your program advisor for specific information on meeting this requirement.
- Present performance-based evidence of cultural responsiveness as an educator.

Consult your program advisor for specific information on meeting this requirement.

Candidate Disposition for All Certification Programs

Candidates in professional education are expected to demonstrate a set of values and attitudes consistent with the highest professional standards. The values and attitudes must be demonstrated in concrete ways in their interactions with members of the faculty, school personnel, and P-12 pupils. Inappropriate behaviors may warrant remediation, probation, or dismissal from the program.

Candidates are expected to demonstrate the following Interstate Teacher Assessment and Support Consortium (InTASC) aligned dispositions:

1. Demonstrate cognitive ability to assume responsibility of own and students' development;
2. Appreciate and value human diversity and show respect for varied talents and perspectives;
3. Contribute to a positive climate in university and P-12 classrooms;
4. Master content and effectively create learning experiences that assure P-12 mastery of content;
5. Commitment to developing as a creative and collaborative problem-solver;
6. Commitment to reflection, assessment and learning as ongoing processes;
7. Plan instruction that supports every student in meeting rigorous learning goals by drawing on knowledge of content, curriculum, and pedagogy in context;

8. Understand and use a variety of instructional strategies to encourage learners to develop deep understanding and connections among content areas;
9. Demonstrate level of responsibility appropriate for a professional; and
10. Demonstrate sensitivity to community and cultural norms of the teacher education program, university classroom, and practicum settings.

Special Requirements for All Certification Programs

In light of the statutory requirements found in the Commissioner's Regulations subdivision 52.21(b), all candidates for New York State certification must complete required training in Child Abuse Detection and Reporting; Abduction Prevention; Alcohol, Tobacco and Drug Abuse Prevention; Fire Safety; and Schools Against Violence in Education (SAVE) legislation. In the College of Education, candidates participate in a series of three 1 credit hour courses (EDU 301, EDU 302, EDU 303) to fulfill these New York State Requirements.

In addition, New York State legislation effective July 1, 2001, requires that all applicants for initial certification and all new school employees be cleared through FBI fingerprinting and criminal background check. The candidate incurs the costs for the fingerprinting and the background check. Current forms and regulations are available at <http://www.highered.nysed.gov/tcert/>.

Also, as of December 31, 2013, candidates in all education programs are required to complete training under the Dignity for All Students Act (DASA). The training required under the Dignity for All Student Act (DASA) will be included in EDU 303 at Fredonia. Graduate candidates who may have completed EDU 303 on campus prior to Spring 2014 must complete the EDU DASA workshop prior to full admission.

International Exchange Program

The College of Education provides opportunities for graduate degree candidates to study in the United Kingdom. Through cooperative efforts with the University of Plymouth in Plymouth, England, students are afforded the opportunity to engage in a five-week international teaching practicum. This five-week internship (May-June) includes classroom experience in the United Kingdom, organized cultural excursions, and free travel time for individual development. Candidates earn 3 hours of graduate credit that can be used to meet the Social Foundations requirement in the Curriculum and Instruction master's degree program or as an elective in programs with elective options (with advisors approval). As a result of reciprocal agreements between The State University of New York at Fredonia and this British institution, students from England visit the Fredonia campus and area schools at selected times each year. TESOL students can also apply to student teach in Mexico.

TEACHING ENGLISH TO SPEAKERS OF OTHER LANGUAGES (TESOL)/BILINGUAL EDUCATION (BE)

Department of Language, Learning and Leadership

Office: E262 Thompson Hall

(716) 673-3702

Dr. Cindy Bird, *Chairperson, Department of Language, Learning and Leadership*

Dr. Karen Lillie, *Program Coordinator*

Email: karen.lillie@fredonia.edu

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Website: <https://home.fredonia.edu/coe/lll>

Two degree/award options are available in TESOL. Both the award of Master of Science in Education in TESOL program and the award of Advanced Certificate in TESOL lead to a recommendation for an initial and/or professional certification in ESOL prek-12.

Each award option has different program options with different admission and completion requirements. See the description for each program.

For Program Options, see TESOL Program Options section of the catalog.

The Advanced Certificate in Bilingual Education is also available. See the Bilingual Education (p. 29) section of the catalog for this option.

Teaching English to Speakers of Other Languages (TESOL)/Bilingual Education (BE) Program Options

For the Master of Science in Education

Option 1 (for candidates with a current NYS teacher certificate)

Appropriate for candidates who have a baccalaureate degree and current New York State teacher certification in a core content area. These candidates must complete the 36-credit-hour program leading to the M.S.Ed. in TESOL. Note: New York State also requires proof of successful completion of at least 12 post-secondary credit hours of study in a language other than English (LOTE) for ESOL certification.

Program Admission and Completion Requirements

Option 2 (for candidates without a current NYS teacher certificate)

Appropriate for candidates who have a baccalaureate degree or a master's degree in a core content area but do

not have current New York State teacher certification. These candidates must complete the 36 hour program leading to the MSED in TESOL and must also complete coursework to compensate for deficiencies in prior preparation in the areas of Developmental Psychology (3 credit hours), Educational Psychology (3 credit hours), Special Education (3 credit hours, with field experience), Child Abuse Detection & Reporting (wkshp/1 credit hour); Tobacco, Drug & Alcohol Abuse Prevention (wkshp/1 credit hour), and Schools Against Violence in Education (SAVE)/Fire Safety & Arson Prevention (wkshp/1 credit hour). NOTE: New York State also requires proof of successful completion of at least 12 post-secondary credit hours of study in a language other than English (LOTE) for ESOL certification.

Program Admission and Completion Requirements

For the Advanced Certificate (CAS)

Certificate of Advanced Study (CAS) in TESOL

Appropriate for candidates who have a masters degree and current New York State teacher certification. These candidates can elect to complete an 18 hour program leading to the Certificate of Advanced Study in TESOL. Note: New York State also requires proof of successful completion of at least 12 post-secondary credit hours of study in a language other than English (LOTE) for ESOL certification.

Program Admission and Completion Requirements (p. 82)

Certificate of Advanced Study (CAS) in Bilingual Education

Designed to address a New York State designated critical shortage area, the Bilingual Education, CAS, is appropriate for candidates who have a masters degree and current New York State teacher certification. These candidates can elect to complete an 18 hour program leading to the Certificate of Advanced Study in Bilingual Education.

Program Admission and Completion Requirements (p. 84)

For the Master of Arts in Language and Learning with a specialization area

Appropriate for candidates who have a baccalaureate degree or a master's degree and are not seeking New York State teacher certification. Candidates will select one of five specialization areas from the following: TESOL / TEFL; Language Policy; Bilingualism/Multilingualism; Heritage Languages; Sociolinguistics. These candidates must complete the 30 hour program leading to the M.A. in Language and Learning, among which 12 credit hours must be completed within the chosen specialization area.

Program Requirements (p. 88)

TESOL MASTER OF SCIENCE IN EDUCATION DEGREE (OPTION 1)

Total Credit Hours for Program Completion: 36

Requirements for Admission to Fredonia's TESOL Program (Option 1)

The requirements for admission to Fredonia's TESOL program without deficiencies are:

- Completion of a baccalaureate degree in an area of arts, science, or education.
- Undergraduate GPA of 3.00 or above. (New York State requirement)
- Evidence of having taken the GRE*. (New York State requirement)
- Evidence of New York State DASA Training
- Current NYS Teaching Certificate
- Completed Graduate Application submitted to the Office of Graduate Studies including:
 - (a) two current (within six months) letters of recommendation which include contact information as the TESOL Program Coordinator has the option of contacting anyone who has submitted a letter on your behalf; and
 - (b) official academic transcripts from all prior undergraduate and graduate institutions (except Fredonia).
- Language Proficiency Requirements:
 - for Native Speakers of English:
 - A statement of your background and goals in addition to a resume (maximum 3 pages)
 - A graduate-level 800-1,200 word short essay in English which addresses the following question: "Describe your reasons for pursuing a graduate degree in TESOL and support your rationale with specific information pertinent to your desired degree."
 - 12 post-secondary credit hours in a Language Other than English (LOTE), or an approved equivalency, in a single language. Candidates may be accepted conditionally into the TESOL program without the LOTE credits fulfilled. Matriculation into the TESOL program is contingent upon the satisfactory completion of this requirement
 - A satisfactory intermediate-level 800-1,200 word short essay in a language other than English (LOTE). Candidates may be accepted conditionally into the TESOL program without the LOTE essay. Matriculation into the TESOL program is contingent upon the satisfactory evaluation of this essay.

- for Non-Native Speakers of English:
 - A statement of your background and goals in addition to a resume
 - A graduate-level 800-1,200 word short essay in English which addresses the following question: "Describe your reasons for pursuing a graduate degree in TESOL and support your rationale with specific information pertinent to your desired degree."
 - A graduate level 800-1,200 word short essay in the candidate's native language. This can be any academic paper (e.g., a paper from a college course).

*It is possible to be conditionally accepted if GRE scores are pending.

Additional Requirements for Non-Native Speakers of English to the TESOL Program:

1. The TESOL graduate program requires that non-native speakers of English show evidence of English proficiency by providing scores which are different from those required of the Graduate College. Proof of proficiency may be shown by achieving the following test scores[1]:
 - a. TOEFL: 550 (paper), 213 (computer), or 79 (internet)
 - b. IELTS (with no subsection below 6.0): 6.5

Fredonia's school code for reporting the TOEFL and IELTS scores electronically is 2539. International students who have been awarded a prior degree from the U.S., U.K./Ireland, Australia, Anglophone Canada, New Zealand, Anglophone Africa, Singapore, and the Commonwealth Caribbean prior to applying to Fredonia are not required to submit TOEFL or IELTS.
2. International applicants must provide official copies of all previous degrees/diplomas and transcripts issued in the original language with a literal English translation of each. Proof of an official certification of the award of any and all degrees must be provided. Include documentation describing in which language the courses were taught. The latter can be included in a separate document as a chart or statement.
3. International applicants must also have transcripts translated and evaluated by WES (www.wes.org) or a similar agency against the American 4.0 standard.

Additionally, all International applicants must meet the requirements outlined by the Graduate Studies website.

DEGREE REQUIREMENTS

Program Completion Requirements

EDU 570	Using Educational Research to Improve Instruction	3
EDU 518	Second Language Acquisition and Development	3
EDU 519	Curriculum Theory for the Second Language Classroom - ESL I	3
EDU 521	Practicum in TESOL, I	
EDU 540	Content Area English as a Second Language	3
EDU 541	Practicum in TESOL II	
EDU 564	Linguistics for ESL Educators	3
EDU 565	Language and Learning: Psycho- and Sociolinguistic Considerations for Educators of ELL Students	3
EDU 568	Foundations of Bilingual Education	3
EDU 567	Practicum in TESOL, III	
EDU 569	Assessment and Evaluation of English Language Learners (ELLs)	3
EDU 671	ESOL/BE Practicum & Supervision 20 Day	3
EDU 660	Conducting Educational Research	3
EDU 690	Master's Thesis/Project	3-6

Subtotal: 33-36

Elective:

In addition to the above program requirements, an additional elective course in Cultural Perspectives (as approved by the TESOL Program Coordinator) is required.

EDU 570 (p. 369): must be completed within the first 9 credit hours of graduate study.

As of December 31, 2013, candidates in all education programs are required to complete training under the Dignity for All Students Act (DASA). The training required under the Dignity for All Student Act (DASA) will be included in EDU 303 at Fredonia. Graduate candidates who may have completed EDU 303 on campus prior to Spring 2014 must complete the EDU DASA workshop prior to full admission.

TESOL MASTER OF SCIENCE IN EDUCATION DEGREE (OPTION 2)

Total credit hours for program completion: 36 (plus courses as needed)

Requirements for Admission to the Program without Deficiencies

Requirements for Admission to Fredonia's TESOL Program (Option 2)

- Completion of a baccalaureate degree in an area of arts, science, or education.

- Undergraduate GPA of 3.00 or above.
- Evidence of having taken the GRE*.
- Completed Graduate Application submitted to the Office of Graduate Studies including:
 - (a) two current (within six months) letters of recommendation which include contact information as the TESOL Program Coordinator has the option of contacting anyone who has submitted a letter on your behalf; and
 - (b) official academic transcripts from all prior undergraduate and graduate institutions (except Fredonia)
- Language Proficiency Requirements
 - for Native Speakers of English:
 - A statement of your background and goals in addition to a resume (maximum three pages)
 - A graduate-level 800-1,200 word short essay in English which addresses the following question: “Describe your reasons for pursuing a graduate degree in TESOL and support your rationale with specific information pertinent to your desired degree.”
 - 12 post-secondary credit hours in a Language Other than English (LOTE), or an approved equivalency, in a single language. Candidates may be accepted conditionally into the TESOL program without the LOTE credits fulfilled. Matriculation into the TESOL program is contingent upon the satisfactory completion of this requirement.
 - A satisfactory intermediate-level 800-1,200 word short essay in a language other than English (LOTE). Candidates may be accepted conditionally into the TESOL program without the LOTE essay. Matriculation into the TESOL program is contingent upon the satisfactory evaluation of this essay.
 - for Non-Native Speakers of English:
 - A statement of your background and goals in addition to a resume (maximum three pages)
 - A graduate-level 800-1,200 word short essay in English which addresses the following question: “Describe your reasons for pursuing a graduate degree in TESOL and support your rationale with specific information pertinent to your desired degree.”
 - A graduate level 800-1,200 word short essay in the candidate's native language. This can be any academic paper (e.g., a paper from a college course).

- Further stipulations as listed below under “Additional requirements for non-native speakers of English to the TESOL program”

*It is possible to be conditionally accepted if GRE scores are pending.

Additional Requirements for Non-Native Speakers of English to the TESOL Program (any aspect):

- The TESOL graduate program requires that non-native speakers of English show evidence of English proficiency by providing scores which are different from those required of the Graduate College. Proof of proficiency may be shown by achieving the following test scores[i]:
 - TOEFL: 550 (paper), 213 (computer), or 79 (internet)
 - IELTS (with no subsection below 6.0): 6.5

Fredonia's school code for reporting the TOEFL and IELTS scores electronically is 2539. International students who have been awarded a prior degree from the U.S., U.K./Ireland, Australia, Anglophone Canada, New Zealand, Anglophone Africa, Singapore, and the Commonwealth Caribbean prior to applying to SUNY Fredonia are not required to submit TOEFL or IELTS.
- International applicants must provide official copies of all previous degrees/diplomas and transcripts issued in the original language with a literal English translation of each. Proof of an official certification of the award of any and all degrees must be provided. Include documentation describing in which language the courses were taught. The latter can be included in a separate document as a chart or statement.
- International applicants must also have transcripts translated and evaluated by WES (www.wes.org) or a similar agency against the American 4.0 standard.

Additionally, all International applicants must meet the requirements outlined by the Graduate Studies website.

DEGREE REQUIREMENTS

Program Completion Requirements

EDU 570	Using Educational Research to Improve Instruction	3
EDU 518	Second Language Acquisition and Development	3
EDU 519	Curriculum Theory for the Second Language Classroom - ESL I	3
EDU 521	Practicum in TESOL, I	
EDU 540	Content Area English as a Second Language	3
EDU 541	Practicum in TESOL II	

EDU 564	Linguistics for ESL Educators	3
EDU 565	Language and Learning: Psycho- and Sociolinguistic Considerations for Educators of ELL Students	3
EDU 568	Foundations of Bilingual Education	3
EDU 567	Practicum in TESOL, III	
EDU 569	Assessment and Evaluation of English Language Learners (ELLs)	3
EDU 673	ESOL/BE Practicum & Supervision (40 day)	3
EDU 660	Conducting Educational Research	3
EDU 690	Master's Thesis/Project	3-6

Elective:

In addition to the above program requirements, an additional elective course in Cultural Perspectives (as approved by the TESOL Program Coordinator) is required.

EDU 570: must be completed within the first 9 credit hours of graduate study.

As of December 31, 2013, candidates in all education programs are required to complete training under the Dignity for All Students Act (DASA). The training required under the Dignity for All Student Act (DASA) will be included in EDU 303 at Fredonia. Graduate candidates who may have completed EDU 303 on campus prior to Spring 2014 must complete the EDU DASA workshop prior to full admission.

ADDITIONAL REQUIREMENTS**One of the following four courses**

EDU 225	Child Development	3
EDU 224	Adolescent Development	3
EDU 501	Advanced Study: Child Psychology	3
EDU 502	Psychology of Adolescence	3

And

EDU 250	Introduction to the Exceptional Learner	3
EDU 251	Practicum in Inclusive Education II	
EDU 349	Educational Psychology	3
EDU 301	Safe Schools/Healthy Students: Child Abuse and Child Abduction	1
EDU 302	Safe Schools/Healthy Students: Alcohol, Tobacco and Other Drug Abuse	1
EDU 303	Safe Schools/Healthy Students- DASA: Safety Education/Fire and Arson/School Violence	1

EDU 250 and EDU 251 may be substituted with an equivalent graduate course as approved by the Dean of the College of Education

EDU 349 may be substituted with an equivalent graduate course as approved by the Dean of the College of Education

Also:

- Fingerprinting requirement
- Completion of pertinent New York State examinations for New York State certification
- Candidate must meet all existing and current requirements as mandated by the New York State Education Department and CAEP

As of December 31, 2013, candidates in all education programs are required to complete training under the Dignity for All Students Act (DASA). The training required under the Dignity for All Student Act (DASA) will be included in EDU 303 at Fredonia.

BILINGUAL EDUCATION CERTIFICATE OF ADVANCED STUDY (CAS)

Total Credit Hours for Program Completion: 18

This eighteen (18) credit hour program leads to a recommendation for an extension to a NYS base certificate in order to become a Bilingual Educator. The NYS required twelve (12) credit hours of Language other than English (LOTE) are in addition to the 18 credit hours listed below for program completion.

Requirements for Admission to the Program without Deficiencies

- Completion of a baccalaureate degree in an area of arts, science, or education
- Undergraduate GPA of 3.00 or above
- Evidence of having taken the GRE*
- Evidence of New York State DASA Training
- Current NYS Teaching Certificate (*other than ESOL*)
- Completed Graduate Application submitted to the Office of Graduate Studies including:
 - (a) two current (within six months) letters of recommendation which include contact information as the TESOL Program Coordinator has the option of contacting anyone who has submitted a letter on your behalf; and
 - (b) official academic transcripts from all prior undergraduate and graduate institutions (except SUNY Fredonia).
- Language Proficiency Requirements:
 - for Native Speakers of English:
 - A statement of your background and goals in addition to a resume (maximum 3 pages)

- A graduate-level 800-1,200 word short essay in English which addresses the following question: “Describe your reasons for pursuing a graduate program in Bilingual Education and support your rationale with specific information pertinent to your desired degree.”
- 12 post-secondary credit hours in a Language Other than English (LOTE), or an approved equivalency, in a single language. Candidates may be accepted conditionally into the Bilingual Education program without the LOTE credits fulfilled. Matriculation into the program is contingent upon the satisfactory completion of this requirement.
- A satisfactory intermediate-level 800-1,200 word short essay in a language other than English (LOTE). Candidates may be accepted conditionally into the Bilingual Education program without the LOTE essay. Matriculation into the program is contingent upon the satisfactory evaluation of this essay.
- for Non-Native Speakers of English:
 - A statement of your background and goals in addition to a resume
 - A graduate-level 800-1,200 word short essay in English which addresses the following question: “Describe your reasons for pursuing a graduate program in Bilingual Education and support your rationale with specific information pertinent to your desired degree.”
 - A graduate level 800-1,200 word short essay in the candidate's native language. This can be any academic paper (e.g., a paper from a college course).
 - Further stipulations as listed below under “Additional requirements for non-native speakers of English to the Bilingual Education program”

*It is possible to be conditionally accepted if GRE scores are pending.

Additional Requirements for Non-Native Speakers of English to the Bilingual Education Program (any aspect):

- a. The program requires that non-native speakers of English show evidence of English proficiency by providing scores which are different from those required of the Graduate College. Proof of proficiency may be shown by achieving the following test scores:

- i. TOEFL: 550 (paper), 213 (computer), or 79 (internet)
- ii. IELTS (with no subsection below 6.0): 6.5

Fredonia's school code for reporting the TOEFL and IELTS scores electronically is 2539. International students who have been awarded a prior degree from the U.S., U.K./Ireland, Australia, Anglophone Canada, New Zealand, Anglophone Africa, Singapore, and the Commonwealth Caribbean prior to applying to SUNY Fredonia are not required to submit TOEFL or IELTS.

- b. International applicants must provide official copies of all previous degrees/diplomas and transcripts issued in the original language with a literal English translation of each. Proof of an official certification of the award of any and all degrees must be provided. Include documentation describing in which language the courses were taught. The latter can be included in a separate document as a chart or statement.
- c. International applicants must also have transcripts translated and evaluated by WES (www.wes.org) or a similar agency against the American 4.0 standard.

Additionally, all International applicants must meet the requirements outlined by the Graduate Studies website.

PROGRAM COMPLETION REQUIREMENTS

Required Courses

EDU 518	Second Language Acquisition and Development	3
EDU 540	Content Area English as a Second Language	3
EDU 541	Practicum in TESOL II	
EDU 555	Methods of Bilingual Education	3
EDU 567	Practicum in TESOL, III	
EDU 568	Foundations of Bilingual Education	3
EDU 569	Assessment and Evaluation of English Language Learners (ELLs)	3
EDU 674	Bilingual Education (BE) Practicum & Supervision- 20 Day	3

Subtotal: 18

As of December 31, 2013, candidates in all education programs are required to complete training under the Dignity for All Students Act (DASA). The training required under the Dignity for All Student Act (DASA) will be included in EDU 303 at Fredonia. Graduate candidates who may have completed EDU 303 on campus prior to Spring 2014 must complete the EDU DASA workshop prior to full admission.

CURRICULUM AND INSTRUCTION IN INCLUSIVE EDUCATION MASTER OF SCIENCE IN EDUCATION

Department of Curriculum and Instruction
Office: E270 Thompson Hall
(716) 673-3701

Dr. Robert Dahlgren, *Chairperson, Department of Curriculum and Instruction*

Dr. Ana Maria Klein, *Program Coordinator*

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The College of Education at the State University of New York at Fredonia prepares early childhood, childhood, middle childhood, and adolescence educators for the significant instructional challenges that await them. The general philosophy underlying the Responsive Educator Program is an organized, yet complex model, which correlates with the themes that characterize current educational research. That is, we believe that all children can learn, and that they can learn best by teachers who are responsive.

The Curriculum and Instruction in Inclusive Education program is open to educators who possess initial certification in one or more of the following:

- Early Childhood Education
- Childhood Education (formerly Elementary Education)
- Adolescence or Middle Childhood Education in English, French, Mathematics, Social Studies, Spanish, or the Sciences
- Students with Disabilities

This program requires a minimum of 36 credit hours of graduate level courses.

This program includes a capstone experience and specific exit requirements. These are currently under review and subject to change. They are intended to be rigorous and to provide evidence that each degree candidate is worthy of a master's degree. The following are the current exit requirements for the Master of Science in Education in Curriculum and Instruction in Inclusive Education program.

1. Performance-based evidence of impact on p-12 student learning through a structured field experience (currently in EDU 514)
2. Performance-based evidence of technology use in being an effective teacher and professional colleague via portfolio assignment (see program coordinator for this assignment)
3. Performance-based evidence of cultural responsiveness as an educator via portfolio assignment (see program coordinator for this assignment)

4. Thesis/Project (as culminating experience in EDU 690)

SPECIAL NOTE: Several Courses are offered each semester during the academic year. Candidates are advised not to rely exclusively on summer offerings to meet graduation goals.

Requirements for Admission to the Program without Deficiencies:

- Initial certification to teach early childhood, childhood, middle childhood, adolescence education, or students with disabilities in the public schools of New York State or equivalent.
- Prior (undergraduate) GPA of 3.00 or above.
- Completed Graduate Application submitted to the Office of Graduate Studies, including two current (within six months) letters of recommendation, formal GRE scores, evidence of completion of DASA training, and official academic transcripts from all prior undergraduate and graduate institutions (except Fredonia).
- Applicants whose native language is not English must also submit proof of demonstrated English proficiency as measured by TOEFL iBT score of 78 (or equivalent) or better.

CURRICULUM AND INSTRUCTION IN INCLUSIVE EDUCATION (INITIAL CERTIFICATIONS EARLY CHILDHOOD TO CHILDHOOD - GENERALIST OR STUDENTS WITH DISABILITIES)

Minimum number of credit hours required for program completion: 36

Research (6 required credit hours)

EDU 570	Using Educational Research to Improve Instruction	3
EDU 660	Conducting Educational Research	3
		Subtotal: 6

EDU 570: Should be completed within the first semester

EDU 660: Must have completed EDU 570 with a B grade or better and 24 credit hours of graduate work

Inclusive Education Core (12 required credit hours)

EDU 508	Teaching Exceptional Learners in Inclusive Settings	3
EDU 514	Assessment and Instruction of Diverse Learners I	3
EDU 529	Proactive Approaches to Classroom Management in Inclusive Settings	3
EDU 530	Assessment and Instruction of Diverse Learners II	3

Linking Content and Pedagogy (12 required credit hours)

Choose 12 credits from the following:

Literacy/Language Arts

EDU 506	Introduction to Literacy Instruction	3
EDU 536	Adolescent Literacies, Literature and Technology	3
EDU 605	Issues, Trends, and Research in Elementary (Childhood) Language	3
ENGL 5XX	By advisement or	
ENGL 6XX	By advisement	
EDU 591	Special Topics: Curriculum and Instruction	3

EDU 591: Candidates may take no more than 6 credit hours of EDU 591 courses.

Any graduate course not used to satisfy other requirements; advisor approval required.

Capstone (Must have completed EDU 660 with a B grade or better and 30 credit hours of graduate work)

Social Studies

EDU 635	Curriculum Development in Social Studies Education	3
EDU 636	Issues, Trends, and Research in Elementary School Social Studies	3
HIST 5XX	By advisement or	
HIST 6XX	By advisement	
POLI 5XX	By advisement or	
POLI 6XX	By advisement	
EDU 591	Special Topics: Curriculum and Instruction	3

EDU 591: Candidates may take no more than 6 credit hours of EDU 591 courses.

Mathematics/Science/Technology

EDU 603	Issues, Trends, and Research in Elementary (Childhood) Science	3
EDU 640	Issues, Trends, and Research in Elementary (Childhood) Mathematics	3
EDU 642	Activity-Oriented Elementary Mathematics	3
EDU 643	Math Assessment in Support of All Learners	3
MAED 5XX	By advisement or	
MAED 6XX	By advisement	
SCED 5XX	or	

SCED 6XX	By advisement	
EDU 591	Special Topics: Curriculum and Instruction	3

EDU 591: Candidates may take no more than 6 credit hours of EDU 591 courses.

Interdisciplinary

EDU 520	Curriculum Framework Theory/Development	3
EDU 525	Curriculum Framework Integration/Innovation	3
EDU 528	Technology in the Schools	3
EDU 543	Education for Gifted and Talented Students	3
EDU 562	Infant Development and Education	3
EDU 625	Early Childhood Curriculum	3
EDU 629	Issues, Trends, and Research in Early Childhood Education	3

Any graduate course not used to satisfy other requirements; advisor approval required.

Electives (3 credit hours)

Any graduate course not used to satisfy other requirements; advisor approval required.

Capstone (3 credit hours)

Must have completed EDU 660 with a B grade or better and 30 credit hours of graduate work

EDU 690	Master's Thesis/Project	3-6
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CURRICULUM AND INSTRUCTION IN INCLUSIVE EDUCATION (INITIAL CERTIFICATIONS MIDDLE TO ADOLESCENCE - GENERALIST OR STUDENTS WITH DISABILITIES)

Minimum number of credit hours required for program completion: 36

Research (6 required credit hours)

A minimum of 6 credit hours, not counting the Capstone requirement (see below). Note: At least one course that meets this requirement is offered each semester during the academic year.

EDU 570	Using Educational Research to Improve Instruction	3
EDU 660	Conducting Educational Research	3

EDU 570: Should be completed within the first semester

EDU 660: Must have completed EDU 570 with a B grade or better and 24 credit hours of graduate work

Inclusive Education Core (12 required credit hours)

EDU 508	Teaching Exceptional Learners in Inclusive Settings	3
EDU 514	Assessment and Instruction of Diverse Learners I	3

EDU 529	Proactive Approaches to Classroom Management in Inclusive Settings	3
EDU 530	Assessment and Instruction of Diverse Learners II	3

Linking Content and Pedagogy (12 required credit hours)

To meet the requirements of the program and NYS regulations, candidates need 12 credit hours of courses that link pedagogy with the content area of their initial certificate. Courses are offered both through the College of Education and the content departments in the College of Liberal Arts & Sciences.

Candidates should select 12 credit hours of course work in consultation with the C&I Program Coordinator and the appropriate department from the College of Liberal Arts & Sciences.

Electives (3 credit hours)

Any graduate course not used to satisfy other requirements; advisor approval required.

Capstone (3 credit hours)

Must have completed EDU 660 with a B grade or better and 30 credit hours of graduate work

EDU 690	Master's Thesis/Project	3-6
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As of December 31, 2013, candidates in all education programs are required to complete training under the Dignity for All Students Act (DASA). The training required under the Dignity for All Student Act (DASA) will be included in EDU 303 at Fredonia. Graduate candidates who may have completed EDU 303 on campus prior to Spring 2014 must complete the EDU DASA workshop prior to full admission.

LANGUAGE AND LEARNING, MASTER OF ARTS

Office: E262 Thompson Hall
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Dr. Cindy Bird, Chairperson

Dr. Karen Lillie, Program Coordinator

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Email: LLL@fredonia.edu

Website: <http://home.fredonia.edu/coe/lll>

The Master of Arts in Language and Learning does not lead to recommendation for teacher certification in New York State. There are five specialization areas from which a student may choose; the selected area will be indicated on the student's transcript when awarded:

- TESOL/TEFL
- Language Policy
- Bilingualism/Multilingualism

- Heritage Languages
- Sociolinguistics

REQUIREMENTS FOR ADMISSION TO FREDONIA'S LANGUAGE AND LEARNING, MA:

NOTE: We are only actively recruiting for the TESOL, Bilingualism/Multilingualism, and Heritage Languages specialization track as of July 16, 2015; however, the admission requirements are the same for all five specialization areas.

- Completion of a baccalaureate degree in an area of arts, science, or education.
- Undergraduate GPA of 3.00 or above.
- Evidence of having taken the GRE with a minimum score of 272 for the combined areas of Verbal and Mathematics.
 - Candidates may be accepted conditionally into the program without the GRE scores.
 - International students are allowed one year from the time they arrive in the United States to fulfill this requirement.
- Completed Graduate Application submitted to the Office of Graduate Studies including:
 - (a) two current (within six months) letters of recommendation which include contact information as the Program Coordinator has the option of contacting anyone who has submitted a letter on your behalf; and
 - (b) official academic transcripts from all prior undergraduate and graduate institutions (except Fredonia).

Language Proficiency Requirements

- for Native Speakers of English:
 - A statement of your background and goals in addition to a resume (maximum three pages)
 - A graduate-level 800-1,200 word short essay in English which addresses the following question: "Describe your reasons for pursuing a graduate degree in Language and Learning and support your rationale with specific information pertinent to your desired degree."
 - 12 post-secondary credit hours in a Language Other than English (LOTE), or an approved equivalency, in a single language. Candidates may be accepted conditionally into the program without the LOTE credits fulfilled. Matriculation into the program is contingent upon the satisfactory completion of this requirement.

- A satisfactory intermediate-level 800-1,200 word short essay in a language other than English (LOTE). Candidates may be accepted conditionally into the program without the LOTE essay. Matriculation into the program is contingent upon the satisfactory evaluation of this essay.
- for Non-Native Speakers of English:
 - A statement of your background and goals in addition to a resume (maximum three pages)
 - A graduate-level 800-1,200 word short essay in English which addresses the following question: "Describe your reasons for pursuing a graduate degree in Language and Learning and support your rationale with specific information pertinent to your desired degree."
 - A graduate level 800-1,200 word short essay in the candidate's native language. This can be any academic paper (e.g., a paper from a college course).
 - Further stipulations as listed below under "Additional requirements for non-native speakers of English to the program."

PROGRAM REQUIREMENTS (30 CREDIT HOURS)

Core Courses - as required for specialization; see below (9 credit hours):

EDU 518	Second Language Acquisition and Development	3
EDU 565	Language and Learning: Psycho- and Sociolinguistic Considerations for Educators of ELL Students	3
EDU 568	Foundations of Bilingual Education	3
EDU 564	Linguistics for ESL Educators	3

NOTE: EDU 518 is an on campus course with an online component.

EDU 565 is the core course taken for the Heritage Language and the Sociolinguistic Specializations

EDU 568 is the core course taken for the TESOL/TFL, Language Policy, and Bilingualism/Multilingualism Specializations

Research Methods (9 credit hours):

EDU 570	Using Educational Research to Improve Instruction	3
EDU 660	Conducting Educational Research	3
EDU 690	Master's Thesis/Project	3-6

SPECIALIZATION ELECTIVES (12 CREDIT HOURS):

Courses that exist in other departments may be approved by Program Coordinator; see far below.

TESOL / TEFL:

EDU 592	Special Topics: Language, Learning, and Leadership	3
EDU 519	Curriculum Theory for the Second Language Classroom - ESL I	3
EDU 540	Content Area English as a Second Language Electives	3

Language Policy:

EDU 592	Special Topics: Language, Learning, and Leadership	3
EDU 565	Language and Learning: Psycho- and Sociolinguistic Considerations for Educators of ELL Students	3
	Electives as advised	

Bilingualism / Multilingualism:

EDU 592	Special Topics: Language, Learning, and Leadership	3
EDU 565	Language and Learning: Psycho- and Sociolinguistic Considerations for Educators of ELL Students	3
EDU 555	Methods of Bilingual Education	3
	One course in Study Abroad in L2 context (by advisement)	

Sociolinguistics:

EDU 592	Special Topics: Language, Learning, and Leadership	3
EDU 568	Foundations of Bilingual Education	3
	Electives as advised	

Heritage Languages:

EDU 592	Special Topics: Language, Learning, and Leadership	3
EDU 519	Curriculum Theory for the Second Language Classroom - ESL I	3
EDU 568	Foundations of Bilingual Education	3

COURSES EXISTING IN OTHER DEPARTMENTS WHICH MAY BE CONSIDERED FOR SPECIALIZATIONS

Using these courses to satisfy a specializations would depend on the specialization and require both approval from Department Chair of the Specific Department and the Program Coordinator. Consult the Program Coordinator.

English:

ENED 554	Composition Theory and Practice	3
ENED 665	Studies in English Education	3

ENGL 520	Graduate Seminar in Literature and Culture	3
Education - C&I or LLL:		
EDU 508	Teaching Exceptional Learners in Inclusive Settings	3
EDU 529	Proactive Approaches to Classroom Management in Inclusive Settings	3
EDU 503	Evaluation in the Schools	3
EDU 505	The Process of Writing: K-12	3
EDU 506	Introduction to Literacy Instruction	3
EDU 539	Current Issues and Problems in Education	3
EDU 552	Introduction to Literacy Assessment	3
EDU 556	Teaching Language Arts in Spanish	3
EDU 614	Principles of School Administration and Leadership	3
EDU 620	Public School Finance	3
EDU 624	Contemporary Problems in School Leadership	3
EDU 579	Social Foundations of Literacy	3
EDU 581	Japanese Culture and Education	3

Note: Also, for the *Bilingualism / Multilingualism and Heritage Languages specializations* - any of the required courses for the bilingual extension (CAS-BLE currently in TESOL program).

EDU 581 Japanese Culture and Education is cross-listed with PSY 570.

Psychology:

PSY 510	Contemporary Issues in Psychology	3
PSY 546	Classroom Expectancy Effects	3
PSY 570	Japanese Culture and Education	3

INED: Study abroad courses

Open SUNY:

ADE 584: Literacy Skills and the Adult Learner (Buffalo State)

ADE 688: Leadership in Organization (Buffalo State)

EDI 647: Teaching Adolescence Reading, Writing, and Literature (The College at Brockport)

Others as approved.

LITERACY EDUCATION: BIRTH-GRADE 12 MASTER OF SCIENCE IN EDUCATION

Department of Language, Learning and Leadership

Office: E262 Thompson Hall
(716) 673-3702

Dr. Cindy Bird, Chairperson, Department of Language, Learning and Leadership

Dr. Susan Sturm, Program Coordinator

Email: susan.sturm@fredonia.edu

Email: LLL@fredonia.edu

Website: <http://home.fredonia.edu/coe/lll>

This program leads to a Master of Science in Education: Literacy Education Birth to Grade 12 degree and recommendations for initial certification in both Literacy Education: Birth to Grade 6 and Literacy Education: Grades 5-12. Program completion results in the ability to teach as a reading specialist, a literacy coach, or as a classroom teacher. The content of the program includes practicum work, research, and opportunities to provide professional development for paraprofessionals and classroom teachers.

The State University of New York at Fredonia does not have the authority to recommend graduating Literacy candidates for a professional certification in the area of their original initial certification, only for Literacy Education (initial and professional). Graduates of the Literacy program who are interested in applying for their professional certification related to their original initial certification area will have to submit their materials directly to NYSED for individual evaluation through the TEACH online system. Please see the following link for further information about this topic:
<http://www.highered.nysed.gov/tcert/certificate/relatedmasters.html>

Requirements for Admission to the Degree Program without Deficiencies

Submit a completed Graduate Application to the Office of Graduate Studies, including two current (within six months) letters of recommendation that address the applicant's academic and teaching abilities, official academic transcripts from all prior undergraduate and graduate institutions (except Fredonia), formal score reports from GRE (and TEOFL or IELTS if required), evidence of initial teaching certification and evidence of DASA training.

- Baccalaureate Degree Awarded.
- Baccalaureate GPA of 3.00 or above.
- Completion of the GRE general exam, with a minimum qualifying score of 272 for combined Verbal and Mathematics sections.
- Initial teacher certification for New York State or equivalent.
- Evidence of completion of DASA training
- For non-native speakers of English, the following sub-scores on the Test of English as a Foreign Language (TOEFL) or the International English Language Testing System (IELTS):

- TOEFL Reading: 21 *or* IELTS Reading: 6.5
- TOEFL Speaking: 18 *or* IELTS Speaking: 6.0
- TOEFL Listening: 15 *or* IELTS Listening: 6.0
- TOEFL Writing: 21 *or* IELTS Writing: 6.5
- Interview with Literacy faculty

As of December 31, 2013, candidates in all education programs are required to complete training under the Dignity for All Students Act (DASA). The training required under the Dignity for All Student Act (DASA) will be included in EDU 303 at Fredonia. Graduate candidates who may have completed EDU 303 on campus prior to Spring 2014 must complete an EDU DASA workshop prior to full admission.

NOTE: Applicants may be granted conditional acceptance and have one semester to complete DASA training and write the GRE.

PROGRAM REQUIREMENTS

A minimum of 36 credit hours of graduate level courses, including the following:

Required courses:

EDU 506	Introduction to Literacy Instruction	3
EDU 552	Introduction to Literacy Assessment	3
EDU 554	Advanced Literacy Assessment	3
EDU 570	Using Educational Research to Improve Instruction	3
EDU 576	Practicum in Literacy for All Students	
EDU 579	Social Foundations of Literacy	3
EDU 583	Literacy Interventionist Practicum I	3
EDU 613	Literacy Interventionist Practicum II	3
EDU 627	Multicultural Children's Literature and Technology	3
EDU 628	Reading Specialist Practicum	
EDU 633	Literacy in the Content Areas	3
EDU 637	Psychological Foundations of Literacy	3
EDU 651	Issues and Research in Literacy	3
EDU 659	Master's Thesis/Project in Literacy	3

TOTAL CREDIT HOURS: 36

Additional Program Requirements

It is the candidate's responsibility to be aware of course prerequisites, the Program Assessment Plan and Transition Point Grid and the required passing grade of B or higher for EDU 552, EDU 554, EDU 583, EDU 613, EDU 651, and EDU 659, as well as the additional program requirements of

- The New York State Content Specialty Test (CST) in Literacy
 - Candidates must pass this CST to become certified in Literacy Education in New York State
- Specific Program Assessments aligned with the International Literacy Association (ILA) Standards
 - Program assessments have been designed to meet these standards as part of the institutional accreditation efforts through the Council for the Accreditation of Educator Preparation (CAEP). Candidates will be kept informed of these assessments.

LITERACY EDUCATION: GRADES 5-12 MASTER OF SCIENCE IN EDUCATION

Department of Language, Learning and Leadership

Office: E262 Thompson Hall
(716) 673-3702

Cindy

Bird, Chairperson, Department of Language, Learning and Leadership

Email: Cindy.Bird@fredonia.edu

Email: LLL@fredonia.edu

Website: <http://home.fredonia.edu/coe/lll>

The program leads to a Master of Science in Education: Literacy Education Grades 5-12 degree and a recommendation for initial certification in Literacy Education: Grades 5-12 resulting in the ability to teach as a reading specialist, a literacy coach, or as a classroom teacher. The content of the program includes clinical work, action research, and opportunities to provide professional development for paraprofessionals and classroom teachers.

Requirements for Admission to the Degree Program without Deficiencies:

Submit a Completed Graduate Application to the Office of Graduate Studies, including two current (within six months) letters of recommendation that address the applicant's academic and teaching abilities, official academic transcripts from all prior undergraduate and graduate institutions (except Fredonia), formal score reports from GRE (and TOEFL or IELTS if required), evidence of initial certification and evidence of DASA training.

- Baccalaureate Degree Awarded.
- Baccalaureate GPA of 3.00 or above.
- Completion of the GRE general exam.
- Initial certification to teach early childhood, childhood, or adolescence education in the public schools of New York State or equivalent early childhood, elementary, or secondary preparation.

- Evidence of completion of DASA training
 - For non-native speakers of English, the following subscores on the Test of English as a Foreign Language (TOEFL) or the International English Language Testing System (IELTS):
 - TOEFL Reading: 21 *or* IELTS Reading: 6.5
 - TOEFL Speaking: 18 *or* IELTS Speaking: 6.0
 - TOEFL Listening: 15 *or* IELTS Listening: 6.0
 - TOEFL Writing: 21 *or* IELTS Writing: 6.5
- Interview. After the application deadline, candidates with completed application materials will be contacted by Literacy faculty for an interview.

NOTE:

The State University of New York at Fredonia does not have the authority to recommend graduating Literacy candidates for a professional certification in the area of their original initial certification, only for Literacy Education (initial and professional). Graduates of the Literacy program who are interested in applying for their professional certification, related to their original initial certified area, will have to submit their materials directly to NYSED for individual evaluation through the TEACH online system. Please see the following link for further information about this topic:
<http://www.highered.nysed.gov/tcert/certificate/relatedmatters.html>

PROGRAM REQUIREMENTS

A minimum of 36 credit hours of graduate level courses, including the following:

Required Courses (36 credit hours)

EDU 506	Introduction to Literacy Instruction	3
EDU 552	Introduction to Literacy Assessment	3
EDU 554	Advanced Literacy Assessment	3
EDU 570	Using Educational Research to Improve Instruction	3
EDU 579	Social Foundations of Literacy	3
EDU 583	Literacy Interventionist Practicum I	3
EDU 613	Literacy Interventionist Practicum II	3
EDU 627	Multicultural Children's Literature and Technology	3
EDU 633	Literacy in the Content Areas	3
EDU 637	Psychological Foundations of Literacy	3
EDU 651	Issues and Research in Literacy	3
EDU 659	Master's Thesis/Project in Literacy	3

As of December 31, 2013, candidates in all education programs are required to complete training under the

Dignity for All Students Act (DASA). The training required under the Dignity for All Student Act (DASA) will be included in EDU 303 at Fredonia. Graduate candidates who may have completed EDU 303 on campus prior to Spring 2014 must complete the EDU DASA workshop prior to full admission.

Additional Program Requirements

It is the candidate's responsibility to be aware of course prerequisites, the Program Assessment Plan and Transition Point Grid noting the required grades for passing (a grade of B or higher) in EDU 552, EDU 554, EDU 583, EDU 613, EDU 651, and EDU 659, as well as the additional program requirements of

- The New York State Content Specialty Test (CST) in Literacy
 - Candidates must pass this CST to become certified in Literacy Education in New York State
- Specific Program Assessments aligned with the International Reading Association (IRA) Standards
 - Program assessments have been designed to meet these standards as part of the institutional accreditation efforts through the Council for the Accreditation of Educator Preparation (CAEP). You will be kept informed of these assessments.

TESOL CERTIFICATE OF ADVANCED STUDY (CAS)

Total Credit Hours for Program Completion: 18

This eighteen (18) credit hour program leads to a recommendation for a NYS certification in ESOL. The NYS required twelve (12) credit hours of Language other than English (LOTE) are in addition to the 18 credit hours listed below for program completion.

Requirements for Admission to the Program without Deficiencies

- Completion of a baccalaureate degree in an area of arts, science, or education
- Undergraduate GPA of 3.00 or above
- Evidence of having taken the GRE*
- Evidence of New York State DASA Training
- Current NYS Teaching Certificate
- Completed Graduate Application submitted to the Office of Graduate Studies including:
 - (a) two current (within six months) letters of recommendation which include contact information as the TESOL Program Coordinator has the option of contacting anyone who has submitted a letter on your behalf; and

- (b) official academic transcripts from all prior undergraduate and graduate institutions (except SUNY Fredonia).
- Language Proficiency Requirements:
 - for Native Speakers of English:
 - A statement of your background and goals in addition to a resume (maximum 3 pages)
 - A graduate-level 800-1,200 word short essay in English which addresses the following question: “Describe your reasons for pursuing a graduate degree in TESOL and support your rationale with specific information pertinent to your desired degree.”
 - 12 post-secondary credit hours in a Language Other than English (LOTE), or an approved equivalency, in a single language. Candidates may be accepted conditionally into the TESOL program without the LOTE credits fulfilled. Matriculation into the TESOL program is contingent upon the satisfactory completion of this requirement.
 - A satisfactory intermediate-level 800-1,200 word short essay in a language other than English (LOTE). Candidates may be accepted conditionally into the TESOL program without the LOTE essay. Matriculation into the TESOL program is contingent upon the satisfactory evaluation of this essay.
 - for Non-Native Speakers of English:
 - A statement of your background and goals in addition to a resume
 - A graduate-level 800-1,200 word short essay in English which addresses the following question: “Describe your reasons for pursuing a graduate degree in TESOL and support your rationale with specific information pertinent to your desired degree.”
 - A graduate level 800-1,200 word short essay in the candidate's native language. This can be any academic paper (e.g., a paper from a college course).
 - Further stipulations as listed below under “Additional requirements for non-native speakers of English to the TESOL program”

*It is possible to be conditionally accepted if GRE scores are pending.

Additional Requirements for Non-Native Speakers of English to the TESOL Program (any aspect):

- a. The TESOL graduate program requires that non-native speakers of English show evidence of English proficiency by providing scores which are different from those required of the Graduate College. Proof of proficiency may be shown by achieving the following test scores:

- i. TOEFL: 550 (paper), 213 (computer), or 79 (internet)
- ii. IELTS (with no subsection below 6.0): 6.5

Fredonia's school code for reporting the TOEFL and IELTS scores electronically is 2539. International students who have been awarded a prior degree from the U.S., U.K./Ireland, Australia, Anglophone Canada, New Zealand, Anglophone Africa, Singapore, and the Commonwealth Caribbean prior to applying to SUNY Fredonia are not required to submit TOEFL or IELTS.

- b. International applicants must provide official copies of all previous degrees/diplomas and transcripts issued in the original language with a literal English translation of each. Proof of an official certification of the award of any and all degrees must be provided. Include documentation describing in which language the courses were taught. The latter can be included in a separate document as a chart or statement.
- c. International applicants must also have transcripts translated and evaluated by WES (www.wes.org) or a similar agency against the American 4.0 standard.

Additionally, all International applicants must meet the requirements outlined by the Graduate Studies website.

PROGRAM COMPLETION REQUIREMENTS

Required Courses

EDU 518	Second Language Acquisition and Development	3
EDU 519	Curriculum Theory for the Second Language Classroom - ESL I	3
EDU 521	Practicum in TESOL, I	
EDU 540	Content Area English as a Second Language	3
EDU 541	Practicum in TESOL II	
EDU 568	Foundations of Bilingual Education	3
EDU 567	Practicum in TESOL, III	
EDU 569	Assessment and Evaluation of English Language Learners (ELLs)	3
EDU 671	ESOL/BE Practicum & Supervision 20 Day	3

Subtotal: 18

As of December 31, 2013, candidates in all education programs are required to complete training under the Dignity for All Students Act (DASA). The training required under the Dignity for All Student Act (DASA) will be included in EDU 303 at Fredonia. Graduate candidates who may have completed EDU 303 on campus prior to Spring 2014 must complete the EDU DASA workshop prior to full admission.

TOTAL CREDIT HOURS: 18

SCHOOL BUILDING LEADERSHIP CERTIFICATE OF ADVANCED STUDY (CAS)

Department of Language, Learning and Leadership

Office: E236 Thompson Hall
(716) 673-3245

Dr. Cindy Bird, *Chairperson*

Dr. Charles Stoddart, *Program Coordinator*

Email: Charles.Stoddart@fredonia.edu

Website: <https://home.fredonia.edu/coe/lll>

The Certificate of Advanced Study in School Building Leadership is open to candidates who already possess teaching certification, a master's degree in education or a related field, and three years of satisfactory teaching or professional experience in a Pre-K-12 setting. The program leads to a recommendation to the New York State Education Department for initial certification as a School Building Leader (SBL). The certificate allows the candidate to assume such roles as principal, assistant principal, supervisor, department chairperson, or program coordinator.

Requirements for Admission to the Program without Deficiencies:

- New York State Education Department teaching certification.
- Master's degree in education or related field with a minimum GPA of 3.0.
- Three years satisfactory teaching or professional experience in a Pre-K-12 school.
- Two written recommendations, one each from the candidates school superintendent and immediate supervisor.

Advising

Graduate students in the School Building Leadership Program should meet with their assigned academic advisor at least once every semester for purposes of program planning and course selection.

PROGRAM REQUIREMENTS

A minimum of 30 semester hours of graduate-level courses, including a 600-clock hour internship:

Required Courses

EDU 614	Principles of School Administration and Leadership	3
EDU 615	School Building Leader	3
EDU 616	Supervision I: Theory/Practice	3
EDU 620	Public School Finance	3
EDU 624	Contemporary Problems in School Leadership	3
EDU 626	Public School Law	3
EDU 630	Educational Administration Special Topics	3

Candidates are also required to submit an internship portfolio providing evidence of the candidate's impact on students in a Pre-K-12 setting.

As of December 31, 2013, candidates in all education programs are required to complete training under the Dignity for All Students Act (DASA). Beginning in the Fall 2013 semester, the training required under the Dignity for All Student Act (DASA) will be included in EDU 303 at Fredonia. Undergraduate candidates planning to graduate after Fall 2013 who have already completed EDU 303 on campus or taken a workshop as a substitution for EDU 303 must also complete the EDU DASA workshop prior to graduation.

Candidates must also successfully pass a comprehensive oral or written examination and the New York State School Building Leadership Examination. In order to be eligible for New York State School Building Leader Initial Certification, candidates must pass the applicable state examinations.

TOTAL CREDIT HOURS: 30

SCHOOL DISTRICT LEADERSHIP PROGRAM CERTIFICATE OF ADVANCED STUDY (CAS)

Department of Language, Learning and Leadership

Office: E236 Thompson Hall
(716) 673-3245

Dr. Cindy Bird, *Chairperson*

Dr. Charles Stoddart, *Program Coordinator*

Email: charles.stoddart@fredonia.edu

Website: <https://home.fredonia.edu/coe/lll>

The School District Leadership Program (SDL) is open to candidates who have completed the requirements for the New York State School Building Leader Certification. The program leads to a recommendation to the New York State Education Department for professional certification as a School District Leader (SDL). This state certification allows the candidate to assume such roles as superintendent, assistant superintendent, district wide director, or coordinator.

All candidates in the School District Leadership program who would like to receive an institutional recommendation for NYS Certification in School District Leadership from The State University of New York at Fredonia must successfully pass the New York State Content Specialty Test (CST) in School District Leadership before graduating from the program.

Any candidate who has not successfully completed the CST in School District Leadership or who is not interested in receiving an institutional recommendation for certification, must change to the SDL-Non Certification program prior to applying for graduation.

Any candidate who graduates from the SDL-Non Certification program, who later intends to pursue NYS Certification, will need to contact and apply through his/her local BOCES (Board of Cooperative Educational Services) for an individual transcript evaluation.

Requirements for Admission to the Program:

- Be eligible for or hold New York State Education Department School Building Leader certification.
- Minimum grade point average of 3.0 in academic program leading to the School Building Leadership Certification or its equivalent.
- Two written recommendations, one each from the candidate's school superintendent and immediate supervisor. (For candidates continuing with this program directly following their completion of the C.A.S. in School Building Leadership, their recommendations for admittance to the C.A.S. program in SBL will be sufficient.)

PROGRAM REQUIREMENTS

A minimum of 6 semester hours of graduate-level courses as listed below:

Required Courses

EDU 662	Policy Development, Politics and Ethical Practices	3
EDU 664	Governance, Media and Crisis Management	3

As of December 31, 2013, candidates in all education programs are required to complete training under the Dignity for All Students Act (DASA). Beginning in the Fall 2013 semester, the training required under the Dignity for All Student Act (DASA) will be included in EDU 303 at Fredonia. Undergraduate candidates planning to graduate after Fall 2013 who have already completed EDU 303 on campus or taken a workshop as a substitution for EDU 303 must also complete the EDU DASA workshop prior to graduation.

TOTAL CREDIT HOURS: 6

ENGINEERING (COOPERATIVE) PROGRAM

Office: 121 Houghton Hall
(716) 673-3302

Dr. Justin Conroy, Director

Email: cooperative.engineering@fredonia.edu

Website: <http://home.fredonia.edu/physics>

The Cooperative Engineering program takes its name from the academic cooperative agreements between Fredonia and its affiliated engineering schools. The intent is to combine liberal arts and sciences at Fredonia with engineering at another school, thereby maximizing the student's potential as a member of society and as an employer or employee. The agreements facilitate student transfer and mutual recognition of general education requirements. Fredonia is currently affiliated in a Cooperative Engineering program with the following institutions:

Case Western Reserve University (1)
Clarkson University (2)
Columbia University (3)
Louisiana Tech University (4)
New York State College of Ceramics at Alfred (5)
Ohio State University (6)
Penn State Erie (7)
Rensselaer Polytechnic Institute (8)
Rochester Institute of Technology (9)
State University of New York at Binghamton (10)
State University of New York at Buffalo (11)
Syracuse University (12)
Tri-State University (13)

The following is a list of the diverse program options available at the engineering colleges, under the Fredonia Cooperative Engineering program, identified by the institution code number given above. As institutions are continually revising and updating their offerings, students are advised to consult with the catalogs of affiliated schools for recent additions and changes.

Aeronautical (2), (9)
Aerospace (1), (12), (13)
Aerospace and Aviation (7)
Applied Physics (3)
Bioengineering (13)
Biomedical (1), (3), (5), (7), (9)
Biomedical Materials Eng. Science (6)
Ceramic (6), (7)
Chemical (1), (2), (3), (7), (9), (12), (13), (14)
Civil (1), (2), (3), (5), (9), (12), (13), (14)
Civil and Environmental (7), (13)
Computer (1), (2), (3), (8), (10), (13), (14)
Computer and Systems (9)
Electrical (1), (2), (3), (5), (7), (8), (9), (10), (11), (12), (13), (14)
Electrical Power (9)

Engineering Administration (14)
 Engineering Mechanics (3)
 Engineering Physics (1), (7), (9), (12), (13)
 Engineering Science (9), (13)
 Environmental (3), (9), (12), (13)
 Fluid and Thermal Science (1)
 Food, Agricultural, and Biological (7)
 Geomatics (7)
 Glass Science (6)
 Industrial (3), (5), (12)
 Industrial and Management (9)
 Industrial and Operations Research (3)
 Industrial and Systems (7), (10), (11)
 Interdisciplinary and Management (2)
 Manufacturing (13)
 Materials (9)
 Materials Science (3), (13)
 Materials Science and Engineering (1), (3), (6), (7)
 Mechanical (1), (2), (3), (5), (7), (8), (9), (10), (11), (12), (13), (14)
 Metallurgical (3), (7)
 Microelectronic (10)
 Nuclear (9)
 Operations Research (3)
 Operations Research and Industrial Engineering
 Polymer Science (1)
 Software Engineering (2), (8), (10), (11)
 Systems and Control Engineering (1), (7)
 Theoretical and Applied Mechanics
 Welding (7)

These cooperative arrangements include but are not limited to the popular Three-Two (3-2) option. Briefly, a student in the 3-2 option takes a minimum of 90 credit hours (three years) at Fredonia in a curriculum, modified specifically for this program, in biology, business administration, chemistry, computer science, economics, English, geology, history, mathematics, mathematics physics, philosophy, physics, political science, psychology, or sociology. The student then transfers to an affiliated school and completes at least 60 credit hours (two years) in an engineering discipline. When the student completes this five-year option, he/she obtains a baccalaureate from the engineering institution. Provided the student has satisfied Fredonia's remaining requirements at the engineering school, he/she obtains a second baccalaureate; this one from Fredonia according to the curriculum there followed. It is possible for students who do not wish to major in any one of the specified departments to enter the Interdisciplinary Studies program, which allows the student to design his/her own Cooperative Engineering curriculum. This curriculum will include, but not be limited to, the engineering core and related courses for the engineering college of the student's choice. Although the popular 3-2 option is considered the basic option for Cooperative Engineering, 2-2, 2-3, 3-3, and 4-2 options are available. The 2-2 and 2-3 options do not lead to Fredonia degrees; the 3-3 and 4-2 programs do. In many cases the latter will result in a master's degree in

engineering in addition to the bachelor's degree from Fredonia.

SUGGESTED ENGINEERING CORE

Core Program:

CHEM 115	General Chemistry Lecture I	3
CHEM 125	General Chemistry Laboratory I	1
CHEM 116	General Chemistry Lecture II	3
CHEM 126	General Chemistry Laboratory II	1
MATH 122	University Calculus I	4
MATH 123	University Calculus II	4
MATH 224	Differential Equations	3
PHYS 230	University Physics I	4
PHYS 232	University Physics I Lab	1
PHYS 231	University Physics II	4
PHYS 233	University Physics II Lab	1
PHYS 321	Engineering Statics	3
PHYS 329	Engineering Dynamics	3
PHYS 322	Mechanics of Solids	4
PHYS 323	Circuit Analysis	4
ENGL 100	English Composition	3

PHYS 321, PHYS 322, PHYS 329, PHYS 323, and PHYS 324: Students interested in electrical engineering may omit PHYS 322; areas other than electrical and mechanical engineering may omit PHYS 324 (in some cases mechanicals may omit this also). Students are encouraged to consult engineering school catalogs for specific requirements.

Strongly recommended are courses in computer programming such as Computer Science I (CSIT 121), Modern Physics (PHYS 234), and 3 to 6 credit hours of economics. This core, coupled with the departmental and general university requirements, forms the basic curriculum for the three-year program at Fredonia.

An attractive feature of the 3-2 option is that the final decision regarding the area of engineering usually is not made until the third year, thus providing the student with sufficient experience to make a proper choice. However, it is to the student's advantage to choose the second institution and the area of engineering as soon as possible so course selections can be tailored to that choice. To transfer, the student first consults with the Cooperative Engineering director and then applies to one of the affiliated engineering colleges or to any other engineering college of his/her choice. Usually, a favorable letter of recommendation from the director is forwarded for highly motivated students with satisfactory academic records. At the affiliated engineering institution, a Fredonia student application is given special consideration. Admission is not, in general, guaranteed. However, for 3-2 students with GPA's exceeding 2.5, 100 percent have gained admission to an engineering school. Also, it should be noted, that for Columbia University admission is guaranteed to students meeting certain GPA and course distribution requirements.

Since there are more than 60 baccalaureate programs with numerous concentrations available at the affiliated institutions, and since these curricula are frequently updated, it is mandatory that all students registered in Cooperative Engineering meet the director or authorized designee for advisement each and every semester.

- For students interested in transferring to the Cooperative Engineering program either from other Fredonia majors or from other colleges, the following applies:
- The student should have completed sufficient background courses to insure timely completion of the three-year Fredonia component.
- The student should have a cumulative GPA of approximately 2.5 or higher. Students should be aware that engineering schools will not accept students with less than outstanding academic records.

A student organization, the Fredonia Engineering and Physics Society, provides opportunities to travel to conferences and other extracurricular activities including design projects. Recent projects include the design and construction of a magnetically levitated model train, an optical holography table, and a small robot.

A large number of engineering and engineering-related courses comprising most courses typically taught in the first two years at engineering schools are offered at Fredonia. These include Statistics, Dynamics and Mechanics of Solids (PHYS 321, PHYS 329, PHYS 322), Circuit Analysis (PHYS 323), Thermodynamics (PHYS 330), Optics w/lab (PHYS 340-PHYS 341), and Electronics w/lab (PHYS 325-PHYS 327).

Students should contact the director of the Cooperative Engineering program for additional details for the following awards:

- Herbert P. Carlyon Scholarship
- Cooperative Engineering Scholarship Award

English

Office: 278 Fenton Hall
(716) 673-3125

Dr. Bruce Simon, *Chairperson*

Email: english.department@fredonia.edu
Website: <http://home.fredonia.edu/english>

Office: 279 Fenton Hall
(716) 673-3125

Dr. Scott Johnston, *Associate Chairperson*

Email: scott.johnston@fredonia.edu

Mission Statement

Working collaboratively with faculty, Fredonia English students explore the power of language and image in the 21st century. They discover new perspectives and develop

crucial skills: strong writing, thoughtful reading, and critical thinking. Whether they choose to focus on literature, creative writing, professional writing, or English education, students personalize their paths through the flexible major in consultation with department advisors. As a vibrant community of learners, we investigate how texts respond to and shape experience in and beyond the classroom.

About Fredonia English

The English Department at Fredonia values the importance of studying literature across cultures; fostering lifelong readers and writers; engaging multiple forms of textual literacy; practicing the arts of creative and critical writing; and championing the key role of the humanities in higher education. Our English programs blend contemporary literary studies with critical, professional, and creative writing, and give students numerous opportunities for hands-on learning through community partnerships and internships. We produce top-notch graduates who get hired by regional and national organizations or go on to graduate programs all over the country. Recent graduates of the department are employed by law and business firms, journals and publishers, news and arts organizations, and schools.

English and English Adolescence Education majors at Fredonia actively participate in local small-press and online writing internships; community service learning projects; literacy campaigns; creative collaborations and field experiences with area schools; public readings of literature to area children, seniors, and the broader community through open-mic events; collaborations with Visual Arts and School of Music students in pairing original writings with graphic design and musical accompaniment; host visiting writers and literary critics; and read a whole lot of terrific literature.

The ***B.A. in English*** (p. 98) combines required foundational courses with a wide range of options among skills- and content-based course categories in order to open pathways for every student to gain the most from the major and our faculty. Internships and other applied learning opportunities in English-related fields help our students turn those pathways into careers.

The ***B.A. in English Adolescence Education*** (p. 18) combines required foundational courses in pedagogy and literature and a plethora of field experiences in order to open pathways for all students to develop the ideas and practices that will make them effective in the classrooms of an increasingly complex and diverse society.

The ***Minor in English*** (p. 160) gives students maximum flexibility to explore the department's range of offerings in American Studies, creative and persuasive writing, drama, English Education, film, linguistics, literary theory, popular culture, women's and gender studies, and world literature.

The *Minor in Writing and Rhetoric* (p. 177) empowers students from an array of disciplines to write effective, persuasive prose for a variety of audiences, contexts, and purposes.

The *Minor in Creative Writing* (p. 157) offers talented fiction writers and poets a crucial opportunity to develop their voice and hone their craft through a series of increasingly rigorous workshop experiences taught by our award-winning writers.

The *Certificate of Advanced Study (CAS) in Professional Writing* (p. 207) is for individuals interested in becoming more expressive, powerful writers of nonfiction prose. Working professionals and advanced students in any field are encouraged to apply.

The department has *two graduate programs* (p. 101):

- The *Master of Arts in English* (p. 103) program prepares students to enter the professions through a rigorous program that spans the field of English studies.
- The *Master of Arts in English 7-12* (p. 105) program for professional certification to teach grades 7-12 is for students already holding initial certification. The program emphasizes the importance of learning how to learn rather than becoming only storehouses of information and giving potential and practicing teachers the opportunity to discover, refine, or change their own approaches to the teaching of language, literature, and literacy.

Awards and Scholarships

The department awards scholarships and prizes recognizing both financial need and superior achievement:

- Mary Louise White Book Award for Incoming Freshman
- Albert A. Dunn Book Grant Award
- Laura D. Foster 1929 Graduates Fund Award
- Albert A. Dunn Memorial Scholarship
- Dr. Robert and Joanne L. Schweik Scholarship
- John and Eleanor Courts Memorial Scholarship
- Crescence Ehmke Graham Scholarship
- The Howard Herkimer and Hildegard Maytum Strong Scholarship
- Henry F. Salerno Scholarship for a Graduating Senior
- The Mac Nelson Scholarship
- Mary Louise White Poetry Award
- Mary Louise White Fiction Award
- Mary Louise White Creative Writing Award
- Best Paper by a Student Beyond the First Year

- Best Paper by a First-Year Student Award

Honor Society

Qualified undergraduate students may apply for membership in the international English honor society, Sigma Tau Delta. Candidates for undergraduate membership must have four semesters of college work, as well as a minimum of four college courses in the English Department at Fredonia beyond the usual requirement for English composition. They must also have a minimum of a 3.5 grade point average in English courses.

English Department Honors Program

Students enrolled in Honors in English write a thesis during the senior year on a topic related to literature, language, or English pedagogy. Students can be nominated by a faculty member or may nominate themselves; nominations must be accompanied by a brief recommendation from a faculty member. Nominations should be made to the department's chairperson.

Students writing an English Honors Thesis should enroll in HONR 400. Students who choose to write the thesis in the fall semester should use the preceding summer for research. Students who choose to write the thesis in the spring semester should use the fall semester for research by taking ENGL 490 Independent Study. Before beginning work on the thesis, the student should identify a faculty member who will be willing to serve as the thesis director. The completed thesis should be read by the director and one other reader, who will typically be a member of the English Department but who may, if the topic so requires, be from another department.

Requirements for Transfer Credit

The English Department requires majors in English to complete a minimum of 21 credit hours of courses applied to the major at Fredonia. Thus, students transferring to Fredonia should normally expect no more than 21 credit hours earned elsewhere to apply to the major in English.

Advising

An assigned faculty advisor will aid each student majoring in English or English Adolescence Education in completing his or her portfolio. Advisors also help both major and minor advisees in preparing course schedules, understanding requirements, making broad educational decisions, and solving academic problems. As a further aid, the department regularly produces a pre-registration *Course Description Booklet* that contains additional details each semester that are not found in the University Catalog, e.g. required readings, papers, and exams.

ENGLISH BACHELOR OF ARTS

REQUIREMENTS FOR THE BACHELOR OF ARTS IN ENGLISH

- The major in English requires a minimum of 42 credit hours of courses selected according to the outline

given below. It also requires the completion of an e-portfolio. In special circumstances, a particular course requirement may be waived and another course substituted with written approval of the chairperson. Students seeking a waiver of a particular course requirement should consult their advisors; approval for such waivers is granted by the English Department chairperson or designee.

- All students must earn a grade of C or higher in each of their required English courses.
- At least one course must focus on literature written before 1800.
- A course in the Theoretical Approaches category is a prerequisite for ENGL 400.
- No more than 6 credit hours earned in any combination of internships and independent studies may be counted toward the major.
- All English majors must complete at least 45 credit hours at Fredonia in order to graduate, of which at least 21 credit hours must be taken within the major.
- All English majors must complete at least 45 upper-level credit hours in order to graduate, of which at least 24 credit hours must be taken at or above the 300 level within the major.
- All English majors must complete a separate minor or second major in another discipline, in creative writing, in writing and rhetoric, or in one of the interdisciplinary programs. Students choosing to minor in creative writing or writing and rhetoric would need more than 120 credit hours to reach 66 credit hours outside of English.
- All majors must complete at least 66 credit hours outside the major in order to graduate. Credits earned for ENGL 100 (English Composition) do not count toward the major, but do count as credit hours outside the major. Credits transferred as ENGL 099 do not count toward the major, but do count as hours outside the major.

Program Outline:

I. Foundations of the Discipline (6 credit hours):

ENGL 106	Introduction to Literary Studies	3
ENGL 213	Texts and Contexts	3

Subtotal: 6

II. Literature/Textual Studies (18 credit hours):

Three (3) credit hours from each of the following categories of courses:

Subtotal: 18

Genres

These courses examine the development and cultural importance of one or more specific types of literature or

popular culture and help students connect form, conventions, and style to economic, political, and social circumstances.

ENGL 207	Drama and Film	3
ENGL 209	Novels and Tales	3
ENGL 215	Detective Fiction	3
ENGL 216	Science Fiction	3
ENGL 217	Fantasy Fiction	3
ENGL 280	Introduction to Film	3
ENGL 315	The Gothic Novel	3
ENGL 318	Studies in Poetry	3
ENGL 321	Contemporary Drama	3
ENGL 329	Graphic Literature	3
ENGL 330	The Contemporary Novel	3
ENGL 333	Environmental Literature	3
ENGL 405	Page and Stage	1.5-6
ENED 355	Adolescent Literature	3

Subtotal: 3

Literature and Identities

These courses explore the ways literature both reflects and shapes individual and group ideas of self and community, addressing issues like gender, sexuality, religious and cultural heritage, social class, race, and profession.

ENGL 240	Introduction to African American Literature and Culture	3
ENGL 241	Introduction to Latino/a Literature	3
ENGL 242	American Indian Literature	3
ENGL 296	American Identities	3
ENGL 304	Latina Literature and Cultural Studies	3
ENGL 314	Women Writers	3
ENGL 331	American Literary Roots	3
ENGL 340	Black Women Writers	3
ENGL 342	African American Autobiography	3
ENGL 344	Contemporary Multiethnic American Literature	3
ENGL 390	Jewish Literature	3
ENGL 396	Russian Literature	3

Subtotal: 3

Literary History I (Broad)

These survey and landmarks courses enable students to develop a big picture of how changes in literary styles, movements, and modes relate to their changing cultural contexts.

ENGL 204	Survey of English Literature	3
ENGL 206	Survey of American Literature	3
ENGL 301	American Literary Landmarks	3
ENGL 302	British Literary Landmarks	3
ENGL 422	English Novel I	3
ENGL 424	English Novel II	3

Subtotal: 3

Literary History II (Focused)

These courses delve deeply into one period or movement of literature in order to closely examine how writers of a time address important social and political issues through art.

ENGL 310	Medieval Literature	3
ENGL 312	Renaissance Literature	3
ENGL 313	Scribbling Women	3
ENGL 316	The Early 17th Century	3
ENGL 319	Modern Drama	3
ENGL 320	The Restoration and 18th Century	3
ENGL 322	The Romantic Age	3
ENGL 326	Victorian Literature	3
ENGL 327	Modern European Literature	3
ENGL 328	Modern British Literature	3
ENGL 332	American Romanticism in Literature	3
ENGL 334	Realism/Naturalism in American Literature	3
ENGL 335	Modern American Poetry	3
ENGL 336	Modernism in American Literature	3
ENGL 338	Contemporary American Literature	3
ENGL 339	Contemporary American Poetry	3
ENGL 341	Harlem Renaissance	3
ENGL 397	Discourses of the Enlightenment	3
ENGL 416	Elizabethan Drama	3
ENGL 418	Restoration/18th Century Drama	3
ENGL 430	Bloomsbury Modernism	3
Subtotal: 3		

World Literature

In our increasingly global society, engagement with the writings of different cultures is essential to intercultural communication, understanding, and empathy. These courses offer students the chance to travel literarily across the globe and to examine different perspectives, aesthetics, and writing styles.

ENGL 205	Epic and Romance	3
ENGL 211	World Poetry	3
ENGL 291	The Bible as Literature	3
ENGL 300	European Literary Landmarks	3
ENGL 303	Global Literary Landmarks	3
ENGL 306	Middle Eastern Literatures	3
ENGL 386	Women in Global Cinema	4
ENGL 389	Greek and Roman Literature	3
ENGL 391	Romanticism in World Literature	3
ENGL 392	Asian Literature	3
ENGL 393	Literatures of Colonization and Globalization	3
ENGL 394	Japanese Literature	3
ENGL 395	Non-Western Literature	3
ENGL 408	Arthurian Literature	3
ENGL 425	Yeats and Company	3
Subtotal: 3		

Major Author

These courses probe the lives, works, and impact of one or two specific authors. Students can see how life circumstances shape a writer's craft, themes, reception, and influences.

ENGL 387	American Film	4
ENGL 410	Chaucer	3
ENGL 412	Early Shakespeare	3
ENGL 414	Later Shakespeare	3
ENGL 420	Milton	3
ENGL 427	Major Writers	3
ENED 413	Teaching Shakespeare	3
Subtotal: 3		

III. Theoretical and Rhetorical Approaches (9 credit hours):**Subtotal: 9****Theoretical Approaches**

These courses teach students to bring new questions and lenses to their explorations of literature and the world.

ENGL 324	Myth and Symbol in Literature	3
ENGL 343	Queer Studies in Literature	3
ENGL 345	Critical Reading	3
ENGL 346	History of Literary Criticism	3
ENGL 348	Modern Literary Criticism	3
ENGL 349	Theories of Gender	3
ENGL 380	Film: Silence to Sound	4
ENGL 381	Narrative Film After 1940	4
ENGL 446	Contemporary Literary Theory	3
ENED 357	Literacy/Language/Learning Theory	3
Subtotal: 3		

Rhetorical Writing

These writing-intensive courses (maximum enrollment of 20) offer practical strategies, methods, and tools for developing clear, accurate, and effective writing for a variety of genres, contexts, audiences, and purposes.

ENGL 366	Opinion in Journalism	3
ENGL 369	Argumentative Writing	3
ENGL 372	Grammar and Style for Writers	3
ENGL 374	Writing and Social Change	3
ENGL 375	Writing for the Professions	3
ENGL 378	Advanced Writing I: The Essay	3
ENGL 379	Writing in a Digital World	3
ENGL 455	Writing Tutors	3
Subtotal: 3		

and

an additional Theoretical Approaches or Rhetorical Writing course

Subtotal: 3

IV. Electives (6 credit hours):**Subtotal: 6****V. Capstone Experience (3 credit hours):**

ENGL 400 Senior Seminar 3

Subtotal: 3

NOTE: A course in the Theoretical Approaches category is a prerequisite for ENGL 400.

TOTAL CREDIT HOURS: 42**English Graduate Programs**

Office: 277 Fenton Hall
(716) 673-3125

Dr. Bruce Simon, *Chairperson***Dr. Jeanette McVicker**, *Graduate Coordinator*Email: english.department@fredonia.eduWebsite: <http://home.fredonia.edu/english/grad-summary>

The English Department offers two registration tracks, one for students seeking professional certification to teach in New York State, and one for non-certification. Both programs provide students the opportunity to study language and literature in various cultures and media, across the field of English studies.

English 7-12 M.A. (p. 105): Students already holding initial certification may choose the Master of Arts in English program for professional certification to teach grades 7-12. The program emphasizes the importance of learning how to learn rather than becoming only storehouses of information. Equally important is giving potential and practicing teachers the opportunity to discover, refine, or change their own approaches to the teaching of language, literature, and literacy. As part of their program, candidates for certification take specially designated ENED courses that emphasize the linkages between content and pedagogy in addition to other coursework in English. Students will culminate their studies by selecting among several options for a required degree project, including the opportunity to write an action research thesis, submit work to a professional journal or take a comprehensive examination.

English M.A. (p. 103): The English Department also offers a Master of Arts in English program that prepares students to enter the professions through a rigorous program that spans the field of English studies. Students seeking preparation at the graduate level for further academic and professional endeavors should enroll in this degree program. Students will culminate their studies by selecting among several options for a required degree project, including the opportunity to write a thesis, submit work to a professional journal or take a comprehensive examination.

Application Deadlines

The English Department conforms to university policy that identifies April 1 for admission in the fall semester.

Applications for English graduate programs received by July 1 will be considered for fall admission; those received after that date will be considered for the following calendar year.

Scholarships and Prizes

The English Department offers an atypically large number of competitive scholarships and prizes recognizing superior academic achievement. The awards provide intellectual promotion of a kind that will increase students' potential for superior placement in career fields and research institutions of their choice, while also providing financial support. The department awards outstanding writing, research, overall academic performance and excellent pedagogy. Each spring semester, an annual ceremony for all award-winning students and their families is held during the last week of classes.

Honor Society

Qualified graduate students may apply for membership in the international English honor society, Sigma Tau Delta. Candidates for graduate membership must be enrolled in a graduate program in English, and have completed 9 semester hours of graduate work or the equivalent with a minimum grade point average of 3.5 in their English course work.

Graduate Assistant Criteria, Processes, Deadlines

Applicants wishing to be considered for a graduate assistantship, please see Graduate Studies and Student Services (p. 267) for more information.

Graduation Requirements

Before graduation, all students must complete an Application for Degree form in the Office of the Registrar. Students must have earned at least a 3.0 cumulative GPA in the program in order to graduate; course grades of B- or below do not count for graduate credit toward the degree. All students will complete a portfolio as part of the coursework in ENGL 695, the program capstone course. M.A. candidates seeking professional certification are required to provide a paper documenting their required structured field experience and should enroll in ENED 601 concurrently with ENED 554. All candidates for the degree will submit a degree project as part of their graduation requirements: thesis, action research thesis, comprehensive exam, or submission to a professional publication in the field. Details can be found below.

Graduation and Professional Certification Requirements

Before graduation, all students must complete an Application for Degree form in the Office of the Registrar. Students seeking professional certification must also fill

out a Graduate Recommendation Release Form, available in the English Department office, the Registrar's Office, and online at <http://home.fredonia.edu/coe/teachwaivers>, in order for Fredonia to release academic and Social Security number information to the New York State Department of Education.

For additional certification requirements, students should see Graduate Certification Information section (p. 279) of the Graduate Studies chapter of the catalog.

Graduate Course Entrance Policy

1. Priority will be given to students who have already been admitted to graduate study in English at Fredonia.
2. Admission to graduate courses in English for approved, non-degree graduate students may be granted on a "space available" basis.
3. All other graduate students will be admitted to graduate courses depending on their preparation, as space permits.
4. With permission of the instructor, and approval of the English Chairperson and the Associate Provost for Graduate Studies, qualified undergraduates may take 500-level graduate courses in accordance with the stated rules provided in the University Catalog and as space permits, with the exception of ENGL 502, ENGL 690/ENED 690, ENGL 695 and ENGL 696/ENED 696.

Departmental Requirements for Admission to all graduate programs in English, including:

- **Master of Arts in English**
- **Master of Arts in English 7-12 (for Professional Certification)**
- Completion of a baccalaureate degree in English or related field with approval of Graduate Committee at an accredited four-year institution.
- Candidates with a GPA of at least 3.0 in an English major will receive preference for admissions. The Graduate Committee and the chair will review applications from students without an undergraduate English degree and determine whether the student may matriculate. Additional preparation or course work at the undergraduate level may be required.
- The Statement of Intent (required for the graduate application) should be approximately two to three pages, and should detail the candidate's reasons for applying to a graduate program in English at Fredonia. **It should be a substantive commentary** on the applicant's qualifications as a candidate, and his/her interests in the field of study, special areas of preparation, etc.

- At least two Recommendation Letters (required for the graduate application) attesting to the candidate's breadth of preparation and quality of performance in an undergraduate English major or equivalent and, if applicable, a letter from a school administrator addressing performance as a teacher of English. Letters should be current (within 6 months) and specific to the applicant's application to engage in graduate-level work.
- Writing Sample: An eight-to-20 page research essay should demonstrate the applicant's interpretive, critical and writing skills. The paper must include a works cited page evidencing knowledge of proper citation format (MLA, Chicago, APA).
- Copy of initial certification to teach English in the secondary schools of New York State, or equivalent preparation (for those seeking professional certification). NOTE: international applicants *may* be admitted to the M.A. English 7-12 program if they can document completion of the undergraduate equivalent of initial certification in their home country, and agree to sign a waiver declining their interest in obtaining NYS certification through the advanced program.
- International applicants must meet the above admission requirements and submit English proficiency scores of 79 on the TOEFL or an IELTS score of 6.5 (with no subsection score below 6.0).

Recommended preparation for graduate studies in English includes course work related to world literature(s), language and linguistics, critical and pedagogical theory, and various interdisciplinary and cultural studies.

As of December 31, 2013, candidates in all education programs are required to complete training under the Dignity for All Students Act (DASA). Beginning in the Fall 2013 semester, the training required under the Dignity for All Student Act (DASA) will be included in EDU 303 at Fredonia. Undergraduate candidates planning to graduate after Fall 2013 who have already completed EDU 303 on campus or taken a workshop as a substitution for EDU 303 must also complete the EDU DASA workshop prior to graduation.

All Fall 2015 applicants to the M.A. English 7-12 program must submit proof of taking the Graduate Record Exam (GRE) general test, as determined by the State University of New York for all graduate education programs.

INTERNATIONAL ADMISSION FOR M.A. ENGLISH

FREDONIA DIRECT ADMISSION (FID)

The Fredonia Direct Admission path is for international students who meet all academic eligibility and admission

requirements of the program and have minimum TOEFL score of 79 or an IELTS score of 6.5 (with no subsection score below 6.0)

To apply, submit the following:

1. Fredonia Graduate Studies
App: <http://home.fredonia.edu/gradstudies/>
2. Application Fee - \$75
3. Authenticated transcript(s) showing an undergraduate GPA equivalent to 3.0 or better (as evaluated by WES) in an English or related major program leading to a B.A. degree. International applicants must provide official copies of all previous degrees/diplomas and transcripts issued in the original language with a literal English translation of each. Proof of an official certification of the award of any and all degrees must be provided. Include documentation describing in which language the courses were taught. The latter can be included in a separate document as a chart or statement
4. Two current (within six months) letters of recommendation which include contact information so that the English Graduate Program Coordinator has the option of contacting anyone who has submitted a letter on your behalf. Letters should indicate the applicant's ability to engage in intensive research, reading and writing in English.
5. A resume and a statement of your background and goals for pursuing an M.A. in English at Fredonia.
6. A writing sample (minimum 8 double-spaced pages, in English) providing evidence of the use of critical secondary sources to analyze literary and/or cultural texts (MLA or Chicago style preferred).
7. Passport copy
8. Financial Statement and Proof of Income

CONDITIONAL ADMISSION (FID)

The Conditional Admission path is for International students who do not meet certain elements of the Fredonia Direct Admission requirements. On Direct Admission application, one may still be considered if any of the following apply.

- Applicants who are below stated English proficiency for Fredonia direct admission *may* be admitted conditionally, with admission to EC English to improve proficiency levels. Applicants who score below 79 on TOEFL or whose writing sample does not provide evidence of the use of standard written English and/or the ability to use critical secondary sources to analyze literacy and/or cultural texts may resubmit these application materials following coursework at EC English. Conditionally accepted students will not be

allowed to take graduate English courses until the required demonstration of oral and written proficiencies, as evidenced by the TOEFL and an accepted application (including a writing sample), have been met.

Applicants who do not have the equivalent of a Bachelor of Arts degree in English may be admitted if they have done substantive work in a cognate field with substantial work in literature, culture and/or writing (equivalent to a minor, or concentration) in English.

EC ENGLISH DIRECTION ADMISSION (VID)

The EC English Direct Admission path is for students seeking ESL instruction who may need additional English language study prior to admission.

This program is for anyone preparing for university admission, seeking an advantage in the workplace, or expanding their career opportunities and other than a F1 visa. With a focus on fluency, this program improves English while working on the 4 skills: speaking, listening, reading and writing.

To apply email Daniel Heckmyer, Campus Manager: danielheckmyer@ecenglish.com

Be prepared to submit the following:

1. Affidavit of Support
2. Proof of funds in US dollars
3. Registration Fee - \$150
4. Passport Copy

ENGLISH MASTER OF ARTS

LEARNING GOALS FOR THE MASTER OF ARTS IN ENGLISH

Students will:

- Broaden their understanding of English as a field and find their places within it;
- Think critically about language and the contexts in which it is produced and received
- Engage with and apply multiple research methodologies in order to express themselves in written and other media.

PROGRAM DESCRIPTION

The Master of Arts in English offers students multiple opportunities to engage with the diverse field of English studies. Students develop their skills as reflective readers, writers, and researchers. Starting with ENGL 500: Introduction to Graduate Studies, students will approach

contemporary issues and problems through multiple methodological lenses, as they discover their own specific professional interests. By exposing students to fresh pedagogical initiatives, interdisciplinary critical methods, and historical currents, the program encourages students to work toward a required degree project that will best suit their professional needs. Courses will be selected from three streams. The program structure supports wide faculty participation to work closely with students in individual and collaborative research settings. Students will participate in departmental and campus events that showcase their research, culminating in a degree project which will provide them with tangible entry into the profession.

The division of our courses into three streams is part of what makes our graduate programs in English at Fredonia distinctive. This framework allows our students to customize their studies in ways that utilize our faculty expertise and advance the learning outcomes of our program, while demonstrating the interrelation between texts, the contexts in which they're produced and read, and the theories that provide interpretive frameworks for engaging them.

TEXTS stream: Offers the opportunity for students to study in-depth textual production in a variety of forms from various regions and/or time periods. Individual courses could include a focus on a particular writer's oeuvre, or a particular genre (for example, silent film, non-fiction essay, the bildungsroman, psychoanalysis) and the retracing of any significant developments therein.

CONTEXTS stream: Engages the multiple contexts in which texts are produced and received at particular moments in time. It promotes the study of the effects of such issues as globalization, institutionalization, class relations, gender, and race on the production and reception of texts. Individual courses could include, but are not restricted to, the study of particular movements and the presentation of a variety of methods, including cultural and interdisciplinary studies, historical approaches, pedagogical and rhetorical practices.

THEORIES stream: Provides opportunities for students to illuminate the underlying conceptual logics that govern texts and textual analysis. Theories of writing, critical theory, pedagogical theory, literary theory are all possible contributions to this stream, through which students will further develop their critical thinking process, their deeper sense of the history of the discipline of English, and their understanding of literature, language, teaching, and culture.

PROGRAM REQUIREMENTS

- The Master of Arts in English requires a minimum of 30 graduate-level credit hours.
- All students must receive a B or better in all graduate courses earned toward the degree. In order to enroll in

ENGL 696 (Degree Project Completion), students must have a cumulative GPA of 3.0 or B.

- All students must successfully complete a degree project: submission and oral defense of a thesis or action research thesis; a grade of "pass" or above on a comprehensive examination; submission of a critical essay to an approved professional publication in the field of English studies with a professional conference presentation based on that research.
- All students must submit a portfolio as part of their assignments in the program capstone course, ENGL 695 (Capstone in English Studies).
- Students are assigned a faculty advisor at the time of their admission to the program and are encouraged to meet regularly with him/her. Students' progress will be reviewed after their first 13.5 hours of course work to determine eligibility for ongoing study. A mandatory advising session will provide feedback to students on their progress in the program and help to consolidate the student's choice of degree project.
- Students may, with the chairperson's approval, transfer up to 6 credit hours of graduate-level credit from another department or institution. Such credit will only be given for courses in which the student has earned a B or better; such courses may not be more than five years old, unless an extension is granted by the chairperson.
- Some courses are variable content courses and may be taken more than once for credit; those that **may not be taken more than once for credit** include: ENGL 500, ENED 554, ENGL 690, ENGL 695, and ENGL 696.

Core experiences

ENGL 500	Introduction to Graduate Studies in English	3
ENGL 502	Directed Study	1.5
ENGL 690	Degree Project Research	3
ENGL 695	Capstone in English Studies	3
ENGL 696	Degree Project Completion	3
	One course from each "stream" can include Texts, Contexts, and Theories (see announced course offerings for topics) *	9

Subtotal: 22.5

NOTE:

- * These 9 credit hours must be completed prior to taking ENGL 690. Please check Your Connection for course descriptions.

Additional courses to complete 30 credit hours

Additional courses from at least two of the three "streams": Texts, Contexts, and Theories (see

	announced course offerings for topics) *	
	Up to one additional directed study	0-1.5
ENGL 694	English Graduate Internship	1-3
Subtotal: 7.5		
TOTAL CREDIT HOURS: 30		

ENGLISH 7-12 MASTER OF ARTS

LEARNING GOALS FOR THE MASTER OF ARTS IN ENGLISH 7-12

Students will:

- Broaden their understanding of English as a field and find their places within it;
- Think critically about language and the contexts in which it is produced and received
- Engage with and apply multiple research methodologies in order to express themselves in written and other media.

PROGRAM DESCRIPTION

The Master of Arts in English 7-12 (for Professional Certification) offers students multiple opportunities to engage with the diverse field of English studies. Students develop their skills as reflective readers, writers, and researchers. Starting with ENGL 500: Introduction to Graduate Studies, students will approach contemporary issues and problems through multiple methodological lenses, as they discover their own specific professional interests. By exposing students to fresh pedagogical initiatives, interdisciplinary critical methods, and historical currents, the program encourages students to work toward a required degree project that will best suit their professional needs. Courses will be selected from three streams. The program structure supports wide faculty participation to work closely with students in individual and collaborative research settings. Students will participate in departmental and campus events that showcase their research, culminating in a degree project which will provide them with tangible entry into the profession.

The division of our courses into three streams is part of what makes our graduate programs in English at Fredonia distinctive. This framework allows our students to customize their studies in ways that utilize our faculty expertise and advance the learning outcomes of our program, while demonstrating the interrelation between texts, the contexts in which they're produced and read, and the theories that provide interpretive frameworks for engaging them.

TEXTS stream: Offers the opportunity for students to study in-depth textual production in a variety of forms

from various regions and/or time periods. Individual courses could include a focus on a particular writer's oeuvre, or a particular genre (for example, silent film, non-fiction essay, the bildungsroman, psychoanalysis) and the retracing of any significant developments therein.

CONTEXTS stream: Engages the multiple contexts in which texts are produced and received at particular moments in time. It promotes the study of the effects of such issues as globalization, institutionalization, class relations, gender, and race on the production and reception of texts. Individual courses could include, but are not restricted to, the study of particular movements and the presentation of a variety of methods, including cultural and interdisciplinary studies, historical approaches, pedagogical and rhetorical practices.

THEORIES stream: Provides opportunities for students to illuminate the underlying conceptual logics that govern texts and textual analysis. Theories of writing, critical theory, pedagogical theory, literary theory are all possible contributions to this stream, through which students will further develop their critical thinking process, their deeper sense of the history of the discipline of English, and their understanding of literature, language, teaching, and culture.

PROGRAM REQUIREMENTS

- The Master of Arts in English 7-12 requires a minimum of 30 graduate-level credit hours.
- All students must receive a B or better in all graduate courses earned toward the degree. In order to enroll in ENED 696 (Degree Project Completion), students must have a cumulative GPA of 3.0 or B.
- All students must successfully complete a degree project: submission and oral defense of a thesis or action research thesis; a grade of "pass" or above on a comprehensive examination; submission of a critical essay to an approved professional publication in the field of English studies.
- All students must submit a portfolio as part of their assignments in the program capstone course, ENGL 695 (Capstone in English Studies). Candidates for professional certification must complete at least one structured field experience, documentation of which must be included within the portfolio, and register for ENED 601 concurrently with ENED 554.
- Students are assigned a faculty advisor at the time of their admission to the program and are encouraged to meet regularly with him/her. Students' progress will be reviewed after their first 13.5 hours of course work to determine eligibility for ongoing study. A mandatory advising session will provide feedback to students on their progress in the program and help to consolidate the student's choice of degree project.

- Students may, with the chairperson's approval, transfer up to 6 credit hours of graduate-level credit from another department or institution. Such credit will only be given for courses in which the student has earned a B or better; such courses may not be more than five years old, unless an extension is granted by the chairperson.
- Some courses are variable content courses and may be taken more than once for credit; those that **may not be taken more than once for credit** include: ENGL 500, ENED 554, ENED 690, ENGL 695, and ENED 696.

Core experiences

ENGL 500	Introduction to Graduate Studies in English	3
ENED 502	Directed Study	1.5
ENED 554	Composition Theory and Practice	3
ENED 665	Studies in English Education	3
ENED 690	Degree Project Research	3
ENGL 695	Capstone in English Studies	3
ENED 696	Degree Project Completion	3

Subtotal: 19.5**NOTE:**

- ENED 554 and ENED 665 must be completed prior to taking ENED 690.

Additional courses as follows to complete 30 credit hours

	Additional courses from at least two of the three "streams": Texts, Contexts, and Theories (see announced course offerings for topics) *	6-9
	Up to one additional directed study	0-1.5
ENGL 694	English Graduate Internship	1-3

Subtotal: 10.5**NOTE:**

- * Please check Your Connection for course descriptions.

TOTAL CREDIT HOURS: 30**FRENCH BACHELOR OF ARTS****REQUIREMENTS FOR THE BACHELOR OF ARTS IN FRENCH****Required Courses**

FREN 315	French Masterpieces	3
	or	
FREN 316	French Plays and Prose	3
FREN 317	French Conversation	3
FREN 318	French Composition	3
FREN 319	Survey of French Literature I	3

FREN 308	Advanced French Phonetics and Diction	3
FREN 423	Senior Seminar	3
FREN 424	Stylistics	3

Plus 15 additional credit hours of 300 or 400 level French courses.

Students seeking a minor or concentration in French should also perform at the B level in these courses.

A maximum of 6 credit hours of LANG courses can be applied towards the major as long as the student does the course work in the target language.

All students are required to complete a separate minor whether it is in another language, in another discipline, or in an interdisciplinary program. Students select a minor in consultation with and approval of the department. Double majors and Adolescence Education majors in language are exempt from the minor requirement.

Childhood and Early Childhood Education majors may earn a concentration in French. Students should consult the Childhood (p. 40) or Early Childhood Education (p. 59) course requirements for these programs.

Students can apply a maximum of 21 credit hours of Study Abroad with a minimum grade of C toward the major in French.

Requirement for Transfer and Study Abroad Credits

A maximum of 21 credit hours of transfer and/or Study Abroad courses can apply to the major at Fredonia. All students are required to take 15 credit hours of their major in residence. They must complete 9 credit hours at the 300-level or above, the senior seminar and at least one other 400-level course at Fredonia.

A maximum of 9 credit hours of transfer and/or Study Abroad courses can apply to the minor. At least 6 credit hours at the 300-level should be taken in residence.

TOTAL CREDIT HOURS: 36**GEOCHEMISTRY BACHELOR OF SCIENCE****REQUIREMENTS FOR THE BACHELOR OF SCIENCE IN GEOCHEMISTRY****Core Program (29 credit hours in Geosciences):**

GEO 102	Freshman Seminar	1
GEO 165	Geology I	3
GEO 169	General Geology Lab	1
GEO 210	Geology II	3
GEO 411	Mineralogy	4
GEO 421	Petrology	4
GEO 431	Geochemistry	4

GEO 459	Seminar in Geosciences	1
	Two GEO 300/400 level courses with labs	8

Subtotal: 29

NOTE: One credit hour of CHEM 495 or CHEM 496 may substitute GEO 459.

Additional Sciences Requirements (29 credit hours in Chemistry):

CHEM 115	General Chemistry Lecture I	3
CHEM 125	General Chemistry Laboratory I	1
CHEM 116	General Chemistry Lecture II	3
CHEM 126	General Chemistry Laboratory II	1
CHEM 215	Organic Chemistry Lecture I	3
CHEM 225	Organic Chemistry Laboratory I	1
CHEM 216	Organic Chemistry Lecture II	3
CHEM 226	Organic Chemistry Laboratory II	1
CHEM 315	Introduction to Physical Chemistry	3
CHEM 325	Physical Chemistry Laboratory I	1
CHEM 317	Analytical Chemistry, Quantitative Analysis	3
CHEM 327	Analytical Chemistry I Laboratory	1
CHEM 318	Analytical Chemistry, Instrumental Analysis	3
CHEM 328	Analytical Chemistry II Laboratory	2

Subtotal: 29

Related Disciplines (21-24 credit hours):

PHYS 230	University Physics I	4
PHYS 232	University Physics I Lab	1
PHYS 231	University Physics II	4
PHYS 233	University Physics II Lab	1
MATH 122	University Calculus I	4
MATH 123	University Calculus II	4
	A course in scientific writing, CHEM 295 is recommended.	1
	Statistics 200 level course or higher	3
	or	
	a course in computer programming *	3

Subtotal: 21-24

NOTE: * will accept CSIT 104.

Writing Intensive:

Requirement can be fulfilled by taking CHEM 225, CHEM 226, and CHEM 295 (in addition to GEO 421).

TOTAL CREDIT HOURS: 79-82

Geology and Environmental Sciences

Office: 121 Houghton Hall

(716) 673-3303

Dr. Sherri Mason, Chairperson

Email: geosciences.department@fredonia.edu

Website: <http://home.fredonia.edu/earth>

The Department of Geology and Environmental Sciences offers four degree programs.

The B.S. degree program in Geology (p. 108) is intended primarily for students planning to undertake employment or graduate study in geology or who desire a liberal arts education with an emphasis in geology. Most geologists are employed by private industry – in petroleum, mining, cement, ceramic, sand and gravel, and in environmental and engineering firms. Many work for various federal agencies and the 50 state geological surveys, or are self-employed, often working as consultants. Colleges and universities offer teaching and/or research positions.

The B.S. degree program in Geochemistry (p. 106), an interdisciplinary program with the Department of Chemistry, prepares the student to undertake employment or graduate study in this field. Geochemists are employed in the mineral resource industries, earth and space sciences, environmental sciences, and several branches of chemical science and technology. In addition to careers in industry, geochemists are employed by consulting firms, academic institutions, and the federal government.

The B.A. degree program in Earth Science (p. 62) is intended primarily for students who want a liberal arts education with a broad emphasis in the several sub-disciplines that constitute the earth science. It is useful to those who have career goals in production, technical services, information systems/processing, marketing/sales, administration and/or finance, rather than goals of becoming professional scientists.

The B.S. degree program in Adolescence Education (p. 17) is intended for those students who plan to teach earth science in secondary schools. It includes the fundamental courses in geology, meteorology, astronomy, and oceanography, which constitute the “content” of earth science, and the necessary professional education courses.

Students planning to pursue a career in the earth sciences as professional scientists should earn one of the B.S. degrees in Geology and Geochemistry, rather than the B.A. or B.S. degrees in Earth Science, because the former require a more rigorous background in physics and mathematics which is needed to pursue graduate studies in the geosciences or employment as professional scientists.

Teacher Certification: Students who desire to teach earth science in secondary schools may obtain initial certification by completing the B.S. degree program in Earth Science with its required professional courses in Education EDU 224, EDU 250, EDU 301, EDU 302, EDU 303, EDU 349, EDU 430 and Science Education SCED 105, SCED 276, SCED 303, SCED 305, SCED 419).

Students in all education programs are required to demonstrate competence in a foreign language. This requirement may be satisfied in any one of the following ways: (1) Achieving an 85 percent on a Regents language exam, (2) Achieving a 65 percent or better on a Regents language exam and successfully completing an Elementary I or Elementary II level college language course, (3) successfully completing Elementary I level and Elementary II level college language courses in the same language, or (4) successfully completing an equivalent Fredonia language proficiency exam. The College Core Curriculum foreign language requirement differs from the certification requirement and must be satisfied for degree conferral. Students are screened by the department chairperson before entering SCED 419.

Students are encouraged to participate in the activities of the Geology Club.

The department awards textbook scholarships for academic achievement each semester and annually presents the MacDiarmid Award to the department's outstanding graduating senior, the Paul D. Willette Scholarship to the outstanding junior, the Walther M. Barnard Geosciences Scholarship to the outstanding sophomore, and the Mark D. and April Hoefner Orgren Scholarship to the outstanding freshman. The Susan Mara Scholarship is awarded by the faculty to students deserving of special recognition, and the Florence M. Eikenburg scholarship is awarded to outstanding sophomore or junior majors, with first preference going to female students. In addition, the department awards the Spatial Studies Award to outstanding students pursuing studies in Geographic Information Systems (GIS) and related fields, the Gary and Eileen Lash Award to promote student growth in the area of field studies, and the Temporal Studies Award for students doing outstanding work in time-based studies of geological processes relevant to issues facing society.

Explanation of geosciences (GEO) course numbers: 100-level courses are introductory courses without prerequisites; 200-level courses are general service courses with prerequisites; 300-level courses are upper-level College Core Curriculum courses, and electives and required courses for geosciences majors; and 400-level courses include required and elective courses for majors, generally with high-level or multiple prerequisites.

Laboratory credit: 1 credit hour of laboratory work includes three clock hours in the laboratory per week. Four (4)-credit hour courses in geosciences include 1 credit hour of laboratory work.

GEOSCIENCES HONORS TRACK

Includes B.S in Geology core program, but with the following stipulations for GEO 3XX/4XX electives: 16 credit hours to include GEO 471 Senior Thesis and STAT 250 Statistics for the Sciences. Recommended courses are

GEO 445 Internship (up to 4 credit hours) and GIS courses (up to 6 credit hours).

GEOLOGY BACHELOR OF SCIENCE

REQUIREMENTS FOR THE BACHELOR OF SCIENCE IN GEOLOGY

Core Program:

40 credit hours in Geosciences		
GEO 102	Freshman Seminar	1
GEO 165	Geology I	3
GEO 169	General Geology Lab	1
GEO 210	Geology II	3
GEO 330	Geomorphology	4
GEO 345	Paleontology	4
GEO 370	Structural Geology	4
GEO 400	Stratigraphy	4
GEO 411	Mineralogy	4
GEO 421	Petrology	4
GEO 459	Seminar in Geosciences	1
GEO 461	Field Geology	3
	One GEO 300/400 level elective course with lab	4

Subtotal: 40

NOTE: GEO 461 is a Capstone experience. GEO 300/400 level elective course with lab may include four (4) credit hours of GIS.

Additional Science Requirements:

25-29 credit hours in related disciplines		
MATH 120	Survey of Calculus I	3
MATH 121	Survey of Calculus II	3
	or	
MATH 122	University Calculus I	4
MATH 123	University Calculus II	4
CHEM 115	General Chemistry Lecture I	3
CHEM 125	General Chemistry Laboratory I and	1
CHEM 116	General Chemistry Lecture II	3
CHEM 126	General Chemistry Laboratory II	1
PHYS 121	College Physics I	3
PHYS 123	College Physics Lab I and	1
PHYS 122	College Physics II	3
PHYS 124	College Physics II Lab	1
	or	
PHYS 230	University Physics I	4
PHYS 232	University Physics I Lab and	1
PHYS 231	University Physics II	4
PHYS 233	University Physics II Lab	1
	Statistics 200 level course or higher	3

Subtotal: 25-29

Writing intensive:

One of the following:

GEO 330	Geomorphology	4
GEO 335	Geophysics	4
GEO 400	Stratigraphy	4

Subtotal: 4

NOTE: GEO 330, GEO 335, GEO 370, GEO 400, and GEO 421 are all Intensive Writing courses; a minimum of three (3) intensive writing courses satisfies the intensive writing requirement.

TOTAL CREDIT HOURS: 69-73**History**

Office: E332A Thompson Hall
(716) 673-3277

Dr. Mary Beth Stevens, Chairperson
Email: history.department@fredonia.edu
Website: <http://home.fredonia.edu/history>

The Department of History offers a broad-based and worldwide curriculum, with an emphasis on developing critical thinking and writing skills. History majors study the complexities of the human experience, deepen their knowledge of their own society and its past, explore other cultures and societies, and prepare for life in a multi-cultural and international community. The History major also prepares the student for a variety of career opportunities in business and industry, including development planning, data analytics, and publishing. In addition, many History majors pursue careers in government, public policy, the law, higher education, journalism, librarianship, and public history. The Social Studies Adolescence Education major prepares students to teach social studies in middle school and high school.

Internships: The history department facilitates internships at local museums and archives, in Washington, D.C. and Albany, N.Y., and within the university. The department also encourages students to participate in international experiences and earn college credit through the Study Abroad or Student Exchange programs, as well as through department-sponsored short-term Study Abroad experiences.

Honors and Awards

The honors program of the Department of History is designed to honor graduates of the History or Social Studies programs who have consistently demonstrated ability and produced work of high quality in the discipline. The honors designation is given to students who achieve an all-university average of 3.0; an average in history courses of 3.25; and who earn appropriate grades in HIST 499 (Honors Research Seminar) and HIST 201 (Doing History). For more information on the honors program, students should contact the chairperson. The department gives a variety of scholarships and awards. These include

the Helen B. Mancuso Scholarship for junior or senior majors; the MacPhee Scholarship for junior majors; the David H. Carnahan Scholarship; the Kenneth E. Cutler Scholarship; the Kim Korhummel Scholarship; the Robert and Marilyn Maytum Scholarship for incoming freshman majors; the Joseph T. Gallagher Memorial Scholarship for minority students pursuing careers in education; the Zimmer History Scholarship for students pursuing a career in law or communications; and the William and Helen Chazanof Award for student work in local history. The department also annually recognizes Outstanding History and Social Studies majors and an Outstanding History paper. The department inducts juniors and seniors who have done excellent work in history courses into Phi Alpha Theta, the national history honor society, and encourages students to present papers at the annual regional conference of the society.

HISTORY/SOCIAL STUDIES**ADOLESCENCE EDUCATION DOUBLE MAJOR**

In order to achieve a double major in History and Social Studies-Adolescence Education with the addition of only one history course (HIST 495/499 Capstone Seminar), the student must select a history course for the American minorities requirement.

Other Requirements

All majors must fulfill all testing and assessment requirements set by the Department of History. At present, these include gated assessment requirements. Grades must be C+ or better in all required courses in the Social Studies program. The Written Communication requirement under the College Core Curriculum must be passed with a C or better. Students are encouraged to complete one course in statistics as part of the College Core Curriculum.

HISTORY BACHELOR OF ARTS**REQUIREMENTS FOR THE BACHELOR OF ARTS DEGREE IN HISTORY**

Forty (40) credit hours in history, at least 18 hours of which must be at the 300-level or above, with the exception that follows. Of those 18 hours, 3 hours may be taken from among the 200-level surveys in African, Asian, Latin American, and Middle Eastern history. Six (6) credit hours above the 100 level must be taken in courses that focus on the period prior to 1800. Before taking 300- or 400-level courses, students should have completed HIST 100 (History Introductory Seminar) and HIST 201 (Doing History). All students must complete a Capstone Seminar (HIST 495/ HIST 499*). Selected students will have the opportunity to participate in the History Department Honors Program. Students must earn at least a C- in all classes required for the major.

The program must include the following:

Methodologies:

HIST 100	History Introductory Seminar	1
HIST 201	Doing History	3
HIST 495	Capstone Seminar	3
	or	
HIST 499	Honors Research Seminar	3

*HIST 499 by invitation only. The course is required for students who wish to graduate with honors in History.

Foundations:

6 credit hours in each of the following categories: U.S. History; European History; Non-Western History for a total of 18 credit hours. Only 12 credit hours may be taken at the 100 level.

Concentrations:

9 additional credit hours in a primary concentration and six additional credit hours in a secondary concentration. Concentrations to be chosen from the following list, after the majority of Foundations courses have been taken:

- U.S. History
- European History
- Non-Western History
- Comparative History (thematic or regional; developed in consultation with advisor)
- Other Thematic Concentration developed in consultation with Advisor (e.g., Urban History, Environmental History, Minority Studies, the History of Cultural Exchange).

Requirements for Transfer Credit

Students transferring credit to Fredonia should normally expect no more than 21 credit hours earned elsewhere to apply to the major in History. As a rule, the department will not accept as equivalents of upper-level courses (above HIST 299) credits earned at two-year colleges. HIST 100, HIST 201, and the capstone requirement (HIST 499 or HIST 495) must be completed at Fredonia.

Other Requirements:

Majors must fulfill all testing and assessment requirements set by the department. Students whose objectives require a different program may, upon petition to the department chairperson, seek approval for a program of their own design.

INDUSTRIAL MANAGEMENT BACHELOR OF SCIENCE

Office: 121 Houghton Hall
(716) 673-3302

Dr. Justin Conroy, Director

Email: industrial.management@fredonia.edu

Website: <http://home.fredonia.edu/physics/indman>

There is a well-recognized need for scientifically and technologically educated managers in the industrial and Research and Development (R & D) communities. The Industrial Management program at Fredonia is designed to serve this need by providing the necessary foundation in applied physics, business, economics, and mathematics. It is similar to many engineering and management programs. The curriculum is structured to prepare students for careers either in industry, governmental facilities or other organizations that address the present and future technological needs of our society. Graduates can also pursue advanced studies at graduate institutions.

The Industrial Management program is an integrated multidisciplinary curriculum combining courses from applied physics (27/29 credit hours), business/economics (24 credit hours), mathematics/computer science (24 credit hours), social sciences/humanities and a sufficient number of supporting elective courses to enhance career objectives. Additionally, the foundation of oral and written communication is developed early in the program and consistently used throughout. A college-approved internship experience is required following the completion of either the sophomore or junior year.

This program is housed in the Department of Physics, but is a distinct program apart from the B.S. in Physics. Therefore, students may double major in Physics and Industrial Management, if they choose to do so. Students are encouraged to see their academic advisor for details.

REQUIRED CORE PROGRAM: (87-90 CREDIT HOURS)

Physics (27-29 credit hours)

PHYS 230	University Physics I	4
PHYS 231	University Physics II	4
PHYS 321	Engineering Statics	3
PHYS 322	Mechanics of Solids	4
PHYS 323	Circuit Analysis	4
	or	
PHYS 325	Electronics	3
PHYS 324	Circuit Analysis II	3
	or	
PHYS 326	Digital Logic	3
PHYS 330	Thermodynamics	3

Subtotal: 24-25

Mathematics/Computer Science (24 credit hours)

MATH 122	University Calculus I	4
MATH 123	University Calculus II	4
MATH 224	Differential Equations	3
MATH 325	Numerical Analysis	3
CSIT 121	Computer Science I	3
	or	
CSIT 105	Visual BASIC I	3

Subtotal: 17		
Business/Economics (24 credit hours)		
ACCT 201	Principles of Financial Accounting	3
ACCT 202	Principles of Managerial Accounting	3
ECON 201	Principles of Macroeconomics	3
ECON 202	Principles of Microeconomics	3
BUAD 310	Legal Environment of Business	3
BUAD 320	Managerial Finance	3
BUAD 323	Organizational Behavior	3
BUAD 328	Marketing Foundations	3
Subtotal: 24		
Operations Research and Statistics (6 credit hours)		
BUAD 327	Operations Management I	3
	or	
MATH 359	Probability Models in Operations Research	3
	or	
MATH 375	Deterministic Models in Operations Research	3
ECON 200	Fundamentals of Statistics for Business Administration and Economics	3

STAT 350	or Probability and Statistics	3
PSY 200	or Statistics	3
SOC 200	or Social Statistics	3
Subtotal: 6		
Communications (6 credit hours)		
COMM 105	Public Speaking	3
ENGL 375	Writing for the Professions	3
Subtotal: 6		

In addition, completion of an appropriate summer industrial work experience is required prior to entering the senior year. Faculty members are listed under the Department of Physics.

NOTE: Students are allowed to double major in Industrial Management and Physics, even though both programs are housed in the same academic department.

TOTAL CREDIT HOURS: 77-78

Interdisciplinary Studies

For information on undergraduate interdisciplinary programs:

Office: 806 Maytum Hall
(716) 673-3173

Dr. Carmen Rivera, Associate Dean, College of Liberal Arts & Sciences

Email: interdisciplinary.studies@fredonia.edu

Website: <http://home.fredonia.edu/interdisciplinary>

For information on graduate interdisciplinary programs:

Office: E230A Thompson Hall
(716) 673-3808

Office of Graduate Studies

Email: graduate.studies@fredonia.edu

Website: <http://home.fredonia.edu/gradstudies/interdisciplinary-studies-ma-ms>

Interdisciplinary Studies Major and Minor Coordinator List

Students interested in electing an Interdisciplinary major or minor should consult with the coordinator from the appropriate area. Majors and minors must be formally declared through the Office of the Registrar.

AREAS OF STUDY

American Studies [major/minor]

Arts Administration [major]

Dance Studio Administration [minor]

Environmental Sciences [major/minor](housed in the
Department of Geology and Environmental Sciences)

Ethnic Studies [minor]

Exercise Science [major] (housed in the Department of Biology)

Film Studies [minor]

Geographic Information Systems [minor]

International Studies [major/minor](housed in the
Department of Politics and International Affairs)

Italian Studies [minor]

Graduate Self-Design

Leadership Studies [minor]

COORDINATORS

Dr. Susan McGee

English
247 Fenton Hall
673-4716

Mr. Jefferson Westwood
G-15 Rockefeller Arts Center
673-3217

Ms. Angelika Summerton
Theatre & Dance
147 Dods Hall
673-3355

Dr. Sherri Mason
Geology and Environmental Sciences
221 Science Center
673-3281

Dr. Jennifer Hildebrand
History
304 Thompson Hall
673-3274

Dr. Patricia Astry
Biology
221 Science Center
673-3282

Dr. Chiara De Santi
World Languages & Cultures
2104 Fenton Hall
673-4496

Dr. Ann Deakin
Geology and Environmental Sciences
20 Houghton Hall
673-3884

Dr. Alexander Caviedes
Politics and International Affairs
E388 Thompson Hall
673-4672

Dr. Chiara De Santi
World Languages & Cultures
2104 Fenton Hall
673-4496

Graduate Studies
E230A Thompson Hall
673-3808

Mr. Mark Suida
Campus Life
Williams Center
673-3143

Museum Studies [minor]**Dr. Ellen Litwicki**

History
E307 Thompson Hall
673-4606

Public Health [minor]**Dr. Randolph Hohle**

Sociology
W395 Thompson Hall
673-3469

Religious Studies [minor]**Dr. Dale Tuggy**

Philosophy
2102 Fenton Hall
673-4892

Russian, East-European and Eurasian Studies [minor]**Dr. John Staples**

History
E332 Thompson Hall
673-3277

Statistics [minor]**Dr. Nancy Boynton**

Mathematical Sciences
204 Fenton Hall
673-4709

Undergraduate Self-Design [major/minor]**Dr. Carmen Rivera**

Associate Dean
College of Liberal Arts & Sciences
806 Maytum Hall
673-3173

Web Programming [minor] (housed in the
Department Applied Professional Studies)**Dr. Reneta Barneva**

Applied Professional Studies
E336 Thompson Hall
673-4959

Women's and Gender Studies [major/minor]**Dr. Jeffry Iovannone**

History 258 Fenton Hall
673-3851

INTRODUCTION TO UNDERGRADUATE INTERDISCIPLINARY STUDIES PROGRAMS

The Interdisciplinary Studies degree program provides students with the greatest possible flexibility in meeting their educational goals by offering the opportunity to participate in creative and individualized interdisciplinary majors and minors. Students in the Interdisciplinary Studies programs are committed to exploring innovative connections and emerging relationships drawn from the traditional disciplines and those developing areas of overlap and interface. These students are typically explorers and creative problem solvers, and many Interdisciplinary Studies students construct their own topics of study (for either major or minor) using analytical approaches and tools from several fields. Students may also choose to pursue one of the many major programs in this area. The degree program constitutes a student's major; the interdisciplinary minors may be taken by students majoring in any program offered by the university.

Students who opt for a truly individualized degree program must develop their own program under the guidance of two faculty members and with the approval of the Associate Dean of the College of Liberal Arts & Sciences. Students should see the Associate Dean for the necessary forms and guidelines for submitting a formal individualized major proposal. The individualized degree program and the model major programs will lead to the degree of Bachelor of Arts or Bachelor of Science (B.A. or B.S.). Students interested in declaring an interdisciplinary major or minor should consult with the coordinator from the appropriate area. Major and minor programs and coordinators are listed on the chart. All majors and minors must be formally declared through the Office of the Registrar.

Requirements for Undergraduate Majors in Interdisciplinary Studies Degree Programs

- Each student who chooses a major program (see list) is advised by the program coordinator or a member of the cadre of faculty from the lead department for each major.
- For students who pursue an individualized major, formal completion and submission of the degree plan proposal must be approved by the appropriate Associate Provost.
- All students in these major programs must complete the university's requirements for the General Education Program and earn the number of credit hours required outside of the major.

- A maximum of 45 credit hours in any one discipline may count toward the 120 credit hours total required for the baccalaureate.
- The proposed major must constitute at least 36 credit hours of which no more than 15 credit hours may come from one discipline.
- At least 24 of those 36 credit hours must be at the 300-400 level.
- A minimum of 36 credit hours of 300-400 level courses must be included overall in the 120 hours required for graduation.

Requirements for the Undergraduate Minor in Interdisciplinary Studies

An Interdisciplinary Studies minor is a group of six to nine courses centering on a topic or problem studied from many different points of view. Each minor may be studied in combination with any major. Individualized minors may be created under advisement. Minors must be formally declared through the Office of the Registrar.

Undergraduate Interdisciplinary Studies Courses

In addition to the major programs and minors, the Interdisciplinary Studies program offers several courses developed for interdisciplinary or special interest purposes.

Independent study and internship options are available through Interdisciplinary Studies on the undergraduate level. Internships may receive up to 15 hours of credit. Students proposing an internship are required to prepare a "Learning Contract" describing the goals of the internship and how they will be met. Internship forms are available from the Career Development Office and must be completed in consultation with the coordinator of the program. Only 6 credit hours earned through internship or independent study may be applied toward the 300- and 400-level course requirements of the individualized major.

INTRODUCTION TO GRADUATE INTERDISCIPLINARY STUDIES PROGRAMS

Interdisciplinary Studies offers two degrees, the Master of Arts and the Master of Science. These individually created degree programs are designed specifically for highly motivated, self-directed students whose personal, educational or career goals require programs that are not found within the traditional graduate boundaries of a single discipline. The degrees do not lead to Fredonia's recommendation for certification, so applicants who are pursuing teaching credentials are advised to investigate alternative certification opportunities.

An Interdisciplinary Studies Program Guide is available in the Graduate Studies Office. The guide will assist candidates in planning degree programs.

Requirements for Admission to the Program without Deficiencies:

- A bachelor's degree at an accredited institution with an overall GPA of at least 2.5.
- Undergraduate and/or previous graduate transcripts should reveal adequate preparation in selected disciplines to meet graduate course prerequisites.
- The Interdisciplinary Studies Program Proposal: A separate two-part proposal form available in the Graduate Studies Office and online. Part I requires the applicant to provide an explanation of the proposed program; Part II asks for both a proposed program topic or title and a list of graduate courses at the 500- and/or 600-level, selected in cooperation with faculty advisors in desired disciplines, which will constitute the entire 30 credit hour program.

As part of the application review process, the Graduate Studies Office will send the details of the proposed program to the pertinent departments, which will make recommendations to the Graduate Studies Office about the quality of the proposed program and the feasibility of its successful completion. Based on details of this review, the student may or may not be accepted as a matriculated graduate student.

If the applicant does not meet those standards, she/he may be granted conditional graduate acceptance. Matriculated status will be granted contingent upon successful completion of undergraduate foundational courses or a stipulated number of graduate courses to demonstrate academic ability, as stipulated by the advisor.

Program Requirements

Students must select graduate level course work from at least two academic disciplines. No more than 15 credit hours of the required course work may be taken in a single department unless the Graduate Studies Office approves a written request for 18 credit hours. At the time of acceptance, an academic advisor will be appointed. It is imperative that a student working toward an interdisciplinary degree confers with his/her advisor regularly. All changes to the initial proposal must be approved by the advisor and the Graduate Studies Office.

Because student programs are individually designed, the capstone research effort, a topic or project explored in depth as part of INDS 690, is tailored to integrate previous learning and related career experience with professional and personal goals. The concentrated study can follow the traditional research pattern of a thesis with 6 credit hours earned in INDS 690 and INDS 691, or it can employ more innovative forms and methods, but in each case a student is required to conduct research and demonstrate its value by presenting a documented literature review of the focused topic. In projects of any format, the completed project must demonstrate growth in skills, knowledge, and vision. All work on Interdisciplinary Studies proposals will be

accomplished with the guidance of a tenure-track faculty mentor in a relevant department and coordinated by the Graduate Studies Office and/or the student's advisor. When the project is completed, three copies of the final version are to be submitted to the Graduate Studies Office at least two weeks before the end of the semester.

Additional information and program planning assistance is available through the Interdisciplinary Studies Program Guide and the Office of Graduate Studies.

Interdisciplinary Studies Major Programs

INTERDISCIPLINARY STUDIES: AMERICAN STUDIES BACHELOR OF ARTS

Office: 257 Fenton Hall
(716) 673-3848

Dr. Shannon McRae, *Coordinator*

Email: american.studies@fredonia.edu

Website: <http://home.fredonia.edu/interdisciplinary>

American Studies is an interdisciplinary field of study that examines the historical development and contemporary status of American cultures, including those of the American hemisphere. The American Studies major and minor programs are designed to provide students with an in-depth understanding of the multiplicity of American cultures and to serve as a useful preparation for careers in such fields as business, advertising, public relations, government service, law, journalism, television, and education.

REQUIREMENTS FOR THE BACHELOR OF ARTS DEGREE IN INTERDISCIPLINARY STUDIES - AMERICAN STUDIES (39 CREDIT HOURS)

Required Core Courses (9 credit hours):

AMST 202	Introduction to American Studies	3
AMST 296	American Identities	3
HIST 105	United States History I	3
	or	
HIST 106	United States History II	3

Subtotal: 9

Exploratory and preparatory courses (6 credit hours chosen from the following course list):

AMST 210	American Popular and Mass Cultures	3
AMST 215	Holidays and American Cultures	3
AMST 289	Comparative North America	3
AMST 338	19th Century American Culture	3
AMST 340	20th Century American Culture	3
AMST 347	United States Immigration	3
AMST 399	Special Topics	3
COMM 102	Mass Media and Society	3

HIST 353	U.S. Consumer Culture	3
POLI 120	American Politics	3
POLI 150	U.S. and World Affairs	3
Subtotal: 6		

or other courses as advised.

Capstone project or seminar (3 credit hours):

Students may choose one to fulfill this option

AMST 400	Concepts/Methods of American Studies	3
AMST 401	Independent Study	3
AMST 402	Senior Project	3-15
Subtotal: 3		

CONCENTRATIONS FOR INTERDISCIPLINARY STUDIES - AMERICAN STUDIES MAJOR

Special topics courses in one of the five concentrations listed below (21 credit hours)

Courses should come from at least two disciplines, and no more than 12 credit hours can be taken from any one department.

Additionally, no more than 9 credit hours may be taken at the 100- or 200-level. Students should plan their concentrations carefully because they may need to complete additional prerequisites before enrolling in upper-level courses in various disciplines.

A. American Identities in the United States

AMST 347	United States Immigration	3
COMM 373	Gender and Communication	3
CRMJ 100	Introduction to Criminal Justice	3
EDU 215	Education in American Society	3
ENGL 240	Introduction to African American Literature and Culture	3
ENGL 242	American Indian Literature	3
ENGL 340	Black Women Writers	3
ENGL 342	African American Autobiography	3
ENGL 344	Contemporary Multiethnic American Literature	3
HIST 333	African American History to 1877	3
HIST 334	African American History Since 1877	3
HIST 335	American Women	3
HIST 344	African American Social Thought	3
HIST 345	Asian American History	3
HIST 351	Defining America	3
HIST 355	American Religious History	3
HIST 359	Ethnicity and Race	3
INDS 241	Introduction to Latino Literature and Culture	3
INDS 315	Italian American Experience	3
MUS 265	History of Jazz	3

MUS 267	African American Music	3
PHIL 228	American Philosophy	3
POLI 365	American Political Thought	3
PSY 255	Psychology of Women	3
SOC 306	Sex and Gender	3
SOC 316	Minority Groups	3

Or other courses as advised.

B. Cultures of the Americas

AMST 289	Comparative North America	3
ANTH 321	Anthropology of Indian America	3
ANTH 324	Anthropology of the Caribbean	3
COMM 386	International Films	3
FREN 310	The Literature/Culture of Quebec	3
HIST 282	Pre-Columbian and Colonial Latin America	3
HIST 283	Latin America: Revolution and Reform	3
HIST 288	The Atlantic World, 1500-1820	3
HIST 342	The American Century	3
HIST 352	Environmental History of North America	3
HIST 356	American Indian History	3
HIST 357	Indians and Europeans in Early America	3
HIST 378	Canada and the Canadians	3
HIST 380	Pre-Columbian/Colonial Mexico	3
HIST 381	Mexico in the Modern World	3
INDS 241	Introduction to Latino Literature and Culture	3
INDS 304/WGST 304/ENGL 304	Latina Literature and Cultural Studies	
LANG 327	Magic Realism in Latin American Literature	3
LANG 371	Canadian Writers	3
LANG 378	Canada Today	3
MUS 334	Music of Latin America	3
POLI 356	U.S. Foreign Policy	3
SPAN 325	Survey of Spanish-American Literature	3
SPAN 425	Spanish-American Fiction	3
WGST 203	Chicana Writers/Visual Artists	3

Or other courses as advised.

C. Democracy and Civic Engagement

HIST 343	Civil Rights Movement	3
PHIL 265	Social/Political Philosophy	3
POLI 120	American Politics	3
POLI 276	Law and Society	3
POLI 313	American Power Structures	3
POLI 323	Elections in America	3
POLI 324	President and Congress	3
POLI 371	Civil Rights and Liberties	3

PSY 358	Psychology and the Law	3
SOC 201	Social Problems	3
SOC 215	Introduction to Public Health	3
SOC 218	Introduction to Social Work	3
SOC 303	Social Class and Inequality	3

Or other courses as advised.

(Students selecting this concentration will be required to include a service-learning component in their capstone project.)

D. Environment and Place in America

BIOL 115	Environmental Biology	3
BIOL 330	Ecology	3
BIOL 331	Ecology Laboratory	1
BIOL 421	Biological Conservation	3
CHEM 113	Chemistry and the Environment	3
CHEM 302	Chemistry in Today's Society	3
ECON 340	Urban and Regional Economics	3
ECON 380	Environmental/Natural Resource Economics	3
ENGL 333	Environmental Literature	3
ENGL 399	Special Topics	1-4
GEO 121	Landform Geography	3
GEO 145	Geology of New York State	1
GEO 359	Vanishing Earth Resources	3
HIST 330	Industrial America, 1890-1920	3
HIST 340	The Westward Movement	3
HIST 352	Environmental History of North America	3
POLI 240	Urbanization and Environmental Challenges	3
POLI 381	Urban Politics and Policy	3
POLI 387	Environmental Policy	3
PSY 373	Human Factors	3

Or other courses as advised.

E. Popular and Visual Cultures

ARTH 102	Art in Culture from 1400 to the Present	3
ARTH 225	Modern Art 1900-1950	3
ARTH 229	Art/Reality - 19th Century America	3
ARTH 329	Art Since 1945	3
COMM 102	Mass Media and Society	3
COMM 350	Telecommunication Technology	3
COMM 375	Mass Media Theory	3
ENGL 381	Narrative Film After 1940	4
ENGL 386	Women in Global Cinema	4
ENGL 399	Special Topics	1-4
HIST 353	U.S. Consumer Culture	3
HIST 376	Film and American Culture	3
MUS 262	American Music	3
MUS 265	History of Jazz	3
MUS 267	African American Music	3

MUS 270	The History of American Popular Music, 1900-1963	3
POLI 326	Media and Politics	3
POLI 345	Film and Politics	4
WGST 203	Chicana Writers/Visual Artists	3

Or other courses as advised.

TOTAL CREDIT HOURS: 18

INTERDISCIPLINARY STUDIES: ARTS ADMINISTRATION BACHELOR OF ARTS

Office: G-23B Michael C. Rockefeller Arts Center
(716) 673-3217

Mr. Jefferson Westwood, Coordinator

Email: arts.administration@fredonia.edu

Website: <http://home.fredonia.edu/interdisciplinary>

The world of the performing and visual arts needs not only talented, creative artists; it also needs skilled and perceptive administrators and managers. Seeking to fill this need, the major in Arts Administration prepares students for entry level work with organizations such as symphony orchestras, opera, theater and dance companies, performing arts centers and community arts councils. The major in Arts Administration combines courses from a variety of departments and includes practica and internship experiences that may range from 3 to 15 credit hours. It is not uncommon for an arts administration student to be pursuing a double major in a field like music, theater or dance. Students that are not following a double major are strongly encouraged to complete a minor in music, theater, art or dance to ensure a broader understanding of at least one art form.

The Arts Administration major is closely allied with the university's Michael C. Rockefeller Arts Center, a three-theater, two-gallery complex that offers extensive internship and employment opportunities for qualified students. Through a combination of the academic course work, internships and the extracurricular opportunities available on campus, students become qualified to work in such areas as marketing, fund raising, box office, operations, and general arts management. A number of students have also gone on to successfully pursue graduate study in the field.

REQUIREMENTS FOR THE BACHELOR OF ARTS IN INTERDISCIPLINARY STUDIES - ARTS ADMINISTRATION (42-54 CREDITS)

Business and Accounting:

CSIT 104	Introduction to Microcomputer Software	3
	or	
CSIT 151	Introduction to Information Systems	3
ACCT 201	Principles of Financial Accounting	3

BUAD 310	Legal Environment of Business	3
	or	
ACCT 311	Business Law I	3
	or	
POLI 277	Introduction to Law	3
BUAD 323	Organizational Behavior	3

Subtotal: 12

NOTE: CSIT 151 preferred.

Communication/Psychology:

Choose one of the following three-course sequences:

(the Communication sequence is recommended)

COMM 101	Fundamentals of Communication	3
COMM 221	Interpersonal Communication	3
COMM 301	Group Communication	3
	or	
PSY 129	Introduction to Psychology	3
PSY 355	Group Dynamics	3
PSY 347	Organizational Psychology	3

Subtotal: 9**Journalism/Public Relations:**

Choose one of the following three-course sequences:

COMM 130	Foundations in Journalism	3
COMM 230	News Gathering	3
COMM 231	Storytelling: Words, Images, Sound	3
	or	
COMM 222	Principles of Public Relations	3
COMM 322	Public Relations Writing	3
COMM 344	Public Relations Case Analysis	3

Subtotal: 9**Industry Survey Course:**

THEA 460	Theatre Organization and Management	3
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Subtotal: 3**Arts Administration Capstone:**

Each major must take AADM 410 for 3 credit hours plus AADM 400 and/or AADM 490 for a combined minimum of 3 credit hours. (Students need the Arts Administration Practicum OR the Internship. It is optional to do both.)

AADM 400	Arts Administration Practicum	1-3
	or	
ARTH 460	Gallery Practicum	1-3
AADM 410	Ticket Office Practicum	1-3
AADM 490	Arts Administration Internship	1-
		15

Subtotal: 6-18

NOTE: AADM 400, ARTH 460, AADM 410, AADM 490 are variable credit hour courses. Students should seek advisement to register for the correct number of credits.

TOTAL CREDIT HOURS: 42-54

INTERDISCIPLINARY STUDIES: ENVIRONMENTAL SCIENCE BACHELOR OF SCIENCE

(Interdisciplinary Studies major housed in the Department of Geology and Environmental Sciences)

Office: 340 Science Center

(716) 673-3292

Dr. Sherri A. Mason, CoordinatorEmail: environmental.science@fredonia.eduWebsite: <http://home.fredonia.edu/interdisciplinary>

Our current socio-economic system requires large quantities of natural resources: fossil fuels, metals, wood, water, plants, rocks and minerals. The extraction, refining, shipping and processing of these natural resources to meet our societal needs and create our consumer products, not to mention their use and disposal, often results in environmental degradation- whether understood or (often) unintended. As a result, there is an increasing demand for environmental scientists to address the environmental challenges we face in this century.

An environmental scientist applies a scientific understanding of the natural world to the protection of the environment. These members of the scientific community are concerned with balancing human needs with the needs of organisms in the natural environment and the needs of future generations who may be harmed by environmental abuses.

The Environmental Sciences major integrates the strengths of programs in Biology, Chemistry, and Geosciences to understand the Earth ecosystem as a whole. As our socio-economic system is nested within this ecosystem, our students are also required to take courses in geographic information systems, as well as courses outside of the natural sciences, in order to provide a complete picture of the complexities of the problems we face as a society.

Many of the courses in this major have field components where students collect environmental samples, analyze them, and produce comprehensive interpretations of the data.

Students demonstrate their ability to conduct independent work in the environmental sciences through internships with local conservation departments, consulting firms or municipalities, or through research with a faculty member.

Possible careers after completion of this major include: environmental consulting, resource management, conservation scientist, aquatic and fishery research/management, wildlife management, conservation officer, environmental and community planning, and graduate school.

REQUIREMENTS FOR THE BACHELOR OF SCIENCE IN INTERDISCIPLINARY STUDIES MAJOR IN ENVIRONMENTAL SCIENCE

A: Core Requirements:

1. Environmental Science (14 credit hours):

ESCI 105	Global Environmental Issues	3
ESCI 310	Methods in Environmental Analysis	3
ESCI 410	Environmental Assessment	3
ESCI 440	Environmental Sciences Seminar	1
ESCI 441	Environmental Sciences Senior Seminar	1
ESCI 490	Environmental Sciences Practicum	1-3

Subtotal: 14

NOTE: ESCI 490 is a variable 1-3 credit course. Students need to complete the course for at least 3 credits to satisfy the degree requirements.

2. Mathematics (9-11 credit hours):

MATH 122	University Calculus I and	4
MATH 123	University Calculus II or	4
MATH 120	Survey of Calculus I and	3
MATH 121	Survey of Calculus II	3
STAT 250	Statistics for Scientists	3

Subtotal: 9-11

NOTE: MATH 122 and MATH 123: recommended.

3. Biology (16 credit hours):

BIOL 131	Introductory Ecology and Evolution	3
BIOL 132	Introductory Ecology and Evolution Laboratory	1
BIOL 133	Introductory Cell and Molecular Biology	3
BIOL 134	Introductory Cell and Molecular Biology Laboratory	1
BIOL 243	Organismal Biology	3
BIOL 244	Organismal Biology Laboratory	1
BIOL 330	Ecology	3
BIOL 331	Ecology Laboratory	1

Subtotal: 16

4. Geosciences (12 credit hours):

GEO 165	Geology I	3
GEO 169	General Geology Lab	1
GEO 330	Geomorphology	4
GEO 450	Hydrogeology	4

Subtotal: 12

5. Geographic Information Systems (6 credit hours):

GIS 201	Geographic Information Systems I	3
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GIS 301	Geographic Information Systems II	3
	or	
GEO 311	Global Climate	3

Subtotal: 6

6. Chemistry (15 credit hours):

CHEM 115	General Chemistry Lecture I	3
CHEM 125	General Chemistry Laboratory I	1
CHEM 116	General Chemistry Lecture II	3
CHEM 126	General Chemistry Laboratory II	1
CHEM 215	Organic Chemistry Lecture I	3
CHEM 225	Organic Chemistry Laboratory I	1
CHEM 317	Analytical Chemistry, Quantitative Analysis	3
	or	
CHEM 341	Introduction to Environmental Chemistry	3

Subtotal: 15

7. Environmental Perspectives (6 credit hours):

Choose two courses from the following:

COMM 321	Environmental Communication	3
ECON 380	Environmental/Natural Resource Economics	3
ENGL 333	Environmental Literature	3
ENGL 374	Writing and Social Change	3
HIST 310	World Environmental History	3
HIST 352	Environmental History of North America	3
POLI 387	Environmental Policy	3

Subtotal: 6

B. Recommended Electives

To be chosen during consultation with faculty advisor based upon future plans and interests of the student. Electives could include courses required to complete minors in areas such as Geographic Information Systems, Foreign Languages, Mathematics, Business, Criminal Justice, Geology, or Chemistry.

TOTAL CREDIT HOURS: 78-80

INTERDISCIPLINARY STUDIES: EXERCISE SCIENCE BACHELOR OF SCIENCE

Department of Biology
Office: 221 Science Center
(716) 673-3282

Dr. Patricia Smith Astry, Department Chairperson

Dr. Todd Backes, Program Coordinator

Email: biology@fredonia.edu

Website: <http://home.fredonia.edu/interdisciplinary>

As people become increasingly health conscious, and as an aging population seeks increased quality and quantity of

life, there is an increased demand for health and fitness professionals trained to serve their needs. With personal health and fitness occupying much of our nation's attention, a major in exercise science provides an excellent way to enter an industry whose goal is the promotion of a healthier nation through therapeutic, exercise and wellness programs.

Exercise Science students study the physiological, neuromuscular, biomechanical and psychological effects of exercise stress on the human body, and learn how to promote healthy living through exercise and other behaviors. Graduates of our program ultimately play a key role in helping people live healthier lives.

Upon graduation, our students are well positioned to pursue advanced study in health related areas, including physical therapy, occupational therapy and sports medicine, and in graduate programs in athletic training and exercise physiology. They are also prepared for career opportunities in health education, cardiac rehabilitation, advanced personal training, health and fitness instruction, weight management consulting, and strength and conditioning.

Our Exercise Science program requires courses in exercise science, biology, chemistry, physics, statistics, and psychology. The senior capstone requires students to complete a senior level experience in research, internship or specialized coursework, providing significant experience in problem solving, written and oral communication.

REQUIREMENTS FOR THE BACHELOR OF SCIENCE IN EXERCISE SCIENCE

Core program (42-48 credit hours)		
BIOL 131	Introductory Ecology and Evolution	3
BIOL 132	Introductory Ecology and Evolution Laboratory	1
BIOL 133	Introductory Cell and Molecular Biology	3
BIOL 134	Introductory Cell and Molecular Biology Laboratory	1
BIOL 220	Principles of Human Nutrition	3
BIOL 245	Human Anatomy and Physiology I	4
BIOL 246	Human Anatomy and Physiology II	4
EXSC 250	Introduction to Applied Human Physiology	1
EXSC 300	Exercise Physiology	4
EXSC 302	Exercise Prescription	3
EXSC 350	Kinesiology	3
EXSC 425	Biomechanics	3
EXSC 491	Senior Capstone - Research or	0-6
EXSC 492	Senior Capstone - Internship or	0-6

EXSC 493	Senior Capstone - Course	0-6
	Nine additional credit hours of 300-400 level electives (as per advisement)	9

Subtotal: 42-48

Required supporting course work (22 credit hours)

CHEM 115	General Chemistry Lecture I	3
CHEM 125	General Chemistry Laboratory I	1
CHEM 116	General Chemistry Lecture II	3
CHEM 126	General Chemistry Laboratory II	1
PHYS 121	College Physics I	3
PHYS 123	College Physics Lab I	1
PHYS 122	College Physics II	3
PHYS 124	College Physics II Lab	1
PSY 129	Introduction to Psychology	3
PSY XXX	Second Course in Psychology	3
STAT 250	Statistics for Scientists	3

Subtotal: 22

REQUIREMENTS FOR TRANSFER CREDIT

The Exercise Science program requires students to complete 45 credit hours of biology and exercise science core courses and elective courses chosen under advisement. Students are expected to complete at least half of these courses at Fredonia. Additional credit hours transferred may be used as general electives toward graduation. As a rule, the department will not accept as equivalent for upper level courses, credit earned at two-year colleges.

TOTAL CREDIT HOURS: 64-70

INTERDISCIPLINARY STUDIES: INTERNATIONAL STUDIES BACHELOR OF SCIENCE

(Interdisciplinary major in the Department of Politics & International Affairs)

Office: E390 Thompson Hall

(716) 673-3887

Dr. Alex Caviedes, Coordinator

Email: alexander.caviedes@fredonia.edu

Website: <http://home.fredonia.edu/interdisciplinary>

The International Studies major has been designed to prepare students for international leadership roles in the twenty-first century. The program encourages its majors and minors to think both globally and across disciplines as they seek to understand the dynamics of a global society. The International Studies program prepares students for careers in the most dynamic sectors of global governance, society and economy. The vitality behind this program comes from faculty in several disciplinary fields who offer courses and act as a steering committee for the program.

Students take a core of interdisciplinary courses, select a specialization, and complete a minor. The core courses in International Studies provide all students with a basis on which to build their individualized programs through one of six thematic specializations. Core courses ensure students will be introduced to international relations, global history, cultural issues, and the concerns and challenges facing developing and developed countries. Students also select a minor that complements the thematic specializations. The specializations offer students the opportunity for more individualized training within the framework of international studies. The six specializations are Advanced Industrial Societies, Cultural Studies of the Americas, Developing Nations, European Cultural Studies, International Political Economy, and Peace and Conflict. The International Political Economy specialization prepares students for careers or graduate study in the area of economic and political analysis and policy-making. The Peace and Conflict specialization would be of interest to students who wish to pursue careers in diplomacy or national security. With the proliferation of international governmental and non-governmental organizations dedicated to cultural exchange and dialogue and the globalization of the entertainment industry, the European Cultural Studies and the Cultural Studies of the Americas specializations prepare students to seek careers in fields such as arts administration, global communication, and the championing of human rights. Advanced Industrial Societies and the Developing World lay the foundation for students to pursue regional specializations in international job settings or in graduate-level training. Proficiency must be demonstrated in a foreign language equivalent to a two-year course of study. More advanced study of a foreign language is strongly encouraged. Students must gain international experience through a study program abroad or an international internship.

REQUIREMENTS FOR THE BACHELOR OF SCIENCE IN INTERDISCIPLINARY STUDIES - INTERNATIONAL STUDIES

I. Core Requirements (23 credit hours)

INTL 101	Introduction to International Studies	1
ANTH 115	Introductory Anthropology	3
ECON 201	Principles of Macroeconomics	3
HIST 102	World History II	3
INTL 401	Intl Studies Senior Project	1
POLI 150	U.S. and World Affairs	3
POLI 352	World Political Geography	3

Plus two of the next three courses listed below:

ARTH 102	Art in Culture from 1400 to the Present	3
ENGL 211	World Poetry	3
MUS 333	Musics of the World	3

II. Foreign Language (3 to 12 credit hours)

The foreign language requirement may be completed via any of the following options:

1. Completion of course work through the 216 level (second-semester intermediate).

Important note about this requirement:

If a language is offered by Fredonia at the elementary (115-116) level only, then, after completing these two courses, a student has the following options for completing the foreign language requirement, with the approval of the program advisor:

- a. With courses taken during a study-abroad program in a country where that language is spoken;
 - b. With intermediate-level language courses taken at an approved institution in the U.S., including courses offered online through the SUNY Learning Network;
 - c. By taking an additional foreign language sequence at the 115-116 level. Students with demonstrated proficiency in a foreign language must take a minimum of one course (3 credit hours) at the college level.
2. Students may complete this requirement at Fredonia, in a program at an approved institution in the U.S., or in a foreign country.
 3. Additional foreign language coursework at the 300- and 400-levels is strongly recommended.

III. International Experience (6 credit hours)

Students must enroll in 6 credits of "international experience" course work that has been approved by the International Studies Curriculum Committee. This requirement may be fulfilled via enrollment in a short- or long-term study abroad program or completion of internships with international agencies.

IV. Specializations (21 credit hours)

1. Students select one of the six specializations listed below:

- Advanced Industrial Societies
- Cultural Studies of the Americas
- Developing Nations
- European Cultural Studies
- International Political Economy
- Peace and Conflict

2. International Studies Specializations Guidelines:

With the exception of the International Political Economy Specialization, no more than 9 credit hours

may be taken from the same discipline. Within each specialization, the student must complete a minor related to that specialization, and take seven (7) of the courses listed, with at least three not counting toward the minor.

INTERNATIONAL POLITICAL ECONOMY (21 CREDIT HOURS)

The student must complete a minor in Economics or Political Science, and take seven (7) of the following courses, subject to the specialization guidelines:

COMM 385	International Media	3
ECON 202	Principles of Microeconomics	3
ECON 320	International Trade/Finance	3
ECON 321	Multinational Corporations	3
ECON 335	Economic Development	3
ECON 345	Comparative Economic Systems	3
ECON 380	Environmental/Natural Resource Economics	3
ECON 395	Comparative Human Resources	3
HIST 266	Modern East Asia	3
HIST 311	Europe in the Modern World	3
HIST 361	Modern Middle East	3
HIST 367	20th Century China	3
HIST 368	Modern Japan	3
HIST 386	Global Studies	3
POLI 330	Western European Politics	3
POLI 341	Political Economy of Development	3
POLI 344	Comparative Public Policy	3
POLI 346	East Asian Political Economy	3
POLI 348	The European Union	3
POLI 349	Topics in Comparative Politics	3
POLI 354	Politics of the Middle East	3
POLI 355	International Political Economy	3
POLI 356	U.S. Foreign Policy	3

ADVANCED INDUSTRIAL SOCIETIES (21 CREDIT HOURS)

The student must complete a minor in Economics, History, or Political Science, and take seven (7) of the following courses, subject to the specialization guidelines:

COMM 385	International Media	3
ECON 202	Principles of Microeconomics	3
ECON 320	International Trade/Finance	3
ECON 321	Multinational Corporations	3
ECON 345	Comparative Economic Systems	3
ECON 395	Comparative Human Resources	3
LANG 378	Canada Today	3
FREN 323	France Today	3
GERM 323	Germany Since 1918	3
HIST 212	History of the Holocaust	3
HIST 309	The Modernization of Europe	3
HIST 311	Europe in the Modern World	3
HIST 312	Modern Germany	3

HIST 317	Modern France	3
HIST 342	The American Century	3
HIST 368	Modern Japan	3
HIST 386	Global Studies	3
POLI 330	Western European Politics	3
POLI 332	Russian Politics	3
POLI 346	East Asian Political Economy	3
POLI 348	The European Union	3
POLI 349	Topics in Comparative Politics	3
POLI 355	International Political Economy	3
POLI 362	Terrorism and Counterterrorism	3
SOC 321	Population and Society	3
SOC 361	Law in the World	3

CULTURAL STUDIES OF THE AMERICAS (21 CREDIT HOURS)

The student must complete a minor in Art History, Communication, English, French, History, Music, Philosophy or Spanish, and complete seven (7) of the following courses, subject to the specialization guidelines:

ANTH 324	Anthropology of the Caribbean	3
ARTH 225	Modern Art 1900-1950	3
ENGL 240	Introduction to African American Literature and Culture	3
ENGL 241	Introduction to Latino/a Literature	3
ENGL 395	Non-Western Literature	3
ENGL 397	Discourses of the Enlightenment	3
LANG 371	Canadian Writers	3
LANG 378	Canada Today	3
FREN 310	The Literature/Culture of Quebec	3
SPAN 325	Survey of Spanish-American Literature	3
HIST 347	U.S. Immigration	3
HIST 351	Defining America	3
HIST 380	Pre-Columbian/Colonial Mexico	3
HIST 381	Mexico in the Modern World	3
POLI 241	Introduction to Comparative Politics	3
POLI 349	Topics in Comparative Politics	3
POLI 351	The Inter-American System	3

DEVELOPING NATIONS (21 CREDIT HOURS)

The student must complete a minor in Anthropology, Economics, History, Political Science, or Sociology, and complete seven (7) of the following courses, subject to the specialization guidelines:

ANTH 321	Anthropology of Indian America	3
ANTH 322	Anthropology of Africa	3
ANTH 324	Anthropology of the Caribbean	3
COMM 385	International Media	3
COMM 465	Intercultural Communication	3
ECON 202	Principles of Microeconomics	3
ECON 320	International Trade/Finance	3
ECON 321	Multinational Corporations	3

ECON 335	Economic Development	3
ECON 345	Comparative Economic Systems	3
ECON 380	Environmental/Natural Resource Economics	3
ENGL 395	Non-Western Literature	3
HIST 261	Islamic Civilization	3
HIST 266	Modern East Asia	3
HIST 342	The American Century	3
HIST 361	Modern Middle East	3
HIST 366	Late Imperial China	3
HIST 367	20th Century China	3
HIST 380	Pre-Columbian/Colonial Mexico	3
HIST 381	Mexico in the Modern World	3
HIST 386	Global Studies	3
HIST 387	Comparative Slave Societies	3
POLI 241	Introduction to Comparative Politics	3
POLI 334	African Politics	3
POLI 341	Political Economy of Development	3
POLI 345	Film and Politics	4
POLI 346	East Asian Political Economy	3
POLI 354	Politics of the Middle East	3
POLI 349	Topics in Comparative Politics	3
POLI 362	Terrorism and Counterterrorism	3
SOC 321	Population and Society	3

HIST 386: if not taken in core

EUROPEAN CULTURAL STUDIES (21 CREDIT HOURS)

The student must complete a minor in Art, Communication, English, French, History, Music, Philosophy or Spanish, and complete seven (7) of the following courses, subject to the specialization guidelines:

ARTH 225	Modern Art 1900-1950	3
COMM 386	International Films	3
ENGL 322	The Romantic Age	3
ENGL 326	Victorian Literature	3
ENGL 328	Modern British Literature	3
ENGL 396	Russian Literature	3
HIST 116	Western Civilization II	3
HIST 306	The Age of Reformation	3
HIST 309	The Modernization of Europe	3
HIST 311	Europe in the Modern World	3
HIST 312	Modern Germany	3
HIST 322	French Revolution and Napoleon	3
FREN 315	French Masterpieces	3
FREN 316	French Plays and Prose	3
FREN 319	Survey of French Literature I	3
FREN 320	Survey of French Literature II	3
SPAN 315	Introduction to Readings in Hispanic Literature	3
SPAN 319	Survey of Spanish Literature I	3
SPAN 320	Survey of Spanish Literature II	3

MUS 115	Music Appreciation	3
MUS 263	Music History in Western Civilization I	3
MUS 350	Special Topics in Music History	3
PHIL 338	Marxist Thought	3
POLI 330	Western European Politics	3
POLI 345	Film and Politics	4
POLI 348	The European Union	3
	Any foreign language or culture course focusing on a European country	

PEACE AND CONFLICT (21 CREDIT HOURS)

The student must complete a minor in History or Political Science, and complete seven (7) of the following courses, subject to the specialization guidelines:

COMM 385	International Media	3
COMM 465	Intercultural Communication	3
ECON 202	Principles of Microeconomics	3
ECON 345	Comparative Economic Systems	3
HIST 212	History of the Holocaust	3
HIST 309	The Modernization of Europe	3
HIST 311	Europe in the Modern World	3
HIST 312	Modern Germany	3
HIST 342	The American Century	3
HIST 349	U.S. Military History	3
HIST 350	The Vietnam War: An International Conflict	3
HIST 361	Modern Middle East	3
HIST 368	Modern Japan	3
POLI 348	The European Union	3
POLI 353	International Law and Organization	3
POLI 354	Politics of the Middle East	3
POLI 356	U.S. Foreign Policy	3
POLI 351	The Inter-American System	3
POLI 361	Modern Political Theory	3
POLI 362	Terrorism and Counterterrorism	3
POLI 363	Game Theory	3

TOTAL CREDIT HOURS: 53-62

INTERDISCIPLINARY STUDIES: SELF-DESIGN BACHELOR OF SCIENCE OR BACHELOR OF ARTS

Office: 806 Maytum Hall
(716) 673-3173

Dr. Carmen Rivera, Coordinator

Email: interdisciplinary.studies@fredonia.edu

Website: <http://home.fredonia.edu/interdisciplinary>

REQUIREMENTS FOR THE BACHELOR OF SCIENCE OR BACHELOR OF ARTS IN INTERDISCIPLINARY STUDIES

If a student would like to self-design a major incorporating courses from one or more disciplines, it is possible to do so after the student has completed his or her freshman year. The curriculum must meet all SUNY requirements for a Bachelor of Arts or Bachelor of Science degree program; must include the completion of the SUNY General Education program; and must meet certain Fredonia requirements that are particular to this type of degree. Interested students should make an appointment for an interview with the Associate Dean, College of Liberal Arts & Sciences, to assess the appropriateness of such a degree.

INTERDISCIPLINARY STUDIES: WOMEN'S & GENDER STUDIES BACHELOR OF ARTS

Women's and Gender Studies Program Office

Office: E319 Thompson Hall

(716) 673-3179

Dr. Jeffrey Iovannone, *Coordinator*

Email: Jeffrey.Iovannone@fredonia.edu

Website: <http://home.fredonia.edu/interdisciplinary>

MISSION STATEMENT: Fredonia's Women's & Gender Studies Program empowers students to explore gender in theoretical and practical ways, inside and outside the traditional classroom. This program provides interdisciplinary knowledge and skills enabling students to work for social justice and global change in ways that are meaningful to them.

PROGRAM OBJECTIVES:

1. To teach and learn about issues related to women, gender, and sexuality (and their connection to systems of domination) through a historical, interdisciplinary, and global framework;
2. To provide curriculum inclusive of multiple identity positions and human experiences;
3. To establish meaningful connections between the classroom and the social world as a framework for working toward social change, both locally and globally.

LEARNING OUTCOMES:

1. Students will be knowledgeable of *theoretical frameworks* that inform the study of gender and sexuality, such as feminist, queer, intersectional, transnational, historical and multicultural theories.
2. Students will gain understanding of *sexual norms and behaviors*, the study of the social, historical, cultural, behavioral, and scientific complexities of sexuality, in

all of its iterations, including the study of heteronormativity, LGBTQ identities, and alternative sexual expressions.

3. Students will gain understanding of *transnational issues*, becoming aware of and respond to global conflicts and crises over health, environmental, and human right issues, as well as issues arising from the uneven distribution and use of wealth and resource.
4. Students will gain understanding of *cultural practices*, and how gender is prescribed and controlled by social institutions, traditions, and language. How gender and attitudes towards it are represented in cultural products such as literature, the arts, and media.
5. Through *experiential learning*, students will demonstrate the ability to apply interdisciplinary knowledge and skills in practical and relevant ways outside the traditional classroom in experiences such as internship, service-learning, community projects, study abroad, field-based learning, etc. Requires director's approval.

Student Organizations and Activities

The program hosts numerous annual events including the Fall Gathering, the Gender Conference, the Gender and Social Change Lecture Series, and a spring research symposium for graduating majors and minors. The program is also strongly affiliated with student groups on campus such as the Women's Student Union and the Pride Alliance. These groups sponsor a variety of events including Take Back the Night, Women Rock and Soul, the Clothesline Project, fall and spring drag shows, Gay Prom, and the National Day of Silence in addition to other Women's History Month and Gay History Month events.

Scholarships are available to academically promising students. The Jeanette McVicker Women's and Gender Studies Scholarship was established to recognize and encourage scholarship and activism informed by scholarly inquiry. Preference is given to declared majors or minors. The Marion Sonnenfeld Award Scholarship is presented each year to outstanding female students who exemplify leadership, hard work, and a good sense of community.

REQUIREMENTS FOR THE BACHELOR OF ARTS IN INTERDISCIPLINARY STUDIES - WOMEN'S AND GENDER STUDIES (36 CREDIT HOURS):

Completion of the interdisciplinary major requires a minimum of 36 credit hours. Up to 12 hours of transfer credit can be applied to the major, based on approval by the coordinator. Students declaring the major in Women's and Gender Studies may use past courses retroactively after consultation with the coordinator. Three (3) credit hours of independent study can be counted in the major.

Required Courses

WGST 201	Introduction to Gender Studies	3
WGST 491	Gender and Social Change	3

(Pre-requisites: Students must complete "Theoretical Frameworks" PRIOR to capstone semester)

Core Categories (at least 3 credit hours in each category for 15 credit hours)

1. Theoretical Frameworks (pre-requisite WGST 201)
2. Sexual Norms and Behaviors
3. Transnational Issues
4. Cultural Practices
5. Experiential Learning (pre-requisite WGST 201)

Electives (15 credit hours from any category)

Interdisciplinary Studies Minor Programs**For information on undergraduate interdisciplinary programs:**

Office: 804 Maytum Hall
(716) 673-3173

Dr. Carmen Rivera, Associate Dean for the College of Liberal Arts & Sciences

Email: interdisciplinary.studies@fredonia.edu

Website: <http://home.fredonia.edu/interdisciplinary>

AFRICAN AMERICAN STUDIES MINOR

Office: E304 Thompson Hall
(716) 673-3274

Dr. Jennifer Hildebrand, Coordinator

Email: africanamerican.studies@fredonia.edu

Website: <http://home.fredonia.edu/interdisciplinary>

The African American Studies minor provides an interdisciplinary investigation of the origins, experiences, conditions, accomplishments, and contributions of people of African ancestry in the Americas. The program is designed for all students who want to deepen their understanding of African Americans by studying their earlier history in Africa, their transition to the New World, and their diasporic experiences in the Americas. The program also seeks to promote new ways of thinking about race, culture and social representation from different perspectives—notably, historical, literary, sociological, anthropological, psychological and artistic.

African American Studies is for everyone. No matter your major or your future plans, the program will provide intellectual skills and cultural knowledge that will benefit you. A minor in African American Studies will deepen your ability to listen and communicate in a meaningful way. It will make you more aware and respectful of differences in your community. These skills will help to prepare you for employment in education, government,

legislation, international business and marketing, urban planning, counseling and social work, the media, and many other fields.

REQUIREMENTS FOR THE MINOR IN AFRICAN AMERICAN STUDIES (21 CREDIT HOURS)

Students declaring an African American Studies minor may use past courses retroactively with approval of the coordinator.

Core courses (12 credit hours):

AMST 202	Introduction to American Studies	3
	or	
AMST 296	American Identities	3
ETHN 206	Introduction to African American Studies	3
ETHN 333	African American History to 1877	3
	or	
ETHN 334	African American History since 1877	3
ETHN 240	Introduction to African American Literature and Culture	3

Subtotal: 12

Electives (6 credit hours):

ANTH 322	Anthropology of Africa	3
ANTH 324	Anthropology of the Caribbean	3
DANC 231	African-Caribbean Dance	2
ENGL 340	Black Women Writers	3
ENGL 341	Harlem Renaissance	3
ENGL 342	African American Autobiography	3
ENGL 344	Contemporary Multiethnic American Literature	3
HIST 272	Africa to 1800	3
HIST 273	Africa From the 1800s	3
ETHN 333	African American History to 1877	3
ETHN 334	African American History since 1877	3
HIST 336	African American Black Women's History	3
HIST 343	Civil Rights Movement	3
HIST 344	African American Social Thought	3
ETHN 359	Ethnicity and Race	3
MUS 265	History of Jazz	3
MUS 267	African American Music	3
POLI 334	African Politics	3
POLI 371	Civil Rights and Liberties	3
SOC 275	Social Inequalities	3

Subtotal: 6

NOTE:

- Six credit hours earned in two courses, each in a different discipline; must not include a course that has been used for core course credit; other courses

not listed may be included with approval of coordinator.

Capstone course (3 credit hours):

ETHN 402	Independent Study: African American Topics	3
	or	
ETHN 490	Ethnic Studies Internship	1-6
Subtotal: 3		

Students are encouraged to explore relevant Study Abroad courses to meet the elective requirements.

The African American Studies minor falls under the umbrella of the Ethnic Studies program, which also offers minors in American Indian Studies, Latino Studies, and Multi-Ethnic Studies.

TOTAL CREDIT HOURS: 21

AMERICAN INDIAN STUDIES MINOR

Office: E304 Thompson Hall
(716) 673-3274

Dr. Jennifer Hildebrand, *Coordinator*

Email: americanindian.studies@fredonia.edu

Website: <http://home.fredonia.edu/interdisciplinary>

American Indian Studies provides an interdisciplinary focus on the historical experiences, cultural traditions and innovations, and political status of Indian peoples across the Americas. Students are particularly encouraged to consider the significance of American Indians' prior presence on these lands. Important topics of exploration include Native American ways of living, understanding the world, and organizing their societies; courses will also examine the impact of invasion and colonization on Indian America, discussions and debates about sovereignty, and the intersection of Indian and European histories and systems of knowledge.

American Indian Studies emphasizes the importance of exploring and interpreting historical and contemporary events from Native American perspectives that consider the many nations' unique history and experiences. Students completing a minor in American Indian Studies will be strongly encouraged to engage with discussions and debates about how their academic knowledge relates to the lived experiences of Native American people and communities.

American Indian Studies is for everyone. No matter your major or your future plans, the program will provide intellectual skills and cultural knowledge that will benefit you. As the workplace and the world become more diversified, the ability to consider different perspectives and communicate across differences becomes increasingly valuable. American Indian Studies coursework will challenge students to think critically and to write persuasively and thoughtfully, pushing them to seek

innovative solutions to problems which they understand to be multifaceted. Students in the program will be well-prepared for careers in human services, museum curatorship, library science, teaching, journalism, scholarship, law, health, inter-ethnic relations, and many other fields.

REQUIREMENTS FOR THE MINOR IN AMERICAN INDIAN STUDIES (21 CREDIT HOURS)

Students declaring an American Indian Studies minor may use past courses retroactively with approval of the coordinator.

Core courses (12 credit hours):

AMST 202	Introduction to American Studies	3
	or	
AMST 296	American Identities	3
ETHN 205	Introduction to American Indian Studies	3
ETHN 242	American Indian Literature	3
Subtotal: 9		

One History course chosen from the following (3 credit hours):

ETHN 282	Pre-Columbian and Colonial Latin America	3
ETHN 283	Latin America: Revolution & Reform	3
ETHN 356	American Indian History	3
ETHN 357	Indians and Europeans in Early America	3
ETHN 358	20th Century American Indian Issues	3
Subtotal: 3		

Electives (6 credit hours):

ANTH 321	Anthropology of Indian America	3
ENGL 331	American Literary Roots	3
SOC 275	Social Inequalities	3
Subtotal: 6		

NOTE:

- **Any of the History courses listed above NOT taken as a core requirement may be used as an elective.**

Capstone course (3 credit hours):

ETHN 404	American Indian Capstone	3
	or	
ETHN 490	Ethnic Studies Internship	1-6
Subtotal: 3		

Students are encouraged to explore relevant Study Abroad courses to meet the elective requirements.

The American Indian Studies minor falls under the umbrella of the Ethnic Studies program, which also offers

minors in African American Studies, Latino Studies, and Multi-Ethnic Studies.

TOTAL CREDIT HOURS: 21

AMERICAN STUDIES MINOR

Office: 257 Fenton Hall

(716) 673-3848

Dr. Shannon McRae, *Coordinator*

Email: american.studies@fredonia.edu

Website: <http://home.fredonia.edu/interdisciplinary>

REQUIREMENTS FOR THE INTERDISCIPLINARY STUDIES MINOR IN AMERICAN STUDIES:

Required Courses

AMST 202	Introduction to American Studies	3
AMST 296	American Identities	3

Subtotal: 6

An additional 12 credit hours from the following list:

AMST 210	American Popular and Mass Cultures	3
AMST 215	Holidays and American Cultures	3
AMST 289	Comparative North America	3
AMST 338	19th Century American Culture	3
AMST 340	20th Century American Culture	3
AMST 347	United States Immigration	3
AMST 399	Special Topics	3
COMM 102	Mass Media and Society	3
ENGL 206	Survey of American Literature	3
ENGL 344	Contemporary Multiethnic American Literature	3
HIST 105	United States History I	3
	or	
HIST 106	United States History II	3
HIST 353	U.S. Consumer Culture	3
HIST 376	Film and American Culture	3
MUS 262	American Music	3
MUS 270	The History of American Popular Music, 1900-1963	3
PHIL 228	American Philosophy	3
POLI 120	American Politics	3
POLI 150	U.S. and World Affairs	3
POLI 365	American Political Thought	3

Subtotal: 12

or other courses as advised.

No more than 6 credit hours from a student's major or other minors may be counted toward the American Studies minor.

TOTAL CREDIT HOURS: 18

DANCE STUDIO ADMINISTRATION MINOR

Office: Dods Hall 147

(716) 673-3355

Ms. Angelika Summerton, *Coordinator*

Email: Angelika.Summerton@fredonia.edu

Website: <http://home.fredonia.edu/interdisciplinary>

A dance studio can provide income as a part-time business or quickly grow into a larger private enterprise. The success is closely tied to the efficient and successful administration of the business and a long-standing personal relationship with its surrounding community. There are various styles of dance studios possible that can be tailored easily to the demands of the customer base or the creative endeavors of the proprietor. Good interpersonal communication and efficient organization are the backbone of such a community-oriented business. The Interdisciplinary Studies minor in Dance Studio Administration will provide the student with the necessary education, preparation and confidence to take the step into the direction of private ownership. The transferable skills acquired with this minor are in alignment with the University's mission to enrich the world through scholarship, artistic expression, community engagement, and entrepreneurship.

The Interdisciplinary Studies minor in Dance Studio Administration is comprised of courses from a variety of disciplines. The minor can complement any major, and is open to all students on campus.

REQUIRED COURSES FOR THE MINOR IN INTERDISCIPLINARY STUDIES - DANCE STUDIO ADMINISTRATION (21 CREDIT HOURS)

Required courses:

ACCT 201	Principles of Financial Accounting	3
POLI 277	Introduction to Law	3
COMM 111	Web Design	1
COMM 116	Desktop Publishing	1
COMM 118	Desktop Audio	1
CSIT 104	Introduction to Microcomputer Software	3
	or	
CSIT 151	Introduction to Information Systems	3
ECON 202	Principles of Microeconomics	3
THEA 121	Introduction to Technical Theatre	3
DANC 370	Dance Studio Management	3

TOTAL CREDIT HOURS: 21

ENVIRONMENTAL STUDIES MINOR

(The Interdisciplinary Studies Environmental Sciences minor is housed in the Department of Geology and Environmental Sciences.)

Office: 340 Science Center
(716) 673-3292

Dr. Sherri A. Mason, Coordinator

Email: mason@fredonia.edu

Website: <http://home.fredonia.edu/interdisciplinary>

The Environmental Studies minor provides students with a broad interdisciplinary perspective on the relationship between humans and the natural world. Drawing equally on insights from the natural sciences, humanities, and social sciences, the program prepares students to address key environmental and social challenges of the 21st Century—unsustainable resources use, climate change, energy policies, ecosystem devastation, social justice issues, population growth and development, industrial food systems, pollution and waste, and human health problems, to name a few.

The Environmental Studies minor is open to all students, and it is particularly useful for students who are thinking about environmentally focused careers in the areas of advocacy and public policy, communication, economics, history, journalism, law, or writing. The breadth and interdisciplinary nature of the program provides a solid foundation in the multitude of perspectives from which to view the natural world, and the variety of independent but interconnected paths from which to build a career focused on sustainability.

REQUIREMENTS FOR THE INTERDISCIPLINARY STUDIES MINOR IN ENVIRONMENTAL STUDIES (20 CREDIT HOURS):

Required Core Courses (12 credit hours):

Students will take at least one class from each of the four areas:

1. Natural Science:

BIOL 115	Environmental Biology	3
	or	
CHEM 113	Chemistry and the Environment	3
	or	
GEO 175	Thirsty Planet	3

Subtotal: 3

2. Historical Contexts:

HIST 310	World Environmental History	3
	or	
HIST 352	Environmental History of North America	3

Subtotal: 3

3. Social Science:

POLI 387	Environmental Policy	3
	or	
ECON 380	Environmental/Natural Resource Economics	3

Subtotal: 3

4. Humanities:

COMM 321	Environmental Communication	3
	or	
ENGL 333	Environmental Literature	3

Subtotal: 3

Electives (6 credit hours):

Students will take at least two courses from two different disciplines, selected from the following list (or from the previous list of required core courses):

ANTH 342	Food and Culture	3
BIOL 222	Introduction to Tropical Biology	2
BIOL 223	Introduction to Tropical Biology	1
	Study Abroad Costa Rica	
BIOL 421	Biological Conservation	3
BIOL 426	Current Environmental Topics	3
ECON 340	Urban and Regional Economics	3
ENGL 374	Writing and Social Change	3
ESCI 105	Global Environmental Issues	3
GEO 359	Vanishing Earth Resources	3
HIST 353	U.S. Consumer Culture	3
POLI 240	Urbanization and Environmental Challenges	3
SOC 215	Introduction to Public Health	3
SOC 303	Social Class and Inequality	3

Subtotal: 6

Capstone (2 credits):

ESCI 440	Environmental Sciences Seminar	1
ESCI 441	Environmental Sciences Senior Seminar	1

Subtotal: 2

NOTE: ESCI 440 AND ESCI 441 are capstone courses.

* Many of the upper level core and elective courses have prerequisites; students are responsible for knowing which prerequisites they need to take and should plan carefully as they complete this minor.

* No more than six credits from a student's major or other minors may be counted toward the Environmental Studies minor.

TOTAL CREDIT HOURS: 20

FILM STUDIES MINOR

Office: 257 Fenton Hall
(716) 673-3848

Dr. Shannon McRae, Coordinator

Email: film.studies@fredonia.edu

Website: <http://home.fredonia.edu/interdisciplinary>

The Film Studies minor considers a variety of approaches to understanding the role of film in all its different forms and intents. A film may have predominantly literary content or may be specifically engaged with historical, political, or cultural concerns. It may also be primarily an abstract, aesthetic work, exploring alternatives to traditional narrative film-making. It is fundamentally a medium used to examine and study human knowledge and exploration. It is tightly interwoven into cultural identity throughout the world.

The Film Studies minor acquaints students with these ideas and introduces key landmarks in the history of film while identifying and challenging the grounds on which landmark status has been recognized. The departments of Communication, English, History, World Languages and Cultures, Politics and International Affairs, and Visual Arts and New Media, and the Women's and Gender Studies, and Film Studies programs offer courses regularly that engage in the academic study of the medium.

This interdisciplinary collaboration between many different departments and programs provides a wide variety of course offerings that change each semester. A variety of special topics courses may be offered at any time. In any given semester, as many as 200 students may be enrolled in courses in which film is the major vehicle for study. Always check with the Film Studies minor coordinator if you have any questions about course availability.

REQUIRED COURSES FOR THE MINOR (18 CREDIT HOURS)

Core (at least 6 credit hours chosen from the following courses):

Choose one from

COMM 155	Rhetoric of Vision and Sound	3
	or	
FILM 220	Film Form	3
	or	
ARTH 276	Film Form	3

Subtotal: 3

NOTE: Students should not take all three classes as only one will count towards the minor.

Choose one from

ENGL 280	Introduction to Film	3
ENGL 380	Film: Silence to Sound	4
ENGL 381	Narrative Film After 1940	4
ARTH 376	Film and Special Effects	3

Subtotal: 3-4

Electives

(at least 12 credit hours, chosen from the following.) It is recommended that students have completed at least one core course before beginning work on electives:

ARTS 222	Introduction to Experimental Video	3
ARTH 345	Film Criticism	3
ARTH 359	New Media Writing	3
COMM 308	Documentary History and Criticism	3
COMM 309	Film Analysis	3
COMM 361	Script Writing Video/Film/Radio	3
COMM 386	International Films	3
ENGL 207	Drama and Film	3
ENGL 386	Women in Global Cinema	4
ENGL 387	American Film	4
FILM 399	Special Topics	1-4
FILM 401	Independent Study	1-4
HIST 363	Chinese Culture Through Films	4
HIST 376	Film and American Culture	3
LANG 380	World in Cinema: Special Topics	3
LANG 385	German Film	3
POLI 345	Film and Politics	4

Subtotal: 12

NOTE: FILM 399 content varies

Cinema Boutique Courses taken J-Term or Summer Session*

Film 399: Cult and Horror, 3 credit hours

Film 399: Cinema Vampires, 3 credit hours

* Any title offered at J-Term

Transfer credits by permission of the Coordinator.

Any course from the core not taken to fulfill core requirements.

At least 18 credit hours needed.

NOTES: Communication Department students can use only one course from their Major Track requirements.

Any History Department film course may be used as an elective.

No more than four courses in any one discipline may be taken for credit toward the film minor.

Faculty in various departments frequently offer other film-related courses that address the goals of the Film Studies program. To determine if a course not listed above will satisfy requirements for the Film Studies minor, students should contact the coordinator.

TOTAL CREDIT HOURS: 18-19**GEOGRAPHIC INFORMATION SYSTEMS
MINOR**

Office: 20 Houghton Hall
(716) 673-3884

Dr. Ann K. Deakin, Coordinator

Email: geographicinformation.systems@fredonia.edu

Website: <http://home.fredonia.edu/interdisciplinary>

The objective of the Geographic Information Systems minor is to provide an interdisciplinary educational experience that prepares undergraduate students to use Geographic Information Systems (GIS) within their chosen fields of study. A GIS is a computer-based system, comprised of both hardware and software that enables the collection, integration, analysis, and graphic display of geographically referenced data. It is estimated that as much as 85 percent of a government agency's data is geographic, including, at a minimum, street addresses, political boundaries, postal codes, and latitude and longitude coordinates. Private sector organizations also work with an overwhelming amount of similar kinds of data in their day-to-day operations. With so much geographically based information, GIS has become essential to the effective operation of both public and private organizations.

The minor will prepare students for careers or graduate study in virtually all areas of the public or private sector where GIS is increasingly in use and critical for efficient management, comprehensive policy analysis, cost-effective decision making, and GIS display and processing. The curriculum in the minor is multidisciplinary in content and interdisciplinary in approach, drawing on a variety of disciplines and departments. Service learning is incorporated into several GIS courses and can be a focus of the GIS practicum experience. Students are strongly encouraged to attend a regional and/or state GIS conference with the GIS faculty and other students in the minor.

REQUIRED COURSES FOR THE MINOR

Students are required to take 25 credit hours (a minimum of 15 credit hours outside of their major) from among the following courses:

A. GIS Core Courses: 16 credit hours

CSIT 101	Programming with 3-D Graphics and Multimedia	3
	or	
CSIT 105	Visual BASIC I	3
	or	
CSIT 107	Web Programming I	3
	or	
CSIT 121	Computer Science I	3
GIS 201	Geographic Information Systems I	3

GIS 301	Geographic Information Systems II	3
GEO 301	Cartography	4
GIS 450	Directed Study	3
	or	
GIS 480	Independent Study	3
	or	
GIS 490	Internship	1-6

B. GIS Elective Courses: 9 credit hours

Students with the natural sciences focus should take GIS 350 Remote Sensing and Image Processing and two additional courses as advised by the coordinator.

Examples of possible electives include:

BIOL 330	Ecology	3
CSIT 205	Visual BASIC II	3
	or	
CSIT 207	Web Programming II	3
	or	
CSIT 221	Computer Science II	3
ESCI 410	Environmental Assessment	3
GEO 330	Geomorphology	4
GIS 401	Special Topics in Geographic Information Systems	3
	Statistics as advised	

Students with the social sciences focus should take GIS 360 (p. 407) Mapping the Social World and two additional courses as advised by the coordinator.

Examples of possible electives include:

BUAD 325	Principles of Marketing	3
ECON 380	Environmental/Natural Resource Economics	3
GIS 401	Special Topics in Geographic Information Systems	3
POLI 311	Fundamentals of Public Administration	3
SOC 215	Introduction to Public Health	3
	Statistics as advised	

TOTAL CREDIT HOURS: 25

INTERNATIONAL STUDIES MINOR

(The Interdisciplinary Studies: International Studies minor is housed in the Department of Politics and International Affairs.)

Office: E390 Thompson Hall
(716) 673-3887

Dr. Alexander Caviedes, Coordinator

Email: alexander.caviedes@fredonia.edu

Website: <http://home.fredonia.edu/interdisciplinary>

REQUIREMENTS FOR THE MINOR IN INTERNATIONAL STUDIES (25 CREDIT HOURS)

Core Requirements (10 credit hours):

Core requirements are intended to introduce students to international studies from the perspective of history, politics, and culture.

INTL 101	Introduction to International Studies	1
HIST 102	World History II	3
POLI 150	U.S. and World Affairs	3
ANTH 115	Introductory Anthropology	3

Upper Level Course Requirement (9 credit hours):

Three courses at the 300 or higher level.

All three courses must come from the same International Studies Specialization as defined in the University Catalog (the specialization tracks are International Political Economy; Advanced Industrial Societies; Cultural Studies of the Americas; The Developing World; European Cultural Studies; Peace and Conflict).

Foreign Language Requirement (minimum 3 credit hours):

The foreign language requirement may be completed via any of the following options:

1. Completion of course work through the 216 level (second-semester intermediate)

Important note about this requirement:

If a language is offered by Fredonia at the elementary (115-116) level only, then, after completing these two courses, a student has the following options for completing the foreign language requirement, with the approval of the program advisor:

- a. With courses taken during a study-abroad program in a country where that language is spoken;
 - b. With intermediate-level language courses taken at an approved institution in the U.S., including courses offered online through the SUNY Learning Network;
 - c. By taking an additional foreign language sequence at the 115-116 level.
2. Students with demonstrated proficiency in a foreign language must take a minimum of one course (3 credit hours) at the college level. Students may complete this requirement at Fredonia, in a program at an approved institution in the U.S., or in a foreign country.
 3. Additional foreign language coursework at the 300- and 400-levels is strongly recommended.

International Experience (3 credit hours):

All International Studies minors must complete a 3-credit "international experience," which can be fulfilled via enrollment in a short-term or long-term study-abroad program or the completion of an internship with an international agency.

TOTAL CREDIT HOURS: 25

ITALIAN STUDIES MINOR

Office: 2104 Fenton Hall

(716) 673-4496

Dr. Chiara De Santi, Coordinator

Email: Chiara.DeSanti@fredonia.edu

Website: <http://home.fredonia.edu/interdisciplinary>

REQUIREMENTS FOR THE MINOR IN ITALIAN STUDIES

Twenty-one credit hours of coursework focusing on development of Italian language skills, and study of Italian culture and history from an interdisciplinary perspective.

Required courses (9 credit hours):

ITAL 115	Elementary Italian I	3
ITAL 116	Elementary Italian II	3
ITAL 210	Italian Through Literature and Popular Culture	3

ITAL 210: or equivalent experience such as Study Abroad or Internship in Italy

Elective courses:

12 credit hours of coursework chosen from the following list of courses by advisement. At least 9 credit hours must be at the 300 level or higher, and chosen from at least two separate disciplines.

LANG 380	World in Cinema: Special Topics	3
LANG 400	Special Topics in Languages and Literatures	.5-3
LANG 410	Directed Study	1-3
ARTH 215	Survey of Renaissance Art	3
ARTH 290	Art History Abroad	.5-3
ARTH 315	Renaissance Art	3
ARTH 318	Baroque Art	3
ENGL 389	Greek and Roman Literature	3
HIST 302	Republican/Imperial Rome	3
HIST 303	Medieval History I	3
HIST 304	Medieval History II	3
HIST 305	Europe in the Era of the Renaissance	3
HIST 309	The Modernization of Europe	3
HIST 311	Europe in the Modern World	3
HIST 391	History of Christianity I	3
INDS 315	Italian American Experience	3
INDS 400	Independent Study	.5-8

INDS 480	Independent Study	1-6
PHIL 223	Roman Philosophy	3
PHIL 369	Topics in Philosophy	1-3
POLI 330	Western European Politics	3
POLI 343	International Migration and Immigration Politics	3
POLI 439	Directed Study: Comparative Politics	1-3
THEA 359	Commedia dell'Arte	3
THEA 451	History of the Theatre I	3

INDS 400, INDS 480, LANG 380, LANG 400, LANG 410, and POLI 439: focus on Italy

ARTH 290: if in Italy

PHIL 369: focus on Italy - Machiavelli, Dante, etc

PSC 390: online Buffalo State 3

LATINO STUDIES MINOR

Office: E304 Thompson Hall
(716) 673-3274

Dr. Jennifer Hildebrand, *Coordinator*

Email: latino.studies@fredonia.edu

Website: <http://home.fredonia.edu/interdisciplinary>

Latino Studies, an interdisciplinary minor, takes you *de la clase a la calle* - "from the classroom discussion to the realities in the streets of our diverse communities." The program provides an overview of the historical, political, social, educational, economic and cultural developments that affect Latinos in the Americas. "Latino" has been defined broadly to include people of Latin American background who reside in the U.S., where they are the fastest growing ethnic population. At a time when "globalization" and "immigration" have become part of everyday political and social discourse, students gain an understanding of the complex dynamics of transnational communities and transculturation.

One of the strengths of Fredonia's approach to the minor is our emphasis on the idea of "de la clase a la calle" — "from the classroom to the streets." This program emphasizes taking the theoretical issues and discussions of the classroom and putting them into practical initiatives and strategies in our communities. This phrase also keeps us rooted in the origins of all Ethnic Studies programs, which emerged directly from the Civil Rights Movement and other social movements of the Sixties and Seventies. Diverse groups of students demanded a curriculum that addressed the different historical and cultural experiences of many groups in the United States. University administrators across the country, tired of the public demonstrations and sit-downs held in the middle of their campuses, allowed students and faculty to incorporate the discussions that had been taking place on the street into the curriculum.

Latino Studies is for everyone! No matter your major or your future plans, the program will provide intellectual skills and cultural knowledge that will benefit you. A minor in Latino Studies opens doors for careers in government, legislation, international organizations, international business and marketing, immigration laws, land management, urban planning, counseling and social work, the media, and many other fields.

REQUIREMENTS FOR THE MINOR IN LATINO STUDIES (21 CREDIT HOURS)

Students declaring a Latino Studies minor may use past courses retroactively with approval of the coordinator.

Core courses (12 credit hours):

AMST 202	Introduction to American Studies	3
	or	
AMST 296	American Identities	3
ETHN 225	Introduction to Latino History and Culture	3

Subtotal: 6

One Spanish language course from the following (3 credit hours):

SPAN 313	Spanish Conversation	3
	or	
SPAN 314	Spanish Composition	3
	or	
	Demonstrated proficiency at this level	

Subtotal: 3

One History course from the following (3 credit hours):

ETHN 282	Pre-Columbian and Colonial Latin America	3
ETHN 283	Latin America: Revolution & Reform	3

Subtotal: 3

Electives (6 credit hours):

ANTH 324	Anthropology of the Caribbean	3
ARTH 280	Survey of Pre-Columbian Art: Mesoamerica	3
DANC 231	African-Caribbean Dance	2
ETHN 241	Introduction to Latino/a Literature	3
ETHN 304	Latina Literature and Cultural Studies	3
ENGL 344	Contemporary Multiethnic American Literature	3
ETHN 359	Ethnicity and Race	3
INTL 303	Globalization in Latin America	3
LANG 327	Magic Realism in Latin American Literature	3
MUS 334	Music of Latin America	3
POLI 343	International Migration and Immigration Politics	3
POLI 351	The Inter-American System	3

POLI 371	Civil Rights and Liberties	3
SOC 275	Social Inequalities	3
SOC 303	Social Class and Inequality	3
SPAN 325	Survey of Spanish-American Literature	3
SPAN 340	Cultural Issues in the Hispanic World	3
SPAN 425	Spanish-American Fiction	3
WGST 203	Chicana Writers/Visual Artists	3
Subtotal: 6		

NOTE:

- Six credit hours earned in two courses, each in a different discipline; must not include a course that has been used for core course credit; other courses not listed may be included with approval of coordinator.

Capstone (3 credit hours):

ETHN 403	Contemporary Issues in Latino Studies	3
or		
ETHN 490	Ethnic Studies Internship	1-6
Subtotal: 3		

Students are encouraged to explore relevant Study Abroad courses to meet the elective requirements.

Study Abroad programs such as INED 399 J-Term in Puerto Rico, INED 399 Study Abroad in Oaxaca, Mexico and INED 399 Study Abroad in Puebla, Mexico are strongly recommended.

The Latino Studies minor falls under the umbrella of the Ethnic Studies program, which also offers minors in African American Studies, American Indian Studies, and Multi-Ethnic Studies.

TOTAL CREDIT HOURS: 21

LEADERSHIP STUDIES MINOR

Office: Campus Life Office, Williams Center
(716) 673-3143

Mr. Mark Suida, Coordinator

Email: mark.suida@fredonia.edu

Website: <http://home.fredonia.edu/interdisciplinary>
<http://www.fredonia.edu/campuslife/leadership/>

This minor in Leadership Studies is an interdisciplinary program created with substantial student input. It requires 21 credit hours of course work and practicum credit. The program is designed to provide intensive study of leadership concepts and ideas, complemented by co-curricular activities provided through Student Affairs.

The goals of the Leadership Studies minor are:

- to introduce leadership as a recognized and well-documented set of concepts and ideas gleaned from designated courses that enhance leadership concepts;
- to provide the opportunity for an internship experience that documents appropriate leadership skills;
- to allow students to use this minor to complement a variety of major programs, including but not limited to, Business Administration, Communication, Social Work, or Education; and
- to offer a substantial menu of educational opportunities in an effort to enhance student potential as active and progressive individuals in a variety of diverse and competitive professional settings.

Requirements for consideration:

- Undergraduate student enrolled at Fredonia;
- Maintain a cumulative grade point average of 2.5;
- Consultation (and approval) with current Academic Advisor; and
- Application and consultation.

Affiliated Student Organizations and Activities

The Leadership Corps provides opportunities for students to program special events, develop leadership competencies, and enhance presentations skills by facilitating workshops for campus and community organizations. Examples of this are Resident Assistant training from several college campuses on our ropes course at the College Lodge, Myers-Briggs Type Inventory presentations, and etiquette dinners.

The Leadership Awards Reception (co-sponsored by Leadership Corps, Campus Life, Faculty Student Association, and University Advancement) provides an opportunity for recognition of our student leaders on campus, while allowing a reception for several scholarship announcements.

The Leadership Minor would also provide students with hand-on experience in the New York Leadership Educator's Consortium (NYLEC). A yearly conference is planned in the summer to provide students and professionals in the field of leadership development an opportunity to learn new theories and present on current trends.

REQUIREMENTS FOR THE MINOR IN LEADERSHIP STUDIES

Completion of the minor requires a minimum of 21 credit hours.

Course work focuses on five basic components:

- theory of leadership development;
- leadership in a changing world;

- communication skills (oral and written);
- techniques for working with groups and organizations; and
- presentation skills.

The minor includes a required internship, scheduled in consultation with the program coordinator.

Core (6 credit hours):

LEAD 201	Advanced Leadership Development	3
LEAD 490	Internship in Leadership	1-6

Electives (15 credit hours):

Must cover at least three of the following areas:

At least six (6) of these credit hours must be at the 300-400 level, and no more than three (3) of these credit hours may be from any one discipline. Many of these courses have prerequisites, but often the prerequisite is a course that could be taken to satisfy a requirement in the General Education Program.

Global Perspectives:

Courses that focus on effective and appropriate interaction with people from various cultural backgrounds, noting different dimensions in both a domestic and international context.

AMST 347	United States Immigration	3
COMM 424	International Public Relations	3
COMM 465	Intercultural Communication	3
ENGL 205	Epic and Romance	3
ENGL 207	Drama and Film	3
ENGL 209	Novels and Tales	3
ENGL 211	World Poetry	3
ENGL 303	Global Literary Landmarks	3
ENGL 351	Language and Society	3
ENGL 386	Women in Global Cinema	4
ENGL 391	Romanticism in World Literature	3
ECON 320	International Trade/Finance	3
ECON 345	Comparative Economic Systems	3
INDS 241	Introduction to Latino Literature and Culture	3
INED 400	Study Abroad	1-23
LANG 322	French Civilization/Culture	3
LANG 388	Spanish Civilization/Culture	3
MUED 315	Music, Play, and Self	3
MUS 333	Musics of the World	3
POLI 344	Comparative Public Policy	3
POLI 352	World Political Geography	3
POLI 356	U.S. Foreign Policy	3
PSY 370	Cross-Cultural Psychology	3
SSED 204	World Regional Geography	3
WGST 201	Introduction to Gender Studies	3

Communication Skills:

Courses that provide a wide range of opportunities to develop and enrich communication skills, including but limited to verbal, non-verbal and electrical. Skill base includes a focus on thinking critically about everyday interactions, including assessment of the content and contributions to creation of meaning. The student will also work on the shaping of personal and social realities.

COMM 105	Public Speaking	3
COMM 221	Interpersonal Communication	3
COMM 251	Audio Production I	3
COMM 321	Environmental Communication	3
BUAD 235	Introduction to Business Communication	3
ENGL 260	Introduction to Creative Writing	3
ENGL 352	History of the English Language	3
ENGL 373	English Grammar for Everyone	3
ENGL 374	Writing and Social Change	3
ENGL 375	Writing for the Professions	3
THEA 130	Acting for Non-Majors	3

Groups and Organizations:

Courses that emphasize communication in small task groups involving decision making and problem solving. These courses will also review theories on the roles of group maintenance, cohesion, conflict management, leadership, socialization and personality management relating to gender, ethnicity, race and other group dynamics.

BUAD 323	Organizational Behavior	3
BUAD 378	Business and Ethics	3
COMM 222	Principles of Public Relations	3
COMM 301	Group Communication	3
COMM 373	Gender and Communication	3
COMM 460	Organizational Communication	3
ENGL 314	Women Writers	3
HIST 359	Ethnicity and Race	3
SPMG 210	Principles of Sports Management	3
POLI 276	Law and Society	3
PSY 245	Social Psychology	3
PSY 347	Organizational Psychology	3
PSY 355	Group Dynamics	3
PSY 391	Multicultural Counseling	3
SOC 204	Social Psychology	3
SOC 316	Minority Groups	3

Presentation Skills:

Courses that develop and enhance the student's presentation abilities through the use of the microcomputer and its different programs and tools.

CSIT 104	Introduction to Microcomputer Software	3
CSIT 107	Web Programming I	3
CSIT 120	Computer Science Overview	3
COMM 110	Desktop Motion	1
COMM 111	Web Design	1

COMM 112	Desktop Video	1
COMM 114	Electronic Darkroom	1
COMM 116	Desktop Publishing	1
GIS 201	Geographic Information Systems I	3
LEAD 101	Intro to Leadership Seminar	1
Subtotal: 21		

NOTE:

1. *Students may count no more than 3 credits from their major program to the minor in Leadership.*
2. *Students that wish to declare a Leadership minor must do so prior to course selection for the second semester of their junior year.*

TOTAL CREDIT HOURS: 21**LEGAL STUDIES MINOR**

For students interested in a broad interdisciplinary background in law and related social science areas. A minimum of 21 credit hours distributed as follows: 6 credit hour core requirement; 15 additional credit hours with 12 at the 300 level or above.

REQUIREMENTS FOR A MINOR IN LEGAL STUDIES**Core Requirements (6 credit hours)**

POLI 276	Law and Society	3
POLI 277	Introduction to Law	3

Law Courses (15 credit hours; 12 at 300 level or above)

INDS 285	Mock Trial I	
POLI 287	Mock Trial II	3
ACCT 311	Business Law I	3
ACCT 312	Business Law II	3
BUAD 310	Legal Environment of Business	3
PHIL 303	Crime and Punishment	3
PHIL 312	Current Moral Issues and Principles	3
PHIL 362	Philosophy of Law	3
PHIL 364	Justice, Law, and Economics	3
POLI 370	American Constitutional Law	3
POLI 371	Civil Rights and Liberties	3
POLI 383	Courts and Social Policy	3
PSY 358	Psychology and the Law	3
POLI 492	Legal Intern	3-6

INDS 285/POLI 287 may be taken only once for completion of minor.

Only three credit hours of POLI 492 may be applied for completion of the minor.

Most professions require effectiveness in writing and speaking. This is certainly true of the legal profession. Students are advised to choose courses which will help them develop these skills; e.g. COMM 105 for speaking; upper division courses as electives for

writing. Students should also acquire knowledge of standard computer software including word processing, spreadsheet and database programs. Familiarity with bibliographic and data search routines including the Internet are strongly encouraged.

TOTAL CREDIT HOURS: 21**MULTI-ETHNIC STUDIES MINOR**

Office: E304 Thompson Hall

(716) 673-3274

Dr. Jennifer Hildebrand, Coordinator

Email: multiethnic.studies@fredonia.edu

Website: <http://home.fredonia.edu/interdisciplinary>

Multi-Ethnic Studies is an interdisciplinary program that encourages a broad, often comparative, study of race and ethnicity in the Americas and the larger world. As our society becomes increasingly diverse, a minor in Multi-Ethnic Studies helps students to understand the rich history of multiple groups in the United States while simultaneously preparing them to thrive in an increasingly diversified workplace and a globalized economy.

Students minoring in Multi-Ethnic Studies will engage in conversations about our similarities as human beings as well as the misunderstandings sometimes caused by our differences. The classroom will provide a safe space where the experiences and perspectives of the people we study as well as our own backgrounds and views can be explored and addressed intellectually and frankly.

Multi-Ethnic Studies is for everyone! No matter your major or your future plans, the program will provide intellectual skills and cultural knowledge that will benefit you. As the workplace and the world become more diversified, the ability to consider different perspectives and communicate across differences becomes increasingly valuable. Multi-Ethnic Studies coursework will challenge students to think critically and to write persuasively and thoughtfully, pushing them to seek innovative solutions to problems which they understand to be multifaceted. Students in the program will be well-prepared for careers in human services, museum curatorship, library science, teaching, journalism, scholarship, law, health, inter-ethnic relations, and many other fields.

REQUIREMENTS FOR THE MINOR IN MULTI-ETHNIC STUDIES (21 CREDIT HOURS)

Students declaring a Multi-ethnic Studies minor may use past courses retroactively with approval of the coordinator.

Core courses (9 credit hours selected from the following):

AMST 202	Introduction to American Studies	3
or		

AMST 296	American Identities	3
		Subtotal: 3

Two courses selected from the following three (6 credit hours):

ETHN 205	Introduction to American Indian Studies	3
ETHN 206	Introduction to African American Studies	3
ETHN 225	Introduction to Latino History and Culture	3
		Subtotal: 6

Electives:

Three courses (nine credit hours) must be taken, one each from African American Studies, American Indian Studies, and Latino Studies. Students may substitute one Multi-Ethnic Studies course; however, it cannot be from the area that they omitted when selecting two courses from ETHN 205, ETHN 206, or ETHN 225. (In other words, if you do NOT take ETHN 205, Introduction to African American Studies, you MUST take an elective in the African American Studies area.) Courses should be selected from at least two different disciplines. Must not include a course that has been used for core course credit, but students may take the third course from above (ETHN 205, ETHN 206, or ETHN 225) as an elective. Other courses not listed may be included with approval of coordinator.

African American Studies (3 credit hours):

ANTH 324	Anthropology of the Caribbean	3
DANC 231	African-Caribbean Dance	2
ETHN 240	Introduction to African American Literature and Culture	3
ENGL 340	Black Women Writers	3
ENGL 341	Harlem Renaissance	3
ENGL 342	African American Autobiography	3
ETHN 333	African American History to 1877	3
ETHN 334	African American History since 1877	3
HIST 336	African American Black Women's History	3
HIST 343	Civil Rights Movement	3
HIST 344	African American Social Thought	3
MUS 265	History of Jazz	3
MUS 267	African American Music	3
POLI 328	African American Politics	3
		Subtotal: 3

American Indian Studies (3 credit hours):

ANTH 321	Anthropology of Indian America	3
ETHN 242	American Indian Literature	3
ETHN 282	Pre-Columbian and Colonial Latin America	3
ETHN 356	American Indian History	3
ETHN 357	Indians and Europeans in Early America	3

ETHN 358	20th Century American Indian Issues	3
		Subtotal: 3

Latino Studies (3 credit hours):

ANTH 324	Anthropology of the Caribbean	3
ETHN 241	Introduction to Latino/a Literature	3
ENGL 304	Latina Literature and Cultural Studies	3
ETHN 282	Pre-Columbian and Colonial Latin America	3
ETHN 283	Latin America: Revolution & Reform	3
LANG 327	Magic Realism in Latin American Literature	3
MUS 334	Music of Latin America	3
SPAN 215	Intermediate Spanish I	3
SPAN 315	Introduction to Readings in Hispanic Literature	3
SPAN 313	Spanish Conversation	3
SPAN 325	Survey of Spanish-American Literature	3
SPAN 425	Spanish-American Fiction	3
WGST 203	Chicana Writers/Visual Artists	3
		Subtotal: 3

Multi-Ethnic Studies (3-6 credit hours):

ETHN 359	Ethnicity and Race	3
	or	
HIST 359	Ethnicity and Race and	3
SOC 275	Social Inequalities	3
		Subtotal: 3-6

NOTE:

- New courses or special topics courses may be credited toward the minor with approval from the coordinator.

Capstone (3 credit hours):

ETHN 405	Issues in Multi-Ethnic Studies	3
	or	
ETHN 490	Ethnic Studies Internship	1-6
		Subtotal: 3

Students are encouraged to explore relevant Study Abroad courses to meet the elective requirements.

The Multi-Ethnic Studies minor falls under the umbrella of the Ethnic Studies program, which also offers minors in African American Studies, American Indian Studies, and Latino Studies.

TOTAL CREDIT HOURS: 21

MUSEUM STUDIES MINOR

Dr. Ellen Litwicki, Coordinator

Email: museum.studies@fredonia.edu

Website: <http://home.fredonia.edu/interdisciplinary>

The Museum Studies minor provides an interdisciplinary introduction to the field of museum work. The minor will prepare students for graduate work in museum studies and for professional careers in history, art, anthropological, or science/natural history museums.

A minor in Museum Studies will uniquely qualify Fredonia students for this ever-expanding discipline, which includes positions in historic preservation, conservation, graphic design, public relations, social media, grant writing, curatorship, and other fields. The minor is congruent with majors in various areas, including Art History, History, Visual Arts & New Media, Natural Sciences (Geosciences, Biology, Physics, Chemistry), American Studies, and Communication, among others. The minor in combination with an education major will help prepare students to enter the rapidly growing field of Museum Education. Moreover, the minor provides opportunities for service learning through internships and the capstone and provides benefits to understaffed local cultural institutions.

Required: 21 credit hours from the following. Students declaring a Museum Studies minor may use past courses retroactively after consultation with the coordinator.

Required courses (9 credit hours):

INDS 202	Introduction to Museum Studies	3
INDS 302	Special Topics: Museum Studies	3
INDS 494	Museum Studies Capstone	3
INDS 495	Museum Studies Portfolio Completion	

Subtotal: 9

Electives (12 credit hours):

to be chosen from History, Art History, Anthropology, Geosciences, Biology, Physics, Communication, American Studies, and other relevant disciplines, in consultation with the coordinator. No more than 6 of the 12 credit hours may be in one discipline, and at least 6 credit hours must be at the 300 level or above.

Subtotal: 12

Optional/Recommended:

A museum internship or practicum for 1-3 credit hours. A 3-credit-hour internship may substitute for one of the elective courses. Possible internships include but are not limited to:

ARTH 499	Internship	1-15
HIST 490	Public History Internship	1-6
ANTH 473	Museum Internship	3

GEO 445	Geosciences Internship	1-15
BIOL 450	Modern Concepts in Biology	1-4
SCI 491	Special Topics in Interdisciplinary Science	1-6

Subtotal: 1-3

TOTAL CREDIT HOURS: 21

PUBLIC HEALTH MINOR

Office: W393 Thompson Hall

(716) 673-3469

Dr. Randolph Hohle, Coordinator

Email: publichealth.minor@fredonia.edu

Website: <http://home.fredonia.edu/interdisciplinary>

Public health incorporates nearly every aspect of health and perhaps is best defined by its mission: "Maximum health for all, via the prevention of disease, disability and unhealthful environmental conditions." The focus of public health is on health conditions of people in social, geographic, economic or other types of communities, both local and global. In contrast, medicine focuses on the health conditions of the individual. Public health emphasizes prevention; in medicine, the emphasis is on treatment.

The Interdisciplinary Studies minor in Public Health offers students the opportunity to acquire knowledge and skills in the broad field of public health, incorporating emergent issues (e.g., new public health topics such as bioterrorism and emerging infectious diseases) along with more traditional topics such as: communicable and chronic diseases; maternal and child health; injuries; psychosocial issues and tobacco; mental health, substance abuse and social violence; and air, water and solid hazardous waste. The Public Health minor will facilitate private or public sector careers addressing physical, mental and/or environmental health concerns of communities and populations at risk for disease/injury, and graduate study in public health.

REQUIREMENTS FOR THE MINOR IN PUBLIC HEALTH

The minor requires successful completion of 19 credit hours.

Six (6) credit hours must be from 300-400 level courses.

Only 6 credit hours may be taken in a student's major.

SOC 215 should be completed early, preferably during the sophomore year, and as soon as possible after declaring the minor. Enrolling in SOC 415 requires completion of 15 credit hours of public health courses, including SOC 215.

Required Courses: (10 credit hours)

SOC 215	Introduction to Public Health	3
BIOL 110	Human Biology	3

	or	
BIOL 111	Introduction to Biology	3
	or	
BIOL 133	Introductory Cell and Molecular Biology	3
BIOL 457	Biostatistics	3
	or	
SOC 300	Research Methods	3
SOC 415	Seminar in Public Health	1

BIOL 457: or STAT 250 for Biology majors

SOC 415: 1 credit hour; after completing 15 credit hours public health course work

Electives: (9 credit hours required)

1. Biosciences (at least 3 credit hours required)

BIOL 131	Introductory Ecology and Evolution	3
BIOL 243	Organismal Biology	3
BIOL 251	Basic Concepts in Biology	1-3
BIOL 310	The Human Genome	3
BIOL 336	Mammalian Physiology	3
BIOL 338	Microbiology	3
BIOL 345	Emerging Infectious Diseases	3
	or	
BIOL 360	AIDS and STDs	3
	or	
BIOL 450	Modern Concepts in Biology	1-4
CHEM 107	Chemistry for Consumers	3
	or	
CHEM 113	Chemistry and the Environment	3
	or	
CHEM 115	General Chemistry Lecture I	3
ESCI 105	Global Environmental Issues	3
	or	
ESCI 410	Environmental Assessment	3

2. Social/Behavioral Sciences (at least 3 credit hours required)

PSY 247	Health Psychology	3
SOC 240	Health and Society	3
SOC 311	Sociology of Addiction	3
SOC 321	Population and Society	3
SOC 345	Women, Health and Society	3
	or	
PSY 255	Psychology of Women	3

3. Specialty Groups/Courses (suggested courses)

Biosciences:

BIOL 437	Molecular Genetics Laboratory	2
BIOL 470	Hormone Mechanisms	3
CHEM 116	General Chemistry Lecture II	3
CHEM 125	General Chemistry Laboratory I	1
CHEM 126	General Chemistry Laboratory II	1

Women's Health:

HLTH 215	Personal and Community Health	3
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HLTH 303	Fitness and Wellness	3
	or	
HLTH 386	Wellness and Health Promotion	3
SOC 345	Women, Health and Society	3
	or	
PSY 255	Psychology of Women	3
SOC 472	Sociology Internship	1-15

SOC 472: after completing 15 credit hours of public health course work and with permission of Coordinator

Community Health:

COMM 101	Fundamentals of Communication	3
	or	
COMM 105	Public Speaking	3
	or	
COMM 460	Organizational Communication	3
	or	
SOC 363	Victimology	3
CSIT 104	Introduction to Microcomputer Software	3
HLTH 215	Personal and Community Health	3
HLTH 386	Wellness and Health Promotion	3
POLI 371	Civil Rights and Liberties	3
SOC 337	Sociology of Aging	3
	or	
SOC 338	Sociology of Death and Dying	3

Fitness, Nutrition and Wellness:

COMM 101	Fundamentals of Communication	3
	or	
COMM 105	Public Speaking	3
	or	
COMM 460	Organizational Communication	3
HLTH 115	First Aid Skills and Knowledge	3
HLTH 215	Personal and Community Health	3
HLTH 303	Fitness and Wellness	3
HLTH 386	Wellness and Health Promotion	3

Specialty Courses:

SOC 350	Special Topics	1-3
SOC 472	Sociology Internship	1-15

SOC 350: permission of Coordinator required

SOC 472: after completing 15 credit hours of public health course work and with permission of Coordinator

TOTAL CREDIT HOURS: 19

RELIGIOUS STUDIES MINOR

Office: 2102 Fenton Hall
(716) 673-4892

Dr. Dale Tuggy, Coordinator

Email: religious.studies@fredonia.edu

Website: <http://home.fredonia.edu/interdisciplinary>

Religions are a ubiquitous influence in political and cultural affairs, and religious thoughts, feelings, institutions, traditions, and obligations are a near-constant concern in the daily lives of most people. The minor in Religious Studies helps to prepare students for life in a religiously diverse world, and for further studies of religion(s).

The minor consists of one required course together with five appropriate electives. Electives are regularly offered in the fields of anthropology, communication, history, psychology, and philosophy. More information on electives may be obtained from the Religious Studies web page listed above.

REQUIREMENTS FOR THE MINOR IN RELIGIOUS STUDIES

The minor in Religious Studies requires 18 credit hours, distributed as follows:

Required Course (3 credit hours):

INDS 120	World Religions	3
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Subtotal: 3

Electives (15 credit hours):

Five courses selected from the following list of 3-credit courses.

ANTH 331	Anthropology of American Utopias	3
COMM 359	Special Topics in Communication	1-3
HIST 101	World History I	3
HIST 261	Islamic Civilization	3
HIST 268	History of South Asia	3
HIST 306	The Age of Reformation	3
HIST 361	Modern Middle East	3
HIST 391	History of Christianity I	3
PHIL 224	Medieval Thought	3
PHIL 238	Philosophy of Religion	3
PHIL 331	Eastern Thought	3
PHIL 369	Topics in Philosophy	1-3
PHIL 446	Selected Problems	3
PHIL 447	Selected Problems	3

Subtotal: 15

NOTE:

- Regarding COMM 359, HIST 399, PHIL 369, PHIL 446, and PHIL 447: students should consult the coordinator, the advising sheet for the minor, or the current course listings to confirm that the course, as taught in a given semester, will count as an elective for the Religious Studies minor.
- At least 6 credit hours must be at the 300-level or above.
- Not all electives may be taken within a single discipline.

TOTAL CREDIT HOURS: 18

RUSSIAN, EAST-EUROPEAN AND EURASIAN STUDIES MINOR

Office: E332 Thompson Hall
(716) 673-3277

Dr. John Staples, Coordinator

Email: John.Staples@fredonia.edu

Website: <http://home.fredonia.edu/interdisciplinary>

The Russian, East-European and Eurasian Studies (REES) Minor promotes the study of this large region within an interdisciplinary framework. Following the collapse of the Soviet Union the world looked forward to a new age of European and world integration; but while some countries from the former Soviet sphere of influence have prospered and moved toward greater integration, others have slipped into poverty, isolation, and authoritarianism. Russia hangs dangerously between authoritarian and democratic tendencies. Students in the REES Minor will explore the history, languages, cultures and societies of Russia, Eastern Europe and Eurasia in order to deepen their understanding of this region, with its unique place in global development.

REQUIREMENTS FOR THE MINOR IN RUSSIAN, EAST-EUROPEAN AND EURASIAN STUDIES

The minor requires 18 credit hours of course work, no more than half of which may come from any one discipline. Courses should be selected from the following list. Other courses might be accepted at the discretion of the program coordinator.

Required Core Courses: (minimum of 12 credit hours)

INDS 250	Introduction to Russia, Eastern Europe & Eurasia, 1789-Present	3
RUSS 115	Elementary Russian I	3
RUSS 116	Elementary Russian II	3
INED	Study Abroad (minimum of 3 credit hours)	

Optional Courses: (by advisement)

ECON 345	Comparative Economic Systems	3
ENGL 396	Russian Literature	3
HIST 313	Medieval Russia, 860-1700	3
HIST 314	Imperial Russia	3
HIST 316	20th Century Russia	3
HIST 324	History of the Ukraine	3
HIST 371	Russia After Stalin	3
INED 402	Study Abroad - American University in Bulgaria	1-21
INED 439	Study Abroad - St. Petersburg University Russia	1-21
POLI 332	Russian Politics	3
PHIL 338	Marxist Thought	3

TOTAL CREDIT HOURS: 18**SELF-DESIGN MINOR**

Office: 804 Maytum Hall
(716) 673-3173

Dr. Carmen Rivera, *Associate Dean for College of Liberal Arts & Sciences*

Email: interdisciplinary.studies@fredonia.edu

Website: <http://home.fredonia.edu/interdisciplinary>

Students who are currently in a departmental major may self-design an Interdisciplinary Studies minor combining courses from a minimum of two disciplines. Student will need to declare the minor with the Registrar's Office using a Change of Major form. Students who are enrolled in any of the Interdisciplinary Studies majors may not declare a self-design minor.

REQUIREMENTS FOR MINOR IN INTERDISCIPLINARY STUDIES SELF DESIGN

- A group of six to nine courses focused on a particular topic or problem studied from many different points of view.
- Courses must be from a minimum of two different departments (disciplines), with no more than 9 credits from any one discipline, as indicated by the course prefix (POLI, SOC, etc.).
- Courses must be beyond the introductory level (200 level and above) for the disciplines, with a minimum of 50% of the courses at the 300-400 level.
- Maximum of 6 credits can overlap with required courses for the major (3 preferred).

STATISTICS MINOR

Office: Fenton Hall 204
(716) 673-4709

Dr. Nancy Boynton, *Coordinator*

Email: Nancy.Boynton@fredonia.edu

Website: <http://home.fredonia.edu/interdisciplinary>

The Interdisciplinary Studies minor in Statistics is housed in the Department of Mathematical Sciences. Please see the Interdisciplinary Studies Minor Programs section of the catalog for details.

WOMEN'S AND GENDER STUDIES MINOR

Office: E319 Thompson Hall
(716) 673-3179

Dr. Jeffry Iovannone, *Coordinator*

Email: Jeffry.Iovannone@fredonia.edu

Women's and Gender Studies Program Office

Office: 171A Fenton Hall
(716) 673-3158

Email: womens.studies@fredonia.edu

Website: <http://home.fredonia.edu/interdisciplinary>

REQUIREMENTS FOR THE MINOR IN WOMEN'S AND GENDER STUDIES (21 CREDIT HOURS):

Completion of the interdisciplinary minor requires a minimum of 21 credit hours. Up to 6 credit hours of transfer credit may be applied to the minor, based on approval by the coordinator. No more than 9 credit hours should be used to fulfill the requirements of the student's major. Students declaring the Women's and Gender Studies minor may use past courses retroactively after consultation with the coordinator.

Required Courses (6 credits):

WGST 201	Introduction to Gender Studies	3
WGST 491	Gender and Social Change	3

Categories (at least 3 credit hours in each category – 15 credit hours):

1. Theoretical Frameworks (pre-requisite WGST 201)
2. Sexual Norms and Behaviors
3. Transnational Issues
4. Cultural Practices
5. Experiential Learning (pre-requisite WGST 201)

NOTES:

a) An E-portfolio will be used for program assessment, initiated in WGST 201 and finalized in WGST 491.

b) WGST 201 is a pre-requisite for the Theoretical Frameworks and Experiential Learning categories; Theoretical Frameworks course is a pre-requisite to WGST 491.

c) Coordinator's approval required prior to registration for Experiential Learning.

TOTAL CREDIT HOURS: 21

WEB PROGRAMMING MINOR

Office: E336 Thompson Hall
(716) 673-4750

Dr. Reneta Barneva, *Coordinator*

Email: Reneta.Barneva@fredonia.edu

Website: <http://home.fredonia.edu/interdisciplinary>

REQUIREMENTS FOR THE MINOR IN INTERDISCIPLINARY STUDIES - WEB PROGRAMMING

Students in the Interdisciplinary Studies minor in Web Programming must take 21 credit hours to fulfill the requirements, distributed as follows:

Required Courses:

CSIT 105	Visual BASIC I	3
CSIT 107	Web Programming I	3
CSIT 205	Visual BASIC II	3
CSIT 207	Web Programming II	3
Subtotal: 12		

Electives:

Two courses from the following:

CSIT 151	Introduction to Information Systems	3
CSIT 203	Multimedia Systems	3
CSIT 251	Information Systems Structures	3
CSIT 307	Web and Mobile App Design	3
CSIT 462	Computer Graphics	3
CSIT 463	Introduction to Digital Image Processing and Computer Vision	3
Subtotal: 6		

One course from the following

CSIT 425	Software Engineering	3
CSIT 455	Relational and Object Databases	3
CSIT 473	Data Warehousing and Mining	3
CSIT 475	Electronic Commerce	3
Subtotal: 3		

NOTE:

1. The courses CSIT 291 (p. 343) (Special Topics), CSIT 300 (p. 343) (Internship), CSIT 490 (p. 347) (Seminar on Selected Topics), CSIT 496 (p. 347) (Special Topics), CSIT 497 (p. 347) (Thesis), CSIT 499 (p. 347) (Senior Project) and other courses can be considered electives upon coordinator's approval.
2. At least two of the elective courses counted toward the minor must be at the 300-400 level.
3. Students majoring in Computer Science or Computer Information Systems must take at least 15 credit hours among the above courses which do not count toward the major program (credit hours from courses within the list of courses of the major not used to satisfy requirements in that major).

TOTAL CREDIT HOURS: 21

LANGUAGE AND LEARNING, MASTER OF ARTS

Office: E262 Thompson Hall
(716) 673-3702

Dr. Cindy Bird, Chairperson

Dr. Karen Lillie, Program Coordinator

Email: Karen.lillie@fredonia.edu

Email: LLL@fredonia.edu

Website: <http://home.fredonia.edu/coe/lll>

The Master of Arts in Language and Learning does not lead to recommendation for teacher certification in New York State. There are five specialization areas from which a student may choose; the selected area will be indicated on the student's transcript when awarded:

- TESOL/TEFL
- Language Policy
- Bilingualism/Multilingualism
- Heritage Languages
- Sociolinguistics

REQUIREMENTS FOR ADMISSION TO FREDONIA'S LANGUAGE AND LEARNING, MA:

NOTE: We are only actively recruiting for the TESOL, Bilingualism/Multilingualism, and Heritage Languages specialization track as of July 16, 2015; however, the admission requirements are the same for all five specialization areas.

- Completion of a baccalaureate degree in an area of arts, science, or education.
- Undergraduate GPA of 3.00 or above.
- Evidence of having taken the GRE with a minimum score of 272 for the combined areas of Verbal and Mathematics.
 - Candidates may be accepted conditionally into the program without the GRE scores.
 - International students are allowed one year from the time they arrive in the United States to fulfill this requirement.
- Completed Graduate Application submitted to the Office of Graduate Studies including:
 - (a) two current (within six months) letters of recommendation which include contact information as the Program Coordinator has the option of contacting anyone who has submitted a letter on your behalf; and
 - (b) official academic transcripts from all prior undergraduate and graduate institutions (except Fredonia).

Language Proficiency Requirements

- for Native Speakers of English:

- A statement of your background and goals in addition to a resume (maximum three pages)
- A graduate-level 800-1,200 word short essay in English which addresses the following question: "Describe your reasons for pursuing a graduate degree in Language and Learning and support your rationale with specific information pertinent to your desired degree."
- 12 post-secondary credit hours in a Language Other than English (LOTE), or an approved equivalency, in a single language. Candidates may be accepted conditionally into the program without the LOTE credits fulfilled. Matriculation into the program is contingent upon the satisfactory completion of this requirement.
- A satisfactory intermediate-level 800-1,200 word short essay in a language other than English (LOTE). Candidates may be accepted conditionally into the program without the LOTE essay. Matriculation into the program is contingent upon the satisfactory evaluation of this essay.
- for Non-Native Speakers of English:
 - A statement of your background and goals in addition to a resume (maximum three pages)
 - A graduate-level 800-1,200 word short essay in English which addresses the following question: "Describe your reasons for pursuing a graduate degree in Language and Learning and support your rationale with specific information pertinent to your desired degree."
 - A graduate level 800-1,200 word short essay in the candidate's native language. This can be any academic paper (e.g., a paper from a college course).
 - Further stipulations as listed below under "Additional requirements for non-native speakers of English to the program."

PROGRAM REQUIREMENTS (30 CREDIT HOURS)

Core Courses - as required for specialization; see below (9 credit hours):

EDU 518	Second Language Acquisition and Development	3
EDU 565	Language and Learning: Psycho- and Sociolinguistic Considerations for Educators of ELL Students or	3
EDU 568	Foundations of Bilingual Education	3
EDU 564	Linguistics for ESL Educators	3

NOTE: EDU 518 is an on campus course with an online component.

EDU 565 is the core course taken for the Heritage Language and the Sociolinguistic Specializations

EDU 568 is the core course taken for the TESOL/TFL, Language Policy, and Bilingualism/Multilingualism Specializations

Research Methods (9 credit hours):

EDU 570	Using Educational Research to Improve Instruction	3
EDU 660	Conducting Educational Research	3
EDU 690	Master's Thesis/Project	3-6

SPECIALIZATION ELECTIVES (12 CREDIT HOURS):

Courses that exist in other departments may be approved by Program Coordinator; see far below.

TESOL / TEFL:

EDU 592	Special Topics: Language, Learning, and Leadership	3
EDU 519	Curriculum Theory for the Second Language Classroom - ESL I	3
EDU 540	Content Area English as a Second Language Electives	3

Language Policy:

EDU 592	Special Topics: Language, Learning, and Leadership	3
EDU 565	Language and Learning: Psycho- and Sociolinguistic Considerations for Educators of ELL Students	3
	Electives as advised	

Bilingualism / Multilingualism:

EDU 592	Special Topics: Language, Learning, and Leadership	3
EDU 565	Language and Learning: Psycho- and Sociolinguistic Considerations for Educators of ELL Students	3
EDU 555	Methods of Bilingual Education	3
	One course in Study Abroad in L2 context (by advisement)	

Sociolinguistics:

EDU 592	Special Topics: Language, Learning, and Leadership	3
EDU 568	Foundations of Bilingual Education	3
	Electives as advised	

Heritage Languages:

EDU 592	Special Topics: Language, Learning, and Leadership	3
EDU 519	Curriculum Theory for the Second Language Classroom - ESL I	3

EDU 568	Foundations of Bilingual Education	3
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COURSES EXISTING IN OTHER DEPARTMENTS WHICH MAY BE CONSIDERED FOR SPECIALIZATIONS

Using these courses to satisfy a specialization would depend on the specialization and require both approval from Department Chair of the Specific Department and the Program Coordinator. Consult the Program Coordinator.

English:

ENED 554	Composition Theory and Practice	3
ENED 665	Studies in English Education	3
ENGL 520	Graduate Seminar in Literature and Culture	3

Education - C&I or LLL:

EDU 508	Teaching Exceptional Learners in Inclusive Settings	3
EDU 529	Proactive Approaches to Classroom Management in Inclusive Settings	3
EDU 503	Evaluation in the Schools	3
EDU 505	The Process of Writing: K-12	3
EDU 506	Introduction to Literacy Instruction	3
EDU 539	Current Issues and Problems in Education	3
EDU 552	Introduction to Literacy Assessment	3
EDU 556	Teaching Language Arts in Spanish	3
EDU 614	Principles of School Administration and Leadership	3
EDU 620	Public School Finance	3
EDU 624	Contemporary Problems in School Leadership	3
EDU 579	Social Foundations of Literacy	3
EDU 581	Japanese Culture and Education	3

NOTE: Also, for the Bilingualism / Multilingualism and Heritage Languages specializations - any of the required courses for the bilingual extension (CAS-BLE currently in TESOL program).

EDU 581 Japanese Culture and Education is cross-listed with PSY 570.

Psychology:

PSY 510	Contemporary Issues in Psychology	3
PSY 546	Classroom Expectancy Effects	3
PSY 570	Japanese Culture and Education	3

INED: Study abroad courses

Open SUNY:

ADE 584: Literacy Skills and the Adult Learner (Buffalo State)

ADE 688: Leadership in Organization (Buffalo State)

EDI 647: Teaching Adolescence Reading, Writing, and Literature (The College at Brockport)

Others as approved.

Liberal Arts Freshman Seminars

Office: Office of the Registrar

First Floor, Reed Library

(716) 673-3188

Email: advising.center@fredonia.edu

Ms. Amy Leclair, Coordinator of Academic Advising & Liberal Arts

Website: <http://home.fredonia.edu/liberalarts>

The Liberal Arts program is part of The Liberal Arts Freshman Year Experience, offered to first-year students who are still exploring for a major. The Liberal Arts Freshman Seminars are a variety of topical, one-credit hour seminars from which to choose. Taught by faculty and professional staff, each seminar is geared toward the process of self-discovery, enrolls no more than 20 students, and is graded on a satisfactory/unsatisfactory basis. In addition to the seminar, all Liberal Arts freshmen must attend one group meeting as part of the course requirement.

For more information on the Liberal Arts program, see Liberal Arts.

LITERACY EDUCATION: BIRTH-GRADE 12 MASTER OF SCIENCE IN EDUCATION

Department of Language, Learning and Leadership

Office: E262 Thompson Hall

(716) 673-3702

Dr. Cindy Bird, Chairperson

Dr. Susan Sturm, Program Coordinator

Email: susan.sturm@fredonia.edu

Email: LLL@fredonia.edu

Website: <http://home.fredonia.edu/coe/lll>

This program leads to a Master of Science in Education: Literacy Education Birth to Grade 12 degree and recommendations for initial certification in both Literacy Education: Birth to Grade 6 and Literacy Education: Grades 5-12. Program completion results in the ability to teach as a reading specialist, a literary coach, or as a classroom teacher. The content of the program includes practicum work, research, and opportunities to provide professional development for paraprofessionals and classroom teachers.

The State University of New York at Fredonia does not have the authority to recommend graduating Literacy candidates for a professional certification in the area of

their original initial certification, only for Literacy Education (initial and professional). Graduates of the Literacy program who are interested in applying for their professional certification related to their original initial certification area will have to submit their materials directly to NYSED for individual evaluation through the TEACH online system. Please see the following link for further information about this topic:
<http://www.highered.nysed.gov/tcert/certificate/relatedmatters.html>

Requirements for Admission to the Degree Program without Deficiencies

Submit a completed Graduate Application to the Office of Graduate Studies, including two current (within six months) letters of recommendation that address the applicant's academic and teaching abilities, official academic transcripts from all prior undergraduate and graduate institutions (except Fredonia), formal score reports from GRE (and TOEFL or IELTS if required), evidence of initial teaching certification and evidence of DASA training.

- Baccalaureate Degree Awarded.
- Baccalaureate GPA of 3.00 or above.
- Completion of the GRE general exam, with a minimum qualifying score of 272 for combined Verbal and Mathematics sections.
- Initial teacher certification for New York State or equivalent.
- Evidence of completion of DASA training
- For non-native speakers of English, the following sub-scores on the Test of English as a Foreign Language (TOEFL) or the International English Language Testing System (IELTS):
 - TOEFL Reading: 21 *or* IELTS Reading: 6.5
 - TOEFL Speaking: 18 *or* IELTS Speaking: 6.0
 - TOEFL Listening: 15 *or* IELTS Listening: 6.0
 - TOEFL Writing: 21 *or* IELTS Writing: 6.5
 - Interview with Literacy faculty

As of December 31, 2013, candidates in all education programs are required to complete training under the Dignity for All Students Act (DASA). The training required under the Dignity for All Student Act (DASA) will be included in EDU 303 at Fredonia. Graduate candidates who may have completed EDU 303 on campus prior to Spring 2014 must complete an EDU DASA workshop prior to full admission.

NOTE: Applicants may be granted conditional acceptance and have one semester to complete DASA training and write the GRE.

PROGRAM REQUIREMENTS

A minimum of 36 credit hours of graduate level courses, including the following:

Required courses:

EDU 506	Introduction to Literacy Instruction	3
EDU 552	Introduction to Literacy Assessment	3
EDU 554	Advanced Literacy Assessment	3
EDU 570	Using Educational Research to Improve Instruction	3
EDU 576	Practicum in Literacy for All Students	
EDU 579	Social Foundations of Literacy	3
EDU 583	Literacy Interventionist Practicum I	3
EDU 613	Literacy Interventionist Practicum II	3
EDU 627	Multicultural Children's Literature and Technology	3
EDU 628	Reading Specialist Practicum	
EDU 633	Literacy in the Content Areas	3
EDU 637	Psychological Foundations of Literacy	3
EDU 651	Issues and Research in Literacy	3
EDU 659	Master's Thesis/Project in Literacy	3

TOTAL CREDIT HOURS: 36

Additional Program Requirements

It is the candidate's responsibility to be aware of course prerequisites, the Program Assessment Plan and Transition Point Grid and the required passing grade of B or higher for EDU 552, EDU 554, EDU 583, EDU 613, EDU 651, and EDU 659, as well as the additional program requirements of

- The New York State Content Specialty Test (CST) in Literacy
 - Candidates must pass this CST to become certified in Literacy Education in New York State
- Specific Program Assessments aligned with the International Literacy Association (ILA) Standards
 - Program assessments have been designed to meet these standards as part of the institutional accreditation efforts through the Council for the Accreditation of Educator Preparation (CAEP). Candidates will be kept informed of these assessments.

LITERACY EDUCATION: GRADES 5-12 MASTER OF SCIENCE IN EDUCATION

Department of Language, Learning and Leadership
Office: E262 Thompson Hall

(716) 673-3702

Dr. Cindy Bird, Chairperson

Email: Cindy.Bird@fredonia.edu

Email: LLL@fredonia.edu

Website: <http://home.fredonia.edu/coe/lll>

The program leads to a Master of Science in Education: Literacy Education Grades 5-12 degree and a recommendation for initial certification in Literacy Education: Grades 5-12 resulting in the ability to teach as a reading specialist, a literary coach, or as a classroom teacher. The content of the program includes clinical work, action research, and opportunities to provide professional development for paraprofessionals and classroom teachers.

Requirements for Admission to the Degree Program without Deficiencies:

Submit a Completed Graduate Application to the Office of Graduate Studies, including two current (within six months) letters of recommendation that address the applicant's academic and teaching abilities, official academic transcripts from all prior undergraduate and graduate institutions (except Fredonia), formal score reports from GRE (and TEOFL or IELTS if required), evidence of initial certification and evidence of DASA training.

- Baccalaureate Degree Awarded.
 - Baccalaureate GPA of 3.00 or above.
 - Completion of the GRE general exam.
 - Initial certification to teach early childhood, childhood, or adolescence education in the public schools of New York State or equivalent early childhood, elementary, or secondary preparation.
 - Evidence of completion of DASA training
 - For non-native speakers of English, the following subscores on the Test of English as a Foreign Language (TOEFL) or the International English Language Testing System (IELTS):
 - TOEFL Reading: 21 *or* IELTS Reading: 6.5
 - TOEFL Speaking: 18 *or* IELTS Speaking: 6.0
 - TOEFL Listening: 15 *or* IELTS Listening: 6.0
 - TOEFL Writing: 21 *or* IELTS Writing: 6.5
- Interview. After the application deadline, candidates with completed application materials will be contacted by Literacy faculty for an interview.

NOTE:

The State University of New York at Fredonia does not have the authority to recommend graduating Literacy candidates for a professional certification in the area of their original initial certification, only for Literacy

Education (initial and professional). Graduates of the Literacy program who are interested in applying for their professional certification, related to their original initial certified area, will have to submit their materials directly to NYSED for individual evaluation through the TEACH online system. Please see the following link for further information about this topic:
<http://www.highered.nysed.gov/tcert/certificate/relatedmasters.html>

PROGRAM REQUIREMENTS

A minimum of 36 credit hours of graduate level courses, including the following:

Required Courses (36 credit hours)

EDU 506	Introduction to Literacy Instruction	3
EDU 552	Introduction to Literacy Assessment	3
EDU 554	Advanced Literacy Assessment	3
EDU 570	Using Educational Research to Improve Instruction	3
EDU 579	Social Foundations of Literacy	3
EDU 583	Literacy Interventionist Practicum I	3
EDU 613	Literacy Interventionist Practicum II	3
EDU 627	Multicultural Children's Literature and Technology	3
EDU 633	Literacy in the Content Areas	3
EDU 637	Psychological Foundations of Literacy	3
EDU 651	Issues and Research in Literacy	3
EDU 659	Master's Thesis/Project in Literacy	3

As of December 31, 2013, candidates in all education programs are required to complete training under the Dignity for All Students Act (DASA). The training required under the Dignity for All Student Act (DASA) will be included in EDU 303 at Fredonia. Graduate candidates who may have completed EDU 303 on campus prior to Spring 2014 must complete the EDU DASA workshop prior to full admission.

Additional Program Requirements

It is the candidate's responsibility to be aware of course prerequisites, the Program Assessment Plan and Transition Point Grid noting the required grades for passing (a grade of B or higher) in EDU 552, EDU 554, EDU 583, EDU 613, EDU 651, and EDU 659, as well as the additional program requirements of

- The New York State Content Specialty Test (CST) in Literacy
 - Candidates must pass this CST to become certified in Literacy Education in New York State
- Specific Program Assessments aligned with the International Reading Association (IRA) Standards

- Program assessments have been designed to meet these standards as part of the institutional accreditation efforts through the Council for the Accreditation of Educator Preparation (CAEP). You will be kept informed of these assessments.

TOTAL CREDIT HOURS: 36

Mathematical Sciences

Office: 211 Fenton Hall

(716) 673-3243

Email: mathematics.department@fredonia.edu

Dr. Julia Wilson, *Chairperson*

Dr. Keary Howard, *Mathematics Education Coordinator*

Website: <http://www.fredonia.edu/department/math/>

The goal of the programs in mathematics is to prepare students for the lifelong study and use of mathematics. The application of mathematics has made possible many of the technological advances now taken for granted. Conversely, problems in business, science and engineering, when formulated mathematically, often spur advances in mathematics. This interplay between mathematics and other disciplines has been growing and now includes many more areas than would have been thought possible only a few years ago.

The Department of Mathematical Sciences offers several undergraduate program options within mathematics. The Mathematics major is recommended for those who plan to pursue graduate study in mathematics or seek general employment following graduation. Students who plan a mathematics-related career in business, industry, or science may wish to major in Applied Mathematics. For students planning a career in teaching, the department offers two majors: Mathematics Adolescence Education (p. 21), to prepare high school mathematics teachers (grades 7 through 12), and Middle Childhood Education – Mathematics Specialist (p. 150), to prepare mathematics teachers for middle school (grades 5 through 9). Both teacher preparation programs lead to recommendation for Initial Certification in New York State.

The department offers a Mathematics 7-12 Master of Science in Education (p. 147) degree program to provide middle and high school mathematics teachers the opportunity to work towards Professional Certification. The department also offers minors in Mathematics and Applied Mathematics and, in collaboration with the Department of Physics, a degree program in Mathematics-Physics (p. 148). It also participates in the Cooperative Engineering program.

Upon recommendation of the faculty, qualified students are invited to join the Honors Program in Mathematics. The objectives of the program are to: (1) deepen a student's understanding and appreciation of mathematics; (2) provide the student with the opportunity to conduct research on a selected topic with guidance from a faculty

member; and (3) enhance the student's preparation for graduate study in mathematics. The program consists of three special courses: MATH 290 Sophomore Honors Mathematics; MATH 390 Honors Special Topics; and MATH 490 Honors Thesis.

Generally, MATH 290 and MATH 390 are taken in the spring semester of the student's sophomore and junior years, respectively, while MATH 490 is taken in the senior year. The department also offers MATH 190 Honors Problem Solving each spring to a select group of freshmen who have been recommended by their calculus instructors. Although not a formal part of the Honors Program, MATH 190 is a good course for freshmen who like working on non-trivial problems and wish to further develop their analytical thinking skills.

Many mathematics students participate in the activities of the Mathematics Club (Chi Tau Omega). The club holds academic and social activities, and helps sponsor trips to professional meetings. In addition, Fredonia has a chapter of Pi Mu Epsilon, a national honorary society devoted to the promotion of scholarly activity in mathematics by students.

Several scholarships are awarded annually to mathematics majors based on academic performance and faculty recommendations: the Frank R. Olson Scholarship, the Earl G. Mathewson Memorial Scholarship, the Santa A. B. DiPasquale Memorial Scholarship, the Mark Buckenmeyer Scholarship, the Dr. Nelson C. & Louise A. Wood Memorial Fund Scholarship, and the Myron T. Dana Scholarship.

For further details about the programs in mathematics, contact the chairperson of the Department of Mathematical Sciences. Interested persons should also examine the programs offered in Computer and Information Sciences.

MATHEMATICS BACHELOR OF SCIENCE

REQUIREMENTS FOR THE BACHELOR OF SCIENCE DEGREE IN MATHEMATICS

Required Courses

MATH 125	Software for Mathematics	3
	or	
CSIT 121	Computer Science I	3
MATH 122	University Calculus I	4
MATH 123	University Calculus II	4
MATH 210	Mathematical Structures and Proof	4
MATH 223	University Calculus III	4
MATH 224	Differential Equations	3
MATH 231	Linear Algebra	4
MATH 323	Introductory Real Analysis	3
MATH 331	Abstract Algebra I	3
STAT 350	Probability and Statistics	3
MATH 405	Senior Seminar	1
MATH 332	Abstract Algebra II	3

	or		
MATH 420	Advanced Calculus	3	
	Two additional MATH or STAT	6	
	courses numbered 311 or higher,		
	as advised		
Subtotal: 4-5			

NOTE: Cooperative Engineering students following this track may substitute PHYS 425 for MATH 420.

All mathematics majors must complete a science course and its laboratory selected from the following:

Subtotal: 4-5			
Chemistry:			
CHEM 115	General Chemistry Lecture I	3	
	and		
CHEM 125	General Chemistry Laboratory I	1	
Physics:			
PHYS 230	University Physics I	4	
	and		
PHYS 232	University Physics I Lab	1	

Mathematics majors are encouraged to take additional courses in computer science consistent with their career and educational goals.

Students may double major in Mathematics and Applied Mathematics, or in Mathematics and Mathematics Adolescence Education, or in Mathematics and Mathematics-Middle Childhood by completing all of the requirements for both majors.

TOTAL CREDIT HOURS: 49-50

MATHEMATICS 7-12 MASTER OF SCIENCE

Office: 223 Fenton Hall
(716) 673-3243

Dr. Julia Wilson, Chairperson

Dr. Keary Howard, Graduate Coordinator

Email: mathematics.department@fredonia.edu

Website: <http://home.fredonia.edu/math/mathmsed>

The Department of Mathematical Sciences offers a program leading to the **Master of Science in Education: Mathematics 7-12**. Candidates completing this program are eligible to be recommended for professional certification in "Mathematics 7-12" and/or "Mathematics 5-9," depending on their initial certification.

REQUIREMENTS FOR ADMISSION TO THE PROGRAM WITHOUT DEFICIENCIES:

Initial certification in New York State in Mathematics Adolescence Education, with a bachelor's degree in mathematics that includes courses equivalent to:

MATH 210	Mathematical Structures and Proof	4
MATH 223	University Calculus III	4

MATH 323	Introductory Real Analysis	3
MATH 331	Abstract Algebra I	3

at least two of the following:

MATH 341	Geometry	3
STAT 350	Probability and Statistics	3
MATH 381	History of Mathematics	3
	or	

Initial certification in New York State in Middle Childhood Education - Mathematics Specialist, with a bachelor's degree in mathematics that includes courses equivalent to:

MATH 123	University Calculus II	4
MATH 210	Mathematical Structures and Proof	4
MATH 231	Linear Algebra	4
MATH 341	Geometry	3
MATH 381	History of Mathematics	3
MAED 301	Mathematics for School Teachers I	3
MAED 302	Mathematics for School Teachers II	3
MAED 303	Mathematics for School Teachers III	3
	and	
	a statistics course	

Program Requirements

The program requires a minimum of 30 credit hours at the graduate level distributed as follows. The student's advisor or the department chairperson must approve any course used to fulfill the requirements below:

1. A course in research methods
2. A minimum of three courses covering three of the following categories:
 - a. historical, philosophical, or comparative foundations of education,
 - b. design and evaluation of mathematics curricula,
 - c. instructional methods,
 - d. use of educational technology in the teaching and learning of mathematics,
 - e. psychological foundations of education.
3. A minimum of four courses covering four of the following categories:
 - a. algebra or analysis,
 - b. geometry or topology,
 - c. number theory, probability, or statistics,
 - d. history or philosophy of mathematics,
 - e. applications of mathematics,
 - f. any approved course in mathematics.
4. Mathematics Education Seminar (MAED 602)

5. Graduate Project (MAED 690)

As of December 31, 2013, candidates in all education programs are required to complete training under the Dignity for All Students Act (DASA). Beginning in the Fall 2013 semester, the training required under the Dignity for All Student Act (DASA) will be included in EDU 303 at Fredonia. Undergraduate candidates planning to graduate after Fall 2013 who have already completed EDU 303 on campus or taken a workshop as a substitution for EDU 303 must also complete the EDU DASA workshop prior to graduation.

For certification information, students should check the Graduate Teacher Education Certification (p. 279) section of the catalog.

MATHEMATICS-PHYSICS BACHELOR OF SCIENCE

REQUIREMENTS FOR THE BACHELOR OF SCIENCE IN MATHEMATICS-PHYSICS

Core Program

32 credit hours in mathematics/computer science; 29 credit hours in physics; 9 credit hours in supporting courses

CSIT 106	Scientific Programming Using C/C++	3
or		
CSIT 121	Computer Science I	3
		Subtotal: 3

Plus 29 hours in mathematics including:

MATH 122	University Calculus I	4
MATH 123	University Calculus II	4
MATH 223	University Calculus III	4
MATH 210	Mathematical Structures and Proof	4
MATH 224	Differential Equations	3
MATH 231	Linear Algebra	4
PHYS 230	University Physics I	4
PHYS 232	University Physics I Lab	1
PHYS 231	University Physics II	4
PHYS 233	University Physics II Lab	1
PHYS 234	Modern Physics	4
PHYS 431	Introduction to Quantum Mechanics	3
		Subtotal: 40

Plus two courses at the 300 level or higher:

MATH 323	Introductory Real Analysis and	3
MATH 420	Advanced Calculus	3
or		
MATH 323	Introductory Real Analysis and	3
PHYS 425	Mathematical Physics I	3
or		

PHYS 425	Mathematical Physics I and	3
PHYS 426	Mathematical Physics II	3
		Subtotal: 6

One course (3 credit hours) from:

PHYS 330	Thermodynamics	3
PHYS 331	Theoretical Mechanics	3
PHYS 333	Electricity and Magnetism	3
		Subtotal: 3

NOTE: PHYS 400 is the suggested Capstone course for this program.

Plus 9 additional credit hours from

Physics 321 - 479, 490		
		Subtotal: 9
Plus 9 credit hours of supporting courses, as advised		
		Subtotal: 9

NOTE: MINIMUM CUMULATIVE GPA OF 2.0
REQUIRED IN ABOVE COURSES FOR GRADUATION.

TOTAL CREDIT HOURS: 70

Medical Technology

Department of Biology
Office: 221 Science Center
(716) 673-3282

Dr. Patricia Smith Astry, Department Chairperson and Program Director

Email: biology@fredonia.edu

Website: <http://home.fredonia.edu/biology>

The Medical Technology program prepares students for careers in many high demand areas of science. Recent program graduates are employed as clinical diagnostic scientists in hospital, forensic, industrial and biotechnology laboratories; as clinical research scientists in biomedical research facilities; and as sales representatives for pharmaceutical, medical instrumentation and computer corporations. Students typically have obtained jobs within their discipline by the time they graduate.

The program is recommended for students wishing to prepare for careers as clinical diagnostic scientists in hospital, forensic, industrial and biotechnology laboratories, and as sales representatives for pharmaceutical, medical instrumentation and computer companies. The curriculum requires the student to study three years at Fredonia and one year in an accredited clinical hospital program. Contracted agreements with three hospitals ensure internship placement for qualified students who have successfully completed university requirements. Entrance to the clinical program is highly competitive and based on a minimum 3.0 GPA and letters of recommendation. The clinical year consists of study in a hospital laboratory where students are supervised and

instructed by medical technologists and physicians. After successful completion of the internship, students receive clinical certification from the hospital, 30 university credits, and the B.S. degree with a major in Medical Technology from Fredonia. Students are then eligible to take the Board of Registry exam given by the American Society of Clinical Pathologists. Passage of the exam results in national board certification. Graduates are also eligible for licensure through the N.Y.S. Education Department Office of the Professions. After 2013, the only individuals who will be able to work as Medical Technologists in N.Y.S. hospitals will be those who have received a B.S. degree in Medical Technology and have obtained N.Y.S. licensure.

The Fredonia Medical Technology program is approved as a licensure qualifying by the New York State Department of Education and is accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS) and the American Medical Associate Council on Health Education.

The percentage of Fredonia Medical Technology students passing the Board of Registry Examination on the first attempt has been 97 percent over the past 10 years, compared to a national passage rate of only 76 percent. Under affiliation agreements entered into by the university, the training of students during the senior clinical internship takes place at the following hospitals under the supervision of clinical Program Directors:

Michele Harms, M.S., MT (ASCP), Program Director, Medical Technology Program, WCA Hospital, Jamestown, N.Y., Courtesy Faculty, State University of New York at Fredonia.

Stephen Johnson, M.S., MT (ASCP), Program Director, Medical Technology Program, St. Vincent's Hospital, Erie, PA, Courtesy Faculty, State University of New York at Fredonia.

Nancy Mitchell, M.S., MT (ASCP), Program Director, School of Medical Technology, Rochester General Hospital, Rochester, N.Y., Courtesy Faculty, State University of New York at Fredonia.

Students wishing to apply to other accredited internship programs may do so upon advisement.

Requirements for Transfer Credit

The Medical Technology program requires students to complete 60 credit hours of biology courses. Students are expected to complete at least half of the biology courses at Fredonia. Additional credit hours transferred may be used as general electives toward graduation. As a rule, the department will not accept as equivalent for upper level courses, credit earned at two-year colleges.

MEDICAL TECHNOLOGY BACHELOR OF SCIENCE

REQUIREMENTS FOR THE BACHELOR OF SCIENCE DEGREE IN MEDICAL TECHNOLOGY

Core program (64 credit hours)

BIOL 131	Introductory Ecology and Evolution	3
BIOL 132	Introductory Ecology and Evolution Laboratory	1
BIOL 133	Introductory Cell and Molecular Biology	3
BIOL 134	Introductory Cell and Molecular Biology Laboratory	1
BIOL 237	Genetics	3
BIOL 238	Genetics Laboratory	1
BIOL 245	Human Anatomy and Physiology I	4
BIOL 246	Human Anatomy and Physiology II	4
BIOL 256	Introduction to Clinical Science	1
BIOL 333	Biochemistry	3
BIOL 334	Biochemistry Laboratory	1
BIOL 338	Microbiology	3
BIOL 344	Parasitology	1
BIOL 431	Senior Seminar	1
BIOL 453	Basic Hematology	1
BIOL 461	Immunology and Serology	3
MEDT 490	Clinical Internship	15
MEDT 491	Clinical Internship	15

Subtotal: 64

Required supporting course work (27-29 credit hours)

CHEM 115	General Chemistry Lecture I	3
CHEM 125	General Chemistry Laboratory I	1
CHEM 116	General Chemistry Lecture II	3
CHEM 126	General Chemistry Laboratory II	1
CHEM 215	Organic Chemistry Lecture I	3
CHEM 225	Organic Chemistry Laboratory I	1
CHEM 216	Organic Chemistry Lecture II	3
CHEM 226	Organic Chemistry Laboratory II	1
STAT 250	Statistics for Scientists	3
PHYS 121	College Physics I	3
PHYS 123	College Physics Lab I and	1
PHYS 122	College Physics II	3
PHYS 124	College Physics II Lab or	1
PHYS 230	University Physics I	4
PHYS 232	University Physics I Lab and	1
PHYS 231	University Physics II	4
PHYS 233	University Physics II Lab	1

Subtotal: 27-29

NOTE: Chemistry and mathematics courses should be completed by the end of the sophomore year, physics courses by the end of the junior year.

Plus Clinical Internship

MEDT 490	Clinical Internship	15
or		
MEDT 491	Clinical Internship	15
Subtotal: 15		

Clinical Internship Courses

Each hospital uses slightly different names in categorizing areas of study. The basic categories are as follows:

Clinical Chemistry: Lecture and laboratory sequence involving the study and detection of biochemical components in body fluids. Methodology, theory, disease states, and instrumentation are stressed.

Clinical Microbiology: Lecture and laboratory rotation in which bacteria, fungi, parasites and viruses are studied, the emphasis being on bacteria. Biochemical, morphological and serological properties are emphasized.

Hematology/Coagulation: Lecture and laboratory sequence concerned with the study of blood. Theory and techniques dealing with cellular components and coagulation mechanisms of normal and abnormal blood are major topics.

Immunohematology (Blood Bank): Lecture and laboratory rotation dealing with the immunological properties of the blood, especially concerning the various blood groups and transfusion therapy. (Other theories and techniques of basic immunology may be included here or in another category.)

Urinalysis: Lecture and laboratory presentation of normal and abnormal physical, chemical, and cellular properties of urine.

TOTAL CREDIT HOURS: 106-108

MIDDLE CHILDHOOD SPECIALIST- MATHEMATICS BACHELOR OF SCIENCE

REQUIREMENTS FOR THE BACHELOR OF SCIENCE IN MIDDLE CHILDHOOD SPECIALIST – MATHEMATICS (83 CREDIT HOURS)

Required Courses

MATH 122	University Calculus I	4
MATH 123	University Calculus II	4
MATH 210	Mathematical Structures and Proof	4
MATH 231	Linear Algebra	4
MAED 301	Mathematics for School Teachers I	3
MAED 302	Mathematics for School Teachers II	3
MAED 303	Mathematics for School Teachers III	3
MAED 310	Reading and Writing Mathematics	3
MATH 341	Geometry	3

STAT 150	Statistical Ideas or	3
MAED 240	Statistics for School Teachers or	3
STAT 350	Probability and Statistics	3
MATH 381	History of Mathematics	3
MATH 405	Senior Seminar	1
	One additional MATH or STAT course numbered 311 or higher	3
MAED 105	Introduction to Contemporary Mathematics Education and	3
MAED 106	Contemporary Mathematics Education - Field Experience	
EDU 224	Adolescent Development	3
EDU 250	Introduction to the Exceptional Learner and	3
EDU 251	Practicum in Inclusive Education II	
MAED 276	Literacy and Technology for Science and Mathematics	3
EDU 301	Safe Schools/Healthy Students: Child Abuse and Child Abduction	1
EDU 302	Safe Schools/Healthy Students: Alcohol, Tobacco and Other Drug Abuse	1
EDU 303	Safe Schools/Healthy Students-DASA: Safety Education/Fire and Arson/School Violence	1
MAED 305	Diversity in the Teaching of Science and Mathematics and	3
MAED 313	Diversity in the Teaching of Science and Mathematics Field Experience	
EDU 321	Teaching in the Middle School	3
EDU 349	Educational Psychology	3
MAED 417	Middle School (Grades 5-9) Methods in Mathematics	3
MAED 416	Math Student Teaching Seminar	3
MAED 428	Student Teaching for Mathematics/Middle Childhood Education: Grades 5-6 Placement	6
MAED 429	Student Teaching for Mathematics/Middle Childhood Education: Grades 7-9 Placement	6

Subtotal: 83

All mathematics majors must complete a science course and its laboratory selected from the following:

Chemistry:

CHEM 115	General Chemistry Lecture I and	3
CHEM 125	General Chemistry Laboratory I	1

Subtotal: 4

or

Physics:

PHYS 230	University Physics I and	4
PHYS 232	University Physics I Lab	1

Subtotal: 5

NOTE:

- Majors in the Middle Childhood Specialist - Mathematics Track may satisfy this requirement by taking SCI 301, SCI 302, and SCI 303.

Candidates in all education programs are required to demonstrate competence in a foreign language. This requirement must be satisfied in any one of the following ways:

- Score of 85 percent or higher on New York State Regents Exam or New York State High School Equivalent Exam*: Requirement is fulfilled.
- Scores of 65 percent - 84 percent on New York State Regents Exam or New York State High School Equivalent Exam*: Student needs to take an Elementary I level course or an Elementary II level course of a language or equivalent course(s), or successfully complete an equivalent Fredonia proficiency exam.
- Scores below 65 percent on New York State Regents Exam or New York State High School Equivalent Exam*: Student needs to take an Elementary I level course and an Elementary II level course or equivalent course(s) of the same language.
- If student did not take a New York State Regents Exam or New York State High School Equivalent Exam*: Student needs to take an Elementary I level course and an Elementary II level course or equivalent course(s) of the same language

NOTE: The General Education foreign language requirement differs from the certification requirement and must be satisfied for degree conferral.

* *High School Equivalent Exam refers to a New York State Local School District Exam or Regional Exam in a Foreign Language.*

As of December 31, 2013, candidates in all education programs are required to complete training under the Dignity for All Students Act (DASA). Beginning in the Fall 2013 semester, the training required under the Dignity for All Student Act (DASA) will be included in EDU 303 at Fredonia. Undergraduate candidates planning to graduate after Fall 2013 who have already completed EDU 303 on campus or taken a workshop as a substitution for EDU 303 must also complete the EDU DASA workshop prior to graduation.

Students may double major in Mathematics-Middle Childhood Education Specialist and Mathematics, or in Mathematics-Middle Childhood Specialist and Applied Mathematics by completing all of the requirements for both majors.

Mathematics majors are encouraged to take additional courses in computer science consistent with their career and educational goals.

For certification information, please consult the Education section of the catalog.

TOTAL CREDIT HOURS: 83

MINORS

A "minor" is a specified minimum number of hours recorded on official transcripts, but involving fewer hours than a major. Below is a comprehensive list of all minors offered at Fredonia.

ACCOUNTING MINOR

REQUIREMENTS FOR THE MINOR IN ACCOUNTING

The department offers a minor in Accounting that requires 18 credit hours of accounting courses as specified below:

Required Courses

ACCT 201	Principles of Financial Accounting	3
ACCT 202	Principles of Managerial Accounting	3
ACCT 301	Intermediate Accounting I	3
ACCT 302	Intermediate Accounting II	3
ACCT 303	Cost Management	3
ACCT 307	Accounting Information Systems I	3

Subtotal: 18

AFRICAN AMERICAN STUDIES MINOR

Office: E304 Thompson Hall
(716) 673-3274

Dr. Jennifer Hildebrand, Coordinator

Email: africanamerican.studies@fredonia.edu

Website: <http://home.fredonia.edu/interdisciplinary>

The African American Studies minor provides an interdisciplinary investigation of the origins, experiences, conditions, accomplishments, and contributions of people of African ancestry in the Americas. The program is designed for all students who want to deepen their understanding of African Americans by studying their earlier history in Africa, their transition to the New World, and their diasporic experiences in the Americas. The program also seeks to promote new ways of thinking about race, culture and social representation from different perspectives—notably, historical, literary, sociological, anthropological, psychological and artistic.

African American Studies is for everyone. No matter your major or your future plans, the program will provide intellectual skills and cultural knowledge that will benefit you. A minor in African American Studies will deepen your ability to listen and communicate in a meaningful way. It will make you more aware and respectful of differences in your community. These skills will help to prepare you for employment in education, government, legislation, international business and marketing, urban planning, counseling and social work, the media, and many other fields.

REQUIREMENTS FOR THE MINOR IN AFRICAN AMERICAN STUDIES (21 CREDIT HOURS)

Students declaring an African American Studies minor may use past courses retroactively with approval of the coordinator.

Core courses (12 credit hours):

AMST 202	Introduction to American Studies	3
	or	
AMST 296	American Identities	3
ETHN 206	Introduction to African American Studies	3
ETHN 333	African American History to 1877	3
	or	
ETHN 334	African American History since 1877	3
ETHN 240	Introduction to African American Literature and Culture	3

Subtotal: 12

Electives (6 credit hours):

ANTH 322	Anthropology of Africa	3
ANTH 324	Anthropology of the Caribbean	3
DANC 231	African-Caribbean Dance	2
ENGL 340	Black Women Writers	3
ENGL 341	Harlem Renaissance	3
ENGL 342	African American Autobiography	3
ENGL 344	Contemporary Multiethnic American Literature	3
HIST 272	Africa to 1800	3
HIST 273	Africa From the 1800s	3
ETHN 333	African American History to 1877	3
ETHN 334	African American History since 1877	3
HIST 336	African American Black Women's History	3
HIST 343	Civil Rights Movement	3
HIST 344	African American Social Thought	3
ETHN 359	Ethnicity and Race	3
MUS 265	History of Jazz	3
MUS 267	African American Music	3
POLI 334	African Politics	3
POLI 371	Civil Rights and Liberties	3
SOC 275	Social Inequalities	3

Subtotal: 6

NOTE:

- Six credit hours earned in two courses, each in a different discipline; must not include a course that has been used for core course credit; other courses not listed may be included with approval of coordinator.

Capstone course (3 credit hours):

ETHN 402	Independent Study: African American Topics	3
	or	
ETHN 490	Ethnic Studies Internship	1-6

Subtotal: 3

Students are encouraged to explore relevant Study Abroad courses to meet the elective requirements.

The African American Studies minor falls under the umbrella of the Ethnic Studies program, which also offers minors in American Indian Studies, Latino Studies, and Multi-Ethnic Studies.

TOTAL CREDIT HOURS: 21

AMERICAN INDIAN STUDIES MINOR

Office: E304 Thompson Hall
(716) 673-3274

Dr. Jennifer Hildebrand, Coordinator

Email: americanindian.studies@fredonia.edu

Website: <http://home.fredonia.edu/interdisciplinary>

American Indian Studies provides an interdisciplinary focus on the historical experiences, cultural traditions and innovations, and political status of Indian peoples across the Americas. Students are particularly encouraged to consider the significance of American Indians' prior presence on these lands. Important topics of exploration include Native American ways of living, understanding the world, and organizing their societies; courses will also examine the impact of invasion and colonization on Indian America, discussions and debates about sovereignty, and the intersection of Indian and European histories and systems of knowledge.

American Indian Studies emphasizes the importance of exploring and interpreting historical and contemporary events from Native American perspectives that consider the many nations' unique history and experiences. Students completing a minor in American Indian Studies will be strongly encouraged to engage with discussions and debates about how their academic knowledge relates to the lived experiences of Native American people and communities.

American Indian Studies is for everyone. No matter your major or your future plans, the program will provide intellectual skills and cultural knowledge that will benefit

you. As the workplace and the world become more diversified, the ability to consider different perspectives and communicate across differences becomes increasingly valuable. American Indian Studies coursework will challenge students to think critically and to write persuasively and thoughtfully, pushing them to seek innovative solutions to problems which they understand to be multifaceted. Students in the program will be well-prepared for careers in human services, museum curatorship, library science, teaching, journalism, scholarship, law, health, inter-ethnic relations, and many other fields.

REQUIREMENTS FOR THE MINOR IN AMERICAN INDIAN STUDIES (21 CREDIT HOURS)

Students declaring an American Indian Studies minor may use past courses retroactively with approval of the coordinator.

Core courses (12 credit hours):

AMST 202	Introduction to American Studies	3
	or	
AMST 296	American Identities	3
ETHN 205	Introduction to American Indian Studies	3
ETHN 242	American Indian Literature	3

Subtotal: 9

One History course chosen from the following (3 credit hours):

ETHN 282	Pre-Columbian and Colonial Latin America	3
ETHN 283	Latin America: Revolution & Reform	3
ETHN 356	American Indian History	3
ETHN 357	Indians and Europeans in Early America	3
ETHN 358	20th Century American Indian Issues	3

Subtotal: 3

Electives (6 credit hours):

ANTH 321	Anthropology of Indian America	3
ENGL 331	American Literary Roots	3
SOC 275	Social Inequalities	3

Subtotal: 6

NOTE:

- Any of the History courses listed above NOT taken as a core requirement may be used as an elective.

Capstone course (3 credit hours):

ETHN 404	American Indian Capstone	3
	or	
ETHN 490	Ethnic Studies Internship	1-6

Subtotal: 3

Students are encouraged to explore relevant Study Abroad courses to meet the elective requirements.

The American Indian Studies minor falls under the umbrella of the Ethnic Studies program, which also offers minors in African American Studies, Latino Studies, and Multi-Ethnic Studies.

TOTAL CREDIT HOURS: 21

AMERICAN STUDIES MINOR

Office: 257 Fenton Hall

(716) 673-3848

Dr. Shannon McRae, Coordinator

Email: american.studies@fredonia.edu

Website: <http://home.fredonia.edu/interdisciplinary>

REQUIREMENTS FOR THE INTERDISCIPLINARY STUDIES MINOR IN AMERICAN STUDIES:

Required Courses

AMST 202	Introduction to American Studies	3
AMST 296	American Identities	3

Subtotal: 6

An additional 12 credit hours from the following list:

AMST 210	American Popular and Mass Cultures	3
AMST 215	Holidays and American Cultures	3
AMST 289	Comparative North America	3
AMST 338	19th Century American Culture	3
AMST 340	20th Century American Culture	3
AMST 347	United States Immigration	3
AMST 399	Special Topics	3
COMM 102	Mass Media and Society	3
ENGL 206	Survey of American Literature	3
ENGL 344	Contemporary Multiethnic American Literature	3
HIST 105	United States History I	3
	or	
HIST 106	United States History II	3
HIST 353	U.S. Consumer Culture	3
HIST 376	Film and American Culture	3
MUS 262	American Music	3
MUS 270	The History of American Popular Music, 1900-1963	3
PHIL 228	American Philosophy	3
POLI 120	American Politics	3
POLI 150	U.S. and World Affairs	3
POLI 365	American Political Thought	3

Subtotal: 12

or other courses as advised.

No more than 6 credit hours from a student's major or other minors may be counted toward the American Studies minor.

TOTAL CREDIT HOURS: 18**ANTHROPOLOGY MINOR**

Anthropology investigates human origins and diversity. Anthropologists attempt to understand human existence, both past and present, from a worldwide perspective. Their discipline has been called the most humanistic of the sciences and the most scientific of the humanities. Anthropology is an integrating academic discipline, consisting of four major divisions: physical anthropology, archaeology, linguistics, and cultural anthropology.

Requirements for an Anthropology Minor

Eighteen (18) hours in anthropology. ANTH 115 (p. 284) Introductory Anthropology (required), plus 15 additional credit hours in anthropology. At least 9 credit hours must be at the 300 or 400 level. At least 9 credit hours must be taken at Fredonia.

APPLIED MATHEMATICS MINOR**REQUIREMENTS FOR THE MINOR IN APPLIED MATHEMATICS****Required Courses**

MATH 122	University Calculus I	4
MATH 123	University Calculus II	4
MATH 223	University Calculus III	4
MATH 231	Linear Algebra	4
Subtotal: 16		

Plus three additional courses chosen from:

MATH 224	Differential Equations	3
MATH 322	Partial Differential Equations	3
MATH 325	Numerical Analysis	3
MATH 329	Mathematical Modeling	3
MATH 337	Combinatorics	3
MATH 359	Probability Models in Operations Research	3
MATH 365	Financial Mathematics	3
MATH 375	Deterministic Models in Operations Research	3
MATH 440	Graph Theory	3
STAT 350	Probability and Statistics	3
STAT 351	Regression and Analysis of Variance	3
STAT 355	Mathematical Statistics	3
PHYS 425	Mathematical Physics I	3
PHYS 426	Mathematical Physics II	3
CSIT 241	Discrete Mathematics for Computer Science I	3
CSIT 242	Discrete Mathematics for Computer Science II	3
Subtotal: 9		

NOTE: At least one of these courses must be a course numbered 311 or higher.

NOTE: A student may not minor in both Mathematics and Applied Mathematics.

TOTAL CREDIT HOURS: 25**ART HISTORY MINOR****REQUIREMENTS FOR THE MINOR IN ART HISTORY (21 CREDIT HOURS)****Foundation Program (6 credit hours)**

ARTH 101	Art in Culture from Prehistory to 1400	3
ARTH 102	Art in Culture from 1400 to the Present	3
Subtotal: 6		

Choose one of the following courses:

(Note that these courses are only offered every third semester)

ARTH 350	Art History Theory and Methods	3
or		
ARTH 355	Writing About Art	3
Subtotal: 3		

Plus the following electives (12 credit hours):

200-level ARTH courses	6
300-400 level ARTH courses	6
<hr/>	
Subtotal: 12	

NOTE: Students should consult with a department advisor in planning a course of study as an Art History minor.
Subtotal: 21

TOTAL CREDIT HOURS: 21**ATHLETIC COACHING MINOR**

Office: E336 Thompson Hall
(716) 673-4959

Dr. Reneta Barneva, Coordinator

Email: reneta.barneva@fredonia.edu

Website: <http://home.fredonia.edu/aps>

MINOR IN ATHLETIC COACHING (23 CREDIT HOURS)

The Athletic Coaching minor is offered to students seeking certification from The New York State Education Department (NYSED) to coach athletic teams in the public schools. Recipients of this minor will also have certification necessary to work in community programs and private schools and organizations.

The NYSED requires the following courses to partially meet the requirements for coaching certification:

- First Aid Skills and Knowledge

- Philosophy, Principles and Organization of Athletics in Education
- Health Sciences Applied to Coaching
- Theory and Techniques of Coaching

To complete the minor, students must also take the following courses: Fitness and Wellness, Sport Psychology, Pre-internship and an internship completed under the direction of a certified experienced coach.

Additional information concerning NYSED Coaching Certification may be found at http://www.p12.nysed.gov/ciai/pe/toolkitdocs/coachingguidelines_07_09.pdf.

Course Requirements:

HLTH 115	First Aid Skills and Knowledge	3
HLTH 303	Fitness and Wellness	3
PSY 129	Introduction to Psychology	3
PSY 237	Sport Psychology	3
SPMG 220	Health Sciences Applied to Coaching	3
SPMG 221	Philosophy, Principles and Organization of Athletics in Education	3
SPMG 298	Pre-Internship	1
SPMG 321	Theory and Techniques of Coaching	2
SPMG 400	Sport Studies Internship	1-12
Subtotal: 23		

NOTE: SPMG 400 is a variable 1-12 credit hour course. Students must complete the course with a minimum of two credit hours to satisfy the requirements for the minor.

TOTAL CREDIT HOURS: 23

BIOLOGY MINOR

REQUIREMENTS FOR THE MINOR IN BIOLOGY

A total of 22 credit hours of biology

Required Courses

BIOL 131	Introductory Ecology and Evolution	3
BIOL 132	Introductory Ecology and Evolution Laboratory	1
BIOL 133	Introductory Cell and Molecular Biology	3
BIOL 134	Introductory Cell and Molecular Biology Laboratory	1
Subtotal: 8		

either Biodiversity and General Ecology with labs:

BIOL 243	Organismal Biology	3
BIOL 244	Organismal Biology Laboratory	1

BIOL 330	Ecology	3
BIOL 331	Ecology Laboratory	1
Subtotal: 8		

or Genetics and Biochemistry with labs:

BIOL 237	Genetics	3
BIOL 238	Genetics Laboratory	1
BIOL 333	Biochemistry	3
BIOL 334	Biochemistry Laboratory	1
Subtotal: 8		

Biology courses at the 300 or 400 level (not including BIOL 440)	6
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Subtotal: 6

NOTE: Students electing BIOL 330 must have completed a minimum of 4 credit hours of chemistry; students electing BIOL 333 will be expected to have completed 16 credit hours of prerequisite chemistry courses.

TOTAL CREDIT HOURS: 22

BUSINESS ADMINISTRATION MINOR

REQUIREMENTS FOR THE MINOR IN BUSINESS ADMINISTRATION

The department offers a minor in Business Administration that requires 27 credit hours of courses as indicated below:

Required Courses

MATH 120	Survey of Calculus I and	3
BUAD 200	Fundamentals of Statistics for Business and Economics or	3
ECON 200	Fundamentals of Statistics for Business Administration and Economics and	3
ACCT 201	Principles of Financial Accounting	3
ACCT 202	Principles of Managerial Accounting	3
ECON 201	Principles of Macroeconomics	3
ECON 202	Principles of Microeconomics	3
BUAD 320	Managerial Finance	3
BUAD 323	Organizational Behavior	3
BUAD 328	Marketing Foundations	3
Subtotal: 27		

Accounting and Music Industry students wishing to minor in Business Administration must take at least 9 credit hours of 300/400 level BUAD-prefixed courses beyond those required for their respective major.

TOTAL CREDIT HOURS: 27

CHEMISTRY MINOR

REQUIREMENTS FOR THE MINOR IN CHEMISTRY

A minimum of 24 credit hours in chemistry is required including

Required Courses

CHEM 115	General Chemistry Lecture I	3
CHEM 116	General Chemistry Lecture II	3
CHEM 125	General Chemistry Laboratory I and	1
CHEM 126	General Chemistry Laboratory II or	1
CHEM 130	Honors General Chemistry Laboratory and	1
	16 additional credit hours at the 200-level or above	16

Subtotal: 24

NOTE: Of the 16 additional credit hours: (1) at least 2 credit hours must be in laboratory courses; (2) at least 6 credit hours must be from 300 or 400-level courses; and (3) CHEM 154, CHEM 170, CHEM 300, CHEM 302, CHEM 305, CHEM 371, and CHEM 372 cannot be counted.

TOTAL CREDIT HOURS: 24**COMMUNICATION MINOR****REQUIREMENTS FOR THE MINOR IN COMMUNICATION**

A minor in Communication requires 18 credit hours including

Required Courses

COMM 101	Fundamentals of Communication	3
	Other COMM courses	15

Subtotal: 18

NOTE: A minimum of 9 credit hours at the 300 level or above must be taken at Fredonia. Students may not use COMM 470- WNYF/FRS/Leader Practicum, COMM 475- Communication Supervision, COMM 480- Communication Internship, or COMM 490- Independent Study toward the minor requirements. Advising with the department is strongly recommended. The minimum GPA for successful completion of the minor is 2.50.

TOTAL CREDIT HOURS: 18**COMPUTER INFORMATION SYSTEMS MINOR****REQUIREMENTS FOR THE MINOR IN COMPUTER INFORMATION SYSTEMS****Required Courses**

CSIT 151	Introduction to Information Systems	3
CSIT 105	Visual BASIC I or	3
CSIT 121	Computer Science I	3
CSIT 205	Visual BASIC II or	3
CSIT 221	Computer Science II	3
CSIT 251	Information Systems Structures	3
CSIT 351	Business Systems Development	3
ACCT 201	Principles of Financial Accounting	3

Subtotal: 18**Two additional courses selected from:**

CSIT 201	Computer Security and Ethics	3
CSIT 203	Multimedia Systems	3
CSIT 225	Java Programming	3
CSIT 241	Discrete Mathematics for Computer Science I	3
CSIT 312	Computer Structures	3
CSIT 341	Data Structures	3
CSIT 333	Mobile Applications Development	3
CSIT 335	Data Communication and Networks I	3
CSIT 425	Software Engineering	3
CSIT 435	Data Communication and Networks II	3
CSIT 455	Relational and Object Databases	3
CSIT 456	Information and Decision Support Systems	3
CSIT 461	Introduction to AI and Knowledge Engineering	3
CSIT 462	Computer Graphics	3
CSIT 463	Introduction to Digital Image Processing and Computer Vision	3
CSIT 471	Information Systems Management	3
CSIT 473	Data Warehousing and Mining	3
CSIT 475	Electronic Commerce	3

Subtotal: 6

NOTE: At least one of these must be at the 300-400 level.

A minimum 15 credit hours counted toward the minor must be taken at Fredonia.

TOTAL CREDIT HOURS: 24**COMPUTER SCIENCE MINOR****REQUIREMENTS FOR THE MINOR IN COMPUTER SCIENCE****Required Courses**

MATH 120	Survey of Calculus I	3
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	or		
MATH 122	University Calculus I	4	
CSIT 121	Computer Science I	3	
CSIT 221	Computer Science II	3	
CSIT 241	Discrete Mathematics for Computer Science I	3	
CSIT 311	Assembly Language and Computer Organizations	3	
CSIT 341	Data Structures	3	
	or		
CSIT 224	Problem Solving Using Objects	3	
Subtotal: 18-19			

One additional course selected from:

CSIT 321	Paradigms of Programming Languages	3	
CSIT 333	Mobile Applications Development	3	
CSIT 413	Computer Architecture	3	
CSIT 425	Software Engineering	3	
CSIT 431	Introduction to Operating Systems	3	
CSIT 433	Compiler Construction	3	
CSIT 435	Data Communication and Networks II	3	
CSIT 441	Analysis and Design of Algorithms	3	
CSIT 443	Theory of Computation	3	
CSIT 455	Relational and Object Databases	3	
CSIT 456	Information and Decision Support Systems	3	
CSIT 461	Introduction to AI and Knowledge Engineering	3	
CSIT 462	Computer Graphics	3	
CSIT 463	Introduction to Digital Image Processing and Computer Vision	3	
CSIT 490	Seminar on Selected Topics	1-3	
CSIT 496	Special Topics	1-3	
CSIT 497	Thesis	3	
CSIT 499	Senior Project	3	
Subtotal: 3			

TOTAL CREDIT HOURS: 21-22**CREATIVE WRITING MINOR****REQUIREMENTS FOR THE MINOR IN CREATIVE WRITING**

The Minor in Creative Writing requires a minimum of 21 credit hours of courses.

Four (4) core courses as follows (12 credit hours):

ENGL 260	Introduction to Creative Writing	3	
ENGL 361	Intermediate Fiction Writing	3	
	or		
ENGL 362	Intermediate Poetry Writing	3	
ENGL 365	Form and Theory of Writing	3	
ENGL 460	Advanced Poetry Writing	3	
	or		

ENGL 461	Advanced Fiction Writing	3	
Subtotal: 12			

Three (3) elective courses chosen from the following (9 credit hours):

ENGL 261	Literary Publishing	3	
ENGL 271	Rhetoric for Writers	3	
ENGL 361	Intermediate Fiction Writing	3	
ENGL 362	Intermediate Poetry Writing	3	
ENGL 363	Intermediate Creative Nonfiction	3	
ENGL 366	Opinion in Journalism	3	
ENGL 369	Argumentative Writing	3	
ENGL 374	Writing and Social Change	3	
ENGL 375	Writing for the Professions	3	
ENGL 378	Advanced Writing I: The Essay	3	
ENGL 379	Writing in a Digital World	3	
ENGL 299/399	Special Topics	3	
ENGL 455	Writing Tutors	3	
ENGL 460	Advanced Poetry Writing	3	
ENGL 461	Advanced Fiction Writing	3	
ENGL 465	English Internships	1-12	
ENGL 490	Independent Study	1-6	
Subtotal: 9			

NOTE:

- Courses in the minor may be taken only once for credit, except for ENGL 299 or ENGL 399.
- Students may count ENGL 299 or ENGL 399 for credit in the minor only when the special topic focuses on writing.
- ENGL 399, ENGL 465, and ENGL 490 are variable credit hour courses. No more than 3 credit hours in internships and/or independent studies may be counted toward the minor.

ADDITIONAL REQUIREMENTS

- All students must earn a grade of C or higher in each of their required courses.
- A minimum of 15 credit hours counted toward the minor must be taken at Fredonia.
- Intermediate courses require submission of a portfolio for entrance to the course, and are prerequisite to the advanced courses. Portfolios are due about 7-10 days prior to advising.
- Students may count 6 credit hours of courses for both an English major and the creative writing minor.
- Students should seek prior permission from the Chairperson to include courses from other departments as electives in the minor. No more than 6 credit hours will be accepted.

- Please note that intermediate and advanced courses in poetry and fiction writing are typically offered once a year; students are advised to plan carefully to ensure they can complete the necessary coursework in a timely fashion.

TOTAL CREDIT HOURS: 21

CRIMINAL JUSTICE MINOR

REQUIREMENTS FOR THE MINOR IN CRIMINAL JUSTICE

The minor in Criminal Justice consists of a minimum of 21 credit hours that must include the following:

Required core courses (12 credit hours):

CRMJ 100	Introduction to Criminal Justice	3
CRMJ 230	Criminal Law	3
	or	
CRMJ 331	Criminal Procedure	3
	or	
POLI 277	Introduction to Law	3
	or	
POLI 383	Courts and Social Policy	3
CRMJ 240	Law Enforcement Policy and Practice	3
CRMJ 340	Introduction to Corrections	3

Subtotal: 12

Electives (9 credit hours from at least two disciplines):

CRMJ 331	Criminal Procedure	3
CRMJ 332	Homeland Security	3
CRMJ 333	Criminal Investigations	3
CRMJ 350	Special Topics	3
CRMJ 355	Organized Crime	3
CRMJ 360	Criminal Justice Ethics	3
CRMJ 361	Capital Punishment	3
CRMJ 370	Criminology	3
CRMJ 375	Serial and Mass Murder in the U.S.	3
CRMJ 380	Transnational Crime	3
CRMJ 440	Corrections Administration	3
CRMJ 441	Police Administration	3
CRMJ 470	Criminal Justice Internship	1-15
PHIL 303	Crime and Punishment	3
PHIL 362	Philosophy of Law	3
CSIT 201	Computer Security and Ethics	3
POLI 276	Law and Society	3
POLI 277	Introduction to Law	3
POLI 311	Fundamentals of Public Administration	3
POLI 370	American Constitutional Law	3
POLI 371	Civil Rights and Liberties	3
POLI 383	Courts and Social Policy	3
PSY 245	Social Psychology	3
PSY 246	Personality	3

PSY 356	Abnormal Psychology	3
PSY 358	Psychology and the Law	3
SOC 201	Social Problems	3
SOC 218	Introduction to Social Work	3
SOC 303	Social Class and Inequality	3
SOC 310	Sociology of Deviant Behavior	3
SOC 311	Sociology of Addiction	3
SOC 316	Minority Groups	3
SOC 350	Special Topics	1-3
SOC 363	Victimology	3
SOC 364	Juvenile Delinquency	3
SOC 365	Family Violence	3

Subtotal: 9

NOTE: SOC 350 (p. 526) Special Topics (as advised). At least 9 credit hours for the minor must be taken at the 300-level or above. Students may transfer up to 9 credit hours of appropriate course work towards completion of the minor.

TOTAL CREDIT HOURS: 21

DANCE MINOR

REQUIREMENTS FOR THE MINOR IN DANCE (27 CREDIT HOURS)

The Minor in Dance is comprised of dance technique courses in a variety of styles, with additional studies in choreography, repertory, dance history, kinesiology, and musical training. The dance program sponsors activities throughout the year, including master classes and workshops with professional companies and teachers. The dance minor can complement any major, and is open to all students on campus. Students must have completed 30 credits to audition for the dance minor. Auditions for the minor are held annually during the fall semester. Acceptance into the minor is based on an audition and a review of the student's transcript, with particular attention paid to grades achieved in DANC courses. Students wishing to declare the minor should have an overall G.P.A. of 3.0 or higher. Contact the Department of Theatre & Dance for more information.

B. 10 credit hours from the following by advisement:

DANC 111	Modern Technique I	2
DANC 211	Modern Technique II	2
DANC 311	Modern Technique III	2
DANC 112	Ballet I	2
DANC 212	Ballet II	2
DANC 312	Ballet III	2
DANC 113	Jazz Dance I	2
DANC 213	Jazz Dance II	2
DANC 313	Jazz Dance III	2
DANC 114	Tap Dance I	2
DANC 214	Tap Dance II	2

NOTE: Eight (8) credit hours at 200 or 300 level and at least two credit hours each in ballet, modern, and jazz. Students will be placed based on experience and proficiency.

B. 17 credit hours:

DANC 264	Choreography I	3
DANC 364	Choreography II	3
MUS 101	Beginning Music Theory I	3
DANC 250	Dance Ensemble	1
DANC 251	Dance Repertory	1
DANC 260	Dance Kinesiology	3
DANC 353	Western Dance History	3

NOTE: DANC 250 or DANC 251: Any combination of these two courses for a total of 2 credit hours.

TOTAL CREDIT HOURS: 27

DANCE STUDIO ADMINISTRATION MINOR

Office: Dods Hall 147

(716) 673-3355

Angelika Summerton, *Coordinator*

Email: Angelika.Summerton@fredonia.edu

Website: <https://home.fredonia.edu/interdisciplinary>

A dance studio can provide income as a part-time business or quickly grow into a larger private enterprise. The success is closely tied to the efficient and successful administration of the business and a long-standing personal relationship with its surrounding community. There are various styles of dance studios possible that can be tailored easily to the demands of the customer base or the creative endeavors of the proprietor. Good interpersonal communication and efficient organization are the backbone of such a community-oriented business. The Interdisciplinary Studies minor in Dance Studio Administration will provide the student with the necessary education, preparation and confidence to take the step into the direction of private ownership. The transferable skills acquired with this minor are in alignment with the University's mission to enrich the world through scholarship, artistic expression, community engagement, and entrepreneurship.

The Interdisciplinary Studies minor in Dance Studio Administration is comprised of courses from a variety of disciplines. The minor can complement any major, and is open to all students on campus.

REQUIRED COURSES FOR THE MINOR IN INTERDISCIPLINARY STUDIES – DANCE STUDIO ADMINISTRATION (21 CREDIT HOURS)

Required courses:

ACCT 201	Principles of Financial Accounting	3
POLI 277	Introduction to Law	3

COMM 111	Web Design	1
COMM 116	Desktop Publishing	1
COMM 118	Desktop Audio	1
CSIT 104	Introduction to Microcomputer Software	3
	or	
CSIT 151	Introduction to Information Systems	3
ECON 202	Principles of Microeconomics	3
THEA 121	Introduction to Technical Theatre	3
DANC 370	Dance Studio Management	3

TOTAL CREDIT HOURS: 21

EARTH SCIENCE MINOR

REQUIREMENTS FOR THE EARTH SCIENCE MINOR

Twenty-four (24) credit hours in Geosciences

Required Courses

GEO 165	Geology I	3
GEO 169	General Geology Lab	1
GEO 150	Moons and Planets	3
GEO 160	Oceanography	3
GEO 210	Geology II	3
GEO 215	Minerals and Rocks	4
GEO 311	Global Climate	3
	One 4-credit hour course from the 300-400 levels	

Subtotal: 24

TOTAL CREDIT HOURS: 24

ECONOMICS MINOR

REQUIREMENTS FOR THE MINOR IN ECONOMICS (24 TO 25 HOURS)

Supporting Course:

MATH 120	Survey of Calculus I	3
	or	
MATH 122	University Calculus I	4

Subtotal: 3-4

Lower Level Economics Core Courses:

ECON 201	Principles of Macroeconomics	3
ECON 202	Principles of Microeconomics	3

Subtotal: 6

Upper Level Economics Core Courses:

ECON 305	Intermediate Microeconomic Theory	3
	or	
ECON 350	Managerial Economics	3
ECON 310	Intermediate Macroeconomic Theory	3

	Subtotal: 6
Elective course requirements:	
Any three Economics courses outside the core at 300 level or above	9

Subtotal: 9
TOTAL CREDIT HOURS: 24-25

ENGLISH MINOR

REQUIREMENTS FOR THE MINOR IN ENGLISH

The minor in English requires a minimum of 21 credit hours of courses. Four (4) courses must be taken at the 300-level or above (a minimum of 12 credit hours). Three (3) additional courses must be taken at the 200-level or above (a minimum of 9 credit hours).

- All students must earn a grade of C or higher in each of their required courses.
- ENGL 100: English Composition may not be counted as part of the minor.
- No more than 9 credit hours may be transferred from other institutions toward the minor.
- No more than 3 credit hours earned in internships and independent study may be counted toward the minor.
- No more than 6 credit hours may be applied to the minor from the student's major program.
- Courses in the minor may be taken only once for credit, except for ENGL 299 *or* ENGL 399.

TOTAL CREDIT HOURS: 21

ENVIRONMENTAL STUDIES MINOR

Office: 340 Science Center
(716) 673-3292

Dr. Sherri A. Mason, Coordinator

Email: mason@fredonia.edu

Website: <http://home.fredonia.edu/interdisciplinary>

The Environmental Studies minor provides students with a broad interdisciplinary perspective on the relationship between humans and the natural world. Drawing equally on insights from the natural sciences, humanities, and social sciences, the program prepares students to address key environmental and social challenges of the 21st Century—unsustainable resources use, climate change, energy policies, ecosystem devastation, social justice issues, population growth and development, industrial food systems, pollution and waste, and human health problems, to name a few.

The Environmental Studies minor is open to all students, and it is particularly useful for students who are thinking

about environmentally focused careers in the areas of advocacy and public policy, communication, economics, history, journalism, law, or writing. The breadth and interdisciplinary nature of the program provides a solid foundation in the multitude of perspectives from which to view the natural world, and the variety of independent but interconnected paths from which to build a career focused on sustainability.

REQUIREMENTS FOR THE INTERDISCIPLINARY STUDIES MINOR IN ENVIRONMENTAL STUDIES (20 CREDIT HOURS):

Required Core Courses (12 credit hours):

Students will take at least one class from each of the four areas:

1. Natural Science:

BIOL 115	Environmental Biology	3
	or	
CHEM 113	Chemistry and the Environment	3
	or	
GEO 175	Thirsty Planet	3

Subtotal: 3

2. Historical Contexts:

HIST 310	World Environmental History	3
	or	
HIST 352	Environmental History of North America	3

Subtotal: 3

3. Social Science:

POLI 387	Environmental Policy	3
	or	
ECON 380	Environmental/Natural Resource Economics	3

Subtotal: 3

4. Humanities:

COMM 321	Environmental Communication	3
	or	
ENGL 333	Environmental Literature	3

Subtotal: 3

Electives (6 credit hours):

Students will take at least two courses from two different disciplines, selected from the following list (or from the previous list of required core courses):

ANTH 342	Food and Culture	3
BIOL 222	Introduction to Tropical Biology	2
BIOL 223	Introduction to Tropical Biology	1
	Study Abroad Costa Rica	
BIOL 421	Biological Conservation	3
BIOL 426	Current Environmental Topics	3
ECON 340	Urban and Regional Economics	3
ENGL 374	Writing and Social Change	3

ESCI 105	Global Environmental Issues	3
GEO 359	Vanishing Earth Resources	3
HIST 353	U.S. Consumer Culture	3
POLI 240	Urbanization and Environmental Challenges	3
SOC 215	Introduction to Public Health	3
SOC 303	Social Class and Inequality	3

Subtotal: 6**Capstone (2 credits):**

ESCI 440	Environmental Sciences Seminar	1
ESCI 441	Environmental Sciences Senior Seminar	1

Subtotal: 2

NOTE: ESCI 440 AND ESCI 441 are capstone courses.

* Many of the upper level core and elective courses have prerequisites; students are responsible for knowing which prerequisites they need to take and should plan carefully as they complete this minor.

* No more than six credits from a student's major or other minors may be counted toward the Environmental Studies minor.

TOTAL CREDIT HOURS: 20**FILM STUDIES MINOR**

Office: 257 Fenton Hall
(716) 673-3848

Dr. Shannon McRae, Coordinator

Email: film.studies@fredonia.edu

Website: <http://home.fredonia.edu/interdisciplinary>

The Film Studies minor considers a variety of approaches to understanding the role of film in all its different forms and intents. A film may have predominantly literary content or may be specifically engaged with historical, political, or cultural concerns. It may also be primarily an abstract, aesthetic work, exploring alternatives to traditional narrative filmmaking. It is fundamentally a medium used to examine and study human knowledge and exploration. It is tightly interwoven into cultural identity throughout the world.

The Film Studies minor acquaints students with these ideas and introduces key landmarks in the history of film while identifying and challenging the grounds on which landmark status has been recognized. The departments of Communication, English, History, World Languages and Cultures, Politics and International Affairs, and Visual Arts and New Media, and the Women's and Gender Studies, and Film Studies programs offer courses regularly that engage in the academic study of the medium.

This interdisciplinary collaboration between many different departments and programs provides a wide variety of course offerings that change each semester. A

variety of special topics courses may be offered at any time. In any given semester, as many as 200 students may be enrolled in courses in which film is the major vehicle for study. Always check with the Film Studies minor coordinator if you have any questions about course availability.

REQUIRED COURSES FOR THE MINOR (18 CREDIT HOURS)**Core (at least 6 credit hours chosen from the following courses):****Choose one from**

COMM 155	Rhetoric of Vision and Sound	3
	or	
FILM 220	Film Form	3
	or	
ARTH 276	Film Form	3

Subtotal: 3

NOTE: Students should not take all three classes as only one will count towards the minor.

Choose one from

ENGL 280	Introduction to Film	3
ENGL 380	Film: Silence to Sound	4
ENGL 381	Narrative Film After 1940	4
ARTH 376	Film and Special Effects	3

Subtotal: 3-4**Electives**

(at least 12 credit hours, chosen from the following.) It is recommended that students have completed at least one core course before beginning work on electives:

ARTS 222	Introduction to Experimental Video	3
ARTH 345	Film Criticism	3
ARTH 359	New Media Writing	3
COMM 308	Documentary History and Criticism	3
COMM 309	Film Analysis	3
COMM 361	Script Writing Video/Film/Radio	3
COMM 386	International Films	3
ENGL 207	Drama and Film	3
ENGL 386	Women in Global Cinema	4
ENGL 387	American Film	4
FILM 399	Special Topics	1-4
FILM 401	Independent Study	1-4
HIST 363	Chinese Culture Through Films	4
HIST 376	Film and American Culture	3
LANG 380	World in Cinema: Special Topics	3
LANG 385	German Film	3
POLI 345	Film and Politics	4

Subtotal: 12

NOTE: FILM 399 content varies

Cinema Boutique Courses taken J-Term or Summer Session*

Film 399: Cult and Horror, 3 credit hours

Film 399: Cinema Vampires, 3 credit hours

* Any title offered at J-Term

Transfer credits by permission of the Coordinator.

Any course from the core not taken to fulfill core requirements.

At least 18 credit hours needed.

NOTES: Communication Department students can use only one course from their Major Track requirements.

Any History Department film course may be used as an elective.

No more than four courses in any one discipline may be taken for credit toward the film minor.

Faculty in various departments frequently offer other film-related courses that address the goals of the Film Studies program. To determine if a course not listed above will satisfy requirements for the Film Studies minor, students should contact the coordinator.

TOTAL CREDIT HOURS: 18

FRENCH OR SPANISH MINOR**REQUIREMENTS FOR THE MINOR IN FRENCH OR SPANISH**

A student may qualify for a minor in any one of the two major languages offered by the department. The minor requires 18 credit hours at the 200-level and above chosen under advisement and with departmental approval.

GEOGRAPHIC INFORMATION SYSTEMS MINOR

Office: 20 Houghton Hall
(716) 673-3884

Dr. Ann K. Deakin, Coordinator

Email: geographicinformation.systems@fredonia.edu

Website: <http://home.fredonia.edu/interdisciplinary>

The objective of the Geographic Information Systems minor is to provide an interdisciplinary educational experience that prepares undergraduate students to use Geographic Information Systems (GIS) within their chosen fields of study. A GIS is a computer-based system, comprised of both hardware and software that enables the collection, integration, analysis, and graphic display of geographically referenced data. It is estimated that as much as 85 percent of a government agency's data is geographic, including, at a minimum, street addresses, political boundaries, postal codes, and latitude and longitude

coordinates. Private sector organizations also work with an overwhelming amount of similar kinds of data in their day-to-day operations. With so much geographically based information, GIS has become essential to the effective operation of both public and private organizations.

The minor will prepare students for careers or graduate study in virtually all areas of the public or private sector where GIS is increasingly in use and critical for efficient management, comprehensive policy analysis, cost-effective decision making, and GIS display and processing. The curriculum in the minor is multidisciplinary in content and interdisciplinary in approach, drawing on a variety of disciplines and departments. Service learning is incorporated into several GIS courses and can be a focus of the GIS practicum experience. Students are strongly encouraged to attend a regional and/or state GIS conference with the GIS faculty and other students in the minor.

REQUIRED COURSES FOR THE MINOR

Students are required to take 25 credit hours (a minimum of 15 credit hours outside of their major) from among the following courses:

A. GIS Core Courses: 16 credit hours

CSIT 101	Programming with 3-D Graphics and Multimedia	3
	or	
CSIT 105	Visual BASIC I	3
	or	
CSIT 107	Web Programming I	3
	or	
CSIT 121	Computer Science I	3
GIS 201	Geographic Information Systems I	3
GIS 301	Geographic Information Systems II	3
GEO 301	Cartography	4
GIS 450	Directed Study	3
	or	
GIS 480	Independent Study	3
	or	
GIS 490	Internship	1-6

B. GIS Elective Courses: 9 credit hours

Students with the natural sciences focus should take GIS 350 Remote Sensing and Image Processing and two additional courses as advised by the coordinator.

Examples of possible electives include:

BIOL 330	Ecology	3
CSIT 205	Visual BASIC II	3
	or	
CSIT 207	Web Programming II	3
	or	
CSIT 221	Computer Science II	3
ESCI 410	Environmental Assessment	3
GEO 330	Geomorphology	4

GIS 401	Special Topics in Geographic Information Systems Statistics as advised	3
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Students with the social sciences focus should take GIS 360 (p. 407) Mapping the Social World and two additional courses as advised by the coordinator.

Examples of possible electives include:

BUAD 325	Principles of Marketing	3
ECON 380	Environmental/Natural Resource Economics	3
GIS 401	Special Topics in Geographic Information Systems	3
POLI 311	Fundamentals of Public Administration	3
SOC 215	Introduction to Public Health Statistics as advised	3

TOTAL CREDIT HOURS: 25

GEOLOGICAL SCIENCES MINOR

REQUIREMENTS FOR THE MINOR IN GEOLOGICAL SCIENCES

Twenty-three (23) credit hours in geosciences

Required Courses

GEO 165	Geology I	3
GEO 169	General Geology Lab	1
GEO 210	Geology II	3
	Four 4-credit hour courses, as advised, from the 200-300-400 levels	

TOTAL CREDIT HOURS: 23

HISTORY MINOR

REQUIREMENTS FOR A MINOR IN HISTORY

Eighteen (18) credit hours of course work in history, including 9 credit hours at the 300-level or above. The department suggests the following concentrations:

Global Studies:

HIST 101	World History I	3
HIST 102	World History II	3
HIST 386	Global Studies	3
	and three additional courses in global or non-Western history	

American Society and Culture:

HIST 105	United States History I	3
HIST 106	United States History II	3
	and four additional courses in American history	

North American Studies:

HIST 105	United States History I	3
HIST 106	United States History II	3
	and four additional courses on the history of Mexico, Canada, and the United States	

Middle East/Asian Studies:

HIST 101	World History I	3
HIST 102	World History II	3

four of the following courses:

HIST 261	Islamic Civilization	3
HIST 264	East Asian Civilizations	3
HIST 265	Pre-modern East Asia	3
HIST 266	Modern East Asia	3
HIST 268	History of South Asia	3
HIST 361	Modern Middle East	3
HIST 366	Late Imperial China	3
HIST 367	20th Century China	3
HIST 368	Modern Japan	3

European Studies:

HIST 115	Western Civilization I	3
HIST 116	Western Civilization II	3
	and four additional courses in European history	

Other concentrations are also possible. The program must be prepared in consultation with a department faculty member and receive department approval. No more than 9 credit hours of history credit earned prior to the declaration of the minor may be credited toward the program.

TOTAL CREDIT HOURS: 18

INDUSTRIAL-ORGANIZATIONAL PSYCHOLOGY MINOR

MINOR REQUIREMENTS:

A minimum of 21 credit hours, distributed as follows:

Core Courses (12 credit hours):

PSY 129	Introduction to Psychology	3
PSY 200	Statistics	3
PSY 317	Tests and Measurements	3
PSY 347	Organizational Psychology	3

Subtotal: 12

Three courses from the following:

PSY 227	Applied Psychology	3
PSY 245	Social Psychology	3
PSY 355	Group Dynamics	3
PSY 373	Human Factors	3
PSY 447	Introduction to Counseling	3
BUAD 321	Management and Organizational Behavior	3

Subtotal: 9

NOTE: A minimum of 2.00 cumulative quality point average in all psychology courses is required.

TOTAL CREDIT HOURS: 21

INTERDISCIPLINARY STUDIES SELF-DESIGN MINOR

Office: 806 Maytum Hall

(716) 673-3173

Dr. Carmen Rivera, Associate Dean for College of Liberal Arts & Sciences

Email: interdisciplinary.studies@fredonia.edu

Website: <http://home.fredonia.edu/interdisciplinary>

Students who are currently in a departmental major may self-design an Interdisciplinary Studies minor combining courses from a minimum of two disciplines. Student will need to declare the minor with the Registrar's Office using a Change of Major form. Students who are enrolled in any of the Interdisciplinary Studies majors may not declare a self-design minor.

REQUIREMENTS FOR MINOR IN INTERDISCIPLINARY STUDIES SELF DESIGN

- A group of six to nine courses focused on a particular topic or problem studied from many different points of view.
- Courses must be from a minimum of two different departments (disciplines), with no more than 9 credits from any one discipline, as indicated by the course prefix (POLI, SOC, etc.).
- Courses must be beyond the introductory level (200 level and above) for the disciplines, with a minimum of 50% of the courses at the 300-400 level.
- Maximum of 6 credits can overlap with required courses for the major (3 preferred).

INTERNATIONAL STUDIES MINOR

(The Interdisciplinary Studies: International Studies minor is housed in the Department of Politics and International Affairs.)

Office: E390 Thompson Hall

(716) 673-3887

Dr. Alexander Caviedes, Coordinator

Email: alexander.caviedes@fredonia.edu

Website: <http://home.fredonia.edu/interdisciplinary>

REQUIREMENTS FOR THE MINOR IN INTERNATIONAL STUDIES (25 CREDIT HOURS)

Core Requirements (10 credit hours):

Core requirements are intended to introduce students to international studies from the perspective of history, politics, and culture.

INTL 101	Introduction to International Studies	1
HIST 102	World History II	3
POLI 150	U.S. and World Affairs	3
ANTH 115	Introductory Anthropology	3

Upper Level Course Requirement (9 credit hours):

Three courses at the 300 or higher level.

All three courses must come from the same International Studies Specialization as defined in the University Catalog (the specialization tracks are International Political Economy; Advanced Industrial Societies; Cultural Studies of the Americas; The Developing World; European Cultural Studies; Peace and Conflict).

Foreign Language Requirement (minimum 3 credit hours):

The foreign language requirement may be completed via any of the following options:

3. Completion of course work through the 216 level (second-semester intermediate)

Important note about this requirement:

If a language is offered by Fredonia at the elementary (115-116) level only, then, after completing these two courses, a student has the following options for completing the foreign language requirement, with the approval of the program advisor:

- a. With courses taken during a study-abroad program in a country where that language is spoken;
 - b. With intermediate-level language courses taken at an approved institution in the U.S., including courses offered online through the SUNY Learning Network;
 - c. By taking an additional foreign language sequence at the 115-116 level.
2. Students with demonstrated proficiency in a foreign language must take a minimum of one course (3 credit hours) at the college level. Students may complete this requirement at Fredonia, in a program at an approved institution in the U.S., or in a foreign country.
 3. Additional foreign language coursework at the 300- and 400-levels is strongly recommended.

International Experience (3 credit hours):

All International Studies minors must complete a 3-credit “international experience,” which can be fulfilled via enrollment in a short-term or long-term study-abroad program or the completion of an internship with an international agency.

TOTAL CREDIT HOURS: 25

ITALIAN STUDIES MINOR

Office: 2104 Fenton Hall
(716) 673-4496

Dr. Chiara De Santi, *Coordinator*

Email: Chiara.DeSanti@fredonia.edu

Website: <http://home.fredonia.edu/interdisciplinary>

REQUIREMENTS FOR THE MINOR IN ITALIAN STUDIES

Twenty-one credit hours of coursework focusing on development of Italian language skills, and study of Italian culture and history from an interdisciplinary perspective.

Required courses (9 credit hours):

ITAL 115	Elementary Italian I	3
ITAL 116	Elementary Italian II	3
ITAL 210	Italian Through Literature and Popular Culture	3

ITAL 210: or equivalent experience such as Study Abroad or Internship in Italy

Elective courses:

12 credit hours of coursework chosen from the following list of courses by advisement. At least 9 credit hours must be at the 300 level or higher, and chosen from at least two separate disciplines.

LANG 380	World in Cinema: Special Topics	3
LANG 400	Special Topics in Languages and Literatures	.5-3
LANG 410	Directed Study	1-3
ARTH 215	Survey of Renaissance Art	3
ARTH 290	Art History Abroad	.5-3
ARTH 315	Renaissance Art	3
ARTH 318	Baroque Art	3
ENGL 389	Greek and Roman Literature	3
HIST 302	Republican/Imperial Rome	3
HIST 303	Medieval History I	3
HIST 304	Medieval History II	3
HIST 305	Europe in the Era of the Renaissance	3
HIST 309	The Modernization of Europe	3
HIST 311	Europe in the Modern World	3
HIST 391	History of Christianity I	3
INDS 315	Italian American Experience	3
INDS 400	Independent Study	.5-8

INDS 480	Independent Study	1-6
PHIL 223	Roman Philosophy	3
PHIL 369	Topics in Philosophy	1-3
POLI 330	Western European Politics	3
POLI 343	International Migration and Immigration Politics	3
POLI 439	Directed Study: Comparative Politics	1-3
THEA 359	Commedia dell'Arte	3
THEA 451	History of the Theatre I	3

INDS 400, INDS 480, LANG 380, LANG 400, LANG 410, and POLI 439: focus on Italy

ARTH 290: if in Italy

PHIL 369: focus on Italy – Machiavelli, Dante, etc

PSC 390: online Buffalo State

3

TOTAL CREDIT HOURS: 21

LATINO STUDIES MINOR

Office: E304 Thompson Hall
(716) 673-3274

Dr. Jennifer Hildebrand, *Coordinator*

Email: latino.studies@fredonia.edu

Website: <http://home.fredonia.edu/interdisciplinary>

Latino Studies, an interdisciplinary minor, takes you *de la clase a la calle* - “from the classroom discussion to the realities in the streets of our diverse communities.” The program provides an overview of the historical, political, social, educational, economic and cultural developments that affect Latinos in the Americas. “Latino” has been defined broadly to include people of Latin American background who reside in the U.S., where they are the fastest growing ethnic population. At a time when “globalization” and “immigration” have become part of everyday political and social discourse, students gain an understanding of the complex dynamics of transnational communities and transculturation.

One of the strengths of Fredonia’s approach to the minor is our emphasis on the idea of “de la clase a la calle” — “from the classroom to the streets.” This program emphasizes taking the theoretical issues and discussions of the classroom and putting them into practical initiatives and strategies in our communities. This phrase also keeps us rooted in the origins of all Ethnic Studies programs, which emerged directly from the Civil Rights Movement and other social movements of the Sixties and Seventies. Diverse groups of students demanded a curriculum that addressed the different historical and cultural experiences of many groups in the United States. University administrators across the country, tired of the public demonstrations and sit-downs held in the middle of their campuses, allowed students and faculty to incorporate the

discussions that had been taking place on the street into the curriculum.

Latino Studies is for everyone! No matter your major or your future plans, the program will provide intellectual skills and cultural knowledge that will benefit you. A minor in Latino Studies opens doors for careers in government, legislation, international organizations, international business and marketing, immigration laws, land management, urban planning, counseling and social work, the media, and many other fields.

REQUIREMENTS FOR THE MINOR IN LATINO STUDIES (21 CREDIT HOURS)

Students declaring a Latino Studies minor may use past courses retroactively with approval of the coordinator.

Core courses (12 credit hours):

AMST 202	Introduction to American Studies	3
	or	
AMST 296	American Identities	3
ETHN 225	Introduction to Latino History and Culture	3

Subtotal: 6

One Spanish language course from the following (3 credit hours):

SPAN 313	Spanish Conversation	3
	or	
SPAN 314	Spanish Composition	3
	or	
	Demonstrated proficiency at this level	

Subtotal: 3

One History course from the following (3 credit hours):

ETHN 282	Pre-Columbian and Colonial Latin America	3
ETHN 283	Latin America: Revolution & Reform	3

Subtotal: 3

Electives (6 credit hours):

ANTH 324	Anthropology of the Caribbean	3
ARTH 280	Survey of Pre-Columbian Art: Mesoamerica	3
DANC 231	African-Caribbean Dance	2
ETHN 241	Introduction to Latino/a Literature	3
ETHN 304	Latina Literature and Cultural Studies	3
ENGL 344	Contemporary Multiethnic American Literature	3
ETHN 359	Ethnicity and Race	3
INTL 303	Globalization in Latin America	3
LANG 327	Magic Realism in Latin American Literature	3
MUS 334	Music of Latin America	3

POLI 343	International Migration and Immigration Politics	3
POLI 351	The Inter-American System	3
POLI 371	Civil Rights and Liberties	3
SOC 275	Social Inequalities	3
SOC 303	Social Class and Inequality	3
SPAN 325	Survey of Spanish-American Literature	3
SPAN 340	Cultural Issues in the Hispanic World	3
SPAN 425	Spanish-American Fiction	3
WGST 203	Chicana Writers/Visual Artists	3

Subtotal: 6

NOTE:

- **6 credit hours earned in two courses, each in a different discipline; must not include a course that has been used for core course credit; other courses not listed may be included with approval of coordinator.**

Capstone (3 credit hours):

ETHN 403	Contemporary Issues in Latino Studies	3
	or	
ETHN 490	Ethnic Studies Internship	1-6

Subtotal: 3

Students are encouraged to explore relevant Study Abroad courses to meet the elective requirements.

Study Abroad programs such as INED 399 J-Term in Puerto Rico, INED 399 Study Abroad in Oaxaca, Mexico and INED 399 Study Abroad in Puebla, Mexico are strongly recommended.

The Latino Studies minor falls under the umbrella of the Ethnic Studies program, which also offers minors in African American Studies, American Indian Studies, and Multi-Ethnic Studies.

TOTAL CREDIT HOURS: 21

LEADERSHIP STUDIES MINOR

Office: Campus Life Office, Williams Center
(716) 673-3143

Mr. Mark Suida, Coordinator

Email: mark.suida@fredonia.edu

Website: <http://home.fredonia.edu/interdisciplinary>
<http://www.fredonia.edu/campuslife/leadership/>

This minor in Leadership Studies is an interdisciplinary program created with substantial student input. It requires 21 credit hours of course work and practicum credit. The program is designed to provide intensive study of leadership concepts and ideas, complemented by co-curricular activities provided through Student Affairs.

The goals of the Leadership Studies minor are:

- to introduce leadership as a recognized and well-documented set of concepts and ideas gleaned from designated courses that enhance leadership concepts;
- to provide the opportunity for an internship experience that documents appropriate leadership skills;
- to allow students to use this minor to complement a variety of major programs, including but not limited to, Business Administration, Communication, Social Work, or Education; and
- to offer a substantial menu of educational opportunities in an effort to enhance student potential as active and progressive individuals in a variety of diverse and competitive professional settings.

Requirements for consideration:

- Undergraduate student enrolled at Fredonia;
- Maintain a cumulative grade point average of 2.5;
- Consultation (and approval) with current Academic Advisor; and
- Application and consultation.

Affiliated Student Organizations and Activities

The Leadership Corps provides opportunities for students to program special events, develop leadership competencies, and enhance presentations skills by facilitating workshops for campus and community organizations. Examples of this are Resident Assistant training from several college campuses on our ropes course at the College Lodge, Myers-Briggs Type Inventory presentations, and etiquette dinners.

The Leadership Awards Reception (co-sponsored by Leadership Corps, Campus Life, Faculty Student Association, and University Advancement) provides an opportunity for recognition of our student leaders on campus, while allowing a reception for several scholarship announcements.

The Leadership Minor would also provide students with hand-on experience in the New York Leadership Educator's Consortium (NYLEC). A yearly conference is planned in the summer to provide students and professionals in the field of leadership development an opportunity to learn new theories and present on current trends.

REQUIREMENTS FOR THE MINOR IN LEADERSHIP STUDIES

Completion of the minor requires a minimum of 21 credit hours.

Course work focuses on five basic components:

- theory of leadership development;

- leadership in a changing world;
- communication skills (oral and written);
- techniques for working with groups and organizations; and
- presentation skills.

The minor includes a required internship, scheduled in consultation with the program coordinator.

Core (6 credit hours):

LEAD 201	Advanced Leadership Development	3
LEAD 490	Internship in Leadership	1-6

Electives (15 credit hours):

Must cover at least three of the following areas:

At least six (6) of these credit hours must be at the 300-400 level, and no more than three (3) of these credit hours may be from any one discipline. Many of these courses have prerequisites, but often the prerequisite is a course that could be taken to satisfy a requirement in the General Education Program.

Global Perspectives:

Courses that focus on effective and appropriate interaction with people from various cultural backgrounds, noting different dimensions in both a domestic and international context.

AMST 347	United States Immigration	3
COMM 424	International Public Relations	3
COMM 465	Intercultural Communication	3
ENGL 205	Epic and Romance	3
ENGL 207	Drama and Film	3
ENGL 209	Novels and Tales	3
ENGL 211	World Poetry	3
ENGL 303	Global Literary Landmarks	3
ENGL 351	Language and Society	3
ENGL 386	Women in Global Cinema	4
ENGL 391	Romanticism in World Literature	3
ECON 320	International Trade/Finance	3
ECON 345	Comparative Economic Systems	3
INDS 241	Introduction to Latino Literature and Culture	3
INED 400	Study Abroad	1-23
LANG 322	French Civilization/Culture	3
LANG 388	Spanish Civilization/Culture	3
MUED 315	Music, Play, and Self	3
MUS 333	Musics of the World	3
POLI 344	Comparative Public Policy	3
POLI 352	World Political Geography	3
POLI 356	U.S. Foreign Policy	3
PSY 370	Cross-Cultural Psychology	3
SSED 204	World Regional Geography	3
WGST 201	Introduction to Gender Studies	3

Communication Skills:

Courses that provide a wide range of opportunities to develop and enrich communication skills, including but limited to verbal, non-verbal and electrical. Skill base includes a focus on thinking critically about everyday interactions, including assessment of the content and contributions to creation of meaning. The student will also work on the shaping of personal and social realities.

COMM 105	Public Speaking	3
COMM 221	Interpersonal Communication	3
COMM 251	Audio Production I	3
COMM 321	Environmental Communication	3
BUAD 235	Introduction to Business Communication	3
ENGL 260	Introduction to Creative Writing	3
ENGL 352	History of the English Language	3
ENGL 373	English Grammar for Everyone	3
ENGL 374	Writing and Social Change	3
ENGL 375	Writing for the Professions	3
THEA 130	Acting for Non-Majors	3

Groups and Organizations:

Courses that emphasize communication in small task groups involving decision making and problem solving. These courses will also review theories on the roles of group maintenance, cohesion, conflict management, leadership, socialization and personality management relating to gender, ethnicity, race and other group dynamics.

BUAD 323	Organizational Behavior	3
BUAD 378	Business and Ethics	3
COMM 222	Principles of Public Relations	3
COMM 301	Group Communication	3
COMM 373	Gender and Communication	3
COMM 460	Organizational Communication	3
ENGL 314	Women Writers	3
HIST 359	Ethnicity and Race	3
SPMG 210	Principles of Sports Management	3
POLI 276	Law and Society	3
PSY 245	Social Psychology	3
PSY 347	Organizational Psychology	3
PSY 355	Group Dynamics	3
PSY 391	Multicultural Counseling	3
SOC 204	Social Psychology	3
SOC 316	Minority Groups	3

Presentation Skills:

Courses that develop and enhance the student's presentation abilities through the use of the microcomputer and its different programs and tools.

CSIT 104	Introduction to Microcomputer Software	3
CSIT 107	Web Programming I	3
CSIT 120	Computer Science Overview	3
COMM 110	Desktop Motion	1
COMM 111	Web Design	1

COMM 112	Desktop Video	1
COMM 114	Electronic Darkroom	1
COMM 116	Desktop Publishing	1
GIS 201	Geographic Information Systems I	3
LEAD 101	Intro to Leadership Seminar	1

NOTE:

1. Students may count no more than 3 credits from their major program to the minor in Leadership.
2. Students that wish to declare a Leadership minor must do so prior to course selection for the second semester of their junior year.

TOTAL CREDIT HOURS: 21**LEGAL STUDIES MINOR**

For students interested in a broad interdisciplinary background in law and related social science areas. A minimum of 21 credit hours distributed as follows:

REQUIREMENTS FOR A MINOR IN LEGAL STUDIES**Core Requirements (6 credit hours)**

POLI 276	Law and Society	3
POLI 277	Introduction to Law	3

Subtotal: 6**Law Courses (15 credit hours):**

INDS 285	Mock Trial I	
POLI 287	Mock Trial II	3
ACCT 311	Business Law I	3
ACCT 312	Business Law II	3
BUAD 310	Legal Environment of Business	3
PHIL 303	Crime and Punishment	3
PHIL 312	Current Moral Issues and Principles	3
PHIL 362	Philosophy of Law	3
PHIL 364	Justice, Law, and Economics	3
POLI 370	American Constitutional Law	3
POLI 371	Civil Rights and Liberties	3
POLI 383	Courts and Social Policy	3
PSY 358	Psychology and the Law	3
POLI 492	Legal Intern	3-6

Subtotal: 15**NOTE:**

- 12 credit hours at 300-level or above;
- INDS 285 / POLI 287 may be taken only once for completion of minor;
- Only three credit hours of POLI 492 may be applied for completion of the minor.

Most professions require effectiveness in writing and speaking. This is certainly true of the legal profession. Students are advised to choose courses which

will help them develop these skills; e.g. COMM 105 for speaking; upper division courses as electives for writing. Students should also acquire knowledge of standard computer software including word processing, spreadsheet and database programs. Familiarity with bibliographic and data search routines including the Internet are strongly encouraged.

TOTAL CREDIT HOURS: 21

MATHEMATICS MINOR

REQUIREMENTS FOR THE MINOR IN MATHEMATICS

Required Courses

MATH 122	University Calculus I	4
MATH 123	University Calculus II	4
MATH 210	Mathematical Structures and Proof	4
MATH 223	University Calculus III	4

Plus three additional MATH or STAT courses chosen from:

MATH 224	Differential Equations	3
MATH 231	Linear Algebra	4
	and	
	courses numbered 311 or higher	

TOTAL CREDIT HOURS: 25-26

MULTI-ETHNIC STUDIES MINOR

Office: E304 Thompson Hall
(716) 673-3274

Dr. Jennifer Hildebrand, *Coordinator*

Email: multiethnic.studies@fredonia.edu

Website: <http://home.fredonia.edu/interdisciplinary>

Multi-Ethnic Studies is an interdisciplinary program that encourages a broad, often comparative, study of race and ethnicity in the Americas and the larger world. As our society becomes increasingly diverse, a minor in Multi-Ethnic Studies helps students to understand the rich history of multiple groups in the United States while simultaneously preparing them to thrive in an increasingly diversified workplace and a globalized economy.

Students minoring in Multi-Ethnic Studies will engage in conversations about our similarities as human beings as well as the misunderstandings sometimes caused by our differences. The classroom will provide a safe space where the experiences and perspectives of the people we study as well as our own backgrounds and views can be explored and addressed intellectually and frankly.

Multi-Ethnic Studies is for everyone! No matter your major or your future plans, the program will provide intellectual skills and cultural knowledge that will benefit you. As the workplace and the world become more diversified, the ability to consider different perspectives

and communicate across differences becomes increasingly valuable. Multi-Ethnic Studies coursework will challenge students to think critically and to write persuasively and thoughtfully, pushing them to seek innovative solutions to problems which they understand to be multifaceted. Students in the program will be well-prepared for careers in human services, museum curatorship, library science, teaching, journalism, scholarship, law, health, inter-ethnic relations, and many other fields.

REQUIREMENTS FOR THE MINOR IN MULTI-ETHNIC STUDIES (21 CREDIT HOURS)

Students declaring a Multi-ethnic Studies minor may use past courses retroactively with approval of the coordinator.

Core courses (9 credit hours selected from the following):

AMST 202	Introduction to American Studies	3
	or	
AMST 296	American Identities	3

Subtotal: 3

Two courses selected from the following three (6 credit hours):

ETHN 205	Introduction to American Indian Studies	3
ETHN 206	Introduction to African American Studies	3
ETHN 225	Introduction to Latino History and Culture	3

Subtotal: 6

Electives:

Three courses (nine credit hours) must be taken, one each from African American Studies, American Indian Studies, and Latino Studies. Students may substitute one Multi-Ethnic Studies course; however, it cannot be from the area that they omitted when selecting two courses from ETHN 205, ETHN 206, or ETHN 225. (In other words, if you do NOT take ETHN 205, Introduction to African American Studies, you MUST take an elective in the African American Studies area.) Courses should be selected from at least two different disciplines. Must not include a course that has been used for core course credit, but students may take the third course from above (ETHN 205, ETHN 206, or ETHN 225) as an elective. Other courses not listed may be included with approval of coordinator.

African American Studies (3 credit hours):

ANTH 324	Anthropology of the Caribbean	3
DANC 231	African-Caribbean Dance	2
ETHN 240	Introduction to African American Literature and Culture	3
ENGL 340	Black Women Writers	3
ENGL 341	Harlem Renaissance	3
ENGL 342	African American Autobiography	3

ETHN 333	African American History to 1877	3
ETHN 334	African American History since 1877	3
HIST 336	African American Black Women's History	3
HIST 343	Civil Rights Movement	3
HIST 344	African American Social Thought	3
MUS 265	History of Jazz	3
MUS 267	African American Music	3
POLI 328	African American Politics	3

Subtotal: 3**American Indian Studies (3 credit hours):**

ANTH 321	Anthropology of Indian America	3
ETHN 242	American Indian Literature	3
ETHN 282	Pre-Columbian and Colonial Latin America	3
ETHN 356	American Indian History	3
ETHN 357	Indians and Europeans in Early America	3
ETHN 358	20th Century American Indian Issues	3

Subtotal: 3**Latino Studies (3 credit hours):**

ANTH 324	Anthropology of the Caribbean	3
ETHN 241	Introduction to Latino/a Literature	3
ENGL 304	Latina Literature and Cultural Studies	3
ETHN 282	Pre-Columbian and Colonial Latin America	3
ETHN 283	Latin America: Revolution & Reform	3
LANG 327	Magic Realism in Latin American Literature	3
MUS 334	Music of Latin America	3
SPAN 215	Intermediate Spanish I	3
SPAN 315	Introduction to Readings in Hispanic Literature	3
SPAN 313	Spanish Conversation	3
SPAN 325	Survey of Spanish-American Literature	3
SPAN 425	Spanish-American Fiction	3
WGST 203	Chicana Writers/Visual Artists	3

Subtotal: 3**Multi-Ethnic Studies (3-6 credit hours):**

ETHN 359	Ethnicity and Race	3
	or	
HIST 359	Ethnicity and Race and	3
SOC 275	Social Inequalities	3

Subtotal: 3-6

NOTE:

- New courses or special topics courses may be credited toward the minor with approval from the coordinator.

Capstone (3 credit hours):

ETHN 405	Issues in Multi-Ethnic Studies	3
	or	
ETHN 490	Ethnic Studies Internship	1-6

Subtotal: 3

Students are encouraged to explore relevant Study Abroad courses to meet the elective requirements.

The Multi-Ethnic Studies minor falls under the umbrella of the Ethnic Studies program, which also offers minors in African American Studies, American Indian Studies, and Latino Studies.

TOTAL CREDIT HOURS: 21**MUSEUM STUDIES MINOR****Dr. Ellen Litwicki, Coordinator**Email: museum.studies@fredonia.eduWebsite: <http://home.fredonia.edu/interdisciplinary>

The Museum Studies minor provides an interdisciplinary introduction to the field of museum work. The minor will prepare students for graduate work in museum studies and for professional careers in history, art, anthropological, or science/natural history museums.

A minor in Museum Studies will uniquely qualify Fredonia students for this ever-expanding discipline, which includes positions in historic preservation, conservation, graphic design, public relations, social media, grant writing, curatorship, and other fields. The minor is congruent with majors in various areas, including Art History, History, Visual Arts & New Media, Natural Sciences (Geosciences, Biology, Physics, Chemistry), American Studies, and Communication, among others. The minor in combination with an education major will help prepare students to enter the rapidly growing field of Museum Education. Moreover, the minor provides opportunities for service learning through internships and the capstone and provides benefits to understaffed local cultural institutions.

Required: 21 credit hours from the following. Students declaring a Museum Studies minor may use past courses retroactively after consultation with the coordinator.

Required courses (9 credit hours):

INDS 202	Introduction to Museum Studies	3
INDS 302	Special Topics: Museum Studies	3
INDS 494	Museum Studies Capstone	3
INDS 495	Museum Studies Portfolio Completion	

Subtotal: 9

Electives (12 credit hours):

to be chosen from History, Art History, Anthropology, Geosciences, Biology, Physics, Communication, American Studies, and other relevant disciplines, in consultation with the coordinator. No more than 6 of the 12 credit hours may be in one discipline, and at least 6 credit hours must be at the 300 level or above.

Subtotal: 12**Optional/Recommended:**

A museum internship or practicum for 1-3 credit hours. A 3-credit-hour internship may substitute for one of the elective courses. Possible internships include but are not limited to:

ARTH 499	Internship	1-15
HIST 490	Public History Internship	1-6
ANTH 473	Museum Internship	3
GEO 445	Geosciences Internship	1-15
BIOL 450	Modern Concepts in Biology	1-4
SCI 491	Special Topics in Interdisciplinary Science	1-6

Subtotal: 1-3**TOTAL CREDIT HOURS: 21****MUSIC MINOR**

The Music Minor is designed for any undergraduate student not otherwise pursuing a degree in the School of Music. It is designed to be flexible such that it can serve a variety of interests, that is, one can focus on traditional, jazz, or world music studies. However, entry into some of the coursework requires prior knowledge and experience in music, so the student desiring a music minor must contact the School of Music Office for advice and placement.

REQUIREMENTS FOR THE MINOR IN MUSIC**Requirements:**

MUS 104	Applied Music Class for Non-Music Majors	1
	Additional Performance Study, such as MUS 104, Jazz Improvisation, etc.	2
	Ensembles (per advisement)	2
MUS 264	Music History in Western Civilization II	3

Subtotal: 9

NOTE: MUS 104 Applied Music Class for Non-Music Majors, two semesters required, for a total of 2 credit hours (included in total above).

Select between these options:

MUS 101	Beginning Music Theory I and	3
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MUS 102	Beginning Music Theory II or all of	3
MUS 121	Aural Skills I	2
MUS 122	Aural Skills II and	2
MUS 123	Music Theory I	3
MUS 124	Music Theory II	3

Subtotal: 6-10**Select one course from the following:**

MUS 263	Music History in Western Civilization I	3
MUS 265	History of Jazz	3
MUS 333	Musics of the World	3

Subtotal: 3**Electives:**

Electives in music theory, music history and literature, and music education	8-12
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Subtotal: 8-12

NOTE: Students interested in Jazz should elect MUS 265 History of Jazz, MUS 361 Jazz Improvisation, and MUS 362 Jazz Theory.

TOTAL CREDIT HOURS: 26-34**NON-FICTION VIDEO PRODUCTION MINOR****REQUIREMENTS FOR THE MINOR IN NON-FICTION VIDEO PRODUCTION****Required Courses (21 credit hours):**

COMM 118	Desktop Audio	1
COMM 155	Rhetoric of Vision and Sound	3
COMM 254	Video Field Production	3
COMM 255	Studio Production	3
COMM 366	Postproduction	3
	Two upper-level Production courses (4 credits each) in studio or documentary video production	8

Subtotal: 21

NOTE: A total of 21 credit hours for either of the two emphases.

TOTAL CREDIT HOURS: 21**PHILOSOPHY MINOR****REQUIREMENTS FOR THE MINOR IN PHILOSOPHY**

Eighteen (18) credit hours in philosophy with at least 9 credit hours in courses numbered 300 or above, as advised.

PHYSICS MINOR**REQUIREMENTS FOR THE MINOR IN PHYSICS (38 CREDIT HOURS)****A minimum of 23 credit hours in physics, including**

PHYS 230	University Physics I	4
PHYS 231	University Physics II	4
PHYS 232	University Physics I Lab	1
PHYS 233	University Physics II Lab	1
PHYS 234	Modern Physics	4

Subtotal: 14**Additional Physics courses required (9 credit hours):**

Physics courses numbered 311, 321 through 479, 490, as advised and approved by Physics department.

Subtotal: 9**Required Mathematics Electives (15 credit hours):**

MATH 122	University Calculus I	4
MATH 123	University Calculus II	4
MATH 223	University Calculus III	4
MATH 224	Differential Equations	3

Subtotal: 15

NOTE: Minimum cumulative GPA of 2.0 required in above courses for graduation.

TOTAL CREDIT HOURS: 38**POLITICAL SCIENCE MINOR****Requirements for the Minor in Political Science**

At least 21 credit hours in political science, including 12 credit hours of 300 level courses. Students who wish to be officially certified as a Political Science minor should plan a program with a departmental advisor. They should see an advisor at least once each semester thereafter. As a minor in Political Science, students may select either a wide cross section of courses from the various fields within the discipline or a group of courses focusing on one of the following specializations:

- Law and Politics
- Political Economy
- American Politics
- International Politics
- Comparative Politics
- Political Theory

For a listing of courses in each minor, students should see an advisor or the department chairperson.

TOTAL CREDIT HOURS: 21**PSYCHOLOGY MINOR****GENERAL PSYCHOLOGY MINOR REQUIREMENTS:**

A minimum of 18 credit hours in psychology, with at least 9 credit hours at the upper level.

One course must come from the psychophysiology area or the cognitive area:

PSY 244	Cognitive Psychology	3
PSY 342	Perception	3
PSY 344	Psychology of Language	3
PSY 351	Physiological Psychology	3
PSY 361	Cognitive Neuroscience	3
PSY 364	Cognitive Development	3

Subtotal: 3**One course must come from the social area or the clinical/counseling area:**

PSY 245	Social Psychology	3
PSY 246	Personality	3
PSY 356	Abnormal Psychology	3
PSY 365	Social Development	3
PSY 379	Child Psychopathology	3
PSY 447	Introduction to Counseling	3

Subtotal: 3

NOTE: A minimum of 2.00 cumulative quality point average in all psychology courses is required.

TOTAL CREDIT HOURS: 18**PUBLIC HEALTH MINOR**

Office: W395 Thompson Hall
(716) 673-3469

Dr. Randolph Hohle, Coordinator

Email: publichealth.minor@fredonia.edu

Website: <http://home.fredonia.edu/interdisciplinary>

Public health incorporates nearly every aspect of health and perhaps is best defined by its mission: "Maximum health for all, via the prevention of disease, disability and unhealthful environmental conditions." The focus of public health is on health conditions of people in social, geographic, economic or other types of communities, both local and global. In contrast, medicine focuses on the health conditions of the individual. Public health emphasizes prevention; in medicine, the emphasis is on treatment.

The Interdisciplinary Studies minor in Public Health offers students the opportunity to acquire knowledge and skills in the broad field of public health, incorporating emergent issues (e.g., new public health topics such as bioterrorism and emerging infectious diseases) along with more traditional topics such as: communicable and chronic diseases; maternal and child health; injuries; psychosocial issues and tobacco; mental health, substance abuse and social violence; and air, water and solid hazardous waste. The Public Health minor will facilitate private or public

sector careers addressing physical, mental and/or environmental health concerns of communities and populations at risk for disease/injury, and graduate study in public health.

REQUIREMENTS FOR THE MINOR IN PUBLIC HEALTH

The minor requires successful completion of 19 credit hours.

Six (6) credit hours must be from 300-400 level courses.

Only 6 credit hours may be taken in a student's major.

SOC 215 should be completed early, preferably during the sophomore year, and as soon as possible after declaring the minor. Enrolling in SOC 415 requires completion of 15 credit hours of public health courses, including SOC 215.

Required Courses: (10 credit hours)

SOC 215	Introduction to Public Health	3
BIOL 110	Human Biology	3
	or	
BIOL 111	Introduction to Biology	3
	or	
BIOL 133	Introductory Cell and Molecular Biology	3
BIOL 457	Biostatistics	3
	or	
SOC 300	Research Methods	3
SOC 415	Seminar in Public Health	1

BIOL 457: or STAT 250 for Biology majors

SOC 415: 1 credit hour; after completing 15 credit hours public health course work

Electives: (9 credit hours required)

1. Biosciences (at least 3 credit hours required)

BIOL 131	Introductory Ecology and Evolution	3
BIOL 243	Organismal Biology	3
BIOL 251	Basic Concepts in Biology	1-3
BIOL 310	The Human Genome	3
BIOL 336	Mammalian Physiology	3
BIOL 338	Microbiology	3
BIOL 345	Emerging Infectious Diseases	3
	or	
BIOL 360	AIDS and STDs	3
	or	
BIOL 450	Modern Concepts in Biology	1-4
CHEM 107	Chemistry for Consumers	3
	or	
CHEM 113	Chemistry and the Environment	3
	or	
CHEM 115	General Chemistry Lecture I	3
ESCI 105	Global Environmental Issues	3
	or	
ESCI 410	Environmental Assessment	3

2. Social/Behavioral Sciences (at least 3 credit hours required)

PSY 247	Health Psychology	3
SOC 240	Health and Society	3
SOC 311	Sociology of Addiction	3
SOC 321	Population and Society	3
SOC 345	Women, Health and Society	3
	or	
PSY 255	Psychology of Women	3

3. Specialty Groups/Courses (suggested courses)

Biosciences:

BIOL 437	Molecular Genetics Laboratory	2
BIOL 470	Hormone Mechanisms	3
CHEM 116	General Chemistry Lecture II	3
CHEM 125	General Chemistry Laboratory I	1
CHEM 126	General Chemistry Laboratory II	1

Women's Health:

HLTH 215	Personal and Community Health	3
HLTH 303	Fitness and Wellness	3
	or	
HLTH 386	Wellness and Health Promotion	3
SOC 345	Women, Health and Society	3
	or	
PSY 255	Psychology of Women	3
SOC 472	Sociology Internship	1-15

SOC 472: after completing 15 credit hours of public health course work and with permission of Coordinator

Community Health:

COMM 101	Fundamentals of Communication	3
	or	
COMM 105	Public Speaking	3
	or	
COMM 460	Organizational Communication	3
	or	
SOC 363	Victimology	3
CSIT 104	Introduction to Microcomputer Software	3
HLTH 215	Personal and Community Health	3
HLTH 386	Wellness and Health Promotion	3
POLI 371	Civil Rights and Liberties	3
SOC 337	Sociology of Aging	3
	or	
SOC 338	Sociology of Death and Dying	3

Fitness, Nutrition and Wellness:

COMM 101	Fundamentals of Communication	3
	or	
COMM 105	Public Speaking	3
	or	
COMM 460	Organizational Communication	3
HLTH 115	First Aid Skills and Knowledge	3
HLTH 215	Personal and Community Health	3
HLTH 303	Fitness and Wellness	3

HLTH 386	Wellness and Health Promotion	3
Specialty Courses:		
SOC 350	Special Topics	1-3
SOC 472	Sociology Internship	1-15

SOC 350: permission of Coordinator required

SOC 472: after completing 15 credit hours of public health course work and with permission of Coordinator

TOTAL CREDIT HOURS: 19

RELIGIOUS STUDIES MINOR

Office: 2102 Fenton Hall
(716) 673-4892

Dr. Dale Tuggy, Coordinator

Email: religious.studies@fredonia.edu

Website: <https://home.fredonia.edu/interdisciplinary>

Religions are a ubiquitous influence in political and cultural affairs, and religious thoughts, feelings, institutions, traditions, and obligations are a near-constant concern in the daily lives of most people. The minor in Religious Studies helps to prepare students for life in a religiously diverse world, and for further studies of religion(s).

The minor consists of one required course together with five appropriate electives. Electives are regularly offered in the fields of anthropology, communication, history, psychology, and philosophy. More information on electives may be obtained from the Religious Studies web page listed above.

REQUIREMENTS FOR THE MINOR IN RELIGIOUS STUDIES

The minor in Religious Studies requires 18 credit hours, distributed as follows:

Required Course (3 credit hours):

INDS 120	World Religions	3
		Subtotal: 3

Electives (15 credit hours):

Five courses selected from the following list of 3-credit courses.

ANTH 331	Anthropology of American Utopias	3
COMM 359	Special Topics in Communication	1-3
HIST 101	World History I	3
HIST 261	Islamic Civilization	3
HIST 268	History of South Asia	3
HIST 306	The Age of Reformation	3
HIST 361	Modern Middle East	3
HIST 391	History of Christianity I	3
PHIL 224	Medieval Thought	3
PHIL 238	Philosophy of Religion	3

PHIL 331	Eastern Thought	3
PHIL 369	Topics in Philosophy	1-3
PHIL 446	Selected Problems	3
PHIL 447	Selected Problems	3

Subtotal: 15

NOTE:

- Regarding COMM 359, HIST 399, PHIL 369, PHIL 446, and PHIL 447: students should consult the coordinator, the advising sheet for the minor, or the current course listings to confirm that the course, as taught in a given semester, will count as an elective for the Religious Studies minor.
- At least 6 credit hours must be at the 300-level or above.
- Not all electives may be taken within a single discipline.

TOTAL CREDIT HOURS: 18

RUSSIAN, EAST-EUROPEAN AND EURASIAN STUDIES MINOR

Office: E332 Thompson Hall
(716) 673-3277

John Staples, Coordinator

Email: John.Staples@fredonia.edu

Website: <https://home.fredonia.edu/interdisciplinary>

The Russian, East-European and Eurasian Studies (REES) Minor promotes the study of this large region within an interdisciplinary framework. Following the collapse of the Soviet Union the world looked forward to a new age of European and world integration; but while some countries from the former Soviet sphere of influence have prospered and moved toward greater integration, others have slipped into poverty, isolation, and authoritarianism. Russia hangs dangerously between authoritarian and democratic tendencies. Students in the REES Minor will explore the history, languages, cultures and societies of Russia, Eastern Europe and Eurasia in order to deepen their understanding of this region, with its unique place in global development.

REQUIREMENTS FOR THE MINOR IN RUSSIAN, EAST-EUROPEAN AND EURASIAN STUDIES

The minor requires 18 credit hours of course work, no more than half of which may come from any one discipline. Courses should be selected from the following list. Other courses might be accepted at the discretion of the program coordinator.

Required Core Courses: (minimum of 12 credit hours)

INDS 250	Introduction to Russia, Eastern Europe & Eurasia, 1789-Present	3
RUSS 115	Elementary Russian I	3

RUSS 116	Elementary Russian II	3
INED	Study Abroad (minimum of 3 credit hours)	
Optional Courses: (by advisement)		
ECON 345	Comparative Economic Systems	3
ENGL 396	Russian Literature	3
HIST 313	Medieval Russia, 860-1700	3
HIST 314	Imperial Russia	3
HIST 316	20th Century Russia	3
HIST 324	History of the Ukraine	3
HIST 371	Russia After Stalin	3
INED 402	Study Abroad - American University in Bulgaria	1-21
INED 439	Study Abroad - St. Petersburg University Russia	1-21
POLI 332	Russian Politics	3
PHIL 338	Marxist Thought	3
TOTAL CREDIT HOURS:		18

SCHOOL AND COUNSELING PSYCHOLOGY MINOR

SCHOOL AND COUNSELING PSYCHOLOGY MINOR REQUIREMENTS:

A minimum of 18 credit hours, distributed as follows:

Required courses (9 credit hours)

PSY 129	Introduction to Psychology	3
PSY 200	Statistics	3
PSY 317	Tests and Measurements	3
Subtotal: 9		

Three courses from the following (9 credit hours)

PSY 364	Cognitive Development	3
PSY 365	Social Development	3
PSY 379	Child Psychopathology	3
PSY 447	Introduction to Counseling	3
Subtotal: 9		

NOTE: A minimum of 2.00 cumulative quality point average in all psychology courses is required.

TOTAL CREDIT HOURS: 18

SOCIOLOGY MINOR

Requirements for the Minor in Sociology

Eighteen (18) credit hours in sociology including SOC 116 (p. 523) (required). The remaining 15 credit hours are free electives and may be taken from any of the department's sociology offerings. At least 9 credit hours must be at the 300 level or above. At least 9 credit hours must be taken at Fredonia.

SPORT MANAGEMENT MINOR

REQUIREMENTS FOR SPORT MANAGEMENT MINOR (21 CREDIT HOURS)

Core Required Courses:

SPMG 210	Principles of Sports Management	3
SPMG 330	Leadership and Management in Sports	3
SPMG 428	Marketing and Public Relations in Sport	3
SPMG 298	Pre-Internship	1
SPMG 400	Sport Studies Internship	1-12
Subtotal: 12		

NOTE: SPMG 400 is a variable credit course for 1-12 credits. Students need to take the course for two credits to satisfy the core required courses.

Select three courses from the following list:

ACCT 201	Principles of Financial Accounting	3
BUAD 235	Introduction to Business Communication	3
SPMG 211	Facility Management	3
PSY 237	Sport Psychology	3
SPMG 212	Event Management	3
SPMG 230	Sport in American Culture	3
Subtotal: 9		

TOTAL CREDIT HOURS: 21

STATISTICS MINOR

(The Interdisciplinary Studies minor in Statistics is housed in the Department of Mathematical Sciences.)

Office: Fenton Hall 204
(716) 673-4709

Dr. Nancy Boynton, Coordinator

Email: Nancy.Boynton@fredonia.edu

Website: <http://home.fredonia.edu/interdisciplinary>

REQUIREMENTS FOR THE MINOR IN INTERDISCIPLINARY STUDIES - STATISTICS

Students in the Interdisciplinary Studies minor in Statistics will take 19-21 credit hours to fulfill the requirements, distributed as follows:

Required Courses (10-12 credit hours):

MATH 120	Survey of Calculus I	3
	or	
MATH 122	University Calculus I	4
MATH 108	Prize-Winning Mathematics	3
	or	
MATH 231	Linear Algebra	4
	or	
CSIT 121	Computer Science I	3

XXXX 200	One 200 level Statistics course from one of the academic departments or	3
STAT 250	Statistics for Scientists or	3
STAT 350	Probability and Statistics	3
BUAD 300	Statistical Analysis or	3
ECON 300	Statistical Analysis or	3
STAT 351	Regression and Analysis of Variance	3
STAT 405	Statistics Seminar	1

Subtotal: 10-12**Electives (6 credit hours):**

BIOL 457	Biostatistics	3
CSIT 473	Data Warehousing and Mining	3
ECON 400	Econometrics and Business Applications	3
MATH 359	Probability Models in Operations Research	3
PSY 310	Advanced Research Methods	3
STAT 352	Categorical Data Analysis	3
STAT 355	Mathematical Statistics	3
STAT 408	Special Topics	3

Subtotal: 6**an additional course from the following (3 credit hours):**

BUAD 300	Statistical Analysis	3
ECON 300	Statistical Analysis	3
STAT 351	Regression and Analysis of Variance	3

Subtotal: 3

NOTE: In addition, independent Study or Research courses with substantial statistical content may be counted with approval from the program Coordinator and the student's research or independent study advisor.

At least 12 credit hours must be different from those taken for the student's major or other minors.

Both BUAD 300 and ECON 300 cannot be counted in this minor.

TOTAL CREDIT HOURS: 19-21**THEATRE MINOR****REQUIREMENTS FOR THE MINOR IN THEATRE (22 CREDIT HOURS):****Required Courses:**

THEA 101	Theatre and Dance Productions	1
THEA 102	Theatre and Dance Productions	1

THEA 114	Introduction to the Performing Arts	3
THEA 117	Script Analysis	3
THEA 121	Introduction to Technical Theatre	3
THEA 130	Acting for Non-Majors or	3
THEA 133	Introduction to Acting	3
THEA 201	Theatre and Dance Productions	1
THEA 202	Theatre and Dance Productions	1

Subtotal: 16**Two of the following:**

THEA 325	History of Costume	3
THEA 451	History of the Theatre I	3
THEA 452	History of the Theatre II	3
THEA 460	Theatre Organization and Management	3

Subtotal: 6**TOTAL CREDIT HOURS: 22****VISUAL ARTS AND NEW MEDIA MINOR****DEGREE REQUIREMENTS****Requirements for the Minor in the Visual Arts and New Media (21 credit hours with a minimum of 9 credit hours resident within the department)**

ARTS 105	Foundations in Drawing	3
ARTS 102	Foundations in 2-D Form and Content	3
	Five courses in any combination from ARTS studio art courses offered in Visual and Media Arts	15

Subtotal: 21

NOTE: The Visual Arts and New Media minor can easily be organized to complement any major. The minor may take a variety of Visual Arts and New Media courses or the courses may be in a specific area of study. However, due to enrollment demands, a minor may find it difficult to register for some studios, so flexibility is important.

Students should consult with a department advisor in planning a course of study as a Visual Arts and New Media minor.

TOTAL CREDIT HOURS: 21**WEB PROGRAMMING MINOR**

Office: E336 Thompson Hall
(716) 673-4750

Dr. Reneta Barneva, *Coordinator*

Email: Reneta.Barneva@fredonia.edu

Website: <http://home.fredonia.edu/interdisciplinary>

REQUIREMENTS FOR THE MINOR IN INTERDISCIPLINARY STUDIES - WEB PROGRAMMING

Students in the Interdisciplinary Studies minor in Web Programming must take 21 credit hours to fulfill the requirements, distributed as follows:

Required Courses:

CSIT 105	Visual BASIC I	3
CSIT 107	Web Programming I	3
CSIT 205	Visual BASIC II	3
CSIT 207	Web Programming II	3
Subtotal:		12

Electives:

Two courses from the following:

CSIT 151	Introduction to Information Systems	3
CSIT 203	Multimedia Systems	3
CSIT 251	Information Systems Structures	3
CSIT 307	Web and Mobile App Design	3
CSIT 462	Computer Graphics	3
CSIT 463	Introduction to Digital Image Processing and Computer Vision	3
Subtotal:		6

One course from the following

CSIT 425	Software Engineering	3
CSIT 455	Relational and Object Databases	3
CSIT 473	Data Warehousing and Mining	3
CSIT 475	Electronic Commerce	3
Subtotal:		3

NOTE:

1. The courses CSIT 291 (p. 343) (Special Topics), CSIT 300 (p. 343) (Internship), CSIT 490 (p. 347) (Seminar on Selected Topics), CSIT 496 (p. 347) (Special Topics), CSIT 497 (p. 347) (Thesis), CSIT 499 (p. 347) (Senior Project) and other courses can be considered electives upon coordinator's approval.
2. At least two of the elective courses counted toward the minor must be at the 300-400 level.
3. Students majoring in Computer Science or Computer Information Systems must take at least 15 credit hours among the above courses which do not count toward the major program (credit hours from courses within the list of courses of the major not used to satisfy requirements in that major).

TOTAL CREDIT HOURS: 21

WOMEN'S AND GENDER STUDIES MINOR

Office: E319 Thompson Hall
(716) 673-3179

Dr. Jeffry Iovannone, Coordinator
Email: Jeffry.Ivoannone@fredonia.edu

Women's and Gender Studies Program Office
Office: 171A Fenton Hall
(716) 673-3158
Email: womens.studies@fredonia.edu
Website: <http://home.fredonia.edu/interdisciplinary>

REQUIREMENTS FOR THE MINOR IN WOMEN'S AND GENDER STUDIES (21 CREDIT HOURS):

Completion of the interdisciplinary minor requires a minimum of 21 credit hours. Up to 6 credit hours of transfer credit may be applied to the minor, based on approval by the coordinator. No more than 9 credit hours should be used to fulfill the requirements of the student's major. Students declaring the Women's and Gender Studies minor may use past courses retroactively after consultation with the coordinator.

Required Courses (6 credits):

WGST 201	Introduction to Gender Studies	3
WGST 491	Gender and Social Change	3

Categories (at least 3 credit hours in each category - 15 credit hours):

1. Theoretical Frameworks (pre-requisite WGST 201)
2. Sexual Norms and Behaviors
3. Transnational Issues
4. Cultural Practices
5. Experiential Learning (pre-requisite WGST 201)

NOTES:

- a) An E-portfolio will be used for program assessment, initiated in WGST 201 and finalized in WGST 491.
- b) WGST 201 is a pre-requisite for the Theoretical Frameworks and Experiential Learning categories; Theoretical Frameworks course is a pre-requisite to WGST 491.
- c) Coordinator's approval required prior to registration for Experiential Learning.

TOTAL CREDIT HOURS: 21

WRITING AND RHETORIC MINOR

REQUIREMENTS FOR THE MINOR IN WRITING AND RHETORIC

The minor in Writing and Rhetoric requires a minimum of 21 credit hours of courses.

I. Three (3) core courses as follows (9 credit hours):

ENGL 271	Rhetoric for Writers	3
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ENGL 369	Argumentative Writing	3
ENGL 372	Grammar and Style for Writers	3
Subtotal: 9		

NOTE:

- Completion of ENGL 373 English Grammar for Everyone is recommended prior to completion of ENGL 372 Grammar and Style for Writers.

II. Four (4) elective courses chosen from the following (12 credit hours):

ENGL 213	Texts and Contexts	3
ENGL 299	Special Topics	1-4
ENGL 366	Opinion in Journalism	3
ENGL 373	English Grammar for Everyone	3
ENGL 374	Writing and Social Change	3
ENGL 375	Writing for the Professions	3
ENGL 378	Advanced Writing I: The Essay	3
ENGL 379	Writing in a Digital World	3
ENGL 399	Special Topics	1-4
ENGL 455	Writing Tutors	3
ENGL 465	English Internships	1-12
ENGL 490	Independent Study	1-6
Subtotal: 12		

NOTE:

- Courses in the minor may be taken only once for credit, except for ENGL 299 or ENGL 399.
- Students may count ENGL 299 or ENGL 399 for credit in the minor only when the special topic focuses on writing.
- ENGL 399, ENGL 465, and ENGL 490 are variable credit courses. No more than 3 credit hours in internships and/or independent studies may be counted toward the minor.

ADDITIONAL REQUIREMENTS

- All students must earn a grade of C or higher in each of their required courses.
- The prerequisite for each core course is ENGL 100 English Composition; the prerequisite may be waived by permission of instructor.
- A minimum of 15 credit hours counted toward the minor must be taken at Fredonia.
- Students may count 6 credit hours of courses for both an English major and the writing and rhetoric minor.
- Students should seek prior permission from the Chairperson to include courses from other departments as electives in the minor. No more than 6 credit hours will be accepted.
- Please note that core courses are typically offered once a year; students are advised to plan carefully to ensure

they can complete the necessary coursework in a timely fashion.

TOTAL CREDIT HOURS: 21

MOLECULAR GENETICS BACHELOR OF SCIENCE

Department of Biology
Office: 221 Science Center
(716) 673-3282

Dr. Patricia Smith Astry, *Department Chairperson*

Dr. Scott B. Ferguson, *Program Coordinator*

Email: biology@fredonia.edu

Website: <http://home.fredonia.edu/biology/molgen>

Virtually all areas of the life sciences are being affected by the application of molecular genetics to solve biological problems. A strong background in molecular genetics will allow students to address problems in medicine, agriculture, environmental science, industry, forensics and basic biology. Indeed, molecular genetics is playing a central role in virtually all aspects of modern biological research.

Fredonia's Bachelor of Science program in Molecular Genetics, the first of its kind in New York State, provides students with the necessary background, skills and training to enter the exciting areas of molecular biology and biotechnology. Students enrolled in the program will gain experience in DNA cloning, fluorescent microscopy, protein biochemistry, forensic DNA analysis, bioinformatics, polymerase chain reaction, and DNA sequencing, which form the backbone of molecular genetics research. The B.S. degree in Molecular Genetics also combines an educational experience in the liberal arts with broad coverage of fundamental aspects of the biological sciences. Graduates in Molecular Genetics are well prepared for graduate work in molecular biology, genetic counseling or forensic science as well as entrance to a medical program, or employment as a research technician.

The first two years of the program consist of a core of courses taken by most students interested in the biological sciences. In addition, a laboratory course in Molecular Genetics provides the student with a sequence of experiments in a research project setting that includes a comprehensive selection of the techniques employed in modern genetics research.

The Department of Biology is particularly proud of its undergraduate research opportunities. Undergraduate students work closely with faculty members on original research projects (for example, see BIOL 440). Students annually present their research results at the university-wide Student Research and Creativity Exposition and at regional and national meetings. Students have been co-authors of papers published in scientific journals. A wide

range of research projects is available in molecular or cellular biology, biochemistry, physiology, behavior, aquatic biology and ecology.

Summer Research Fellowships are sponsored in biology each summer. Each sophomore or junior awarded a prestigious fellowship will work on a specific project designed in collaboration with a faculty sponsor. The fellowships have been previously supported by the Constantine Barker Memorial Endowment, the Biology Endowment, the Holmberg Foundation, Merck/A.A.A.S. and the McNair Scholars program. Each award provides the student with a generous stipend and a supplies budget. For more information, interested students should contact a faculty sponsor in the department.

Requirements for Transfer Credit

The Molecular Genetics program requires students to complete 40 credit hours of biology core courses and elective courses chosen under advisement. Students are expected to complete at least half of the biology courses at Fredonia. Additional credit hours transferred may be used as general electives toward graduation. As a rule, the department will not accept as equivalent for upper level courses, credit earned at two-year colleges.

REQUIREMENTS FOR THE BACHELOR OF SCIENCE IN MOLECULAR GENETICS

Core program (40-46 credit hours)

BIOL 131	Introductory Ecology and Evolution	3
BIOL 132	Introductory Ecology and Evolution Laboratory	1
BIOL 133	Introductory Cell and Molecular Biology	3
BIOL 134	Introductory Cell and Molecular Biology Laboratory	1
BIOL 237	Genetics	3
BIOL 238	Genetics Laboratory	1
BIOL 243	Organismal Biology	3
BIOL 333	Biochemistry	3
BIOL 334	Biochemistry Laboratory	1
BIOL 338	Microbiology	3
BIOL 380	Cell and Molecular Biology	3
BIOL 381	Cell and Molecular Biology Lab	1
BIOL 435	Developmental Biology	3
BIOL 437	Molecular Genetics Laboratory	2
BIOL 491	Senior Capstone - Research	1-6
	or	
BIOL 492	Senior Capstone - Internship	1-6
	or	
BIOL 493	Senior Capstone - Course	0-6
	Nine additional credit hours of biology electives at the 300-400 level	9

Subtotal: 40-46

Required supporting course work (30-34 credits)

CHEM 115	General Chemistry Lecture I	3
CHEM 125	General Chemistry Laboratory I	1
CHEM 116	General Chemistry Lecture II	3
CHEM 126	General Chemistry Laboratory II	1
CHEM 215	Organic Chemistry Lecture I	3
CHEM 225	Organic Chemistry Laboratory I	1
CHEM 216	Organic Chemistry Lecture II	3
CHEM 226	Organic Chemistry Laboratory II	1
PHYS 121	College Physics I	3
PHYS 123	College Physics Lab I	1
PHYS 122	College Physics II	3
PHYS 124	College Physics II Lab	1
	or	
PHYS 230	University Physics I	4
PHYS 232	University Physics I Lab	1
PHYS 231	University Physics II	4
PHYS 233	University Physics II Lab	1
MATH 120	Survey of Calculus I	3
MATH 121	Survey of Calculus II	3
	or	
MATH 122	University Calculus I	4
MATH 123	University Calculus II	4

Subtotal: 30-34

Chemistry and mathematics courses should be completed by the end of the sophomore year, physics courses by the end of the junior year.

The Molecular Genetics major is strongly advised to plan on at least one year of Undergraduate Research (BIOL 440-BIOL 441) in the area of molecular biology.

TOTAL CREDIT HOURS: 70-80

Music, School of

Office: 1151 Mason Hall
(716) 673-3151

Dr. Melvin P. Unger, Director

Dr. Laura Koepke, Associate Director and Graduate Coordinator

Dr. Barry M. Kilpatrick, Assistant Director

Email: music.school@fredonia.edu

Website: <http://home.fredonia.edu/music>

Curricular Area Chairs and Coordinators:

Academic Studies

Dr. Gordon Root

Music Education

Dr. Katherine M. Levy

Performance

Dr. Sarah Hamilton

Music History/Literature

Dr. James A. Davis

Music Theory

Dr. Gordon Root

Music Composition

Dr. Robert Deemer

Music Therapy

Dr. Joni Milgram-Luterman

Sound Recording Technology

Dr. Bernd Gottinger

Applied Studies

Mr. Sean Duggan, Keyboard

Dr. Kay H. Stonefelt, Percussion/Harp

Dr. Susan Royal, Woodwinds

Dr. Harry P. Jacobson, String

Dr. Barry Kilpatrick, Brass

Dr. Joe Dan Harper, Voice

The State University of New York at Fredonia School of Music is internationally recognized for its programs at the undergraduate and graduate professional level. It provides the foundation of outstanding musicianship for all music majors and enriches the cultural life of the campus and community. Its mission is to provide the resources and guidance necessary to motivate students to seek excellence in their individual careers in music education, performance, composition, musical theatre, music therapy and sound recording. In an environment oriented to the individual, it endeavors to create musicians who will assume vigorous roles as leaders and participants in significant musical experiences.

An audition is required for admission to a degree program in the School of Music. All first-year students have essentially the same course work, and specialization increases in each subsequent year of study.

All students pursuing a degree program in the School of Music take private lessons on their principal instrument (Applied Music) and will be involved in ensembles.

Statement on Applied Study: A grade of "F" in any semester of private applied study or a grade of "D" in two consecutive semesters of private applied study will result in the removal of the student from the School of Music curriculum.

Statement on Ensembles: Students following a Bachelor of Science degree program in the School of Music must earn a total of four (4) credits in ensembles. Enrollment is required especially during the semesters of private applied study. Students in the Bachelor of Arts or Bachelor of Music degree programs must be in a 1-credit ensemble each semester of residency as a minimum. This enrollment will be using the principal instrument unless specifically exempted by the administration of the School of Music. Students in residence for more than four years should continue in 1-credit ensembles as a minimum, unless advised otherwise. Students in Musical Theatre or Music

Business should refer to the ensemble requirement information under those program descriptions.

No student may be in more than four ensembles in any given semester.

Statement on the Graduate Program: The School of Music offers three graduate degrees: Music Education, Master of Music; Music Performance, Master of Music; and Music Theory-Composition, Master of Music.

Statement on Accreditation: The following sections describe the degree requirements of the undergraduate and graduate degree programs in Music and are accredited by the National Association of Schools of Music (NASM). The Music Education, Master of Music also is accredited within Fredonia's Professional Education Unit, by the Council for the Accreditation of Educator Preparation (CAEP).

Other Undergraduate Music Programs**JAZZ STUDIES CONCENTRATION**

The concentration in Jazz Studies is available to any Music major (Performance, Composition, Music Education, Music Therapy, Sound Recording Technology, or Bachelor of Arts in Music) wishing to pursue jazz through performance, historical context, and theoretical background. Course work and ensemble participation beyond the minimum requirements is possible and encouraged.

The concentration is in addition to, and does not supersede nor replace, requirements for the student's declared major. Also, Music Education majors wishing to complete a concentration in Jazz Studies will do so in addition to their concentration in either Vocal/General or Instrumental music education.

6 credit hours in Music History per advisement (i.e., African American Music, History of Jazz, American Music). Three (3) of the 6 credit hours can also serve within the student's major.

3 credit hours in Music Theory (300 level or above) per advisement. These credit hours can also serve within the student's major.

Plus the following:

MUS 362	Jazz Theory	3
MUS 361	Jazz Improvisation	2
	2 semesters participation in Jazz Combo	
	2 semesters participation in Jazz Ensemble	

TOTAL CREDIT HOURS: 16**COMMUNITY MUSIC CONCENTRATION**

The program is available to any Music major in addition to the student's primary curriculum. Any of the courses below may also be used to satisfy courses in the major, including general studies, as applicable.

Required Courses

MUED 250	Foundations of Music Education I	2
	or	
MUED 251	Foundations of Music Education II	2
MUED 450	Directed Study in Music Education	1-3
MUTY 240	Music for Children with Disabilities	1
MUTY 270	Social Instruments	2
MUS 119	Free Improvisation	1
MUS 380	The Business of Music	3

Three courses from: Music

MUS 264	Music History in Western Civilization II	3
MUS 265	History of Jazz	3
MUS 270	The History of American Popular Music, 1900-1963	3
MUS 333	Musics of the World	3
MUS 334	Music of Latin America	3
MUS 457	Seminar in Popular Music	3

Alternative, nontraditional, community-based ensembles by advisement.

The following, while not required in the concentration, are recommended for further study:

MUS 404	Choral Arranging	2
	or	
MUED 291	Technology in Music I	2
	or	
MUS 485	Multimedia for Musicians	3

TOTAL CREDIT HOURS: 24

MUSIC MINOR

The Music Minor is designed for any undergraduate student not otherwise pursuing a degree in the School of Music. It is designed to be flexible such that it can serve a variety of interests, that is, one can focus on traditional, jazz, or world music studies. However, entry into some of the coursework requires prior knowledge and experience in music, so the student desiring a music minor must contact the School of Music Office for advice and placement.

REQUIREMENTS FOR THE MINOR IN MUSIC

Requirements:

MUS 104	Applied Music Class for Non-Music Majors	1
	Additional Performance Study, such as MUS 104, Jazz Improvisation, etc.	2
	Ensembles (per advisement)	2

MUS 264	Music History in Western Civilization II	3
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Subtotal: 9

NOTE: MUS 104 Applied Music Class for Non-Music Majors, two semesters required, for a total of 2 credit hours (included in total above).

Select between these options:

MUS 101	Beginning Music Theory I and	3
MUS 102	Beginning Music Theory II or all of	3
MUS 121	Aural Skills I	2
MUS 122	Aural Skills II and	2
MUS 123	Music Theory I	3
MUS 124	Music Theory II	3

Subtotal: 6-10

Select one course from the following:

MUS 263	Music History in Western Civilization I	3
MUS 265	History of Jazz	3
MUS 333	Musics of the World	3

Subtotal: 3

Electives:

Electives in music theory, music history and literature, and music education	8-12
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Subtotal: 8-12

NOTE: Students interested in Jazz should elect MUS 265 History of Jazz, MUS 361 Jazz Improvisation, and MUS 362 Jazz Theory.

TOTAL CREDIT HOURS: 26-34

MUSIC CONCENTRATION FOR BACHELOR OF SCIENCE IN CHILDHOOD EDUCATION

(34 credit hours)

DEGREE REQUIREMENTS

Required Courses

MUS 121	Aural Skills I	2
MUS 122	Aural Skills II	2
MUS 123	Music Theory I	3
MUS 124	Music Theory II	3
MUED 315	Music, Play, and Self	3
MUS 450	Directed Studies	2
MUS 451	Directed Studies	2
	Music History courses 300 and/or 400 level by advisement	

Choose any three Piano Class
courses (beginning with MUS
118)

Subtotal: 17

NOTE: MUS 121, MUS 122, MUS 123, MUS 124: Access to any course designed for Music majors requires satisfaction of prerequisites and/or testing.

Choose either:

MUED 310	Guitar Class	1
	and	
MUED 311	Guitar Class	1
	or	
MUTY 270	Social Instruments	2

Subtotal: 2

TOTAL CREDIT HOURS: 19

COURSES FOR MAJORS AND NON-MAJORS

The degree programs for Music majors often require electives in theory and history. Below are pre-approved courses to satisfy the requirements.

Approved Music Theory Electives for Majors:

MUS 129	Beginning Composition	2
MUS 130	Beginning Composition	2
MUS 301	Composition Lab: Instrumentation	2
MUS 302	Composition Lab: Orchestration	2
MUS 311	Composition Lab: Music Notation	2
MUS 312	Composition Lab: Music Arranging	2
MUS 321	Composition Lab: Collaborative Composition	2
MUS 322	Composition Lab: Music of the 21st Century	2
MUS 361	Jazz Improvisation	2
MUS 362	Jazz Theory	3
MUS 403	Counterpoint	3
MUS 404	Choral Arranging	2
MUS 440	Composition for Electronic Media I	3
MUS 441	Composition for Electronic Media II	3

Subtotal: 32

NOTE:

- Other courses with advisor approval;
- MUS 301, MUS 302, MUS 311, MUS 312, MUS 321, and MUS 322: Primarily for Composition majors. Open to other Music majors if space available in class.

Approved Music History Electives for Majors:

MUS 262	American Music	3
MUS 265	History of Jazz	3
MUS 267	African American Music	3

MUS 270	The History of American Popular Music, 1900-1963	3
MUS 333	Musics of the World	3
MUS 334	Music of Latin America	3
MUS 408	History and Literature of the Wind Band	3
MUS 409	History and Literature of the Guitar	3
MUS 420	Piano Literature I	3
MUS 424	The History of Opera	3
MUS 433	Romanticism and Music	3
MUS 453	The Baroque Period in Music	3
MUS 454	The Classical Period in Music	3
MUS 455	The Romantic Period in Music	3
MUS 456	The Modern Period in Music	3

Subtotal: 45

Courses for Non-Music Majors:

The following courses are available to students who are not Music majors.

MUS 101	Beginning Music Theory I	3
MUS 102	Beginning Music Theory II	3
MUS 104	Applied Music Class for Non-Music Majors	1
MUS 115	Music Appreciation	3
MUS 119	Free Improvisation	1
MUS 262	American Music	3
MUS 265	History of Jazz	3
MUS 267	African American Music	3
MUS 269	Music Criticism	3
MUS 270	The History of American Popular Music, 1900-1963	3
MUS 333	Musics of the World	3
MUS 334	Music of Latin America	3
MUS 433	Romanticism and Music	3
MUED 315	Music, Play, and Self	3
MUTY 115	Introduction to Music Therapy	2

Subtotal: 40

On a space-available basis, non-Music majors are encouraged to perform in the All-College Band and/or the University Chorus MUS 021 and MUS 025, for which no audition is required.

Non-major students may also audition to perform in all other School of Music ensembles (MUS 022-050). Students should contact the School of Music to learn more about ensemble auditions.

Non-majors do not have access to courses that are intended for music majors, except when the following conditions exist:

1. They have met course prerequisites and/or met standards based on testing.
2. Their curriculum requires it or they have obtained permission from the School of Music.

3. There is space available in the desired course.

GRADUATE FINAL PROJECT PROGRAM

The program provides the graduate student who is a teacher a greater range of courses than the often more specialized concentration of the Final Project program. In recognition of the individual differences among teachers, their teaching positions, and thus of their particular needs, this program allows maximum flexibility with a broad, yet balanced selection of choices. The program leads to the academic qualifications required for Professional Certification in New York State.

General Requirements

1. At least 15 credit hours of the overall program should be in music education and music education related course work.
2. At least 12 credit hours of the overall program should be in course work dealing with music theory, history, literature, analysis, or performance.
3. At least 18 credit hours of the overall program should be in course work at the 600 level.
4. For more detailed information about program requirements, the candidate is referred to the Policies and Practices for Master of Music Degree Candidates available from the School of Music office.

For certification information, students should see Graduate Programs Leading to New York State Certification (p. 78).

SPECIFIC REQUIREMENTS

Required Courses

MUS 521	Music Bibliography	3
MUS 624	Analytic Techniques	3
MUED 619	Foundations of Music Education I	3
MUED 620	Foundations of Music Education II	3
MUED 621	Music Education Foundation III	3

6 credit hours of Music Education or Music Education-related course work, by advisement (MUED or MUS)
6 credit hours of course work in theory, history, literature, performance

9 credit hours of elective course work by advisement*

*Individualized selections of course work in theory, history, literature, performance and special studies MUS 590 or MUED 590 and MUED 591. Course work outside of music is also acceptable, subject to the course relationship to the candidate's personal growth and professional competence. Short "workshops" MUED 555/MUED 565 can be applied only in this category and require prior permission of the program advisor.

MUSIC-APPLIED BACHELOR OF ARTS

(Minimum of 54 credit hours in music)

The Bachelor of Arts degree provides advanced training in performance along with the general study of music and the liberal arts.

Please note that the program requires 66 credit hours outside of Music.

DEGREE REQUIREMENTS

Musicianship Core

The musicianship core is the set of required studies common to all music degree programs (Bachelor of Arts in Music, Bachelor of Science in Music Therapy, Bachelor of Science in Music with an emphasis in Sound Recording Technology, all programs of the Bachelor of Music).

MUS 163	Our World of Music	1
MUS 164	Our World of Music	1
MUS 263	Music History in Western Civilization I	3
MUS 264	Music History in Western Civilization II	3
MUS 231	Conducting I	2
MUS 121	Aural Skills I	2
MUS 122	Aural Skills II	2
MUS 123	Music Theory I	3
MUS 124	Music Theory II	3
MUS 221	Aural Skills III	2
MUS 222	Aural Skills IV	2
MUS 223	Music Theory III	3
MUS 224	Music Theory IV	3
MUS 118	Piano Class, Elementary	2
MUS 100	Recital-Seminar	
MUS 120	Concert Attendance	
MUS 105	Applied Music Major	2
MUS 106	Applied Music Major	2

Subtotal: 36

NOTE:

- MUS 125 and MUS 126 (instead of MUS 105 and MUS 106) for Bachelor of Music degree in Music Education and Bachelor of Music degree in Performance
- MUS 118: waived for students whose principal instrument is piano
- MUS 120: each semester of private applied lessons.
- MUS 107 and MUS 108 are required of all freshmen oboe and bassoon majors.

Plus the following:

MUS 200	Recital Seminar	
MUS 205	Applied Music Major	2
MUS 206	Applied Music Major	2
MUS 217	Piano Class, Intermediate	1
MUS 218	Piano Class, Intermediate	1
MUS 300	Recital Seminar	
MUS 305	Applied Music Major	2

MUS 306	Applied Music Major	2
MUS 400	Recital Seminar	
MUS 405	Applied Music Major	2
MUS 406	Applied Music Major	2

Subtotal: 14**NOTE:**

- 1-credit ensemble using principal instrument each semester of residency
- Graduation Recital
- MUS 118: waived for students whose principal instrument is piano

Additional requirements if voice is principal instrument:

MUS 033	Opera Prod Practicum	0.5
MUS 137	Diction for Singers	.5
MUS 138	Diction for Singers	.5
MUS 139	Diction for Singers	.5
MUS 140	Diction for Singers	.5

Subtotal: 2.5**NOTE:**

- MUS 033: one semester required during the freshman year
- MUS 138 is the 2nd of 4 diction courses
- MUS 139 is the 3rd of 4 diction courses
- MUS 140 is the 4th of 4 diction courses Voice students in the B.A. in Music degree program are strongly encouraged to complete the same language requirement as performance majors, thus utilizing foreign language offerings to partially complete the required 66 hours outside the major area.

TOTAL CREDIT HOURS: 52.5

MUSIC COMPOSITION BACHELOR OF MUSIC

(91 credit hours in music)

The program explores artistic concepts and pragmatic tools that are necessary to begin a career in music composition.

DEGREE REQUIREMENTS

Musicianship Core

The musicianship core is the set of required studies common to all music degree programs (Bachelor of Arts in Music, Bachelor of Science in Music Therapy, Bachelor of Science in Music with an emphasis in Sound Recording Technology, all programs of the Bachelor of Music).

MUS 163	Our World of Music	1
MUS 164	Our World of Music	1

MUS 263	Music History in Western Civilization I	3
MUS 264	Music History in Western Civilization II	3
MUS 231	Conducting I	2
MUS 121	Aural Skills I	2
MUS 122	Aural Skills II	2
MUS 123	Music Theory I	3
MUS 124	Music Theory II	3
MUS 221	Aural Skills III	2
MUS 222	Aural Skills IV	2
MUS 223	Music Theory III	3
MUS 224	Music Theory IV	3
MUS 118	Piano Class, Elementary	2
MUS 100	Recital-Seminar	
MUS 120	Concert Attendance	
MUS 105	Applied Music Major	2
MUS 106	Applied Music Major	2

Subtotal: 36**NOTE:**

- MUS 125 and MUS 126 (instead of MUS 105 and MUS 106) for Bachelor of Music degree in Music Education and Bachelor of Music degree in Performance;
- MUS 118: waived for students whose principal instrument is piano;
- MUS 120: each semester of private applied lessons;
- MUS 107 and MUS 108 are required of all freshmen oboe and bassoon majors.

Plus the following

MUS 298	Composition Forum	
MUS 299	Composition Forum	
MUS 398	Composition Forum	
MUS 399	Composition Forum	
MUS 498	Composition Forum	
MUS 499	Composition Forum	
MUS 129	Beginning Composition	2
MUS 130	Beginning Composition	2
	or	
MUS 127	Applied Lessons (Composition)	2
MUS 128	Applied Lessons (Composition)	2
MUS 227	Applied Music (Composition)	2
MUS 228	Applied Music (Composition)	2
MUS 327	Applied Music (Composition)	2
MUS 328	Applied Music (Composition)	2
MUS 427	Applied Music (Composition)	2
MUS 285	Music Copyright	3
MUS 217	Piano Class, Intermediate	1
MUS 218	Piano Class, Intermediate	1
MUS 301	Composition Lab: Instrumentation	2
MUS 302	Composition Lab: Orchestration	2
MUS 311	Composition Lab: Music Notation	2

MUS 312	Composition Lab: Music Arranging	2
MUS 321	Composition Lab: Collaborative Composition	2
MUS 322	Composition Lab: Music of the 21st Century	2
MUS 491	Senior Project in Composition	2

Subtotal: 35**NOTE:**

- Senior Composition Recital;
- 1-credit ensemble each semester of residency, including at least two choral ensembles;
- MUS 137, MUS 138, MUS 139 and MUS 140 are required if voice is principal instrument.

CONCENTRATIONS

Each student must declare one of the following concentrations. This should be done no later than the end of the first year of study:

Standard Program

MUS 232	Conducting II	2
MUS 403	Counterpoint	3
MUS 404	Choral Arranging	2
MUS 205	Applied Music Major	2
MUS 206	Applied Music Major	2
MUS 305	Applied Music Major	2
MUS 306	Applied Music Major	2
MUS 200	Recital Seminar	
MUS 300	Recital Seminar	

Subtotal: 15**Performance Concentration**

MUS 225	Applied Music Major	2
MUS 226	Applied Music Major	2
MUS 325	Applied Music Major	2
MUS 326	Applied Music Major	2
MUS 425	Applied Music Major	2
MUS 426	Applied Music Major	2
MUS 200	Recital Seminar	
MUS 300	Recital Seminar	
MUS 400	Recital Seminar	
MUS 403	Counterpoint	3
	Senior Performance Recital (Capstone experience)	

Subtotal: 15**Electronic Music Concentration**

MUS 205	Applied Music Major	2
MUS 206	Applied Music Major	2
MUS 200	Recital Seminar	
MUS 285	Music Copyright	3
MUS 440	Composition for Electronic Media I	3

MUS 441	Composition for Electronic Media II	3
MUS 442	Seminar in Computer Music	3
MUS 443	Seminar in New Music Software	3

Subtotal: 19**TOTAL CREDIT HOURS: 91****MUSIC EDUCATION BACHELOR OF MUSIC**

The Music Education degree program provides the means for students to acquire and demonstrate the required competencies for certification to teach music in the elementary and secondary schools. The New York State Education Department also requires students to pass tests of professional knowledge (the Education Teacher Performance Assessment - edTPA portfolio, the Educating All Students test – EAS), general knowledge (Academic Literacy Skills Test – ALST), the Content Specialty Test (CST) in music, fingerprinting, practicum hours including 15 hours understanding needs of students with disabilities, and experience a high-needs school setting, and workshops designated for all applicants for the Initial Certificate to teach music.

GENERAL REQUIREMENTS:**Musicianship Core**

The musicianship core is the set of required studies common to all music degree programs (Bachelor of Arts in Music, Bachelor of Science in Music Therapy, Bachelor of Science in Music with an emphasis in Sound Recording Technology, all programs of the Bachelor of Music).

MUS 163	Our World of Music	1
MUS 164	Our World of Music	1
MUS 263	Music History in Western Civilization I	3
MUS 264	Music History in Western Civilization II	3
MUS 231	Conducting I	2
MUS 121	Aural Skills I	2
MUS 122	Aural Skills II	2
MUS 123	Music Theory I	3
MUS 124	Music Theory II	3
MUS 221	Aural Skills III	2
MUS 222	Aural Skills IV	2
MUS 223	Music Theory III	3
MUS 224	Music Theory IV	3
MUS 118	Piano Class, Elementary	2
MUS 100	Recital-Seminar	
MUS 120	Concert Attendance	
MUS 125	Applied Music Major	2
MUS 126	Applied Music Major	2
	Graduation Recital	

Subtotal: 36**NOTE:**

- MUS 118: waived for students whose principal instrument is piano;
- MUS 120: each semester of private applied lessons;
- MUS 125 and MUS 126 (instead of MUS 105 and MUS 106) for Bachelor of Music in Music Education and Bachelor of Music in Performance;
- MUS 107 and MUS 108 are required of all freshmen oboe and bassoon majors;
- Each student must declare a General/Choral or Instrumental concentration as designated by the Music Education Handbook.

Plus the following

MUS 200	Recital Seminar	
MUS 217	Piano Class, Intermediate	1
MUS 218	Piano Class, Intermediate	1
MUS 225	Applied Music Major	2
MUS 226	Applied Music Major	2
MUS 231	Conducting I	2
MUS 232	Conducting II	2
MUS 300	Recital Seminar	
MUS 325	Applied Music Major	2
MUS 326	Applied Music Major	2
MUED 150	Introduction to Public School Music	
MUED 250	Foundations of Music Education I	2
MUED 251	Foundations of Music Education II	2
MUED 252	Child Abuse/Neglect Reporting	
MUED 253	Alcohol, Tobacco, and Drug Abuse Identification	
MUED 255	Foundations I Practicum - Elementary	
MUED 256	Foundations II Practicum - Middle School	
MUED 291	Technology in Music I	2
MUED 300	Foundations in Music Education III	3
MUED 303	Literacy Instruction Workshop	
MUED 355	Foundations III Practicum - Secondary	
MUED 356	Methods Practicum	
MUED 400	Professional Semester	12
MUTY 240	Music for Children with Disabilities	1
EDU 303	Safe Schools/Healthy Students-DASA: Safety Education/Fire and Arson/School Violence course	1
	Graduation Recital	

Subtotal: 37

NOTE: One MUED 255/MUED 256 practicum must be in a high-needs school.

Subtotal: 73

GENERAL/CHORAL CONCENTRATION REQUIREMENTS**For Non-Piano/Non-Voice Students:**

MUS 217	Piano Class, Intermediate	1
MUS 218	Piano Class, Intermediate	1
MUS 317	Piano Class	1
MUS 318	Piano Class	1
MUS 417	Piano Class for Non-Keyboard Majors	1
MUED 203	Intermediate Voice Class	1.5
MUED 204	Advanced Voice Class	1.5
MUED 210	Guitar Class	1
MUED 211	Guitar Class	1
MUED 301	General Music in Elementary School	2
MUED 302	General Music in Secondary School	2
MUED 391	Elementary School Choral Rehearsal Techniques	3
MUED 392	Secondary School Choral Rehearsal Techniques	3

Subtotal: 20.0

NOTE: Music Education electives by advisement, including brass, woodwinds, string and percussion secondary instruments. One (1) credit ensemble each semester of residency except during student teaching, four of which must be choral ensembles.

For Keyboard Students:

MUS 113	Voice Class	1
MUS 415	Piano Class for Keyboard Majors	1
MUS 416	Piano Class for Keyboard Majors	1
MUED 203	Intermediate Voice Class	1.5
MUED 204	Advanced Voice Class	1.5
MUED 210	Guitar Class	1
MUED 211	Guitar Class	1
MUED 301	General Music in Elementary School	2
MUED 302	General Music in Secondary School	2
MUED 391	Elementary School Choral Rehearsal Techniques	3
MUED 392	Secondary School Choral Rehearsal Techniques	3

Subtotal: 18.0

NOTE: Music Education electives by advisement, including brass, woodwinds, string and percussion secondary instruments. One (1)-credit ensemble each semester of residency including piano ensemble and a minimum of four semesters in choral ensembles.

For Voice Students:

MUS 033	Opera Prod Practicum	0.5
MUS 137	Diction for Singers	.5
MUS 138	Diction for Singers	.5
MUS 139	Diction for Singers	.5
MUS 140	Diction for Singers	.5
MUS 217	Piano Class, Intermediate	1
MUS 218	Piano Class, Intermediate	1
MUS 317	Piano Class	1
MUS 318	Piano Class	1
MUS 417	Piano Class for Non-Keyboard Majors	1
MUED 210	Guitar Class	1
MUED 211	Guitar Class	1
MUED 301	General Music in Elementary School	2
MUED 302	General Music in Secondary School	2
MUED 391	Elementary School Choral Rehearsal Techniques	3
MUED 392	Secondary School Choral Rehearsal Techniques	3

Subtotal: 19.5

NOTE: Music Education electives by advisement, including brass, woodwinds, string and percussion secondary instruments. Seven semesters in 1-credit choral ensembles.

INSTRUMENTAL CONCENTRATION REQUIREMENTS

For Instrumental Applied Students:**Required Courses:**

MUS 113	Voice Class	1
MUED 301	General Music in Elementary School	2
	or	
MUED 302	General Music in Secondary School	2
MUED 304	Instrumental Music in Elementary School	2
MUED 305	Instrumental Music in Secondary School	2
MUED 393	Elementary School Instrumental Rehearsal Techniques	2
MUED 394	Secondary School Instrumental Rehearsal Techniques	2

Subtotal: 11

NOTE: Secondary instrument courses required, as designated by the Music Education Handbook. Successful completion of competency examinations on specified secondary instruments. Music Education electives by advisement. One (1)-credit ensemble using principal instrument each semester, plus two semesters in a 1-credit

choral ensemble, plus at least one semester of instrumental chamber music.

Secondary Instrument Courses (8 credit hours):

MUS 113	Voice Class	1
MUS 217	Piano Class, Intermediate	1
MUS 218	Piano Class, Intermediate	1
MUED 161	Beginning Trumpet	1
MUED 162	Beginning Trombone	1
MUED 163	Beginning French Horn	1
MUED 164	Beginning Tuba/Euphonium	1
MUED 171	Beginning Clarinet	1
MUED 172	Beginning Flute	1
MUED 173	Beginning Oboe	1
MUED 174	Beginning Bassoon	1
MUED 175	Beginning Saxophone	1
MUED 185	Beginning Violin/Viola	1
MUED 186	Beginning Cello	1
MUED 187	Beginning String Bass	1
MUED 221	Percussion Class	2
MUED 222	Advanced Percussion	1
MUED 260	Brass Pedagogy	1
MUED 261	Advanced Trumpet	1
MUED 262	Advanced Trombone	1
MUED 263	Advanced French Horn	1
MUED 264	Advanced Tuba/Euphonium	1
MUED 271	Advanced Clarinet	2
MUED 272	Advanced Flute	2
MUED 273	Advanced Oboe	2
MUED 274	Advanced Bassoon	2
MUED 275	Advanced Saxophone	2
MUED 285	Advanced Violin/Viola	2
MUED 286	Advanced Cello/String Bass	2

Subtotal: 8**For Keyboard or Voice Students (this option only by permission of the Area Chair for Music Education):****Required Courses:**

MUS 315	Secondary Applied Study	1
MUS 316	Secondary Applied Study	1
MUED 301	General Music in Elementary School	2
	or	
MUED 302	General Music in Secondary School	2
MUED 304	Instrumental Music in Elementary School	2
MUED 305	Instrumental Music in Secondary School	2
MUED 393	Elementary School Instrumental Rehearsal Techniques	2
MUED 394	Secondary School Instrumental Rehearsal Techniques	2

Subtotal: 12

NOTE: MUS 316: additional permission required.
Secondary instrument courses required as designated by the Music Education Handbook.

Secondary Instrument Courses (8 credit hours):

MUED 161	Beginning Trumpet	1
MUED 162	Beginning Trombone	1
MUED 163	Beginning French Horn	1
MUED 164	Beginning Tuba/Euphonium	1
MUED 171	Beginning Clarinet	1
MUED 172	Beginning Flute	1
MUED 173	Beginning Oboe	1
MUED 174	Beginning Bassoon	1
MUED 175	Beginning Saxophone	1
MUED 185	Beginning Violin/Viola	1
MUED 186	Beginning Cello	1
MUED 187	Beginning String Bass	1
MUED 221	Percussion Class	2
MUED 222	Advanced Percussion	1
MUED 260	Brass Pedagogy	1
MUED 261	Advanced Trumpet	1
MUED 262	Advanced Trombone	1
MUED 263	Advanced French Horn	1
MUED 264	Advanced Tuba/Euphonium	1
MUED 271	Advanced Clarinet	2
MUED 272	Advanced Flute	2
MUED 273	Advanced Oboe	2
MUED 274	Advanced Bassoon	2
MUED 275	Advanced Saxophone	2
MUED 285	Advanced Violin/Viola	2
MUED 286	Advanced Cello/String Bass	2
MUED 301	General Music in Elementary School	2
	or	
MUED 302	General Music in Secondary School	2
MUED 304	Instrumental Music in Elementary School	2
MUED 305	Instrumental Music in Secondary School	2
MUED 393	Elementary School Instrumental Rehearsal Techniques	2
MUED 394	Secondary School Instrumental Rehearsal Techniques	2

Subtotal: 8

Successful completion of competency examinations on specified secondary instruments. Music Education electives by advisement. One (1) credit ensemble each semester of residency. Minimum of four must be 1-credit instrumental ensembles and two must be 1-credit choral ensembles. A minimum of two semesters of Secondary Applied MUS 315- MUS 316 or other approved private study on an orchestral instrument (woodwind, brass, string, or percussion).

Students who can demonstrate the competencies and any additional requirements associated with any course will be excused from taking the course. However, since there is no upper limit in skill development, it is recommended that students use the time thus saved to complete a like amount of advanced course work from the area(s) in question. Students are encouraged to elect as much additional course work as possible in their concentration, in music education, or in performance, theory, history and literature in consultation with their academic advisor and/or the Chair for Music Education.

Students must complete at least 120 total credit hours of course work in order to meet the minimum university requirements for the awarding of a degree.

Professional Standing is the recognition that students have successfully completed all requirements to enter educator preparation courses, which are MUED courses at the 300 level. Upon completion of 200-level Music and Music Education requirements, each student will submit a formal application for Professional Standing and must demonstrate the following:

1. 3.00 overall GPA;
2. C minimum earned grade in MUED courses;
3. C- minimum grade earned in Music Theory MUS 222, MUS 224;
4. MUED 150, MUED 250 and MUED 251 completed;
5. Two practica completed;
6. Secondary Instrument Competencies: General/Choral Concentration: vocal MUS 317 and MUED 204; Instrumental Concentration: (four playing classes, completed with at least two proficiencies, MUS 113 and MUS 218; and
7. MUS 231 and MUS 232 completed.

Any student not meeting all standards will be denied acceptance into Professional Standing and will not be admitted into junior level Music Education educator preparation course work. Music Education courses may be retaken only once.

Foreign Language Requirement

Candidates in all education programs are required to demonstrate competence in a foreign language. This requirement must be satisfied in any one of the following ways:

- Score of 85 percent or higher on New York State Regents Exam or New York State High School Equivalent Exam*: Requirement is fulfilled.
- Scores of 65 percent - 84 percent on New York State Regents Exam or New York State High School Equivalent Exam*: Student needs to take an Elementary I level course or an Elementary II level course of a language or equivalent course(s), or

successfully complete an equivalent Fredonia proficiency exam.

- Scores below 65 percent on New York State Regents Exam or New York State High School Equivalent Exam*: Student needs to take an Elementary I level course and an Elementary II level course or equivalent course(s) of the same language.
- If student did not take a New York State Regents Exam or New York State High School Equivalent Exam*: Student needs to take an Elementary I level course and an Elementary II level course or equivalent course(s) of the same language.

NOTE: The General Education foreign language requirement differs from the certification requirement and must be satisfied for degree conferral.

* *High School Equivalent Exam refers to a New York State Local School District Exam or Regional Exam in a Foreign Language.*

As of December 31, 2013, candidates in all education programs are required to complete training under the Dignity for All Students Act (DASA). Beginning in the Fall 2013 semester, the training required under the Dignity for All Student Act (DASA) will be included in EDU 303 at Fredonia. Undergraduate candidates planning to graduate after Fall 2013 who have already completed EDU 303 on campus or taken a workshop as a substitution for EDU 303 must also complete the EDU DASA workshop prior to graduation. For additional information on Teacher Certification requirements, please see Office of Student Services catalog page entitled Teacher Education Certification and Education Advisement (p. 67).

Student Teaching

(MUED 400 Professional Semester and assorted special seminar classes held during student teaching.) The student must have:

1. An overall minimum of 3.00 GPA with last semester before student teaching minimum GPA of 2.75;
2. An average of 2.50 (C+) in all MUED and MUTY required courses and no less than a grade of C in any single MUED course;
3. A 2.00 (C) average in MUS required courses, with a minimum grade of C- in theory and D+ in other MUS courses;
4. Satisfactorily completed all stated prerequisite competencies for performance, musicianship, and music education as stated in the Music Education Handbook;
5. Satisfactorily completed four required practica (MUED 255, MUED 256, MUED 355, MUED 356);
6. The recommendation of the Music Education professional staff, based on contact with the student in the Foundations in Music Education sequence of courses and the Methods Course sequence MUED 150, MUED 250, MUED 251, MUED 300, MUED 301, MUED 302, MUED 304, MUED 305, MUED 391, MUED 392, MUED 393, MUED 394;
7. Demonstrated professional dispositions, the values and attitudes consistent with the highest professional standards, at all times in real world interactions and in all online activities that are accessible by other professionals and the public. The specific Professional Dispositions required are listed in the Music Education Handbook and online, through the College of Education website;
8. Completed and submitted student teaching application, personal data forms, and Music Education e-portfolio by the announced due dates.

Other Activities during the Professional Semester (Capstone experience)

Because of the time involved and the importance of student teaching in the preparation of a teacher:

1. Students may not participate in any university courses or formal (School of Music sponsored) extracurricular activities during the professional semester;
2. Students may not perform recitals, opera roles, concerto or ensembles during the professional semester;
3. Students are urged to avoid other regular obligations, such as jobs, during the professional semester; student teachers often must stay after school for rehearsals and return evenings for rehearsals and concerts.

MUSIC EDUCATION MASTER OF MUSIC

(30-36 credit hours)

Requirements for Admission to Program without Deficiencies:

- Undergraduate studies equivalent to the Bachelor of Music Education degree offered at Fredonia;
- Completion of a baccalaureate degree in Music at an accredited four-year institution with a minimum of 3.0 GPA preferred;
- Prior (undergraduate) GPA of 3.00 or above;
- Initial certification to teach music in the public schools of New York State or equivalent preparation;
- Reported scores on the GRE;
- Applicants who do not meet these requirements may be admitted conditionally by permission of the Director of the School of Music and with the approval of the Associate Provost for Graduate Studies;

- A performance audition is not necessary; however, students in the Music Education degree program who desire to do a Performance Recital Final Project must audition for and be accepted by the appropriate applied music faculty at the time of application and not later than 6 to 12 credit hours into the program.

The School of Music offers two tracks, the Final Project Program and the In-Service Program, for the Master of Music in Music Education. Each track consists of core curriculum required for all Master of Music degrees and additional requirements as accredited by the National Association of Schools of Music (NASM).

Final Project Program

The program leads to one of three Final Project options: Thesis, Composition/Arrangement, or Performance Recital. Prior approval must be obtained from the performance faculty or Music Education committee for students wishing to exercise this option. (For the Performance Recital option, the applicant must audition for and be accepted by the appropriate applied music faculty at the time of application and not later than 6 to 12 credit hours into the program.) The program is designed to prepare a student for further graduate study and/or to refine a specific area of interest or competence. The program leads to the academic qualifications required for Professional Certification in New York State.

General Requirements

1. At least 12 credit hours for the overall program should be in music education and music education-related course work.
2. At least 9 credit hours for the overall program should be in course work dealing with music theory, history, literature, analysis, or performance.
3. At least 15 credit hours of the overall program should be in course work at the 600 level.

SPECIFIC REQUIREMENTS

Required Courses

MUS 521	Music Bibliography	3
MUS 624	Analytic Techniques	3
MUED 619	Foundations of Music Education I	3
MUED 620	Foundations of Music Education II	3
MUED 621	Music Education Foundation III	3
MUED 695	Thesis/Final Project	1-3
Subtotal:		16-18

NOTE:

- 3 credit hours of Music Education or Music Education-related course work, by advisement (MUED)
- 3 credit hours of course work in theory, history, literature, performance
- 6 credit hours of elective course work by advisement*

*Individualized selections of course work in theory, history, literature, performance and special studies MUS 590 or MUED 590 and MUED 591. Course work outside of music may be acceptable, subject to the establishing of a clear relationship to the candidate's professional goals. Short "workshops" MUED 555/MUED 565 can be applied only in this category. For those approved for the performance project option, electives will include MUS 605 and MUS 606 as 4 of the 6 elective credits.

As of December 31, 2013, candidates in all education programs are required to complete training under the Dignity for All Students Act (DASA). Beginning in the Fall 2013 semester, the training required under the Dignity for All Student Act (DASA) will be included in EDU 303 at Fredonia. Undergraduate candidates planning to graduate after Fall 2013 who have already completed EDU 303 on campus or taken a workshop as a substitution for EDU 303 must also complete the EDU DASA workshop prior to graduation.

TOTAL CREDIT HOURS: 30-36

MUSIC INDUSTRY BACHELOR OF SCIENCE

Office: E336 Thompson Hall
(716) 673-4959

Dr. Reneta Barneva, *Chairperson*

Email: reneta.barneva@fredonia.edu

Website: <http://home.fredonia.edu/musicindustry>

The Music Industry major is for students interested in a comprehensive exploration of the various facets of the music industry including: contracts, publishing (copyrights, dissemination of the intellectual property licensing, music books, exploitation of catalog), the record business (recording, artist management, licensing, record distribution), tour management, self-employment business basics, marketing, business and legal affairs, public relations, promotion, sales and distribution, merchandising, and artist relations and ethics in the music industry.

REQUIREMENTS FOR THE BACHELOR OF SCIENCE IN MUSIC INDUSTRY

A. Supporting courses (27 credit hours):

COMM 102	Mass Media and Society	3
CSIT 107	Web Programming I	3
CSIT 104	Introduction to Microcomputer Software	3
	or	
CSIT 151	Introduction to Information Systems	3
ECON 200	Fundamentals of Statistics for Business Administration and Economics	3
	or	

BUAD 200	Fundamentals of Statistics for Business and Economics	3
ACCT 201	Principles of Financial Accounting	3
ACCT 202	Principles of Managerial Accounting	3
ECON 201	Principles of Macroeconomics	3
ECON 202	Principles of Microeconomics	3
ENGL 100	English Composition	3

Subtotal: 27**B. Major course requirements (51 credit hours):**

	MUS 021-048 Special Ensemble	0.5
	MUS 021-048 Special Ensemble	0.5
MUS 101	Beginning Music Theory I	3
MUS 104	Applied Music Class for Non-Music Majors	1
MUS 115	Music Appreciation	3
MUSB 101	Music Industry Career Foundations	3
MUSB 201	The Business of Music	3
MUSB 230	History of the Music Industry	3
MUSB 301	Music Copyrights	3
MUSB 304	Business of the Beatles	3
MUSB 320	Music Contracts	3
MUSB 420	Student Record Label	3
MUSB 425	Music Marketing and Promotion	3
MUSB 435	Contemporary Issues in Music and the Marketplace	3
MUSB 465	Music Industry Internship	1-15
MUSB 470	Concert Touring and Sound	3
MUS 333	Musics of the World	3

Subtotal: 45**NOTE:**

- MUS 104 must be taken twice for a total of 2 credit hours (credit hours are included in the total above).
- MUSB 465 is a variable 1-15 credit hour course; students must successfully complete the course with a minimum of 3 credit hours to satisfy the degree requirements.

Plus 3 credit hours from the following:

MUS 265	History of Jazz	3
MUS 270	The History of American Popular Music, 1900-1963	3
MUS 457	Seminar in Popular Music	3

Subtotal: 3**Music Industry Elective:**

	MUSB or MUS or BUAD course, by advising	3
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Subtotal: 3**C. All Music Industry majors must complete at least 66 credit hours of non-MUSB prefixed courses****TOTAL CREDIT HOURS: 78****MUSIC PERFORMANCE BACHELOR OF MUSIC**

(76-85 credit hours in music)

Through a study of solo, chamber and large ensemble literature, this program emphasizes the development of skills for a potential career as a performer.

GENERAL REQUIREMENTS:**Musicianship Core**

The musicianship core is the set of required studies common to all music degree programs (Bachelor of Arts in Music, Bachelor of Science in Music Therapy, Bachelor of Science in Music with an emphasis in Sound Recording Technology, all programs of the Bachelor of Music).

MUS 163	Our World of Music	1
MUS 164	Our World of Music	1
MUS 263	Music History in Western Civilization I	3
MUS 264	Music History in Western Civilization II	3
MUS 231	Conducting I	2
MUS 121	Aural Skills I	2
MUS 122	Aural Skills II	2
MUS 123	Music Theory I	3
MUS 124	Music Theory II	3
MUS 221	Aural Skills III	2
MUS 222	Aural Skills IV	2
MUS 223	Music Theory III	3
MUS 224	Music Theory IV	3
MUS 118	Piano Class, Elementary	2
MUS 100	Recital-Seminar	
MUS 120	Concert Attendance	
MUS 125	Applied Music Major	2
MUS 126	Applied Music Major	2

Subtotal: 36**NOTE:**

- MUS 125 and MUS 126 (instead of MUS 105 and MUS 106) for Bachelor of Music degree in Music Education and Bachelor of Music degree in Performance;
- MUS 118: waived for students whose principal instrument is piano;
- MUS 120: each semester of private applied lessons;
- MUS 107 and MUS 108 are required of all freshmen oboe and bassoon majors.

Plus the following:

MUS 200	Recital Seminar	
MUS 245	Performance Major	3
MUS 246	Performance Major	3
MUS 300	Recital Seminar	
MUS 345	Performance Major	3
MUS 346	Performance Major	3
MUS 400	Recital Seminar	
MUS 445	Performance Major	3
MUS 446	Performance Major	3
MUS 347	Junior Recital	1
MUS 447	Senior Recital	1
MUED 291	Technology in Music I	2

Subtotal: 22

NOTE: 1-credit hour ensemble using principal instrument each semester of residency. Six participations in .5 credit hour ensembles.

Each student is admitted to the program on a principal performing instrument, with additional requirements as follows:

For a Major in Performance, Percussion

MUS 217	Piano Class, Intermediate	1
MUS 218	Piano Class, Intermediate	1
MUS 355	Pedagogy Practicum	
MUS 356	Pedagogy Practicum	

Subtotal: 2**For a Major in Performance, Piano**

MUS 340	Piano Pedagogy I	3
MUS 420	Piano Literature I	3
MUS 421	Piano Literature II	3
MUS 355	Pedagogy Practicum	
MUS 356	Pedagogy Practicum	
MUS 415	Piano Class for Keyboard Majors	1
MUS 416	Piano Class for Keyboard Majors	1

Subtotal: 11

Piano Performance majors may add a Concentration in Piano Pedagogy by also taking the following courses in addition to the requirements of the Bachelor of Music in Performance, Piano:

MUS 341	Piano Pedagogy II	3
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Subtotal: 3**For a Major in Performance, Stringed Instruments (71 credit hours)**

MUS 217	Piano Class, Intermediate	1
MUS 218	Piano Class, Intermediate	1
MUS 355	Pedagogy Practicum	
MUS 356	Pedagogy Practicum	
	Electives in music theory, musicology, string literature or chamber music literature	6

Subtotal: 8**For a Major in Performance, Voice**

MUS 033	Opera Prod Practicum	0.5
MUS 137	Diction for Singers	.5
MUS 138	Diction for Singers	.5
MUS 139	Diction for Singers	.5
MUS 140	Diction for Singers	.5
MUS 217	Piano Class, Intermediate	1
MUS 218	Piano Class, Intermediate	1
MUS 317	Piano Class	1
MUS 318	Piano Class	1
MUS 344	Vocal Pedagogy	3
MUS 349	Vocal Pedagogy Practicum	1
MUS 417	Piano Class for Non-Keyboard Majors	1
MUS 418	Piano Improvisation for Non-Keyboard Majors	1
	Music Theory elective	
	Music history or literature elective	

Subtotal: 12.5

NOTE:

- MUS 138 (p. 461) is the 2nd of 4 diction courses;
- MUS 139 (p. 461) is the 3rd of 4 diction courses;
- MUS 417 (p. 471) - MUS 418 (p. 471): or successful completion of one semester of accompanying work under the supervision of the MUS 418 (p. 471) Class Piano Instructor.
- A minimum of four semesters of German French, Italian or Spanish by advisement.
- At least two semesters of Opera Seminar (level I or II)
- Voice performance majors are required to enroll for a minimum of four semesters of MUS 033 (p. 457) Opera Production Practicum as part of the ensemble requirements. The required freshman year participation in Practicum may count as one of the required semesters.

Credit in Opera Production Practicum may be earned in one of two ways:

1. By working on a set, costume, lighting, or running crew for one School of Music stage production during the semester that would require two to three evenings' attendance a week for a period of approximately five weeks.
2. By performing a leading or secondary role or singing in the chorus of a university musical stage production during the semester.

For a Major in Performance, Wind Instruments

MUS 217	Piano Class, Intermediate	1
MUS 218	Piano Class, Intermediate	1
MUS 355	Pedagogy Practicum	
MUS 356	Pedagogy Practicum	

Music Theory elective
Music History elective

Subtotal: 2

TOTAL CREDIT HOURS: 76-85

MUSIC PERFORMANCE MASTER OF MUSIC

(30-34 credit hours)

Requirements for Admission to Program without Deficiencies:

Completion of a baccalaureate degree in Music at an accredited four-year institution with a minimum of 3.0 GPA preferred. Applicants who do not meet these requirements may be admitted conditionally by permission of the Director of the School of Music and with the approval of the Office of Graduate Studies.

Must audition for and be accepted by the appropriate applied music faculty.

A student working toward a Master of Music in Performance must select one of the three performance tracks: 1) Instrumental, 2) Voice, or 3) Conducting. Each track consists of core curriculum required for all Master of Music degrees and additional requirements as accredited by the National Association of Schools of Music (NASM).

At least 15 credit hours of the overall program should be at the 600 level.

PERFORMANCE TRACKS REQUIREMENTS

Instrumental (orchestral instruments, guitar, piano)

MUS 521	Music Bibliography	3
MUS 624	Analytic Techniques	3
MUS 692	Graduate Performance Major	3
MUS 693	Graduate Performance Major	3
MUS 694	Recital	3

Collaborative Piano

MUS 521	Music Bibliography	3
MUS 522	Style and Techniques of Song Literature	3
MUS 523	Sonata Duo and Chamber Ensemble Seminar	3
MUS 524	Techniques of Opera Coaching	3
MUS 592	Graduate Performance Major	3
MUS 593	Graduate Performance Major	3
MUS 615	Graduate Diction for Singers	3
MUS 624	Analytic Techniques	3
MUS 692	Graduate Performance Major	3
MUS 693	Graduate Performance Major	3
MUS 694	Recital	3

Voice

MUS 521	Music Bibliography	3
MUS 624	Analytic Techniques	3

MUS 592	Graduate Performance Major	3
MUS 593	Graduate Performance Major	3
MUS 692	Graduate Performance Major	3
MUS 693	Graduate Performance Major	3
MUS 615	Graduate Diction for Singers	3

Conducting

MUS 521	Music Bibliography	3
MUS 624	Analytic Techniques	3
MUS 692	Graduate Performance Major	3
MUS 693	Graduate Performance Major	3
MUS 694	Recital	3

Additional Requirements

Instrumental (orchestral instruments, guitar, piano)

- 3 credit hours of music history, literature, or theory related to the performance area
- 3 credit hours of music theory
- 3 credit hours of music history
- 6 credit hours of elective courses in supporting areas of arts and sciences, professional education, music, or music education
- Two semesters of ensemble participation (by advisement)
- Final Comprehensive Oral Examination

Collaborative Piano

- 6 credit hours of music history, literature or theory (by advisement)
- Final Comprehensive Oral Examination

Voice

- 3 credit hours of music history or theory (by advisement)
- Electives (to complete the degree program, students will elect Plan A or Plan B with approval of the School of Music graduate advisor)

Plan A: Minimum of 10 credit hours of elective courses within the School of Music in theory, history and literature, opera workshop and ensembles, and performance-related courses.

Plan B: Minimum of 4 credit hours of elective courses within the School of Music and minimum of 6 credit hours outside the major or outside the department. Electives may include courses of special interest such as, but not limited to, opera craft, stage direction, language, literature, and vocal pedagogy/speech pathology with approval of graduate music advisor.

- Two semesters of ensemble participation (by advisement)
- Two Public Performances

- Final Comprehensive Oral Examination

Conducting

- 3 credit hours of music history, literature, or theory related to the performance area
- 3 credit hours of music theory
- 3 credit hours of music history
- 6 credit hours of elective courses in supporting areas of arts and sciences, professional education, music, or music education
- Two semesters of ensemble participation (by advisement)
- Final Comprehensive Oral Examination

TOTAL CREDIT HOURS: 30-34

MUSICAL THEATRE BACHELOR OF FINE ARTS

Department of Theatre and Dance

Office: 212 Rockefeller Arts Center
(716) 673-3596

Dr. Thomas Loughlin, *Interim Chairperson*

Email: theatre.dance@fredonia.edu

School of Music

Office: 1151 Mason Hall
(716) 673-3151

Dr. Melvin Unger, *Director*

Email: music.school@fredonia.edu

The Musical Theatre degree is accredited by the National Association of the Schools of Music and the National Association of Schools of Theatre.

DEGREE REQUIREMENTS FOR THE BACHELOR OF FINE ARTS IN MUSICAL THEATRE:

Required Courses

DANC 100	Introduction to Dance	3
DANC 111	Modern Technique I	2
DANC 112	Ballet I	2
DANC 113	Jazz Dance I	2
DANC 114	Tap Dance I	2
DANC 211	Modern Technique II	2
DANC 264	Choreography I	3
MUS 100	Recital-Seminar	
MUS 101	Beginning Music Theory I	3
MUS 102	Beginning Music Theory II	3
MUS 117	Piano Class, Elementary	1
MUS 118	Piano Class, Elementary	2
MUS 125	Applied Music Major	2
MUS 126	Applied Music Major	2
MUS 137	Diction for Singers	.5
MUS 138	Diction for Singers	.5

MUS 139	Diction for Singers	.5
MUS 140	Diction for Singers	.5
MUS 200	Recital Seminar	
MUS 217	Piano Class, Intermediate	1
MUS 218	Piano Class, Intermediate	1
MUS 235	Musical Theatre Voice	3
MUS 236	Musical Theatre Voice	3
MUS 300	Recital Seminar	
MUS 335	Musical Theatre Voice	3
MUS 336	Musical Theatre Voice	3
MUS 400	Recital Seminar	
MUS 435	Musical Theatre Voice	3
MUS 436	Musical Theatre Voice	3
THEA 100	Theatre Majors Seminar	1
THEA 101	Theatre and Dance Productions	1
THEA 102	Theatre and Dance Productions	1
THEA 121	Introduction to Technical Theatre	3
THEA 131	Acting Studio: Acting I	3
THEA 132	Acting Studio: Acting II	3
THEA 201	Theatre and Dance Productions	1
THEA 202	Theatre and Dance Productions	1
THEA 220	Makeup	1
THEA 231	Acting Studio: Scene Study I	3
THEA 232	Acting Studio: Scene Study II	3
THEA 242	Acting Studio: Introduction to Voice and Movement I	3
THEA 243	Acting Studio: Introduction to Voice and Movement II	3
THEA 301	Theatre and Dance Productions	1
THEA 302	Theatre and Dance Productions	1
THEA 341	Acting Studio: Shakespeare	3
THEA 353	History of Musical Theatre	3
THEA 382	Musical Theatre Styles I	3
THEA 401	Theatre and Dance Productions	1
THEA 402	Theatre and Dance Productions	1
THEA 424	Acting Studio: Audition Techniques	3
THEA 432	Musical Theatre Styles	3
THEA 434	Musical Theatre Styles Lab	1

Subtotal: 98.0

NOTE: In addition to the DANC courses listed above, 2 additional Level II courses (Jazz II, Tap II, Ballet II) or their substitutes as approved by faculty are required.

The Music Recital Seminars (MUS 100, 200, 300, 400) must each be taken twice. Students are required to be in a Recital Seminar class for each semester they are taking voice lessons.

In addition to the MUS courses listed above, Musical Theatre students must participate in a minimum of two choral ensembles. Students are encouraged to audition for choral ensembles at the beginning of the year. Participation in any choral ensemble, including University Chorus, will fulfill this requirement.

THEA 101,102, 201, 202, 301, 302, 401 and 402 cannot be applied to the completion of the B.F.A. degree.

Additional Requirements

In addition to the specific and individual courses, periodic reviews of achievement are conducted for all candidates with the purpose of determining advancement or retention. The Musical Theatre program requires a vocal and acting jury at the conclusion of each semester. Dance juries are held at the end of the first year and each succeeding semester. A Vocal/Acting/Dance jury is conducted at the conclusion of the fourth semester to determine continuance in the program. A public senior recital is presented in the fourth year. The recital includes performance in acting, dancing and singing, and must be 25 minutes in length. Students on academic probation will not be permitted to participate in public performances. Details for these and other requirements may be found in the Student Handbook for the Department of Theatre and Dance.

Musical Theatre majors are required to complete Theatre and Dance Productions obligations every semester, which are practical extensions of the classroom. Theatre and Dance Productions credits do not count toward the total number of credits required in the B.F.A. Musical Theatre major. Musical Theatre majors must successfully complete a minimum of 30 upper level credit hours.

TOTAL CREDIT HOURS: 98.0

MUSIC THEORY-COMPOSITION MASTER OF MUSIC

Requirements for Admission to Program without Deficiencies:

Undergraduate studies in music equivalent to a Bachelor of Music degree with a major in theory or composition, or any other undergraduate music degree which includes four semesters of music theory (equivalent to Fredonia's MUS 121-MUS 122, MUS 123-MUS 124, MUS 221-MUS 222, MUS 223-MUS 354), a music history survey (equivalent to MUS 263 and MUS 264), and advanced undergraduate courses in theory, composition, orchestration, counterpoint, or music history totaling at least 12 semester hours.

MUSIC THEORY TRACK

Final Comprehensive Oral Examination required

Core Requirements

MUS 521	Music Bibliography	3
MUS 624	Analytic Techniques	3
		Subtotal: 6

Required Theory Courses

MUS 503	20th Century Counterpoint	3
MUS 614	The Pedagogy of Music Theory	3
MUS 652	Schenkerian Analysis	3
MUS 653	Post-Tonal Analysis	3

Subtotal: 12

Music History Requirements.

Select 3 of the following:

MUS 542	Renaissance Period in Music	3
MUS 643	Baroque Period in Music	3
MUS 544	Classical Period in Music	3
MUS 545	Romantic Period in Music	3
MUS 646	Modern Period In Music	3

Subtotal: 9

Final Requirements

During the final semester, theory track majors will complete the following projects:

MUS 695	Thesis	1-3
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Subtotal: 1-3

NOTE: MUS 695 is a variable 1-3 credit hour course. Students must complete the course for 3 credit hours in order to satisfy the degree requirements.

MUSIC COMPOSITION TRACK

Final Comprehensive Oral Examination required

Core Requirements

MUS 521	Music Bibliography	3
MUS 624	Analytic Techniques	3

Subtotal: 6

Composition Requirements

MUS 609	Composition	3
MUS 610	Composition	3
MUS 611	Composition	3
MUS 651	Pedagogy of Music Composition	3

Subtotal: 12

Music Theory Requirements

MUS 614	The Pedagogy of Music Theory	3
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Subtotal: 6

Choose one course from the following:

MUS 503	20th Century Counterpoint	3
MUS 652	Schenkerian Analysis	3
MUS 653	Post-Tonal Analysis	3

Subtotal: 3

Music History Requirements

Select three courses from the following:

MUS 542	Renaissance Period in Music	3
MUS 643	Baroque Period in Music	3
MUS 544	Classical Period in Music	3
MUS 545	Romantic Period in Music	3
MUS 646	Modern Period In Music	3

Subtotal: 9

Final Requirements

During the final semester, composition track majors will complete the following projects:

MUS 695	Thesis	1-3
		Subtotal: 1-3

NOTE: MUS 695 is a variable 1-3 credit hour course. Students must complete the course for 3 credit hours in order to satisfy the degree requirements.

MUSIC THERAPY BACHELOR OF SCIENCE

(77-83 credit hours in MUS, MUED and MUTY)

DEGREE REQUIREMENTS

The program is designed to provide academic, clinical and professional preparation necessary for a career in the music therapy profession. Upon completion of all degree requirements, students are eligible for professional membership in the American Music Therapy Association (AMTA), to sit for the Certification Board for Music Therapists (CBMT), and to become a Board Certified Music Therapist (MT-BC). All music therapy students are advised to minor in Psychology.

The program is designed as direct preparation for the Master of Music degree in Music Therapy. The completion of the master's degree is required to become licensed in New York State as a Creative Arts Therapist.

Music Therapy majors must achieve a minimum grade of B- in all courses designated with the prefix MUTY.

Musicianship Core

The musicianship core is the set of required studies common to all music degree programs (Bachelor of Arts in Music, Bachelor of Science in Music Therapy, Bachelor of Science in Music with an emphasis in Sound Recording Technology, all programs of the Bachelor of Music).

MUS 163	Our World of Music	1
MUS 164	Our World of Music	1
MUS 263	Music History in Western Civilization I	3
MUS 264	Music History in Western Civilization II	3
MUS 231	Conducting I	2
MUS 121	Aural Skills I	2
MUS 122	Aural Skills II	2
MUS 123	Music Theory I	3
MUS 124	Music Theory II	3
MUS 221	Aural Skills III	2
MUS 222	Aural Skills IV	2
MUS 223	Music Theory III	3
MUS 224	Music Theory IV	3
MUS 118	Piano Class, Elementary	2
MUS 100	Recital-Seminar	
MUS 120	Concert Attendance	
MUS 105	Applied Music Major	2
MUS 106	Applied Music Major	2

Subtotal: 36

NOTE:

- MUS 125 and MUS 126 (instead of MUS 105 and MUS 106) for Bachelor of Music degree in Music Education and Bachelor of Music degree in Performance;
- MUS 118: waived for students whose principal instrument is piano;
- MUS 120: each semester of private applied lessons;
- MUS 107 and MUS 108 are required of all freshmen oboe and bassoon majors.

Plus the following:

MUS 042	African Drumming Ensemble	.5
MUS 113	Voice Class	1
MUS 137	Diction for Singers	0.5
MUS 138	Diction for Singers	0.5
MUS 139	Diction for Singers	0.5
MUS 140	Diction for Singers	0.5
MUS 217	Piano Class, Intermediate	1
MUS 218	Piano Class, Intermediate	1
MUS 317	Piano Class	1
MUS 415	Piano Class for Keyboard Majors	1
MUS 318	Piano Class	1
	Successful completion of Piano Proficiency Examination	
MUS 109	Harp Class, Elementary or	1
MUS 119	Free Improvisation	1
MUED 210	Guitar Class	1
MUED 211	Guitar Class	1
MUED 291	Technology in Music I	2
MUS 200	Recital Seminar	
MUS 205	Applied Music Major	2
MUS 206	Applied Music Major	2
PHED 127	Yoga	2
	or	
MUS 370	Rhythm, Pitch, and Gesture	3
MUTY 112	Music Therapy Clinical Observation and Seminar	1
MUTY 115	Introduction to Music Therapy	2
MUTY 116	Orientation to Clinical Practice	2
MUTY 211	Clinical Placement and Seminar I	1
MUTY 212	Clinical Placement and Seminar II	1
MUTY 215	Music Therapy Repertoire	2
MUTY 216	Impact of Music on Human Health and Behavior	2
MUTY 311	Clinical Placement and Seminar III	1
MUTY 312	Clinical Placement and Seminar IV	1
MUTY 315	Methods of Music Therapy	2
MUTY 316	Principles of Music Therapy	2

MUTY 411	Clinical Placement and Seminar V	1
MUTY 416	Music Therapy Internship Seminar	1
MUTY 450	Internship in Music Therapy	4
PSY 129	Introduction to Psychology	3
PSY 200	Statistics	3
	PSY XXX Developmental Psychology Courses	3
PSY 351	Physiological Psychology or	3
PSY 361	Cognitive Neuroscience	3
PSY 356	Abnormal Psychology	3
PSY 447	Introduction to Counseling	3

Subtotal: 65.5-67.5

NOTE:

- MUS 113 waived if voice is principal instrument;
- MUS 137 - MUS 140 required if voice is principal instrument;
- MUS 217 - MUS 218, MUS 317 waived if piano is principal instrument;
- MUS 415 required if piano is principal instrument;
- MUS 318 music therapy section;
- PSY 289 or other developmental psychology course with advisory approval;
- MUS 370 or PHED 127, or as advised;
- PSY 200 may be substituted with an elective psychology course, as advised. Recommended ensemble experiences: 1-credit large ensemble with principal instrument; choral experience for non-vocalists, African drumming. One semester of MUS 033 Opera Production Practicum is required in freshman year for vocalists. Total of 4 credit hours earned in ensembles is required as a minimum (*total included above*).

Music eurythmics class may substitute for yoga.

TOTAL CREDIT HOURS: 77-83

MUSIC THERAPY MASTER OF MUSIC

The Master of Music in Music Therapy program requires completion of 48 credit hours of graduate-level courses. This includes the core music graduate curriculum, core music therapy courses including mental health courses (Psychopathology and Developmental Psychology) and graduate music education courses (Psychology of Music, Psychological Research in Music and Thesis/Final Project). The program is designed with the needs of full-time working music therapists in mind and may be pursued on a part-time basis. The Master of Music in Music Therapy program has been approved as licensed-designated by the New York State Education Department, is approved by the American Music Association, and

accredited by the National Association for Schools of Music.

Requirements for Admission to Program without Deficiencies:

- Bachelor's degree (in Music Therapy) or the equivalent from an accredited college or university
- Minimum of 2.75 overall grade point average
- Two letters of recommendation: one from a clinical supervisor, and one from an academic source (i.e. professor or advisor)

REQUIREMENTS FOR THE MUSIC THERAPY MASTER OF MUSIC

Graduate Core Curriculum

MUS 521	Music Bibliography	3
MUS 624	Analytic Techniques	3
		Subtotal: 6

Music Therapy Course Work

MUTY 505	Foundations of Advanced Music Therapy I	3
MUTY 510	Advanced Guitar Skills for Music Therapists	2
MUTY 518	Advanced Clinical Piano Improvisations	2
MUTY 520	Theory of Vocal Psychotherapy	2
MUTY 530	Introduction to Guided Imagery and Music	2
MUTY 590	Special Studies in Music Therapy	1-3
MUTY 605	Foundations of Advanced Music Therapy II	3
MUTY 620	Vocal Psychotherapy Practice	2
MUTY 630	Theory and Practice in Guided Imagery and Music	2
MUTY 640	Clinical Applications of Guided Imagery and Music Theory and Practice	2

Subtotal: 27-29

NOTE: MUTY 590, as advised.

MUTY 550	Internship in Music Therapy	4
MUTY 650	Advanced Practicum in Music Therapy	2

Subtotal: 6

NOTE: MUTY 550 may be replaced with two credit hours of MUTY 650 (by advisement).

Music Education Course Work

MUED 514	Psychology of Music	3
MUED 522	Psychological Research in Music	3

Subtotal: 6

Psychology Course Work

MUTY 560	Lifespan Human Development	3
MUTY 570	Psychopathology	3
Subtotal: 6		

Final Project

MUED 695	Thesis/Final Project	1-3
Subtotal: 1-3		

TOTAL CREDIT HOURS: 48

MUSICAL THEATRE BACHELOR OF FINE ARTS

Department of Theatre and Dance

Office: 212 Rockefeller Arts Center
(716) 673-3596

Dr. Thomas Loughlin, *Interim Chairperson*

Email: theatre.dance@fredonia.edu

School of Music

Office: 1151 Mason Hall
(716) 673-3151

Dr. Melvin Unger, *Director*

Email: Music.School@fredonia.edu

The Musical Theatre degree is accredited by the National Association of the Schools of Music and the National Association of Schools of Theatre.

REQUIREMENTS FOR THE BACHELOR OF FINE ARTS IN MUSICAL THEATRE

Required Courses:

DANC 100	Introduction to Dance	3
DANC 111	Modern Technique I	2
DANC 112	Ballet I	2
DANC 113	Jazz Dance I	2
DANC 114	Tap Dance I	2
DANC 211	Modern Technique II	2
DANC 264	Choreography I	3
MUS 100	Recital-Seminar	
MUS 101	Beginning Music Theory I	3
MUS 102	Beginning Music Theory II	3
MUS 117	Piano Class, Elementary	1
MUS 118	Piano Class, Elementary	2
MUS 125	Applied Music Major	2
MUS 126	Applied Music Major	2
MUS 137	Diction for Singers	.5
MUS 138	Diction for Singers	.5
MUS 139	Diction for Singers	.5
MUS 140	Diction for Singers	.5
MUS 200	Recital Seminar	
MUS 217	Piano Class, Intermediate	1
MUS 218	Piano Class, Intermediate	1
MUS 235	Musical Theatre Voice	3
MUS 236	Musical Theatre Voice	3
MUS 300	Recital Seminar	

MUS 335	Musical Theatre Voice	3
MUS 336	Musical Theatre Voice	3
MUS 400	Recital Seminar	
MUS 435	Musical Theatre Voice	3
MUS 436	Musical Theatre Voice	3
THEA 100	Theatre Majors Seminar	1
THEA 101	Theatre and Dance Productions	1
THEA 102	Theatre and Dance Productions	1
THEA 121	Introduction to Technical Theatre	3
THEA 131	Acting Studio: Acting I	3
THEA 132	Acting Studio: Acting II	3
THEA 201	Theatre and Dance Productions	1
THEA 202	Theatre and Dance Productions	1
THEA 220	Makeup	1
THEA 231	Acting Studio: Scene Study I	3
THEA 232	Acting Studio: Scene Study II	3
THEA 242	Acting Studio: Introduction to Voice and Movement I	3
THEA 243	Acting Studio: Introduction to Voice and Movement II	3
THEA 301	Theatre and Dance Productions	1
THEA 302	Theatre and Dance Productions	1
THEA 341	Acting Studio: Shakespeare	3
THEA 353	History of Musical Theatre	3
THEA 382	Musical Theatre Styles I	3
THEA 401	Theatre and Dance Productions	1
THEA 402	Theatre and Dance Productions	1
THEA 424	Acting Studio: Audition Techniques	3
THEA 432	Musical Theatre Styles	3
THEA 434	Musical Theatre Styles Lab	1
Subtotal: 98.0		

NOTE: The Music Recital Seminars (MUS 100, 200, 300, 400) must each be taken twice. Students are required to be in a Recital Seminar class for each semester they are taking voice lessons.

Additional Requirements:

In addition to the specific and individual courses, periodic reviews of achievement are conducted for all candidates with the purpose of determining advancement or retention. The Musical Theatre program requires a vocal and acting jury at the conclusion of each semester. Dance juries are held at the end of the first year and each succeeding semester. A Vocal/Acting/Dance jury is conducted at the conclusion of the fourth semester to determine continuance in the program. A public senior recital is presented in the fourth year. The recital includes performance in acting, dancing and singing, and must be 25 minutes in length. Students on academic probation will not be permitted to participate in public performances.

Musical Theatre majors are required to complete Theatre and Dance Productions obligations every semester, which are practical extensions of the classroom. Theatre and Dance Productions credits do not count toward the total

number of credits required in the B.F.A. Musical Theatre major. Musical Theatre majors must successfully complete a minimum of 45 upper level credit hours.

Additional Requirements:

In addition to the specific and individual courses, periodic assessments are conducted for all candidates with the purpose of determining advancement or retention. The Musical Theatre program requires a vocal and acting jury at the conclusion of each semester. Dance juries are held at the end of the first year and each succeeding semester. A Vocal/Acting/Dance jury is conducted at the conclusion of the fourth semester to determine continuance in the program. A public senior recital is presented in the fourth year. The recital includes performance in acting, dancing and singing, and must be 25 minutes in length. Students on academic probation will not be permitted to participate in public performances. Details for these and other requirements may be found in the Student Handbook for the Department of Theatre and Dance.

Musical Theatre majors are required to complete Theatre and Dance Productions obligations every semester, which are practical extensions of the classroom. Theatre and Dance Productions credits do not count toward the total number of credits required in the B.F.A. Musical Theatre major. Musical Theatre majors must successfully complete a minimum of 30 upper level credit hours.

TOTAL CREDIT HOURS: 98

NATURAL SCIENCE 7-12 MASTER OF SCIENCE IN EDUCATION

Office: Science Center 221E/318
(716) 673-3285

Dr. Holly Jon Lawson, *Project Coordinator, Fredonia Science Center*

Email: holly.lawson@fredonia.edu

Website: <http://home.fredonia.edu/scienceeducation>

The Science Education Partnership and the Natural Science departments offer a program leading to the **Master of Science in Education: Natural Science 7-12** and includes recommendation for professional certification for the following titles:

Biology 7-12 PRF	Earth Science 7-12 PRF
Chemistry 7-12 PRF	Physics 7-12 PRF

DEPARTMENT REQUIREMENTS FOR ADMISSION TO THE PROGRAM WITHOUT DEFICIENCIES

- An undergraduate major in biology, chemistry, earth science, physics, or related science with requisite

evidence of training and motivation necessary to succeed in graduate study.

- Appropriate supporting science background to include math and cognate science courses.
- Candidates must have an initial certification to teach biology, chemistry, earth science, or physics in the secondary schools of New York State, or equivalent preparation.

Content Linked Pedagogy Courses

(1) Six hours of courses that link content and pedagogy in BIOL, CHEM, GEO, PHYS, SCI or SCED from the list below. These are courses that have been developed collaboratively between science content and education faculty and are intended to present NYS science content and its instruction in adolescence grades.

BIOL 510	Tropical Biology	3
BIOL 690	Thesis Research	1-9
CHEM 530	Understanding Chemistry	3
CHEM 573	Environmental Aquatic Chemistry	3
CHEM 581	Special Topics in Chemistry	1-3
CHEM 690	Independent Study	1-3
CHEM 691	Research I	1-3
CHEM 692	Research II	1-3
CHEM 693	Research III	1-3
CHEM 694	Research IV	1-3
EDU 516	Improving Educational Outcomes: Working with Children and Families from Poverty	3
EDU 542	Evidence-Based Practices for Inclusive Settings	3
EDU 580	Teaching Grades 7-12	3
GEO 505	Earth Science of Chautauqua County	3
GEO 590	Independent Study	3
GEO 610	Independent Research	3
GEO 615	Independent Research	3
PHYS 690	Research	3
PHYS 691	Research	3
SCED 510	Nature in the School Curriculum	3
SCED 511	Teaming with Nature	3
SCED 512	Vernal Pool Project	3
SCED 541	Electricity and Magnetism	3
SCED 542	Light and Color	3
SCED 543	Moving Objects	3
SCED 544	Properties of Matter	3
SCED 591	Special Topics in Science Education	1-3

Subtotal: 6

PROGRAM REQUIREMENTS:

Education Courses (one three credit hour EDU course upon advisement)

EDU 514	Assessment and Instruction of Diverse Learners I	3
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EDU 570	Using Educational Research to Improve Instruction	3
		Subtotal: 3

Seminar

SCED 600	Graduate Seminar for Science Teachers	1
		Subtotal: 1

Graduate Thesis Project

This is an action research field study in science learning. A Research Proposal for this project should be presented to the candidate's graduate committee upon completion of EDU 570 (p. 369).

SCED 690	Graduate Research Project in Science Learning	3
		Subtotal: 3

Content Courses

Candidate should select 9 hours of courses from BIOL, CHEM, GEO, PHYS or SCI graduate offerings upon advisement.

Subtotal: 9**Additional Requirements**

As of December 31, 2013, candidates in all education programs are required to complete training under the Dignity for All Students Act (DASA). Beginning in the Fall 2013 semester, the training required under the Dignity for All Student Act (DASA) will be included in EDU 303 at Fredonia. Graduate Candidates who have not had DASA training must do so before earning the MSed/Science.

Philosophy

Office: 2110 Fenton Hall
(716) 673-3495

Dr. Stephen P. Kershner, *Chairperson*

Email: philosophy.department@fredonia.edu

Website: <http://www.fredonia.edu/philosophy/>

Philosophy is the study of the most basic questions one can ask about the nature of reality, human existence, knowledge, value, and meaning. It develops the skills of careful inquiry and logical thinking, which are the hallmarks of successful people in all walks of life. The philosophy department offers a major, a minor, and a series of courses designed to complement student majors in other fields, as well as courses of general interest to all students.

Numerous philosophy courses are designed to complement student majors in other fields including business, economics, computer science, art, film, music, theatre, criminal justice, legal studies, and the natural and social sciences. The philosophy department has advisement material available for students who wish to pursue an

interest in philosophy in conjunction with these majors and minors.

PHILOSOPHY DEPARTMENTAL HONORS**Philosophy Departmental Honors**

Philosophy department honors will be earned by those graduating majors who fulfill the following: (1) an overall GPA of at least 3.3; (2) a GPA in philosophy courses of at least 3.50; (3) completion of at least two 400-level courses with grades of "A-" or higher (exclusive of credit earned as a teaching assistant).

Philosophy department high honors will be earned by those graduating majors who fulfill the following: (1) an overall GPA of at least 3.3; (2) a GPA in philosophy courses of at least 3.70; (3) completion of at least two 400-level courses with grades of "A" (exclusive of credit earned as a teaching assistant); (4) completion of a 3-credit hour, independent study thesis, PHIL 485, with a grade of "A-" or higher.

PHILOSOPHY BACHELOR OF ARTS**REQUIREMENTS FOR THE BACHELOR OF ARTS DEGREE IN PHILOSOPHY**

Thirty (30) credit hours in philosophy, at least 18 credit hours of which are in courses numbered 300 or above.

Required courses:**One logic course**

PHIL 116	Introduction to Logic	3
or		
PHIL 301	Intermediate Deductive Logic	3
		Subtotal: 3

One history of philosophy course

PHIL 222	The Greek Way	3
or		
PHIL 223	Roman Philosophy	3
or		
PHIL 224	Medieval Thought	3
or		
PHIL 226	The Age of Reason and Its Legacy	3
or		
PHIL 432	The Age of Analysis: Philosophy Since 1900	3
		Subtotal: 3

One capstone course

PHIL 477	Capstone Seminar	3
		Subtotal: 3

A Model Program would include the following (in addition to the required courses listed above):

PHIL 115	Introduction to Philosophy	3
PHIL 218	Introduction to Ethics	3

	or	
PHIL 265	Social/Political Philosophy	3
PHIL 345	The Meaning of Life	3
	or	
PHIL 441	Philosophy of Language and Semantics	3
PHIL 430	Philosophy of Mind	3
	or	
PHIL 351	Metaphysics	3
	or	
PHIL 353	Theory of Knowledge	3
Subtotal: 12		

NOTE: Plus related philosophy courses and PHIL 477 capstone experience. Seniors are strongly urged to take an additional seminar.

Graduates with a major in Philosophy typically go on to careers in areas such as law, business, public service, teaching and creative writing.

The Fredonia Philosophical Society is a student-initiated club organized for the purpose of holding extracurricular discussions of a wide range of philosophical topics. The Fredonia Philosophical Society and the Department of Philosophy co-sponsor external speakers of general interest. All meetings are open to the entire campus and the public.

Students should consult the department for current offerings in the above areas. All waivers of requirements must be approved by the chairperson.

TOTAL CREDIT HOURS: 21

Physics

Office: 121 Houghton Hall
(716) 673-3301

Dr. Justin Conroy, Chairperson

Email: physics.department@fredonia.edu

Website: <http://home.fredonia.edu/physics>

The discipline of physics is basic among the sciences and focuses on the study of natural phenomena. Its centrality and emphasis on problem solving makes an undergraduate degree in physics an excellent beginning for diverse careers well beyond the discipline, such as in engineering, biophysics, technical business, patent law, medicine, and radiation therapy to name a few. Within physics itself, research and development opportunities are growing as new fields such as nanotechnology, quantum computing, and new energy technologies mature. A steady demand for teachers at the high school and college level provides additional attractive physics careers. Within the department students find many opportunities for independent study and research with faculty. An active student club provides additional research experiences, travel opportunities to conferences, and social events. Some students also engage in internships with businesses and national laboratories.

The Department of Physics offers a major with several different concentrations including Pre-law (p. 205) and Pre-med (p. 206) in addition to more traditional programs, a minor, a major through the 3-2 Cooperative Engineering program, an initial certification to teach physics in secondary school (Adolescence Education - Physics (p. 22)), interdisciplinary major in Mathematics-Physics (p. 148) (with the Geology and Environmental Sciences and Mathematical Sciences departments, respectively), a major in Industrial Management (p. 110), and courses to complement majors in other areas.

Additional Programs

The Department of Physics administers the Cooperative Engineering program and the degree program in Industrial Management (p. 110). See separate entries in the catalog for these programs.

It is of special note that students may double major in Physics and Industrial Management, if they choose to do so. Interested students should see their academic advisor for details.

Student Honors and Awards

Student honors and awards presented by the Department of Physics include the Hack Arroe Memorial Scholarship Award, the John J. Connelly Physics Scholarship Incentive Award, the John J. Connelly Physics Peer Recognition Award, and the Physics Department Scholarship Award. Students should contact the Department of Physics chairperson for additional details on these awards. Specific awards for Cooperative Engineering students are also available (see section on Cooperative Engineering)

PHYSICS BACHELOR OF SCIENCE

REQUIREMENTS FOR THE BACHELOR OF SCIENCE IN PHYSICS

The requirements for a B.S. in Physics include the core courses listed below and one of the Tracks I-IV. For a B.S. in Physics Adolescence Education, students must complete the core courses and Track VII.

Physics Core:

PHYS 230	University Physics I	4
PHYS 232	University Physics I Lab	1
PHYS 231	University Physics II	4
PHYS 233	University Physics II Lab	1
PHYS 234	Modern Physics	4
PHYS 330	Thermodynamics	3
PHYS 400	Undergraduate Seminar	1
PHYS 425	Mathematical Physics I	3
PHYS 431	Introduction to Quantum Mechanics	3

Subtotal: 24

Supporting math\CSIT courses:

MATH 122	University Calculus I	4
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MATH 123	University Calculus II	4
MATH 223	University Calculus III	4
MATH 224	Differential Equations	3
CSIT 106	Scientific Programming Using C/C++	3
	or	
CSIT 121	Computer Science I	3

Subtotal: 18**Track I – Theoretical Emphasis**

PHYS 331	Theoretical Mechanics	3
PHYS 333	Electricity and Magnetism	3
PHYS 426	Mathematical Physics II	3
	Physics from 321-479, 490	6
	Science, mathematics, computer science, engineering, or education	12

Subtotal: 27

NOTE: Recommended courses include MATH 231 and CHEM 115-CHEM 116 (with CHEM 125 - CHEM 126).

Track II – Experimental Emphasis

PHYS 333	Electricity and Magnetism	3
PHYS 340	Optics	3
PHYS 341	Optics Laboratory	1
PHYS 426	Mathematical Physics II	3
PHYS 450	Advanced Laboratory	1
	or	
	Experimental Physics Project (independent study or tutorial)	
	Physics from 321-479, 490	4
	Science, mathematics, computer science, engineering, or education	12

Subtotal: 27

NOTE: CHEM 115 and CHEM 116 (with CHEM 125 and CHEM 126) is strongly recommended. STAT 250 or STAT 350 and MATH 231 are recommended.

Track III – Computational Emphasis

PHYS 331	Theoretical Mechanics	3
PHYS 333	Electricity and Magnetism	3
PHYS 426	Mathematical Physics II	3
	Computational Physics Project (independent study or tutorial)	
	Plus 4 additional credit hours of physics from 321-479, 490	

Subtotal: 13**Plus the following courses:**

MATH 231	Linear Algebra	4
MATH 325	Numerical Analysis	3
CSIT 221	Computer Science II	3

Subtotal: 10

NOTE: STAT 350 is recommended.

Track IV – Physics with Cooperative Engineering

PHYS 321	Engineering Statics	3
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PHYS 426	Mathematical Physics II	3
PHYS 331	Theoretical Mechanics	3
	or	
PHYS 333	Electricity and Magnetism	3
PHYS 323	Circuit Analysis	4
	or	
PHYS 325	Electronics	3
PHYS 327	Electronics Lab	1
	or	
PHYS 326	Digital Logic	3
PHYS 328	Digital Lab	1
	12 additional credit hours (see note below)	12

NOTE: 12 additional credit hours of science, mathematics, computer science, engineering, or education, including at least one additional course from PHYS 322 through 328 and PHYS 340 - PHYS 341 as advised. Students interested in electrical engineering should take PHYS 323 and PHYS 324 while students interested in non-electrical engineering should take PHYS 322.

CHEM 115 and CHEM 116 (with CHEM 125 and CHEM 126) is strongly recommended and required by most engineering schools.

Affiliated engineering institutions may have additional requirements for courses and/or grades.

Track V – Physics with Pre-law

This track is excellent preparation for the expanding field of patent and intellectual property law, which requires substantial technical and mathematical knowledge in order to sit for the required licensing exam.

PHYS 340	Optics	3
PHYS 341	Optics Laboratory	1
	Physics from 321-479	9

Subtotal: 13**Plus the following courses:**

STAT 250	Statistics for Scientists	3
	or	
STAT 350	Probability and Statistics	3
POLI 276	Law and Society	3
POLI 277	Introduction to Law	3
	or	
BUAD 310	Legal Environment of Business	3
PHIL 106	Critical Thinking	3
	or	
PHIL 116	Introduction to Logic	3
PHIL 218	Introduction to Ethics	3
	or	
PHIL 310	Business Ethics	3

Subtotal: 15

POLI 370, CHEM 115 and CHEM 116 (w/CHEM 125 and CHEM 126) are recommended.

In fulfilling College Core Curriculum requirements, students are advised to take ECON 201 or ECON 202 and PSY 129.

Track VI – Physics with Pre-med/Biophysics

Physics majors are highly sought by medical schools, because mathematical and problem-solving abilities stressed in physics are more than ever needed in today's medical fields. Due to their relative rarity, physics majors stand out in the applicant pool. Sufficient time is allotted to take the biology and chemistry courses required by most medical schools and needed to prepare for the MCAT exam. The program may also be followed by students preparing for graduate school in biophysics or related fields.

PHYS 340	Optics and	3
PHYS 341	Optics Laboratory	1
PHYS 325	or Electronics and	3
PHYS 327	Electronics Lab	1
CHEM 215	Organic Chemistry Lecture I	3
CHEM 216	Organic Chemistry Lecture II	3
CHEM 225	Organic Chemistry Laboratory I	1
CHEM 226	Organic Chemistry Laboratory II	1
Subtotal: 12		

Plus the following courses:

CHEM 115	General Chemistry Lecture I	3
CHEM 125	General Chemistry Laboratory I	1
CHEM 116	General Chemistry Lecture II	3
CHEM 126	General Chemistry Laboratory II	1
BIOL 131	Introductory Ecology and Evolution	3
BIOL 132	Introductory Ecology and Evolution Laboratory	1
BIOL 133	Introductory Cell and Molecular Biology	3
BIOL 134	Introductory Cell and Molecular Biology Laboratory	1
BIOL 237	Genetics	3
BIOL 238	Genetics Laboratory	1
BIOL 336	Mammalian Physiology	3
BIOL 337	Mammalian Physiology Lab	1
Subtotal: 24		

In fulfilling College Core Curriculum requirements, students are advised to take an English course in addition to ENGL 100, and also PSY 129. If time permits, BIOL 333 Biochemistry and BIOL 338 Microbiology are also recommended.

Note: Students are allowed to double major in Physics and Industrial Management, even though these two programs are housed in the same academic department.

The procedure to be followed for admission to the professional sequence of courses is described in the Education section of the catalog.

Candidates in all education programs are required to demonstrate competence in a foreign language. This requirement must be satisfied in any one of the following ways:

- Score of 85 percent or higher on New York State Regents Exam or New York State High School Equivalent Exam*: Requirement is fulfilled.
- Scores of 65 percent - 84 percent on New York State Regents Exam or New York State High School Equivalent Exam*: Student needs to take an Elementary I level course or an Elementary II level course of a language or equivalent course(s), or successfully complete an equivalent Fredonia proficiency exam.
- Scores below 65 percent on New York State Regents Exam or New York State High School Equivalent Exam*: Student needs to take an Elementary I level course and an Elementary II level course or equivalent course(s) of the same language.
- If student did not take a New York State Regents Exam or New York State High School Equivalent Exam*: Student needs to take an Elementary I level course and an Elementary II level course or equivalent course(s) of the same language.

Note: The General Education foreign language requirement differs from the certification requirement and must be satisfied for degree conferral.

* *High School Equivalent Exam refers to a New York State Local School District Exam or Regional Exam in a Foreign Language.*

The General Education foreign language requirement differs from the certification requirement and must be satisfied for degree conferral.

As of December 31, 2013, candidates in all education programs are required to complete training under the Dignity for All Students Act (DASA). Beginning in the Fall 2013 semester, the training required under the Dignity for All Student Act (DASA) will be included in EDU 303 at Fredonia. Undergraduate candidates planning to graduate after Fall 2013 who have already completed EDU 303 on campus or taken a workshop as a substitution for EDU 303 must also complete the EDU DASA workshop prior to graduation.

Notes:

Tracks I-VI will result in a Bachelor of Science degree in Physics, Track VII a Bachelor of Science degree in Physics Adolescence Education.

A 2.0 GPA in the set of all physics courses used to satisfy the major plus the four required math courses is required

for graduation. Physics Adolescence Education must satisfy additional grade and portfolio requirements for graduation. Interested students should contact the chair of the physics department for current requirements.

Politics & International Affairs

Office: E370 Thompson Hall
(716) 673-3207

Dr. David Rankin, Chairperson

Email: political.science@fredonia.edu

Website: <http://home.fredonia.edu/polisci>

The Department of Politics and International Affairs offers a Political Science Bachelor of Arts (p. 204) or minor in Political Science (p. 172) and a major or minor in International Studies.

A degree in Political Science is a liberal arts discipline designed to prepare students as informed citizens and leaders in the public and private sector. Fredonia graduates hold responsible positions from local to international levels of government and politics, policy, business, journalism, education, numerous and diverse careers across the United States and abroad. Many of our alumni continue their studies in graduate or law school. Our department offers a wide array of courses and specialization across American politics, comparative politics, international relations, public law and political theory. Areas of specialization include U.S. foreign policy, Latin American politics, European politics, media and politics, constitutional law, elections, Congress, the presidency, public administration, public policy and many other areas.

We encourage students to enhance and apply their learning on and off campus. Students participate in study abroad, for a full semester or for shorter trips of two to three weeks. Many students earn academic credit while interning in Washington, DC or Albany for the summer or a full semester. Others participate in the Model European Union across New York State and in Europe. Still others participate in local and regional internship opportunities to earn academic credit through their work on political campaigns, in governmental agencies, offices, and an assortment of organizations. Many students are actively involved in campus leadership and initiatives with the Political Science Association and as part of numerous other student group activities on campus, in the community, and region.

Awards, Activities and Organizations

The department is a member of Pi Sigma Alpha, the national Political Science Honor Society. Undergraduates need not be a political science major to qualify for membership.

Fredonia also operates a chapter of Sigma Iota Rho, honor society for International Studies. Students who are

interested in membership should contact the coordinator of the International Studies program.

The Department offers scholarships to entering freshmen, based on merit: the Political Science Alumni Scholarship, the Politics & International Affairs Faculty Scholarship and a J.R. Soukup Freshmen Award.

The Department annually gives the Erna G. and J. Murdoch Dawley Award to the outstanding graduating senior. A J.R. Soukup Pi Sigma Alpha Award is given annually to the outstanding junior. The department awards the John R. Quatroche Jr. Award to a Political Science student who demonstrates an outstanding record of involvement in extracurricular affairs, campus service and leadership. The James Hurtgen Scholarship provides assistance to students interning in Washington, DC.

Politics and International Affairs Special Program

The Department of Politics & International Affairs participates in various Interdisciplinary Studies majors and minors such as the Legal Studies minor (p. 168), Geographic Information Systems minor (p. 162), and also houses the International Studies major and minor (p. 164) programs. The department also participates in the Cooperative Engineering program.

POLITICAL SCIENCE BACHELOR OF ARTS

REQUIREMENTS FOR THE BACHELOR OF ARTS IN POLITICAL SCIENCE

Minimum required: 36 credit hours

1. Required Core Courses (12 credit hours)

POLI 120	American Politics	3
POLI 150	U.S. and World Affairs	3
POLI 200	Statistics	3
POLI 241	Introduction to Comparative Politics	3

Subtotal: 12

2. Students must pick an area of concentration, which are: American Politics, Law and Politics or World Politics as noted below.

American Politics Concentration

A. Three courses from the following (at least one of which must be POLI 323, POLI 324 or POLI 370)

POLI 311	Fundamentals of Public Administration	3
POLI 321	Political Parties and Interest Groups	3
POLI 322	New York Government	3
POLI 323	Elections in America	3
POLI 324	President and Congress	3
POLI 325	Public Opinion and Participation	3
POLI 326	Media and Politics	3

POLI 329	Topics in American Politics	3
POLI 370	American Constitutional Law	3
POLI 382	Social Welfare Policy	3
Subtotal: 9		

B. One course from Political Theory**Subtotal: 3****C. Two courses from World Politics****Subtotal: 6****Law and Politics Concentration****A. Three courses from the following:**

POLI 353	International Law and Organization	3
POLI 370	American Constitutional Law	3
POLI 371	Civil Rights and Liberties	3
POLI 375	The Judicial Branch	3
POLI 379	Topics in Public Law	3
POLI 383	Courts and Social Policy	3
Subtotal: 9		

B. One course from Political Theory**Subtotal: 3****C. Two courses from World Politics****Subtotal: 6****World Politics Concentration****A. Four courses from the following:****Subtotal: 12-13****Western Courses**

POLI 330	Western European Politics	3
POLI 332	Russian Politics	3
POLI 343	International Migration and Immigration Politics	3
POLI 348	The European Union	3
POLI 349	Topics in Comparative Politics	3
POLI 351	The Inter-American System	3

Non-Western Courses

POLI 341	Political Economy of Development	3
POLI 345	Film and Politics	4
POLI 346	East Asian Political Economy	3

International Relations

POLI 352	World Political Geography	3
POLI 353	International Law and Organization	3
POLI 355	International Political Economy	3
POLI 356	U.S. Foreign Policy	3
POLI 359	Topics in International Politics	3
POLI 362	Terrorism and Counterterrorism	3

B. One course from American Politics**Subtotal: 3****C. One course from Political Theory****Subtotal: 3****Political Theory Concentration**

A concentration in Political Theory may be designed with the approval of the department chairperson.

Political Theory courses include the following:

POLI 360	Classical Political Theory	3
POLI 361	Modern Political Theory	3
POLI 363	Game Theory	3
POLI 365	American Political Thought	3
POLI 369	Topics in Political Theory	3

Students may also create their own concentration, e.g., International Political Economy, Middle East Politics, Political Theory, with the approval of the department chairperson.

3. Required Senior Seminar Course (Capstone experience)

POLI 450	Capstone Seminar	3
Subtotal: 3		

TOTAL CREDIT HOURS: 36**Pre-Law Advisement**

Office: 232 Fenton Hall
(716) 673-3852

Dr. David Kaplin, Pre-Law Advisor

Office: E388 Thompson Hall
(716) 673-4672

Dr. Alex Caviedes, Pre-Law Advisor

Website: <http://home.fredonia.edu/interdisciplinary>

Pre-Law Advising Program

A liberal arts education offers the ideal preparation for a career in law. The American Bar Association does not recommend a particular major or set of courses to prepare for a legal education; instead, it identifies a series of skills required in law school and later as an attorney (<http://www.abanet.org/legaled/prelaw/prep.html>). At Fredonia, students are able to develop the reading comprehension ability, written and oral communication skills, and analytical and critical thinking skills necessary to excel in these environments. In addition, there are many substantive courses dealing with the law and its role in society, politics and business that will grant students greater familiarity with the law and the legal profession.

Mission Statement

To help students take advantage of Fredonia's curriculum, the Pre-Law Advising Committee at Fredonia works to advise and support students preparing for a career in law and those who plan to attend law school. The committee assists students through course and career advisement and provides guidance on the preparation of a successful law school application, including the organization of test (LSAT) preparation programs.

Overview

The Pre-Law Advising Program at Fredonia assists students interested in attending law school. The Program holds general meetings to introduce all students to process of preparing for law school, as well as offering individual counseling.

All Fredonia students interested in attending law school should register with the Pre-Law Advising Program. Please see Dr. David Kaplin or Dr. Alex Caviedes.

Students interested in receiving advisement as to which courses are particularly suited to develop and strengthen the above-listed skills should contact Dr. Alex Caviedes, in Thompson Hall E388.

Students interested in preparing for the Law School Admissions Test (LSAT) should contact Dr. David Kaplin, in Fenton Hall 232.

Students interested in receiving advisement and assistance with the process of applying to law school can contact either Dr. Alex Caviedes or Dr. David Kaplin.

Pre-Medicine and Allied Areas

Health Professions Advising Program
Office: 221 Science Center
(716) 673-3282

Dr. Ted Lee, Coordinator

Email: biology@fredonia.edu

Website: <http://home.fredonia.edu/prehealth>

Fredonia graduates have enjoyed considerable success in gaining entry to medical, veterinary, osteopathic, optometry, dental and other professional health programs. The Health Professions Advising Committee closely advises and assists each pre-medical student and prepares a committee letter on his/her behalf. The complete credentials file is assembled by the Biology Department and submitted in a timely manner on behalf of each applicant.

While medical schools do not stipulate a particular major program of undergraduate study, they do require that students have minimum preparation in a number of areas including Biology, Chemistry, English, Psychology, and Physics. The Fredonia Biology major meets the requirements for American medical schools and many students choose it as the most appropriate undergraduate pre-med program. Pre-Health students may select any major at Fredonia. Students interested in careers in the health professions should register with the Health Professions Advising Program as freshmen to ensure appropriate advice and assistance (register at the Department of Biology Office in the Science Center, room 221).

The Health Professions Advising Committee at Fredonia advises students on course selection and extracurricular

activities. The committee interviews sophomores to provide advice early in the academic program and when the students are preparing to apply to health professional schools. It is highly recommended that all pre-health students use the advising services of the Health Professions Advising Committee.

Students who are seriously considering a medical, veterinary or dental career should seek appropriate summer employment/internship opportunities early in their undergraduate experience. Fredonia students regularly intern at local practices and clinics.

The Health Professions Advising Office has books, DVDs and other resources on careers in medicine and the health professions that students can borrow. The program offers a 1-credit professional development course (BIOL 275 Health Professions Careers) that is designed to assist students in preparing for the application process and beyond. Students take this course in the fall semester of their sophomore or junior years. The Pre-Health Professions Club invites guest speakers to campus to talk about careers in the health professions, has on-campus meetings and activities, and sponsors local volunteering events.

Early Assurance program with SUNY Upstate Medical University College of Medicine

Fredonia has an articulation agreement with SUNY Upstate Medical University for students from rural communities. Accepted students will earn their undergraduate degree from Fredonia and then enroll in Upstate's Rural Medical Scholars Program. Applicants must be high school seniors with a strong academic record who have a demonstrated commitment to community service. Admission into the program is competitive and dependent on a number of factors in addition to the usual admission policies at Fredonia. Students who meet the academic requirements are interviewed by Fredonia and Upstate Medical University, and Upstate makes the final decisions on who is accepted into the program. Students interested in this program should contact either the Department of Biology or the Admissions Office for further details.

Early Acceptance program with the Lake Erie College of Osteopathic Medicine (LECOM)

Fredonia has an affiliation agreement with LECOM that allows students to earn a baccalaureate degree from Fredonia and a doctoral degree in osteopathic medicine. There are 2 tracks to the program; a 4+4 track where students complete their undergraduate degree at Fredonia before matriculating to LECOM and a 3+4 track where students complete 3 years at Fredonia and 4 years at LECOM. Students in the 3+4 track earn the baccalaureate degree from Fredonia upon completion of 30 credit hours at LECOM. Admission to the program is competitive and dependent on a number of factors in addition to the usual

admission policies at Fredonia. Students may apply as high school seniors or as Fredonia undergraduates. Students interested in this program should contact either the Department of Biology or the Admissions Office for further details.

There is also an affiliation agreement with LECOM's Pharmacy School. There are both 3+4 and 4+4 tracks for this program. Students may apply as high school seniors or as Fredonia undergraduates. Students interested in this program should contact either the Department of Biology or the Admissions Office for further details.

Combined Degree Program with University at Buffalo School of Dental Medicine

The Combined Degree Program is a seven-year dentistry program developed between the State University of New York at Fredonia and the State University of New York at Buffalo, School of Dental Medicine. This program allows participating students the opportunity to receive a baccalaureate degree in either Biology or Chemistry and a doctoral degree in dentistry. The first three years of the program are completed at Fredonia and the last four years are completed at SUNY at Buffalo, School of Dental Medicine. Admission into the program is competitive and dependent on a number of factors in addition to the usual admission policies at Fredonia. Students interested in this program should contact either the Department of Biology or the Admissions Office for further details.

Combined Degree Program with SUNY College of Optometry

This Combined Degree (3/4) Program is a seven-year program developed between the State University of New York at Fredonia and the State University of New York State College of Optometry. This program allows participating students the opportunity to receive a baccalaureate (B.S.) degree in Biology and a Doctor of Optometry (O.D.) degree in optometry. The first three years of the program are completed at Fredonia and the last four years are completed at SUNY College of Optometry. Admission is competitive and requirements are in addition to the usual admission policies at Fredonia. Accepted students are admitted into Fredonia's Biology major and simultaneously admitted to candidacy to the SUNY College of Optometry's professional program of study. Students interested in this program should contact either the Department of Biology or the Admissions Office for further details.

Combined Degree Program with the University of Buffalo School of Pharmacy and Pharmaceutical Sciences

The Combined Degree Program is a seven-year program developed between the State University of New York at Fredonia and the State University of New York at Buffalo, School of Pharmacy and Pharmaceutical Sciences. This program allows participating students the opportunity to

receive a baccalaureate degree in either Biology or Biochemistry and a doctoral degree in pharmacy. The first three years of the program are completed at Fredonia and the last four years are completed at SUNY at Buffalo, School of Pharmacy and Pharmaceutical Sciences. Students apply to this program in their junior year at Fredonia and need to have completed the prerequisite courses for the Pharmacy program at Buffalo with a 3.5 GPA for all courses. Students interested in this program should contact either the Department of Biology or the Admissions Office for further details.

PROFESSIONAL WRITING CERTIFICATE OF ADVANCED STUDY (CAS)

The Certificate of Advanced Study (CAS) in Professional Writing is for individuals interested in becoming more expressive, powerful writers of nonfiction prose. Working professionals and advanced students in any field are encouraged to apply.

GENERAL ADMISSION REQUIREMENTS

General admission requirements for enrollment in the certificate program include the following:

- a letter of intent for studying in this program;
- documented completion of a bachelor's degree in any field from an accredited institution;
- one letter of recommendation addressing the applicant's aptitude for success in a post-baccalaureate writing program;
- either an official recent transcript (i.e., within 10 years of the application date) or a second letter of recommendation addressing the applicant's potential for success in a post-baccalaureate program; and
- a portfolio demonstrating the equivalent of 10 pages of written work* (*see NOTE below*).

International Students: Please refer to the Fredonia Graduate Studies website for an additional requirement at <http://home.fredonia.edu/gradstudies>.

Current and Prospective M.A./M.S. Candidates: You may be eligible for a modified application process. Please refer to the Fredonia Graduate Studies website for further information at <http://home.fredonia.edu/gradstudies>.

*NOTE: * The portfolio may include digital writing and/or media projects, press releases, advertising copy, etc. For example, a portfolio might include 7-8 pages of written work and 1 podcast or digital video. Or it might include 3-4 pages of written work and 2 electronic works. At least 3 pages should demonstrate your proficiency with print text. Please note that non-print texts must be sent via email or*

DropBox to the current Graduate Program Coordinator; they cannot be uploaded with the application.

APPLICATION PROCESS, DEADLINES, AND FEES

Applicants should apply online. PLEASE NOTE: All graduate programs at Fredonia require a \$75 application fee. Applications are accepted until the first week of the semester; however, there is an additional \$25 late fee for applications received after the deadline of November 1 for spring semester and April 1 for summer and fall semesters.

Students should be registered for the certificate program when they begin taking courses for credit.

A student's acceptance is valid for one academic year. Students who need to seek deferral should contact Wendy Dunst in Graduate Studies to prepare paperwork; the English Department's Graduate Program Coordinator should also be notified.

Transferring in Credit

Students may transfer up to 3 credits earned in a graduate-level writing course from an accredited graduate-degree granting institution toward the certificate following review by the Graduate Program Coordinator in English. The transfer credit course approval form must be obtained from the Registrar's office and signed by the English department Chairperson in order for the course credit to be applied to the student's program.

Taking Courses as a Non-matriculated Student

Individuals may take one or several courses as non-matriculated students; please see the guidelines for registering as an auditor or as a non-degree student.

Meeting TOEFL or IELTS Levels of Proficiency (International Applicants Only)

In addition to the general application criteria, international applicants must meet currently accepted levels of proficiency at the post-baccalaureate level for students seeking entry to the M.A. program in English (minimum TOEFL score of 79 or an IELTS score of 6.5, with no subsection score below 6.0) because of the writing-intensiveness of this program. See the Graduate Studies website for further application details for international students.

Modified Pathways for Current and Prospective M.A. Candidates

The CAS in Professional Writing actively encourages current and prospective candidates in a range of M.A. and M.S. programs to apply. Please find below the pathway information pertinent to your situation:

- **Students already accepted to the M.A. in English** need only submit a new letter of intent briefly

explaining why they seek the CAS in Professional Writing in addition to the M.A. in English. Please address the letter to the English department's Graduate Program Coordinator and upload during the online application process. Students should plan to take the required seminars and internship (15 credit hours) for the CAS as electives in their M.A. programs; ENGL 591, E-portfolio, will be a 1-hour additional credit needed for the certificate specifically.

- **Students applying to the M.A. in Interdisciplinary Studies** should submit a letter of intent addressing how the CAS in Professional Writing supports their broader work in the M.A. Interdisciplinary Studies program; this letter should be addressed to the English Department's Graduate Program Coordinator and uploaded during the online application process. Applicants should ensure they have met the admission criteria above *in addition to* the admission criteria for the M.A. in Interdisciplinary Studies. They should plan to take the required 16 credits in English writing courses (including the internship and E-portfolio) as part of their program.
- **Students already accepted to the M.A. in Interdisciplinary Studies** who have taken advanced writing coursework should send a letter of intent addressing how the CAS in Professional Writing supports their broader work in the M.A. program; this letter should indicate the courses they have already taken that support the certificate program. Please address the letter to the English department's Graduate Program Coordinator and upload during the online application process.
- **Students already accepted to other M.A./M.S. programs** should submit a letter of intent for the CAS, one letter of recommendation addressing their potential for success in a post-baccalaureate professional writing program, and a writing sample to the English department's Graduate Program Coordinator (upload during application process).

Modified Pathways for Auditors, Non-degree Students, and Advanced Undergraduates

The CAS in Professional Writing also invites individuals who have previously completed a course as an auditor, a non-degree student, or an advanced undergraduate to enroll formally in the program. Please find below the pathway information pertinent to your situation:

- **Prospective applicants who audit one of the advanced writing courses and then wish to apply to the program** should submit materials according to the general admission criteria outlined above. Work produced in the audited course may be used for the writing sample, but since auditors do not receive credit or a transcript demonstrating successful course completion, audited courses may not be applied to

matriculation in the program. Such courses may be retaken for credit after the student has been accepted as a matriculated student in the CAS program.

- **Prospective applicants who have taken one of the advanced writing courses as a non-degree student** should submit materials according to the general admission criteria outlined above. Work produced in the course may be used for the writing sample. Non-degree students are allowed a maximum of nine credit hours (three courses); these may be applied to matriculation in the program once the student has been successfully admitted to the CAS.
- **Undergraduate students who have taken one or more of the advanced writing courses as an undergraduate** should, upon completion of the B.A./B.S. degree, follow the general admission criteria outlined above. As long as the course or courses have not counted toward the 120 credits for the B.A./B.S. and the student earned a B- or better in the course(s), such applicants may petition to convert the completed course(s) for graduate credit in the CAS program, with payment of the appropriate tuition differential. The form for requesting this conversion is available on the Graduate Studies website. See the Graduate Studies website for specifics.

NOTE:

Admission criteria for taking a single course in the program:

1. *Register as an auditor: no application fee, \$50 audit fee, paper application through the office of Lifelong Learning and Special Programs.*
2. *Register as a non-degree student: \$25 application fee, statement of intent/résumé/recommendation letters not required, course registration (~\$1,500 for NYS residents), online application through Graduate Studies. Nine hours max allowed.*
3. *Register as a matriculated degree student: \$75 application fee, full application materials, online application through Graduate Studies. Only matriculated students may earn the certificate as an official credential.*

REQUIREMENTS FOR THE CERTIFICATE

Course Requirements (16 credit hours):

Students are required to complete both an internship and an E-portfolio.

ENGL 591	E-portfolio	1
ENGL 694	English Graduate Internship	1-3
Subtotal: 4		

NOTE:

- ENGL 694 is a variable 1-3 credit hour internship/course. Students must successfully complete

the internship/course with 3 credit hours to satisfy the degree requirement.

Students will take 12 credit hours of writing-focused graduate courses from the following group, including, for example:

ENGL 521	Ethics of Writing	3
ENGL 522	Writing for Digital Media	3
ENGL 523	Grant Writing	3
ENGL 524	Art of Grammar	3
ENGL 525	Foundations of Editing	3
ENED 554	Composition Theory and Practice	3

Subtotal: 12

NOTE:

- Additionally, students may take ENGL 520 Graduate Seminar in Literature and Culture so long as there is a writing-intensive or writing-oriented focus. See semesterly course call-outs and consult your advisor.

TOTAL CREDIT HOURS: 16

Psychology

Office: W357 Thompson Hall
(716) 673-3129

Dr. Jack Croxton, Chairperson

Email: psychology.department@fredonia.edu

Website: <http://www.fredonia.edu/departments/psychology/>

The psychology department has several objectives:

- To provide the student with a basic knowledge of a broad range of psychological concepts and theories, and an understanding of the methods used by psychologists in the study of human behavior; to contribute to the building of an integrated liberal education, designed to equip the student for postgraduate employment or further specialized education; and to demonstrate the relevance of psychological analysis to current social problems and provide students with the knowledge to better understand themselves and others. A liberal arts education with a major in psychology is good preparation for a wide variety of jobs including human services, sales, and management. Some jobs in psychology and related mental health are available at the bachelor's degree level; others may require an advanced degree. Many of our majors continue in graduate school in fields of study including school psychology, social work, counselor education, cognitive psychology, counseling psychology, and law.
- To meet all of these objectives the department offers courses spanning the entire field of psychology. Internships and independent study opportunities are also available. It recognizes superior student performance with the Psychology Merit Award and

Donald John Lehr Endowment, and it supports the Psychology Club and a local chapter of Psi Chi, the national honor society for psychology. Interested persons should see the department chairperson for additional information.

Requirements for Transfer Credit

For a transfer course to be counted toward the minimum hours required for a major or a minor, the course must be evaluated as equivalent to a course taught in the Department of Psychology.

For a major, a limit of 12 transfer credits may be counted towards the 35 required, i.e., a minimum of 23 credit hours must be taken in the department at Fredonia.

For a minor, a minimum of 9 credit hours must be taken in the department at Fredonia.

The psychology department participates in the Cooperative Engineering program and offers three minors: Industrial-Organizational Psychology minor (p. 163), Psychology minor, and School and Counseling Psychology minor.

PSYCHOLOGY BACHELOR OF ARTS

REQUIREMENTS FOR THE BACHELOR OF ARTS IN PSYCHOLOGY

The Psychology Department requires a good academic standing (minimum overall GPA 2.0) for entry into the Psychology B.A. major from another major at Fredonia.

I. Courses in Psychology (35 credit hours required)

Core Group - all courses required

PSY 129	Introduction to Psychology	3
PSY 130	Psychology Laboratory	1
PSY 200	Statistics	3
PSY 210	Research Methods	4
Subtotal: 11		

NOTE:

- The above courses should be completed by the end of the junior year.
- PSY 100 Freshman Seminar is recommended for all first semester freshman majors.
- PSY 130 is waived for all students entering the program with 30 hours or more of undergraduate coursework completed.

Choose one course from the Psychophysiology area:

PSY 342	Perception	3
PSY 351	Physiological Psychology	3
PSY 361	Cognitive Neuroscience	3
Subtotal: 3		

Choose one course from the Cognitive area:

PSY 244	Cognitive Psychology	3
PSY 344	Psychology of Language	3

PSY 364	Cognitive Development	3
Subtotal: 3		

Choose one course from the Social area:

PSY 245	Social Psychology	3
PSY 246	Personality	3
PSY 365	Social Development	3
Subtotal: 3		

Choose one course from the Clinical/Counseling area:

PSY 356	Abnormal Psychology	3
PSY 379	Child Psychopathology	3
PSY 447	Introduction to Counseling	3
Subtotal: 3		

Choose one course in Theoretical Thinking (capstone experience) area:

PSY 429	History and Systems of Psychology	3
PSY 430	Theories of Psychology	3
PSY 439	Senior Honors Seminar	3
PSY 445	Seminar in Social Psychology	3
PSY 454	Theories of Memory	3
Subtotal: 3		

Choose one course of a Development Focus:

PSY 289	Lifespan Human Development	3
PSY 349	Child Psychology	3
PSY 364	Cognitive Development	3
PSY 365	Social Development	3
PSY 366	Psychology of Adulthood	3
PSY 379	Child Psychopathology	3
Subtotal: 3		

NOTE:

- Students choosing to take PSY 364, PSY 365 or PSY 379 to meet both an area requirement and a developmental focus must take an additional psychology elective in order to fulfill the requirement that they have 35 credit hours of psychology courses.

Psychology Electives:

6-7 credit hours of any psychology courses to bring total psychology credit hours to 35.

Subtotal: 6-7

II. Math

At least one course in mathematics as advised by department.

Subtotal: 3

III. Specializations

Students may elect to specialize in School and Child, Counseling and Health, or Forensics. If so, they should consult with their advisor about appropriate courses to take.

IV. Minor Requirement

A minor in a field other than Psychology to complement the major, chosen with advisement, is required.

V. Of the total hours counting for graduation, 45 credit hours must be upper level (300 and above), and 66 credit hours must be outside of Psychology

VI. Transfer students must take at least 23 credit hours in Psychology at Fredonia.

VII. A minimum of 2.00 cumulative quality point average in all psychology courses.

TOTAL CREDIT HOURS: 38-39

PSYCHOLOGY BACHELOR OF SCIENCE

REQUIREMENTS FOR THE BACHELOR OF SCIENCE IN PSYCHOLOGY

The Psychology Department requires a good academic standing (minimum overall GPA 2.0) for entry into Psychology Bachelor of Science major from another major at Fredonia.

I. Courses in Psychology (41 credit hours):

Core Group - all courses required

PSY 129	Introduction to Psychology	3
PSY 130	Psychology Laboratory	1
PSY 200	Statistics	3
PSY 210	Research Methods	4
PSY 310	Advanced Research Methods	3
PSY 489	Independent Study	1-3

Subtotal: 17

NOTE:

- PSY 489 is a variable 1-3 credit hour course. Students must complete this course with 3 credit hours to satisfy the degree requirement.

Additional Requirements:

Choose one course from the Psychophysiology area:

PSY 342	Perception	3
PSY 351	Physiological Psychology	3
PSY 361	Cognitive Neuroscience	3

Subtotal: 3

Choose one course from the Cognitive area:

PSY 244	Cognitive Psychology	3
PSY 344	Psychology of Language	3
PSY 364	Cognitive Development	3

Subtotal: 3

Choose one course from the Social area:

PSY 245	Social Psychology	3
PSY 246	Personality	3
PSY 365	Social Development	3

Subtotal: 3

Choose one course from the Clinical/Counseling area:

PSY 356	Abnormal Psychology	3
PSY 379	Child Psychopathology	3
PSY 447	Introduction to Counseling	3

Subtotal: 3

Choose one course from the Theoretical Thinking (capstone experience) area:

PSY 429	History and Systems of Psychology	3
PSY 430	Theories of Psychology	3
PSY 439	Senior Honors Seminar	3
PSY 445	Seminar in Social Psychology	3
PSY 454	Theories of Memory	3

Subtotal: 3

Choose one course of a Developmental Focus:

PSY 289	Lifespan Human Development	3
PSY 349	Child Psychology	3
PSY 364	Cognitive Development	3
PSY 365	Social Development	3
PSY 366	Psychology of Adulthood	3
PSY 379	Child Psychopathology	3

Subtotal: 3

NOTE:

- Students choosing to take PSY 364, PSY 365 or PSY 379 to meet both an area requirement and a developmental focus must take an additional psychology elective in order to fulfill the requirement that they have 35 credit hours of psychology courses.

II. Psychology Electives:

6-7 credit hours of any Psychology courses to bring total Psychology credit hours to 41.

Subtotal: 6

III. Related Science Courses (14-15 credit hours):

One Mathematics course

MATH 105	Precalculus	4
MATH 106	University Precalculus	3
MATH 108	Prize-Winning Mathematics	3
MATH 110	Mathematics in Action	3
MATH 120	Survey of Calculus I	3
MATH 122	University Calculus I	4

Subtotal: 3-4

and either the Biology or Chemistry focus.

Biology Focus

BIOL 131	Introductory Ecology and Evolution	3
BIOL 132	Introductory Ecology and Evolution Laboratory	1
BIOL 133	Introductory Cell and Molecular Biology	3
BIOL 134	Introductory Cell and Molecular Biology Laboratory	1

CHEM 115	General Chemistry Lecture I	3
Subtotal: 11		

Chemistry Focus

CHEM 115	General Chemistry Lecture I	3
CHEM 125	General Chemistry Laboratory I	1
CHEM 116	General Chemistry Lecture II	3
CHEM 126	General Chemistry Laboratory II	1
BIOL XXX	One Biology Course	3
Subtotal: 11		

Biopsychology/Cognitive Neuroscience Specialization

As an alternative to the Psychology Bachelor of Science requirements listed above, students can elect to complete the following:

1. Psychology courses all the same as above except all three courses in the Psychophysiology group (Group A) are required.
2. Same requirements outside of Psychology as above for the Bachelor of Science (select between Biology focus and Chemistry focus) except BIO 243 (Biodiversity) and BIO 434 (Animal Behavior) are also added.

IV. Of the total hours counting for graduation, 45 credit hours must be upper level (300 and above), and 66 credit hours must be outside of Psychology.

V. Transfer students must take at least 23 hours in Psychology at Fredonia.

VI. Honors thesis may be substituted for the Independent Study requirement.

VII. A minimum of 2.00 cumulative quality point average in all psychology courses.

TOTAL CREDIT HOURS: 55-56

PUBLIC ACCOUNTANCY BACHELOR OF SCIENCE

In order to qualify for CPA licensure in New York State, students must complete 150 credit hours of courses. In addition to the 120 credit hours required for the B.S. in Accounting, the following courses will enable the student to meet the education requirement to become a CPA:

DEGREE REQUIREMENTS**Required Courses**

PHIL 218	Introduction to Ethics	3
	or	
BUAD 378	Business and Ethics	3
	and	

ACCT 312	Business Law II	3
ACCT 401	Advanced Accounting	3
ACCT 440	Accounting Theory & Research	3
ACCT 455	Adv Auditing&Fraud Examination	3

Subtotal: 15

Plus 15 credit hours of 200/300/400-level

200/300/400-level	15
ACCT/BUAD/ECON-prefixed	
courses and/or 300/400-level non-	
ACCT/BUAD/ECON prefixed	
courses, by advisement	

Subtotal: 15

TOTAL CREDIT HOURS: 30

**SCHOOL BUILDING LEADERSHIP
CERTIFICATE OF ADVANCED STUDY
(CAS)****Department of Language, Learning and Leadership**

Office: E236 Thompson Hall
(716) 673-3245

Cindy Bird, *Chairperson, Department of Language, Learning and Leadership*

Charles Stoddart, *Program Coordinator*

Email: Charles.Stoddart@fredonia.edu

Website: <https://home.fredonia.edu/coe/lll>

The Certificate of Advanced Study in School Building Leadership is open to candidates who already possess teaching certification, a master's degree in education or a related field, and three years of satisfactory teaching or professional experience in a Pre-K-12 setting. The program leads to a recommendation to the New York State Education Department for initial certification as a School Building Leader (SBL). The certificate allows the candidate to assume such roles as principal, assistant principal, supervisor, department chairperson, or program coordinator.

Requirements for Admission to the Program without Deficiencies:

- New York State Education Department teaching certification.
- Master's degree in education or related field with a minimum GPA of 3.0.
- Three years satisfactory teaching or professional experience in a Pre-K-12 school.
- Two written recommendations, one each from the candidates school superintendent and immediate supervisor.

Advising

Graduate students in the School Building Leadership Program should meet with their assigned academic advisor

at least once every semester for purposes of program planning and course selection.

PROGRAM REQUIREMENTS

A minimum of 30 semester hours of graduate-level courses, including a 600-clock hour internship:

Required Courses

EDU 614	Principles of School Administration and Leadership	3
EDU 615	School Building Leader	3
EDU 616	Supervision I: Theory/Practice	3
EDU 620	Public School Finance	3
EDU 624	Contemporary Problems in School Leadership	3
EDU 626	Public School Law	3
EDU 630	Educational Administration Special Topics	3

Candidates are also required to submit an internship portfolio providing evidence of the candidate's impact on students in a Pre-K-12 setting.

As of December 31, 2013, candidates in all education programs are required to complete training under the Dignity for All Students Act (DASA). Beginning in the Fall 2013 semester, the training required under the Dignity for All Student Act (DASA) will be included in EDU 303 at Fredonia. Undergraduate candidates planning to graduate after Fall 2013 who have already completed EDU 303 on campus or taken a workshop as a substitution for EDU 303 must also complete the EDU DASA workshop prior to graduation.

Candidates must also successfully pass a comprehensive oral or written examination and the New York State School Building Leadership Examination. In order to be eligible for New York State School Building Leader Initial Certification, candidates must pass the applicable state examinations.

TOTAL CREDIT HOURS: 30

SCHOOL DISTRICT LEADERSHIP PROGRAM CERTIFICATE OF ADVANCED STUDY (CAS)

Department of Language, Learning and Leadership

Office: E236 Thompson Hall
(716) 673-3245

Dr. Cindy Bird, Chairperson

Dr. Charles Stoddart, Program Coordinator

Email: charles.stoddart@fredonia.edu

Website: <https://home.fredonia.edu/coe/III>

The School District Leadership Program (SDL) is open to candidates who have completed the requirements for the New York State School Building Leader Certification. The program leads to a recommendation to the New York State

Education Department for professional certification as a School District Leader (SDL). This state certification allows the candidate to assume such roles as superintendent, assistant superintendent, district wide director, or coordinator.

All candidates in the School District Leadership program who would like to receive an institutional recommendation for NYS Certification in School District Leadership from The State University of New York at Fredonia must successfully pass the New York State Content Specialty Test (CST) in School District Leadership before graduating from the program.

Any candidate who has not successfully completed the CST in School District Leadership or who is not interested in receiving an institutional recommendation for certification, must change to the SDL-Non Certification program prior to applying for graduation.

Any candidate who graduates from the SDL-Non Certification program, who later intends to pursue NYS Certification, will need to contact and apply through his/her local BOCES (Board of Cooperative Educational Services) for an individual transcript evaluation.

Requirements for Admission to the Program:

- Be eligible for or hold New York State Education Department School Building Leader certification.
- Minimum grade point average of 3.0 in academic program leading to the School Building Leadership Certification or its equivalent.
- Two written recommendations, one each from the candidate's school superintendent and immediate supervisor. (For candidates continuing with this program directly following their completion of the C.A.S. in School Building Leadership, their recommendations for admittance to the C.A.S. program in SBL will be sufficient.)

PROGRAM REQUIREMENTS

A minimum of 6 semester hours of graduate-level courses as listed below:

Required Courses

EDU 662	Policy Development, Politics and Ethical Practices	3
EDU 664	Governance, Media and Crisis Management	3

As of December 31, 2013, candidates in all education programs are required to complete training under the Dignity for All Students Act (DASA). Beginning in the Fall 2013 semester, the training required under the Dignity for All Student Act (DASA) will be included in EDU 303 at Fredonia. Undergraduate candidates planning to graduate after Fall 2013 who have already completed EDU 303 on campus or taken a workshop as a substitution for

EDU 303 must also complete the EDU DASA workshop prior to graduation.

TOTAL CREDIT HOURS: 6

Science Education Graduate Programs

Department of Chemistry and Biochemistry
Science Center
(716) 673-3285

Dr. Holly Lawson, Program Coordinator

Email: chemistry.department@fredonia.edu

Website: <http://home.fredonia.edu/scienceeducation>

ADOLESCENCE SCIENCE EDUCATION MASTER OF ARTS IN TEACHING

Office: Science Center 221E/318
(716) 673-3285

Dr. Holly Jon Lawson, Project Coordinator, Fredonia Science Center

Email: holly.lawson@fredonia.edu

Website: <http://home.fredonia.edu/scienceeducation>

Program Purpose

This master's program is intended for students who have earned a bachelor's degree in biology, chemistry, geosciences, or physics (or equivalent) and who wish to earn a certificate to teach in grades 7-12 in N.Y.S. public schools. This accelerated (15 month) program will provide all of the required course work, field experiences and student teaching as well as selected courses in the content areas so that graduates will be eligible for both initial and professional certification in the science disciplines in their first degree, as well as General Science 7-12 and science in grades 5-6. This provides an opportunity to fulfill a regional need for qualified science teachers from nontraditional sources such as content majors or individuals considering a second career.

Program Structure and Content

The academic content contains a pedagogical core, literacy and language acquisition courses, method courses specific to the teaching of science, use of technology to enhance learning and assist student with special needs, assessment, teaching scholarship and science content courses.

PROGRAM REQUIREMENTS FOR THE ADOLESCENCE SCIENCE EDUCATION MASTER OF ARTS IN TEACHING (44 CREDIT HOURS)

Pedagogical Core:

EDU 502	Psychology of Adolescence	3
EDU 508	Teaching Exceptional Learners in Inclusive Settings	3
EDU 301	Safe Schools/Healthy Students: Child Abuse and Child Abduction	1

EDU 302	Safe Schools/Healthy Students: Alcohol, Tobacco and Other Drug Abuse	1
EDU 303	Safe Schools/Healthy Students-DASA: Safety Education/Fire and Arson/School Violence	1

Subtotal: 9

Literacy:

EDU 528	Technology in the Schools	3
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Subtotal: 6

Plus one course from the following:

EDU 506	Introduction to Literacy Instruction	3
EDU 589	Writing in the Middle and Secondary Schools	3
EDU 633	Literacy in the Content Areas	3

Subtotal: 3

Methods:

SCED 560	Foundations of Teaching Science to Adolescent Learners	3
SCED 561	Foundations of Teaching Science Field Experience	1
SCED 660	Developing Expertise in Science Teaching	3
SCED 661	Developing Expertise in Science Teaching Field Experience	1
SCED 680	Inquiry into Science Teaching in Context	3

Subtotal: 11

Content:

BIOL, CHEM, GEO, PHY, SCI, SCED: 6 cr hrs of electives, upon advisement	6
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Subtotal: 6

Supervised Teaching:

SCED 670	Student Teaching - Middle School Science	6
SCED 671	Student Teaching - Secondary School Science	6

Subtotal: 12

Required course for 5-6 extension:

EDU 321	Teaching in the Middle School	3
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Subtotal: 3

Additional requirements for General Science 7-12 extension:

Candidates are required to have completed at least 18 credit hours of study in two sciences outside the area of initial certification.

As of December 31st, 2013, candidates in all education programs are required to complete training under the Dignity for All Students Act (DASA). Beginning in the Fall 2013 semester, the training required under the Dignity

for All Students Act (DASA) will be included in EDU 303 at Fredonia. Candidates planning to graduate after Fall 2013 who have already completed EDU 303 on campus or taken a workshop as a substitution for EDU 303 must also complete the EDU DASA workshop prior to graduation. Subtotal: 47

Criteria and Procedures for Admission

Candidates must possess a bachelor's degree in Biology, Chemistry, Geosciences, or Physics or the equivalent and have an overall GPA of 3.00 in their undergraduate program; two recent (within last six months) letters of recommendation are required. General admission requirements can be found at the Application Procedures section of the Graduate Studies website (<http://home.fredonia.edu/gradstudies>). In general, students are expected to apply by January 15 to begin the program the next summer. The program is designed for students to take a sequence of courses starting one summer and through to the end of the next summer. Some allowance, upon advisement, may be given for certain courses to be taken out of sequence or on a part time bases. Students will be admitted to the program based on the assessment of GPA and letters of recommendation by the Science Education Partnership (SEP) Graduate Committee. A transcript screen tool will be employed to determine content course deficiencies and requirements for any dual certifications or the general science 7-12 extension.

Admission to the Program

- B.S. degree in Biology, Chemistry, Earth Science, Physics, or equivalent; 3.00 GPA overall and in the discipline. Evaluation of transcript by the M.A.T. Coordinator to identify the certification area(s) and any deficiencies that must be addressed through further course work. Identified deficiencies will be outlined in a contract along with a timeline for their completion.
- Passage of the Content Specialty Test (CST) in the disciplinary area. If candidate has not taken/passed the CST, then candidate must pass exam and have results in hand during the fall semester. Students should see the following for links to certification examinations (http://www.nystce.nesinc.com/NY_viewSG_opener.asp).
- Evidence of completing the GRE general exam.

Candidates in all education programs are required to demonstrate competence in a foreign language. This requirement must be satisfied in any one of the following ways:

- Score of 85 percent or higher on New York State Regents Exam or New York State High School Equivalent Exam*: Requirement is fulfilled.
- Scores of 65 percent - 84 percent on New York State Regents Exam or New York State High School Equivalent Exam*: Student needs to take an

Elementary I level course or an Elementary II level course of a language or equivalent course(s), or successfully complete an equivalent Fredonia proficiency exam.

- Scores below 65 percent on New York State Regents Exam or New York State High School Equivalent Exam*: Student needs to take an Elementary I level course and an Elementary II level course or equivalent course(s) of the same language.
- If student did not take a New York State Regents Exam or New York State High School Equivalent Exam*: Student needs to take an Elementary I level course and an Elementary II level course or equivalent course(s) of the same language.

NOTE:

- *The General Education foreign language requirement differs from the certification requirement and must be satisfied for degree conferral.*
- ** High School Equivalent Exam refers to a New York State Local School District Exam or Regional Exam in a Foreign Language.*

TOTAL CREDIT HOURS: 47

NATURAL SCIENCE 7-12 MASTER OF SCIENCE IN EDUCATION

Office: Science Center 221E/318
(716) 673-3285

Dr. Holly Jon Lawson, *Project Coordinator, Fredonia Science Center*

Email: holly.lawson@fredonia.edu

Website: <http://home.fredonia.edu/scienceeducation>

The Science Education Partnership and the Natural Science departments offer a program leading to the Master of Science in Education: Natural Science 7-12 and includes recommendation for professional certification for the following titles:

Biology 7-12 PRF Earth Science 7-12 PRF

Chemistry 7-12 PRF Physics 7-12 PRF

DEPARTMENT REQUIREMENTS FOR ADMISSION TO THE PROGRAM WITHOUT DEFICIENCIES

- An undergraduate major in biology, chemistry, earth science, physics, or related science with requisite evidence of training and motivation necessary to succeed in graduate study.
- Appropriate supporting science background to include math and cognate science courses.
- Candidates must have an initial certification to teach biology, chemistry, earth science, or physics in the

secondary schools of New York State, or equivalent preparation.

Content Linked Pedagogy Courses

(1) Six hours of courses that link content and pedagogy in BIOL, CHEM, GEO, PHYS, SCI or SCED from the list below. These are courses that have been developed collaboratively between science content and education faculty and are intended to present NYS science content and its instruction in adolescence grades.

BIOL 510	Tropical Biology	3
BIOL 690	Thesis Research	1-9
CHEM 530	Understanding Chemistry	3
CHEM 573	Environmental Aquatic Chemistry	3
CHEM 581	Special Topics in Chemistry	1-3
CHEM 690	Independent Study	1-3
CHEM 691	Research I	1-3
CHEM 692	Research II	1-3
CHEM 693	Research III	1-3
CHEM 694	Research IV	1-3
EDU 516	Improving Educational Outcomes: Working with Children and Families from Poverty	3
EDU 542	Evidence-Based Practices for Inclusive Settings	3
EDU 580	Teaching Grades 7-12	3
GEO 505	Earth Science of Chautauqua County	3
GEO 590	Independent Study	3
GEO 610	Independent Research	3
GEO 615	Independent Research	3
PHYS 690	Research	3
PHYS 691	Research	3
SCED 510	Nature in the School Curriculum	3
SCED 511	Teaming with Nature	3
SCED 512	Vernal Pool Project	3
SCED 541	Electricity and Magnetism	3
SCED 542	Light and Color	3
SCED 543	Moving Objects	3
SCED 544	Properties of Matter	3
SCED 591	Special Topics in Science Education	1-3

Subtotal: 6

PROGRAM REQUIREMENTS:

Education Courses (one three credit hour EDU course upon advisement)

EDU 514	Assessment and Instruction of Diverse Learners I	3
EDU 570	Using Educational Research to Improve Instruction	3

Subtotal: 3

Seminar

SCED 600	Graduate Seminar for Science Teachers	1
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Subtotal: 1

Graduate Thesis Project

This is an action research field study in science learning. A Research Proposal for this project should be presented to the candidate's graduate committee upon completion of EDU 570 (p. 369).

SCED 690	Graduate Research Project in Science Learning	3
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Subtotal: 3

Content Courses

Candidate should select 9 hours of courses from BIOL, CHEM, GEO, PHYS or SCI graduate offerings upon advisement.

Subtotal: 9

Additional Requirements

As of December 31, 2013, candidates in all education programs are required to complete training under the Dignity for All Students Act (DASA). Beginning in the Fall 2013 semester, the training required under the Dignity for All Student Act (DASA) will be included in EDU 303 at Fredonia. Graduate Candidates who have not had DASA training must do so before earning the MSed/Science.

SCIENCE LEARNING MASTER OF SCIENCE

Office: Science Center 221E
(716) 673-3285

Dr. Holly Lawson, *Director, Science Education Partnership*

Email: holly.lawson@fredonia.edu

Website: <http://home.fredonia.edu/scienceeducation>

Department Requirements for Admission to the Program without Deficiencies

- An undergraduate major in biology, chemistry, earth science, physics, or related science with requisite evidence of training and motivation necessary to succeed in graduate study.
- Appropriate supporting math and cognate science courses.
- Minimum GPA 3.0

PROGRAM REQUIREMENTS (30 CREDIT HOURS):

Foundations of Education:

EDU 502	Psychology of Adolescence	3
EDU 508	Teaching Exceptional Learners in Inclusive Settings	3

One course from the following: EDU 5XX-6XX (upon advisement)		3
		Subtotal: 9
Science Methods:		
SCED 560	Foundations of Teaching Science to Adolescent Learners	3
SCED 660	Developing Expertise in Science Teaching	3
		Subtotal: 6
Science Content Courses:		
Science Content Electives		6
		Subtotal: 6
NOTE: Courses to be selected from offerings in Biology, Chemistry, Geoscience, Physics, Science or Science Education upon advisement.		
Capstone Project:		
SCED 690	Graduate Research Project in Science Learning	3
		Subtotal: 3
Students will engage in an independent capstone project with advisement from the student's graduate committee (faculty from science and science education). Projects could be:		
<ul style="list-style-type: none"> Research papers on areas such as comparative curriculum, comparative instruction or comparative teacher practice. Comprehensive literature reviews on specific pedagogies, problem areas or interventions. Self-studies of practice as teaching assistants in science courses on campus. 		
All projects will be written up using a basic thesis format and the project will be presented to the student's graduate committee upon completion of the study.		
Literacy:		
EDU 528	Technology in the Schools	3
EDU 633	Literacy in the Content Areas	3
		Subtotal: 6
TOTAL CREDIT HOURS: 30		

SCIENCE LEARNING MASTER OF SCIENCE

Office: Science Center 221E
(716) 673-3285

Dr. Holly Lawson, Director, Science Education Partnership

Email: holly.lawson@fredonia.edu

Website: <http://home.fredonia.edu/scienceeducation>

Department Requirements for Admission to the Program without Deficiencies

- An undergraduate major in biology, chemistry, earth science, physics, or related science with requisite evidence of training and motivation necessary to succeed in graduate study.
- Appropriate supporting math and cognate science courses.
- Minimum GPA 3.0

PROGRAM REQUIREMENTS (30 CREDIT HOURS):

Foundations of Education:		
EDU 502	Psychology of Adolescence	3
EDU 508	Teaching Exceptional Learners in Inclusive Settings	3
One course from the following: EDU 5XX-6XX (upon advisement)		3
		Subtotal: 9
Science Methods:		
SCED 560	Foundations of Teaching Science to Adolescent Learners	3
SCED 660	Developing Expertise in Science Teaching	3
		Subtotal: 6
Science Content Courses:		
Science Content Electives		6
		Subtotal: 6
NOTE: Courses to be selected from offerings in Biology, Chemistry, Geoscience, Physics, Science or Science Education upon advisement.		
Capstone Project:		
SCED 690	Graduate Research Project in Science Learning	3
		Subtotal: 3

Students will engage in an independent capstone project with advisement from the student's graduate committee (faculty from science and science education). Projects could be:

- Research papers on areas such as comparative curriculum, comparative instruction or comparative teacher practice.
- Comprehensive literature reviews on specific pedagogies, problem areas or interventions.
- Self-studies of practice as teaching assistants in science courses on campus.

All projects will be written up using a basic thesis format and the project will be presented to the student's graduate committee upon completion of the study.

Literacy:

EDU 528	Technology in the Schools	3
EDU 633	Literacy in the Content Areas	3

Subtotal: 6**TOTAL CREDIT HOURS: 30****Sociocultural and Justice Sciences**

(formerly the Department of Sociology, Anthropology, Social Work, and Criminal Justice)

Office: W363 Thompson Hall

(716) 673-3205

Dr. Mary Carney, Chairperson

Email: sociology.anthropology@fredonia.edu

Website: <http://home.fredonia.edu/sociocultural>

The Department of Sociocultural and Justice Sciences offers majors in Sociology (p. 218), Social Work (p. 218), and Criminal Justice (p. 55). Minors in Anthropology (p. 154), Criminal Justice (p. 158), and Sociology (p. 175) are offered as well.

SOCIOLOGY BACHELOR OF ARTS

Office: W363 Thompson Hall

(716) 673-3205

Dr. Mary Carney, Chairperson

Email: sociology.anthropology@fredonia.edu

Website: <http://home.fredonia.edu/sociocultural>

Sociology provides valuable insights into the human experience and assists in the understanding of human behavior. Sociologists are interested in understanding how people live and interact, in learning how human groups of all kinds (families, Sport teams, religious groups, crowds, large bureaucratic organizations, etc.) operate in a wide variety of situations, and in assessing and evaluating how societies work. Sociology explores assumptions about people, their groups, and their societies. It carefully analyzes problem areas and evaluates possible solutions.

Student Honors and Awards

Sociology majors who maintain a minimum 3.0 grade point average in the discipline and overall will be eligible for induction into Alpha Kappa Delta, the International Sociology Honor Society. A minimum of 12 credit hours of sociology taken at Fredonia is required.

REQUIREMENTS FOR THE BACHELOR OF ARTS IN SOCIOLOGY**Required Courses (21 credit hours):**

ANTH 115	Introductory Anthropology	3
SOC 116	Introductory Sociology	3
SOC 200	Social Statistics	3
SOC 202	Social Analysis	3
SOC 300	Research Methods	3
SOC 380	Sociological Theory	3

SOC 400	Senior Seminar	3
Subtotal: 21		

NOTE: SOC 200 (p. 524): or equivalent. SOC 380 (p. 527): Fall semester only. SOC 400 (p. 527): Spring semester only.

Electives (18 credit hours):

Elective courses in Sociology, by advisement.

Subtotal: 18**TOTAL CREDIT HOURS: 39****SOCIAL WORK BACHELOR OF SCIENCE**

Office: W379 Thompson Hall

(716) 673-3470

Dr. Brian Masciadrelli, Director

Email: brian.masciadrelli@fredonia.edu

Website: <http://home.fredonia.edu/socialwork>

The Bachelor of Science in Social Work is one of several major degree programs offered by the Department of Sociocultural and Justice Sciences (formerly known as the Department of Sociology, Anthropology, Social Work, and Criminal Justice). The program is accredited by the Council on Social Work Education (CSWE), the profession's educational accreditation organization. All program activities are designed to meet its mission and goals. Students must demonstrate mastery of ten core competencies for which they and the program are assessed on an annual basis.

SOCIAL WORK PROGRAM MISSION STATEMENT

The mission of The State University of New York at Fredonia Bachelor of Science in Social Work program is to enact the mission of the university and home department, the Department of Sociocultural and Justice Sciences. Through committed, quality teaching-learning activities, the program educates, challenges, and inspires students to be connected, creative, responsible, global citizens and generalist social work professionals who will advance and promote a socially and economically just world.

PROGRAM GOALS

The goals of the Fredonia Social Work program are as follows:

1. The Fredonia Social Work program seeks to prepare generalist social workers who value the principles of service and importance of human relationships in their efforts to maintain and improve the social functioning of individuals, families, groups, organizations, communities and society.
2. The Fredonia Social Work program seeks to prepare generalist social workers who are practitioner-researchers: active, applied social scientists who work

to strengthen and improve the well-being of others through their critical and scientific approach and enactment of the generalist problem solving method with systems of all sizes.

3. The Fredonia Social Work program seeks to prepare generalist social workers who understand and enact the standards and core principles of the NASW Code of Ethics in their interactions, relationships and decision-making.
4. The Fredonia Social Work program seeks to prepare generalist social workers who practice ethnic and culturally sensitive social work practice with diverse populations and who fight to eliminate social injustice experienced by oppressed populations.
5. The Fredonia Social Work program seeks to prepare well-rounded, liberal arts trained generalist social workers who have mastered the CSWE core competencies, especially the skills and mindset needed in the use of the professional self.
6. The Fredonia Social Work program seeks to prepare generalist social workers who integrate knowledge, values, and skills for competent entry-level professional practice and/or graduate education.

PROGRAM POLICIES

The social work profession has been a leader in the cause of fighting prejudice, discrimination, and oppression against all people in society. Admission and advancement into the program are based upon the published criteria. Race, color, national origin, religion, creed, age, disability, sex, gender identity, sexual orientation, familial status, pregnancy, predisposing genetic characteristics, military status, domestic violence victim status, ethnicity, and/or political orientation play no role in the program decisions. Criminal conviction does not play a role in admission and advancement. However, criminal conviction can be an obstacle to placement in certain field agency sites. The program works with these students to find appropriate placement.

Social work is also a professional field with expectations of professional behavior. Students who meet the published criteria but who have evidenced a pattern of unprofessional, unsuitable behavior may be denied advancement and/or dismissed from the program. Students may also be dismissed from the program for academic reasons. Students must earn a grade of “C” or better in their required social work major courses to continue in the major. More specific expectations and policies are detailed in the student handbook.

ASSESSMENT

The program assesses students’ mastery of the nine core competencies on a yearly basis. A multiple methods approach based upon students’ actual performance and

written products are used in this assessment. A weighted score is created for each student and for each cohort group. The aggregate cohort scores are reported on the program web page each year and they serve as guides in curriculum discussions. Assessment patterns and trends inform curriculum decisions.

TRANSFER STUDENTS

The Social Work program welcomes transfer students. The curriculum was designed to facilitate a successful transition from other institutions. Incoming freshmen and sophomore students are given intensive advising to prepare for advancement and to promote success in all academic pursuits. Incoming juniors who transfer with an A.A./A.S. degree or who have 60 credit hours are also given intensive advisement but they must meet all the advancement criteria prior to transfer. When applying for advancement into the junior year course work, these students must file their application with supporting documents and they must:

1. Be formally accepted into Fredonia for the fall semester;
2. Document the completion of 60 credit hours (or submit their plan to complete at least 60 hours before they start the fall semester); and
3. Establish equivalency for courses transferring as Introduction to Social Work (Introduction to Human Services), and Human Biology.

To establish equivalency, students must submit a syllabus for the course in question to the Social Work Program Director who must determine that the purpose, content, and scope of the course is the same or similar enough to the Fredonia course that it can stand in the place of the Fredonia course. The program director may contact the college/university to gather more information to make a determination. If approved, a Transfer Credit Approval form must be filed with the Fredonia Registrar.

Social work courses transferred from a Council on Social Work Education Accredited program will be approved for credit but may not be judged equivalent to the Fredonia social work courses. This occurs because of differences in curriculum and course sequencing among programs. Transfer students from an accredited program will need to meet with the program director to determine equivalency. No equivalency will be granted for the Field Practicum unless placed by the program in an international placement. Students earning a B.S. degree in Social Work from Fredonia must complete their 500 practicum hours through the Fredonia program.

NOTE: No academic credit for life or work experience will be given as an equivalent for any course

C.S.W.E. COMPETENCIES

The curriculum is designed to help students master CSWE's ten core professional social work

competencies. Each course is intentionally designed and delivered to teach the knowledge, values and skills needed to perform the practice behaviors associated with each competency. In our capstone professional field education experience, students put the knowledge, values and skills into action. These nine competencies are:

1. Demonstrate ethical and professional behavior;
2. Engage diversity and difference in practice;
3. Advance human rights and social, economic, and environmental justice;
4. Engage in practice-informed research and research-informed practice;
5. Engage in policy practice;
6. Engage with individuals, families, groups, organizations, and communities;
7. Assess individuals, families, groups, organizations, and communities;
8. Intervene with individuals, families, groups, organizations, and communities; and
9. Evaluate practice with individuals, families, groups, organizations, and communities.

ADVANCEMENT INTO THE PROFESSIONAL METHODS SEQUENCE

CSWE Accreditation Standards require programs to have admissions criteria into the major. The Fredonia program has a two tiered process. First, students are classified as “pre-candidates” until they have completed 30 credit hours of general education and other course work; passed Introductory Sociology, Introduction to Psychology, Human Biology and Statistics; and have a 2.5 cumulative grade point average. Upon completion of these criteria, students will be considered candidates for “Advanced Status” in Social Work. To obtain Advanced Status, candidates must complete the second tier of the Advancement process which allows entry into the foundation professional methods courses. The professional methods courses are taken in a sequence beginning in the fall semester of the junior year. The second-tier of the Advancement process requires an application, a written response to a question posed on the application, three recommendations, verification that all the prerequisite coursework and grade point average criteria are met.

REQUIREMENTS FOR THE BACHELOR OF SCIENCE IN SOCIAL WORK

Degree candidates in Social Work must

1. complete the College Core Curriculum (CCC);
2. complete prerequisite courses;
3. successfully complete the Advancement process in the second semester of their sophomore year;

4. complete required social work courses;
5. complete 6 credit hours of course work with diversity content from an approved list of College Core Curriculum courses (taken as part of the CCC);
6. maintain and complete a portfolio;
7. complete enough general elective hours and/or a minor to earn 120 credit hours; and
8. consistently demonstrate professional behavior.

Prerequisite Courses:

SOC 116	Introductory Sociology	3
PSY 129	Introduction to Psychology	3
BIOL 110	Human Biology	3
BUAD 200	Fundamentals of Statistics for Business and Economics	3
	or	
EDU 200	Statistics	3
	or	
POLI 200	Statistics	3
	or	
PSY 200	Statistics	3
	or	
SOC 200	Social Statistics	3
	or	
STAT 200	Statistical Methods I	3
SOC 218	Introduction to Social Work	3

Subtotal: 15

Required Social Work Courses:

SOCW 249	Social Welfare Institutions	3
POLI 382	Social Welfare Policy	3
SOC 300	Research Methods	3
SOCW 325	Foundations of Generalist Practice	3
SOCW 340	Human Behavior in Social Environment I	3
SOCW 341	Human Behavior in Social Environment II	3
SOCW 370	Generalist Practice Skills	3
SOCW 390	Practice with Individuals, Families and Small Groups	3
SOCW 400	Practice with Organizations and Larger Social Systems	3
SOCW 480	Field Practicum I	3
SOCW 485	Field Practicum I with Seminar	3
SOCW 490	Field Practicum II	3
SOCW 495	Field Practicum II with Seminar	3
	Six (6) credit hours of Approved Social Work Electives	6

Subtotal: 45

TRANSCRIPTS MUST DOCUMENT THAT STUDENTS HAVE MET THE FOLLOWING ADVANCEMENT REQUIREMENTS:

1. A 2.5 average for the following prerequisite courses:

SOC 116	Introductory Sociology	3
PSY 129	Introduction to Psychology	3
BIOL 110	Human Biology	3
SOC 200	Social Statistics	3
	or	
	Any other 200-level introduction to statistics course	
SOC 218	Introduction to Social Work	3

Subtotal: 15

2. A cumulative grade point average of 2.5 or higher, and

3. A grade of "B-" or better in:

SOC 218	Introduction to Social Work	3
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Subtotal: 3

The application materials with complete instructions can be obtained by contacting the department and/or the program director.

Students will not be allowed into the Practice Methods Sequence if they have not successfully completed this process. Once accepted into the advanced course work, students are identified as having "Advanced Status" and must follow the required sequence of courses. This sequence is based upon the developmental design of the curriculum. All foundation area practice methods courses build upon the knowledge of the course that precedes it. Because of this, students who anticipate any need for part-time study or who wish to study abroad should talk with their advisors as soon as possible to plan their progress through the curriculum. Students must also achieve a minimum grade of "C" in their required social work courses to continue in sequence.

FIELD EDUCATION

In the senior year, students must complete a 500 hour professionally supervised placement in a social service agency. Conceived as one experience spread over two semesters, the student must complete a minimum of 250 hours of activities during each of the fall and spring semesters. Students begin the application process for their Field Practicum placement in the fall semester of the junior year. Students must have completed all prerequisite courses prior to entering their field work. They must also have a 2.0 cumulative G.P.A. and a 2.5 average in all the required social work courses.

Field practicum policies and procedures can be found in the *Field Manual* available to the students during the application-to-the-field process in the spring semester.

Social Work Field Education Courses:

SOCW 480	Field Practicum I	3
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SOCW 485	Field Practicum I with Seminar	3
SOCW 490	Field Practicum II	3
SOCW 495	Field Practicum II with Seminar	3

Subtotal: 12

TOTAL CREDIT HOURS: 60

SOUND RECORDING TECHNOLOGY BACHELOR OF SCIENCE

Office: 1151 Mason Hall
(716) 673-3151

Dr. Melvin Unger, *Director, School of Music*

Dr. Bernd Gottinger, *Coordinator*

Email: soundrecording.technology@fredonia.edu

Website: <http://home.fredonia.edu/music/srt>

The Bachelor of Science degree program in Sound Recording Technology is designed to provide undergraduate students with academic and professional preparation necessary for successful careers in music, sound recording, and related professions, and in technical, artistic, and management positions.

DEGREE REQUIREMENTS

Musicianship Core

The musicianship core is the set of required studies common to all music degree programs (Bachelor of Arts in Music, Bachelor of Science in Music Therapy, Bachelor of Science in Music with an emphasis in Sound Recording Technology, all programs of the Bachelor of Music).

MUS 163	Our World of Music	1
MUS 164	Our World of Music	1
MUS 263	Music History in Western Civilization I	3
MUS 264	Music History in Western Civilization II	3
MUS 231	Conducting I	2
MUS 121	Aural Skills I	2
MUS 122	Aural Skills II	2
MUS 123	Music Theory I	3
MUS 124	Music Theory II	3
MUS 221	Aural Skills III	2
MUS 222	Aural Skills IV	2
MUS 223	Music Theory III	3
MUS 224	Music Theory IV	3
MUS 118	Piano Class, Elementary	2
MUS 100	Recital-Seminar	
MUS 120	Concert Attendance	
MUS 105	Applied Music Major	2
MUS 106	Applied Music Major	2

Subtotal: 36

NOTE:

- MUS 118: waived for students whose principal instrument is piano.

- MUS 120: each semester of private applied lessons.
- Ensembles: Selection of ensembles is by advisement, and by audition when applicable.
- Ensembles: Participation in ensembles is required especially during the semesters of private applied study.
- MUS 107 and MUS 108 are required of all freshmen oboe and bassoon majors

Sound Recording Technology Requirements (in addition to Musicianship Core and ensembles):

SRT 105	Recording Techniques for Music	1
SRT 200	Recording Practicum	2
SRT 201	Recording Practicum	2
SRT 250	Recording Techniques	2
SRT 251	Recording Techniques	2
SRT 300	Recording Practicum	2
SRT 301	Recording Practicum	2
SRT 350	Technology and Practices of the Recording Industry	3
SRT 351	Technology and Practices of the Recording Industry	3
SRT 450	Senior Seminar/Project	2
SRT 451	Senior Seminar/Project	2
CSIT 105	Visual BASIC I	3
MATH 122	University Calculus I	4
MATH 123	University Calculus II	4
PHYS 121	College Physics I	3
PHYS 122	College Physics II	3
	or	
PHYS 230	University Physics I	4
PHYS 231	University Physics II	4
PHYS 123	College Physics Lab I	1
PHYS 124	College Physics II Lab	1
	or	
PHYS 232	University Physics I Lab	1
PHYS 233	University Physics II Lab	1
PHYS 311	Acoustics I	3
PHYS 318	Basic Electronics	3

Subtotal: 44-56

Internship: Internships within the recording industry are strongly encouraged. Up to 15 credit hours of credit may be earned.

Electives: by advisement from Sound Recording Technology Coordinator.

TOTAL CREDIT HOURS: 80-92

SPANISH BACHELOR OF ARTS

REQUIREMENTS FOR THE BACHELOR OF ARTS IN SPANISH

Required Courses

SPAN 313	Spanish Conversation	3
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SPAN 314	Spanish Composition	3
SPAN 315	Introduction to Readings in Hispanic Literature	3
SPAN 423	Senior Seminar	3

Subtotal: 12

Plus 24 additional credit hours in the following categories:

literature	12
advanced grammar	3
culture/civilization courses	3
Electives taught in target language at the 300-400 level	6

Subtotal: 24

Students majoring in Spanish should pass SPAN 313, SPAN 314, SPAN 315 with a minimum of B- in each.

A maximum of 6 credit hours of LANG courses can be applied towards the major as long as the student does the course work in the target language.

Childhood and Early Childhood Education majors may earn a concentration in Spanish. Students should consult the Childhood or Early Childhood Education course requirements for these programs.

All students are required to complete a separate minor whether it is in another language, in another discipline, or in an interdisciplinary program. Students select a minor in consultation with and approval of the department. Double majors and Adolescence Education majors in language are exempted from the minor requirement.

Students can apply a maximum of 21 credit hours of Study Abroad with a minimum grade of C toward the major in Spanish.

Requirement for Transfer and Study Abroad Credits

A maximum of 21 credit hours of transfer and/or Study Abroad courses can apply to the major at Fredonia. All students are required to take 15 credit hours of their major in residence. They must complete 9 credit hours at the 300-level or above, the senior seminar and at least one other 400-level course at Fredonia.

A maximum of 9 credit hours of transfer and/or Study Abroad courses can apply to the minor. At least 6 credit hours at the 300-level should be taken in residence.

TOTAL CREDIT HOURS: 36

COMMUNICATION DISORDERS AND SCIENCES GRADUATE PROGRAM: MS IN SPEECH-LANGUAGE PATHOLOGY

Office: W123 Thompson Hall
(716) 673-3202

Dr. Kim L. Tillery, Chairperson and Graduate Advisor

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Website:

<http://www.fredonia.edu/departments/commdisorders/>

The graduate program in Speech-Language Pathology is designed to enable students to meet requirements for: (1) a Master of Science degree, (2) New York State Department of Education academic and clinical requirements for Initial and Professional Certification as a Teacher of Students with Speech and Language Disabilities (TSSLD), (3) New York State Department of Education academic and clinical requirements for licensure in Speech Pathology, and (4) American Speech-Language and Hearing Association (ASHA) academic and clinical practicum requirements for the Certificate for Clinical Competency in Speech-Language Pathology (CCC-SLP).

The master's education program in Speech-Language Pathology at Fredonia is accredited by the Council on Academic Accreditation (CAA) in Audiology and Speech-Language Pathology of the American Speech-Language-Hearing Association (ASHA).

The CDS department does not accept non-matriculated students into the master's program.

To be considered for Graduate Admission, an Applicant must have:

- A bachelor's degree from an accredited institution.
- A minimum grade point average of 3.0.
- Graduate Records Examinations (GRE) scores no older than three years.
- A minimum of 30 credits in communication disorders and sciences courses as follows:
 - 15 credit hours of coursework related to the normal development of or the sciences related to speech, language, and hearing;
 - 9 credit hours in speech-language pathologies;
 - 6 credit hours in audiology.
- Three-credit courses in biology, physical sciences, statistics, and social sciences.
- Submitted a completed graduate application packet by the deadline.

MISSION OF THE DEPARTMENT OF COMMUNICATION DISORDERS AND SCIENCES

The Department of Communication Disorders and Sciences challenges and inspires students to become competent professionals by developing a foundation of knowledge and effective clinical skills. Students will demonstrate a positive attitude for learning, connect in cooperative relationships with faculty, supervisors, and fellow students, develop responsibility for ethical and

professional behavior in the academic and clinical environments.

Program Goals:

1. Engage the local, university, and professional communities through clinical training, clientele support groups, and continuing education seminars;
2. Provide opportunities for student and faculty research resulting in presentations or publications;
3. Complete diagnostic evaluations of speech, language and hearing disorders for culturally, economically and linguistically diverse populations of persons with communication and swallowing disorders in all age groups across the life span, including screening and prevention, collecting and integrating case history information, using appropriate evaluation procedures and adapting these as necessary, interpreting and synthesizing evaluative data, reporting, and referring when necessary;
4. Plan and execute treatment programs for diverse populations of persons with communication and swallowing disorders in all age groups across the life span, including developing and implementing setting-appropriate intervention plans; selecting, developing, and using appropriate materials and instruments; measuring and evaluating performance; modifying plans, strategies, materials, and instruments as needed; reporting; and identifying and referring when appropriate;
5. Integrate current developments in methodology and technology into clinical practice;
6. Maintain familiarity with current research and critical reports and relate findings to the improvement of clinical practice;
7. Adhere to ASHA's code of ethics, professional standards, scope of practice, and preferred practice patterns; and
8. Satisfy the academic and practicum requirements for obtaining the ASHA Certification of Clinical Competence in Speech-Language Pathology (CCC-SLP), the New York State Professional License in Speech Pathology, and New York State Initial/Professional Certification for a Teacher of Students with Speech and Language Disabilities at the completion of the M.S. degree requirements.

PROGRAM REQUIREMENTS:

(Total MS degree is 62 credit hours.)

Academic courses (41 credit hours):

CDS 555	Dysphagia	3
CDS 598	Voice Disorders	3
CDS 500	Child Language Disorders	3

CDS 530	Augmentative and Alternative Communication	3
CDS 582	Fluency Disorders	3
CDS 583	Speech Sound Disorders and Language Intervention	3
CDS 589	Professional Issues	2
CDS 606	Research Design in Communication Disorders and Sciences	3
CDS 608	Neurogenic Language Disorders	3
CDS 611	Motor Speech Disorders	3
	Four electives as advised (3 credit hours each)	12

Subtotal: 41**Clinical experiences (21 credit hours):**

Capstone experiences

CDS 502	Clinical Practice, Communication Disorders	3
CDS 605	Advanced Clinical Methods and Practice	6-12
CDS 632	Graduate Student Teaching	6

Subtotal: 21

NOTE: Three CDS 502 classes at 3 credit hours each must be taken to satisfy the clinical practice course, for a total of 9 credit hours.

CDS 605 is a variable 6-12 credit course. Students who have already earned the initial teaching certification will register for 12 credit hours. All other students will register for 6 credit hours in CDS 605 and 6 credit hours in CDS 632 to satisfy the degree requirements.

One choice of the following is required:

CDS 619	Comprehensive Exam	
CDS 629	Directed Studies in Research Methodology - Thesis Research	1-6

Subtotal: 0-6

NOTE: CDS 629 can be earned as an elective.

A minimum of 375 clock hours of supervised clinical practice is required for program completion, of which 325 hours must be completed at the graduate level.

All graduate students must complete the course content required for application for New York State Department of Education initial certification for the TSSLD certificate.

TOTAL CREDIT HOURS: 62-68**SPORT MANAGEMENT BACHELOR OF SCIENCE**

The Sport Management program is housed in the Department of Applied Professional Studies.

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Website: <http://home.fredonia.edu/sportmanagement>

The major in Sport Management incorporates the social and cultural dimensions of sport, management and leadership, ethics, marketing, communications, budget and finance, economics, sport governance, sport law, facility and event management and video technology in its program offerings. A pre-internship and internship (400 clock hours) complete the requirements for a Bachelor of Science degree in Sport Management.

Our capstone experience requires students to engage in a 400-hour internship at an organization involved in sports or sport management/administration. The Buffalo Bills, Buffalo Sabres, New York Islanders, Jamestown Jammers, Buffalo Bisons, local and regional universities and high school athletic departments, regional and national YMCA's, service organizations, sporting good firms, and local and regional health and recreation centers are just a few of the high-quality internship experiences Fredonia Sport Management students have contracted with. The Sport Management internship may be completed during any semester including summer and J-Term. Students must meet all transportation and living expenses while involved in the intern experience.

For information on Sport Management internships, please contact Dr. Penny Hite. The Career Development Office provides additional information on these and other opportunities and college policy on experiential education.

REQUIREMENTS FOR THE BACHELOR OF SCIENCE IN SPORT MANAGEMENT**Core Courses:**

ACCT 201	Principles of Financial Accounting	3
PSY 237	Sport Psychology	3
STAT 200	Statistical Methods I	3
SPMG 210	Principles of Sports Management	3
SPMG 211	Facility Management	3
SPMG 212	Event Management	3
SPMG 218	Technology in Sports	3
SPMG 230	Sport in American Culture	3
SPMG 305	Economics of Sport	3
SPMG 330	Leadership and Management in Sports	3
SPMG 410	Sport Law and Risk Management	3
SPMG 428	Marketing and Public Relations in Sport	3

Subtotal: 36**Choose one of the following courses:**

BUAD 323	Organizational Behavior	3
PSY 347	Organizational Psychology	3

Subtotal: 3

Prerequisite courses:

COMM 235	Introduction to Business Communication	3
CSIT 104	Introduction to Microcomputer Software	3
CSIT 151	or Introduction to Information Systems	3
ENGL 100	English Composition	3
ECON 201	Principles of Macroeconomics	3
ECON 202	Principles of Microeconomics	3
PSY 129	Introduction to Psychology	3
SOC 116	Introductory Sociology	3
PHIL 115	Introduction to Philosophy	3

Subtotal: 24**Internship (capstone experience):**

SPMG 298	Pre-Internship	1
SPMG 400	Sport Studies Internship	1-
		12

Subtotal: 7**NOTE:**

SPMG 400 Sports Studies Internship is a variable 1-12 credit course. Students must successfully complete the course with a minimum of 6 credit hours to satisfy the degree requirements.

Sport Management majors with a coaching minor are required to complete 8 credit hours of internship, all other majors complete 6 credit hours.

TOTAL CREDIT HOURS: 70**TESOL CERTIFICATE OF ADVANCED STUDY (CAS)**

Total Credit Hours for Program Completion: 18

This eighteen (18) credit hour program leads to a recommendation for a NYS certification in ESOL. The NYS required twelve (12) credit hours of Language other than English (LOTE) are in addition to the 18 credit hours listed below for program completion.

Requirements for Admission to the Program without Deficiencies

- Completion of a baccalaureate degree in an area of arts, science, or education
- Undergraduate GPA of 3.00 or above
- Evidence of having taken the GRE*
- Evidence of New York State DASA Training
- Current NYS Teaching Certificate
- Completed Graduate Application submitted to the Office of Graduate Studies including:

- (a) two current (within six months) letters of recommendation which include contact information as the TESOL Program Coordinator has the option of contacting anyone who has submitted a letter on your behalf; and
- (b) official academic transcripts from all prior undergraduate and graduate institutions (except SUNY Fredonia).
- **Language Proficiency Requirements:**
 - for Native Speakers of English:
 - A statement of your background and goals in addition to a resume (maximum 3 pages)
 - A graduate-level 800-1,200 word short essay in English which addresses the following question: "Describe your reasons for pursuing a graduate degree in TESOL and support your rationale with specific information pertinent to your desired degree."
 - 12 post-secondary credit hours in a Language Other than English (LOTE), or an approved equivalency, in a single language. Candidates may be accepted conditionally into the TESOL program without the LOTE credits fulfilled. Matriculation into the TESOL program is contingent upon the satisfactory completion of this requirement.
 - A satisfactory intermediate-level 800-1,200 word short essay in a language other than English (LOTE). Candidates may be accepted conditionally into the TESOL program without the LOTE essay. Matriculation into the TESOL program is contingent upon the satisfactory evaluation of this essay.
 - for Non-Native Speakers of English:
 - A statement of your background and goals in addition to a resume
 - A graduate-level 800-1,200 word short essay in English which addresses the following question: "Describe your reasons for pursuing a graduate degree in TESOL and support your rationale with specific information pertinent to your desired degree."
 - A graduate level 800-1,200 word short essay in the candidate's native language. This can be any academic paper (e.g., a paper from a college course).
 - Further stipulations as listed below under "Additional requirements for non-native speakers of English to the TESOL program"

*It is possible to be conditionally accepted if GRE scores are pending.

Additional Requirements for Non-Native Speakers of English to the TESOL Program (any aspect):

- a. The TESOL graduate program requires that non-native speakers of English show evidence of English proficiency by providing scores which are different from those required of the Graduate College. Proof of proficiency may be shown by achieving the following test scores:
 - i. TOEFL: 550 (paper), 213 (computer), or 79 (internet)
 - ii. IELTS (with no subsection below 6.0): 6.5

Fredonia's school code for reporting the TOEFL and IELTS scores electronically is 2539. International students who have been awarded a prior degree from the U.S., U.K./Ireland, Australia, Anglophone Canada, New Zealand, Anglophone Africa, Singapore, and the Commonwealth Caribbean prior to applying to SUNY Fredonia are not required to submit TOEFL or IELTS.
- b. International applicants must provide official copies of all previous degrees/diplomas and transcripts issued in the original language with a literal English translation of each. Proof of an official certification of the award of any and all degrees must be provided. Include documentation describing in which language the courses were taught. The latter can be included in a separate document as a chart or statement.
- c. International applicants must also have transcripts translated and evaluated by WES (www.wes.org) or a similar agency against the American 4.0 standard.

Additionally, all International applicants must meet the requirements outlined by the Graduate Studies website.

PROGRAM COMPLETION REQUIREMENTS

Required Courses

EDU 518	Second Language Acquisition and Development	3
EDU 519	Curriculum Theory for the Second Language Classroom - ESL I	3
EDU 521	Practicum in TESOL, I	
EDU 540	Content Area English as a Second Language	3
EDU 541	Practicum in TESOL II	
EDU 568	Foundations of Bilingual Education	3
EDU 567	Practicum in TESOL, III	

EDU 569	Assessment and Evaluation of English Language Learners (ELLs)	3
EDU 671	ESOL/BE Practicum & Supervision 20 Day	3

Subtotal: 18

As of December 31, 2013, candidates in all education programs are required to complete training under the Dignity for All Students Act (DASA). The training required under the Dignity for All Student Act (DASA) will be included in EDU 303 at Fredonia. Graduate candidates who may have completed EDU 303 on campus prior to Spring 2014 must complete the EDU DASA workshop prior to full admission.

Theatre and Dance

Office: 120 Houghton Hall
(716) 673-3596

Dr. Samantha Kenney, Chairperson

Dr. Thomas Loughlin, Acting Chairperson

Email: theatre.dance@fredonia.edu

Website: <http://home.fredonia.edu/theatredance>

It is the mission of the Department of Theatre and Dance to provide training for professional, community, and academic theatres and dance companies within the framework of a liberal arts education. To this end, the department offers the Bachelor of Arts degree, and the Bachelor of Fine Arts degrees in several areas. All degrees offered by the department are fully accredited by the National Association of Schools of Theatre (NAST).

The Bachelor of Arts degree is one means of acquiring a liberal arts education. It is designed to be a general degree in Theatre Arts, covering all aspects of theatre arts and practice, including performance, design, technical production, theory, criticism, and history. Combined with the required minor, or with the choice of a second major, this degree gives student great flexibility in terms of career choice. Minors in Theatre (p. 176) or Dance (p. 158) are available as well, allowing a student to pursue a secondary interest in theatre or dance as support for a major area or for personal growth and satisfaction.

The Bachelor of Fine Arts degree programs are limited to those students who demonstrate excellence or the potential for excellence in Dance (p. 58), Acting (p. 13), Musical Theatre (p. 194), or Theatrical Production and Design (p. 230). Admission to these degree programs is by audition or portfolio interview only. They are designed for those students who enter the university with a firm idea of their professional goals. The BFA in Musical Theatre is offered in conjunction with the School of Music (p. 179).

There are many opportunities for students to perform during the academic year. Theatre students may participate in the Walter Gloor Mainstage Series of departmental productions. The department presents five fully-mounted

productions each year, including a dance concert performed by the Fredonia Dance Ensemble. The Performing Arts Company (PAC), a Student Association (SA)-supported theatre group at the university, presents two productions each semester and sponsors workshops and additional experimental theatre productions. Orchesis and the Fredonia Dance Organization are two SA-supported dance organizations that produce a number of dance concerts and events each year. Students also participate in student improvisational groups, including Random Acts and the Improv Society. Finally, the Directing I class presents an evening of one-act plays at the end of each semester. All shows produced on campus by any organization are open to participation by any and all students registered for classes during that semester.

Admission to the Department

Students should contact the Department of Theatre and Dance for information regarding auditions or portfolio reviews for all B.F.A. programs. Applications for an audition or portfolio review are submitted through an electronic audition request form. The department does not accept recorded auditions except for international students, or for unusual circumstances.

Bachelor of Arts - Theatre Arts

There is no audition process for the Bachelor of Arts degree. All students who indicate Theatre as their first major preference and are academically accepted by the university are automatically admitted to the Bachelor of Arts program. Students in the Bachelor of Art program are required to complete a minor. Recommended minors include Arts Administration (21 credit hours), Dance (27 credit hours; audition required), Business Administration (24 credit hours), Communication (18 credit hours), Film Studies (21 credit hours), English (21 credit hours), Writing (22 credit hours), and Music (30 credit hours).

Bachelor of Fine Arts – Acting

In addition to admittance to the university, students must audition during the year prior to entering Fredonia on one of the designated audition dates. Audition information and application forms are available on the department website. The B.F.A. Acting degree normally requires four years for completion. Students in the B.F.A. Acting program may choose to minor in an additional area, but it is not required for the degree.

Transfer students should audition for the B.F.A. Acting program during the semester before transferring.

Bachelor of Fine Arts - Musical Theatre

The Department of Theatre and Dance and School of Music jointly offer study leading to the Bachelor of Fine Arts in Musical Theatre degree. The program is limited to those students who demonstrate excellence in acting, dance and singing, and who are firmly committed to professional careers in musical theatre performance. Students must audition during the year prior to entering Fredonia on

designated audition dates. The auditions consist of acting, dance and singing. Audition information and application forms are available on the department website. The B.F.A. normally requires four years for completion. Students in the B.F.A. Musical Theatre program may choose to minor in an additional area, but it is not required for the degree.

Transfer students should audition for the Musical Theatre degree the semester before transferring.

Bachelor of Fine Arts – Theatrical Production and Design

In addition to admittance to the university, prospective students must interview with the production and design faculty for acceptance into the program. A portfolio of creative work should be part of this process. This may be done during the spring semester the year prior to attending Fredonia, or at the end of the first semester if entering as a BA Theatre major. Ideally, students should interview on campus, but may also interview via Skype with portfolios submitted online. Portfolio review information and application forms are available on the department website.

Bachelor of Fine Arts – Dance

The B.F.A. in Dance provides training for dance professionals within a liberal arts education. In addition to intensive technical training in a variety of dance styles, additional studies in choreography, repertory, dance history, kinesiology, and musical training are required. The Dance program curriculum is consistent with the guidelines developed by The National Association of Schools of Dance. Acceptance to the Dance major is by audition only. Audition information and application forms are available on the department website.

Dance majors are required to audition for the Fredonia Dance Ensemble, the pre-professional training ensemble. Dance majors are expected to take at least two technique classes per semester. They are also encouraged to participate in dance program-sponsor activities throughout the year including performances, master classes, and workshops with professional artists.

Additional Requirements

- Students who are not accepted academically by the university will not be admitted to any B.F.A. program regardless of the results of their audition or portfolio review. Students must be academically accepted by the university AND pass their audition or interview for acceptance into any B.F.A. degree program.
- Audition or interview results are not released to a potential student unless and until they are admitted as a major in the Theatre and Dance department.
- Students who do not succeed in gaining admittance into one of the B.F.A. degree programs may choose to attend Fredonia as a B.A. Theatre Arts major and audition or interview a second time for their desired program. However, students who attempt a second

audition should realize that the department makes every attempt to limit the number of B.F.A. students in those programs based on available resources, so as to insure a high level of quality training based on national standards of teacher-student ratios in the classroom. Admission to the B.F.A. program through a second audition is contingent upon space availability in the program. Students who audition a second time may not be admitted into the program if the department determines that there is no space available for additional students in the program or its classes.

- Under no circumstances may a student audition or interview more than twice for any B.F.A. program. Students who have completed 60 credit hours or more as a B.A. Theatre Arts major at Fredonia may no longer audition for the B.F.A. programs. Students who transfer from another institution into the department as B.A. Theatre Arts major and wish to audition or interview for a B.F.A. program must do so within the first two semesters of their arrival.
- All Theatre and Dance majors and minors are required to complete the Theatre and Dance Production course sequence. These are practical extensions of the classroom and vary in accordance with the specific programs. The Theatre and Dance Production commitment requires approximately eight (8) clock hours per week but may, in certain cases, require significantly more time. Theatre and Dance Production credit does not count toward the total number of credits required in any degree program.
- In addition to the specific and individual courses, there are periodic assessments of achievement/improvement for the B.F.A. Acting, B.F.A. Musical Theatre, B.F.A. Dance, and B.F.A. Production and Design students, with the purpose of determining advancement/retention. Students in the B.F.A. degree programs are initially accepted on a probationary basis. They are then assessed through a jury process at the conclusion of each semester in which they are enrolled in the program.
 - Students in the B.F.A. Acting program must present acting juries at the conclusion of each semester, and must perform a senior recital or a leading role in a departmental production during their fourth year.
 - Students in the B.F.A. Musical Theatre program must present acting and vocal juries at the conclusion of each semester, and must perform a senior recital in their fourth year consisting of acting, singing and dancing components.
 - Students in the BFA Theatrical Production and Design program must present a portfolio for review annually, and must formally present complete portfolios to the faculty in their fourth year. They may also participate in a senior design exhibit.
- Students in the BFA Dance program must present dance juries annually, and their performances in the Fredonia Dance Ensemble are also assessed.
- Generally speaking, at the conclusion of the fourth semester, the performance, dance or design faculty assesses the student's progress through a "barrier jury," and a determination is made for continuance in the program. Students who do not demonstrate sufficient growth and improvement will not be permitted to continue study in the B.F.A., but may continue in the B.A. Theatre Arts program or select another major.
- Transfer students admitted into B.F.A. degree programs must spend a minimum of two semesters in the program before undergoing a barrier jury. Generally speaking, B.F.A. transfers should expect to spend a minimum of three years on the Fredonia campus.
- B.F.A. Acting and Musical Theatre majors are required to audition for all Department of Theatre and Dance productions, and to perform as cast. B.F.A. Dance majors are required to audition for the Fredonia Dance Ensemble and perform as cast.
- All department majors must successfully complete a minimum of 45 upper-level credit hours and appropriate supporting courses as determined by faculty advisement.
- Students who are on academic probation will not be permitted to participate in public performances, nor will major technical production crew assignments be permitted.
- Transfer students in the B.A. General Theatre Studies degree program must complete at least 60 percent (27 credit hours) of their major at Fredonia.
- Juniors and seniors who contribute significantly to the theatre program and who attain a grade point average of 3.25 in their major may be eligible for initiation into Alpha Psi Omega, the national honorary dramatic society.
- Further department policies and procedures are outlined in the department Student Handbook. Student majors in Theatre and Dance agree to be bound by these policies as a condition of being a major in one of the department's degree programs.

Awards and Scholarships

The department offers students numerous opportunities to earn awards and scholarships across their four years. The following is a list of the awards and scholarships available to student majors:

- President's Award for Excellence in Theatre
- Paul and Mary Joyce Schaefer Scholarship
- Theatre Arts Outstanding Senior

- Jurgen P. Banse-Fay Production Management Internship
- Alice E. Bartlett for Excellence in Theatre Arts
- Howard E. Marsh for Excellence in Musical Theatre
- Artist of Dionysus Award
- Golden Batocio Award
- Bea Ullman Award for Excellence in Theatre Arts
- Gary Eckhart Award for Excellence in Theatre
- Harry John Brown & Paul Mockovak Award in Musical Theatre
- Mary and Steve Rees Rising Junior Award
- Outstanding Service Award for BFA Dance
- Trent Illig Memorial Award for Dance
- John S. Mintun Outstanding Performance Scholarship
- Michael J. Loughlin Award For Creative Uniqueness
- Georgiana von Tornow Scholarship
- Robert L. Gloor Endowment for Theatre and Dance
- Bruce Walford Award
- 1929 Graduate Ballet Fund
- Keith Cronin Memorial Award for Excellence in Production and Design
- Theatre and Dance Award for Excellence in Stage Management
- NY State Federation of Home Bureaus/ Sally Bulger Award
- Carol Prevet Dance Award Orchestras
- Gertrude Prushaw Maytum Scholarship
- Myers BFA Dance Award (New Majors - Incoming Freshman)
- Tim Douglas Jensen Class of 1990 Scholarship
- Walter Gloor Scholarship
- Jack L. Cogdill Scholarship
- Robert Marvel Scholarship
- Eileen Star Batrouny Visual and Performing Arts Scholarship

THEATRE ARTS BACHELOR OF ARTS

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Dr. Samantha Kenney, *Chairperson*

Dr. Thomas Loughlin, *Acting Chairperson*

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DEGREE REQUIREMENTS FOR BACHELOR OF ARTS IN THEATRE ARTS

Required Core Courses

THEA 100	Theatre Majors Seminar	1
THEA 101	Theatre and Dance Productions	1
THEA 102	Theatre and Dance Productions	1
THEA 114	Introduction to the Performing Arts	3
THEA 117	Script Analysis	3
THEA 121	Introduction to Technical Theatre	3
THEA 133	Introduction to Acting	3
THEA 201	Theatre and Dance Productions	1
THEA 202	Theatre and Dance Productions	1
	or	
DANC 250	Dance Ensemble	1
DANC 251	Dance Repertory	1
THEA 220	Makeup	1
THEA 301	Theatre and Dance Productions	1
THEA 302	Theatre and Dance Productions	1
	or	
DANC 250	Dance Ensemble	1
DANC 251	Dance Repertory	1
THEA 441	Directing I	3
THEA 451	History of the Theatre I	3
THEA 452	History of the Theatre II	3
THEA 460	Theatre Organization and Management	3
THEA 481	Senior Projects Seminar	1
THEA 498	Senior Project	3

Subtotal: 38

All students in the B.A. Theatre Arts program must complete a minor consisting of 18-24 hours. Minors should be selected through consultation with a student's academic advisor.

ELECTIVE COURSES

Students must take a minimum of 12 credit hours from the following courses. The required 12 credit hours must be from two different areas of theatre and dance. For example, a student may take 9 credit hours in performance courses and 3 credit hours in technical courses to fulfill this requirement.

Design/Technical Courses

THEA 123	Introduction to Technical Production	3
THEA 125	Drawing and Drafting for the Theatre	3
THEA 222	Stagecraft I	3
THEA 223	Lighting and Sound Technology	3
THEA 226	Scene Painting I	3
THEA 228	Costume Construction I	3

THEA 245	Sound for the Theatre	3
THEA 324	Lighting Design I	3
THEA 325	History of Costume	3
THEA 326	Scene Design I	3
THEA 327	Costume Design I	3
THEA 420	Special Studies in Technical Theatre	3

Performance Courses

THEA 230	Introduction to Scene Study	3
THEA 350	Introduction to Musical Theatre	3
THEA 353	History of Musical Theatre	3
THEA 359	Commedia dell'Arte	3
THEA 383	Acting Studio: Theatre Games	3
THEA 423	Acting Studio: Alternative Acting Styles	3
THEA 442	Directing II	3
THEA 468	Devising Theatre	3

Miscellaneous Courses

AADM 400	Arts Administration Practicum or	1-3
AADM 410	Ticket Office Practicum	1-3
THEA 338	Special Topics	.5-3
THEA 490	Professional Theatre Intern	1-15

NOTE: THEA 490 is a variable 1-15 credit hour course. Students may complete the course with up to 6 credit hours to satisfy the degree requirements.

Dance or Literature Courses (up to 9 credit hours):

DANC 100	Introduction to Dance	3
DANC 111	Modern Technique I	2
DANC 211	Modern Technique II	2
DANC 311	Modern Technique III	2
DANC 112	Ballet I	2
DANC 212	Ballet II	2
DANC 312	Ballet III	2
DANC 113	Jazz Dance I	2
DANC 213	Jazz Dance II	2
DANC 313	Jazz Dance III	2
DANC 114	Tap Dance I	2
DANC 214	Tap Dance II	2
DANC 241	Dance Improvisation	2
ENGL 207	Drama and Film	3
ENGL 319	Modern Drama	3
ENGL 321	Contemporary Drama	3
ENGL 381	Narrative Film After 1940	4
ENGL 407	Tragedy	3
ENGL 412	Early Shakespeare	3
ENGL 414	Later Shakespeare	3
ENGL 416	Elizabethan Drama	3
ENGL 418	Restoration/18th Century Drama	3

TOTAL CREDIT HOURS: 50

THEATRICAL PRODUCTION AND DESIGN BACHELOR OF FINE ARTS

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Dr. Samantha Kenney, *Chairperson*

Dr. Thomas Loughlin, *Acting Chairperson*

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A Bachelor of Fine Arts in Theatrical Production and Design allows a student to pursue intensive training in the behind-the-scenes planning and execution of live theatre within the liberal arts degree. Students that gain admittance into the program take classes in all areas of theatre, but are asked to declare an emphasis in Costume Design, Lighting Design, Scenic Design or Technical Production (scenic construction) by their sophomore year. Most classes in these areas are only offered to students in the program, which allows for a more focused learning environment and close mentoring from our actively professional faculty. As part of the program, students are given the opportunity to serve as designers, assistants, artisans, and technicians for the Department main stage productions. Special attention is paid to creating a professional grade portfolio to showcase the variety of skills and production experiences offered to the BFA.

DEGREE REQUIREMENTS FOR BACHELOR OF FINE ARTS IN THEATRICAL PRODUCTION AND DESIGN

COSTUME DESIGN TRACK

Core Courses (68 credit hours):

THEA 101	Theatre and Dance Productions	1
THEA 102	Theatre and Dance Productions	1
THEA 201	Theatre and Dance Productions	1
THEA 202	Theatre and Dance Productions	1
THEA 301	Theatre and Dance Productions	1
THEA 302	Theatre and Dance Productions	1
THEA 401	Theatre and Dance Productions	1
THEA 402	Theatre and Dance Productions	1
THEA 100	Theatre Majors Seminar	1
THEA 121	Introduction to Technical Theatre	3
THEA 125	Drawing and Drafting for the Theatre	3
THEA 130	Acting for Non-Majors or	3
THEA 133	Introduction to Acting	3
THEA 220	Makeup	1
THEA 221	Digital Tools for the Performing Arts	3
THEA 222	Stagecraft I	3
THEA 223	Lighting and Sound Technology	3

THEA 226	Scene Painting I	3	THEA 100	Theatre Majors Seminar	1
THEA 228	Costume Construction I	3	THEA 121	Introduction to Technical Theatre	3
THEA 303	Rendering Technique I	3	THEA 125	Drawing and Drafting for the Theatre	3
THEA 304	Rendering Technique II	3	THEA 130	Acting for Non-Majors	3
THEA 315	The Dramatic Imagination	3		or	
THEA 324	Lighting Design I	3	THEA 133	Introduction to Acting	3
THEA 326	Scene Design I	3	THEA 220	Makeup	1
THEA 327	Costume Design I	3	THEA 221	Digital Tools for the Performing Arts	3
THEA 334	Digital Tools for the Performing Arts II	3	THEA 222	Stagecraft I	3
THEA 381	Technical Theatre Seminar	.5	THEA 223	Lighting and Sound Technology	3
THEA 441	Directing I	3	THEA 226	Scene Painting I	3
THEA 451	History of the Theatre I	3	THEA 228	Costume Construction I	3
THEA 452	History of the Theatre II	3	THEA 303	Rendering Technique I	3
THEA 481	Senior Projects Seminar	1	THEA 304	Rendering Technique II	3
THEA 499	Performance/Production Seminar	3	THEA 315	The Dramatic Imagination	3
Track Courses (12 credit hours):			THEA 324	Lighting Design I	3
THEA 325	History of Costume	3	THEA 326	Scene Design I	3
THEA 319	Costume Construction II	3	THEA 327	Costume Design I	3
THEA 328	Costume Design II	3	THEA 334	Digital Tools for the Performing Arts II	3
THEA 420	Special Studies in Technical Theatre	3	THEA 381	Technical Theatre Seminar	.5
Electives (6 credit hours):			THEA 441	Directing I	3
ARTH 101	Art in Culture from Prehistory to 1400	3	THEA 451	History of the Theatre I	3
	or		THEA 452	History of the Theatre II	3
ARTH 102	Art in Culture from 1400 to the Present	3	THEA 481	Senior Projects Seminar	1
THEA 245	Sound for the Theatre	3	THEA 499	Performance/Production Seminar	3
THEA 322	Stagecraft II	3	THEA 381: .5 credit taken six times		
THEA 420	Special Studies in Technical Theatre	3	Track Courses (9 credit hours)		
THEA 420	Special Studies in Technical Theatre	3	THEA 429	Lighting Design II	3
THEA 420	Special Studies in Technical Theatre	3	THEA 245	Sound for the Theatre	3
THEA 426	Scene Design II	3	THEA 420	Special Studies in Technical Theatre	3
THEA 427	Scene Painting II	3	Electives (9 credit hours)		
THEA 460	Theatre Organization and Management	3	ARTH 101	Art in Culture from Prehistory to 1400	3
THEA 429	Lighting Design II	3		or	
THEA 337	Properties for the Stage	3	ARTH 102	Art in Culture from 1400 to the Present	3
THEA 339	Stage Management	3	ARTS 105	Foundations in Drawing	3
LIGHTING DESIGN TRACK			THEA 319	Costume Construction II	3
Core Courses (68 credit hours)			THEA 322	Stagecraft II	3
THEA 101	Theatre and Dance Productions	1	THEA 325	History of Costume	3
THEA 102	Theatre and Dance Productions	1	THEA 328	Costume Design II	3
THEA 201	Theatre and Dance Productions	1	THEA 420	Special Studies in Technical Theatre	3
THEA 202	Theatre and Dance Productions	1	THEA 420	Special Studies in Technical Theatre	3
THEA 301	Theatre and Dance Productions	1	THEA 420	Special Studies in Technical Theatre	3
THEA 302	Theatre and Dance Productions	1	THEA 426	Scene Design II	3
THEA 401	Theatre and Dance Productions	1	THEA 427	Scene Painting II	3
THEA 402	Theatre and Dance Productions	1			

THEA 460	Theatre Organization and Management	3
THEA 337	Properties for the Stage	3
THEA 339	Stage Management	3

TECHNICAL PRODUCTION TRACK

Core Courses (68 credit hours)

THEA 101	Theatre and Dance Productions	1
THEA 102	Theatre and Dance Productions	1
THEA 201	Theatre and Dance Productions	1
THEA 202	Theatre and Dance Productions	1
THEA 301	Theatre and Dance Productions	1
THEA 302	Theatre and Dance Productions	1
THEA 401	Theatre and Dance Productions	1
THEA 402	Theatre and Dance Productions	1
THEA 100	Theatre Majors Seminar	1
THEA 121	Introduction to Technical Theatre	3
THEA 125	Drawing and Drafting for the Theatre	3
THEA 130	Acting for Non-Majors	3
	or	
THEA 133	Introduction to Acting	3
THEA 220	Makeup	1
THEA 221	Digital Tools for the Performing Arts	3
THEA 222	Stagecraft I	3
THEA 223	Lighting and Sound Technology	3
THEA 226	Scene Painting I	3
THEA 228	Costume Construction I	3
THEA 303	Rendering Technique I	3
THEA 304	Rendering Technique II	3
THEA 315	The Dramatic Imagination	3
THEA 324	Lighting Design I	3
THEA 326	Scene Design I	3
THEA 327	Costume Design I	3
THEA 334	Digital Tools for the Performing Arts II	3
THEA 381	Technical Theatre Seminar	.5
THEA 441	Directing I	3
THEA 451	History of the Theatre I	3
THEA 452	History of the Theatre II	3
THEA 481	Senior Projects Seminar	1
THEA 499	Performance/Production Seminar	3

THEA 381: .5 credit taken six times

Track Courses (9 credit hours)

THEA 322	Stagecraft II	3
THEA 339	Stage Management	3
	or	
THEA 245	Sound for the Theatre	3
THEA 420	Special Studies in Technical Theatre	3

Elective Courses (9 credit hours)

ARTH 101	Art in Culture from Prehistory to 1400	3
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	or	
ARTH 102	Art in Culture from 1400 to the Present	3
ARTS 105	Foundations in Drawing	3
THEA 245	Sound for the Theatre	3
THEA 319	Costume Construction II	3
THEA 322	Stagecraft II	3
THEA 325	History of Costume	3
THEA 328	Costume Design II	3
THEA 337	Properties for the Stage	3
THEA 339	Stage Management	3
THEA 420	Special Studies in Technical Theatre	3
THEA 420	Special Studies in Technical Theatre	3
THEA 420	Special Studies in Technical Theatre	3
THEA 426	Scene Design II	3
THEA 427	Scene Painting II	3
THEA 429	Lighting Design II	3
THEA 460	Theatre Organization and Management	3

SCENE DESIGN TRACK

Core Courses (68 credit hours)

THEA 101	Theatre and Dance Productions	1
THEA 102	Theatre and Dance Productions	1
THEA 201	Theatre and Dance Productions	1
THEA 202	Theatre and Dance Productions	1
THEA 301	Theatre and Dance Productions	1
THEA 302	Theatre and Dance Productions	1
THEA 401	Theatre and Dance Productions	1
THEA 402	Theatre and Dance Productions	1
THEA 100	Theatre Majors Seminar	1
THEA 121	Introduction to Technical Theatre	3
THEA 125	Drawing and Drafting for the Theatre	3
THEA 130	Acting for Non-Majors	3
	or	
THEA 133	Introduction to Acting	3
THEA 220	Makeup	1
THEA 221	Digital Tools for the Performing Arts	3
THEA 222	Stagecraft I	3
THEA 223	Lighting and Sound Technology	3
THEA 226	Scene Painting I	3
THEA 228	Costume Construction I	3
THEA 303	Rendering Technique I	3
THEA 304	Rendering Technique II	3
THEA 315	The Dramatic Imagination	3
THEA 324	Lighting Design I	3
THEA 326	Scene Design I	3
THEA 327	Costume Design I	3
THEA 334	Digital Tools for the Performing Arts II	3

THEA 381	Technical Theatre Seminar	.5
THEA 441	Directing I	3
THEA 451	History of the Theatre I	3
THEA 452	History of the Theatre II	3
THEA 481	Senior Projects Seminar	1
THEA 499	Performance/Production Seminar	3

THEA 381: 5 credit taken six times

Track Courses (9 credit hours)

THEA 420	Special Studies in Technical Theatre	3
THEA 426	Scene Design II	3
THEA 427	Scene Painting II	3

Elective Courses (9 credit hours)

ARTH 101	Art in Culture from Prehistory to 1400 or	3
ARTH 102	Art in Culture from 1400 to the Present	3
ARTS 105	Foundations in Drawing	3
THEA 245	Sound for the Theatre	3
THEA 319	Costume Construction II	3
THEA 322	Stagecraft II	3
THEA 325	History of Costume	3
THEA 328	Costume Design II	3
THEA 420	Special Studies in Technical Theatre	3
THEA 420	Special Studies in Technical Theatre	3
THEA 420	Special Studies in Technical Theatre	3
THEA 429	Lighting Design II	3
THEA 460	Theatre Organization and Management	3

TOTAL CREDIT HOURS: 86

Visual Arts and New Media

Office: 121 Houghton Hall
(716) 673-3537

Dr. Michele Bernatz, *Chairperson*

Email: visualarts.newmedia@fredonia.edu

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The Department of Visual Arts and New Media provides a balanced, comprehensive undergraduate program in the practice, theory, and history of the visual arts and new media. The department offers both majors and elective students an opportunity to experience the arts as an important and enriching facet of a liberal arts education. Whether the goal is a career or advanced study in the arts and new media, or simply a greater understanding of art and technology's cultural impact, the curriculum offers a dynamic mix of studios, lectures, and seminars. The program provides a comprehensive foundation of design skills, historical and conceptual approaches to visual

expression. Visual Arts and New Media majors study an interdisciplinary curriculum emphasizing the concepts, theories, design, aesthetics and skills that inform all visual arts, including those involving electronic mediated expression. Content consists of traditional methods and materials, emerging technologies, and current approaches to artistic production and theory.

The department's graduates possess a unique set of hybrid skills that provide a critical edge for leadership positions in the competitive and evolving marketplace. Graduates have successful careers in corporate and public settings as art directors, working artists and designers, teachers, creative freelancers, and owners of pottery studios, photo studios and design firms. Others work as photographer's assistants, web designers, gallery directors, exhibition curators, and in the special effects industry for film and entertainment. Many Visual Arts and New Media graduates have also been accepted into some of the country's best graduate schools for advanced study.

Degree Programs

The department offers Visual Arts and New Media majors multiple opportunities for professional education in studio specialties and art history through various degree options. Students may receive a Bachelor of Arts degree in Art History (p. 235) or in Visual Arts and New Media (p. 236) or a Bachelor of Fine Arts degree is available with majors in Animation and Illustration (p. 236), Ceramics (p. 237), Drawing and Painting (p. 237), Graphic Design (p. 239), Film & Video Arts (p. 238), Photography (p. 240) or Sculpture (p. 240). Students in the department may also consider dual majoring between the studio and art history degree programs. The Bachelor of Arts (B.A.) degree in Art History offers a wide variety of courses ranging from ancient times to the 21st century. The Bachelor of Arts (B.A.) in Visual Arts and New Media degree is a balanced, comprehensive overview of the range of creative and career possibilities in different media, with the added benefit of incorporating an interdisciplinary pedagogy within a traditional liberal arts curriculum. Both of these degree options, more general than the Bachelor of Fine Arts (B.F.A.), provide an excellent grounding for students interested in dual majors or graduate studies in areas such as secondary education, art therapy, imaging technologies in the visual arts, advertising and marketing, public relations or arts administration.

The Bachelor of Fine Arts (B.F.A.) in specific majors emphasizes the range of skills, theories and media necessary for the development of the designer or creative artist. The creative process, from inception to presentation, is emphasized. This degree option fosters intellectual and creative curiosity, critical aesthetic thinking, encourages fusion between different artistic disciplines, and extensive use and evaluation of current technologies. Visual design is of great importance, but equal consideration is given to the concept and context. The historical relationship between an extensive range of media, and the impact of interaction on

those media, are thoroughly explored. Critical awareness, and the ability for self-evaluation, is encouraged and developed. Visual Arts and New Media students may apply after completing a minimum of 27 credit hours in the Visual Arts and New Media courses for a Bachelor of Fine Arts degree in a specialized major.

Students from other departments may also receive a Visual Arts and New Media minor (p. 176) or an Art History minor (p. 154) to complement their major field of study. Minors consult with a department advisor in choosing either a variety of arts and media arts courses or specific area of study. Art History majors may also consider a minor in Visual Arts and New Media as well Visual Arts and New Media studio majors may consider a minor in Art History. Students selecting minors should consult with a department advisor in choosing courses or specific area of study.

Admission to the Program

Admission to the department's studio program requires the submission of an acceptable portfolio for both freshman and transfer students. All prospective students are required to submit a CD or DVD of their work for admission consideration; this portfolio will be retained for the department file of all accepted and enrolled students. Information specific to portfolio content may be found on the department's website at <http://home.fredonia.edu/art/admissions>. In-person interviews are available as necessary for **transfer students only after** their initial mail-in portfolios have been reviewed and accepted. These interviews are scheduled on specific days throughout the year and students should contact the department to make an appointment. Transfer students are advised that it may take more than two years at Fredonia to complete degree requirements, depending on their chosen major.

The admissions process is a two-part application. The Office of Admissions will review your academic background. Admission to the college is based upon a review of your academic work, but admission to the department is dependent upon an acceptable portfolio. Incoming freshmen portfolios should be submitted by **November 15** for early acceptance decisions and **February 15** for regular acceptance decisions. Transfer student portfolios should be submitted by **November 15** for spring acceptance decisions and **April 15** for fall acceptance decisions. **Portfolios may still be submitted and will be reviewed after these dates; acceptance will be based upon available space in the program.**

Please contact the Department of Visual Arts and New Media with any additional questions or concerns.

Visiting Artist Program (VAP)

All Visual Arts and New Media students are required to participate in the Visiting Artist Program each semester in which they are enrolled as a major on campus. A forum for departmental news and updates, VAP program content

includes a range of thought-provoking speakers each semester, providing information about the many directions, options and possibilities inherent in art and design, as well as opportunities to attend gallery openings throughout the academic year.

24 Credit-Hour Review

The 24 Credit-Hour Review takes place after students have completed, or are in the process of completing, 24 credit hours in visual arts and new media courses (reviews take place in the spring semester). The purpose of the 24 Credit-Hour Review is to evaluate student performance, offer constructive criticism and advice, and to help the student assess their career goals. The review is a mandatory departmental requirement. Any student failing to participate in the 24 Credit-Hour Review process will be suspended from taking further courses in the Department of Visual Arts and New Media.

Bachelor of Fine Arts (B.F.A.) Program

Students wanting to apply for the B.F.A. degree may do so after completing a minimum of 27 credit hours in Visual Arts and New Media courses. In order to apply for B.F.A. degree status, applicants must have attained at least a 3.0 average in all Visual Art and New Media courses, including Art History, with a 2.0 required for courses taken outside the department to qualify for review. Students native to Fredonia must apply for B.F.A. status before completing six semesters of Fredonia course work; transfer students must apply before completing four semesters of Fredonia course work. Students considering a dual major in two studio disciplines must apply for both programs at the same time, selecting area representation from both majors. It is the student's responsibility to contact the chosen faculty members individually to discuss their intention to apply for the B.F.A. well in advance of their review. In areas heavily impacted by enrollment, only a limited number of students may be admitted to the B.F.A. program.

Students with a 3.25 or higher GPA in all Visual Art and New Media courses and 3.0 or higher cumulative GPA and a score of 3.5 or greater during the 24 Credit-Hour Review may be granted acceptance to B.F.A. without committee review, however this is contingent on faculty recommendation and approval from the major area. Students should contact faculty area coordinators for more information. Students waived out of the review requirement must still receive major area approval and complete a Change of Major form for admittance to the B.F.A. program. All B.F.A. students are required to participate in Senior Seminar.

Graduation Requirements and Senior Seminar

All Visual Arts and New Media students must maintain a 2.0 average in the Visual Arts and New Media Foundation Program. B.A. students must maintain a 2.0 in all Visual Arts and New Media courses to remain in the program, B.F.A. students must maintain a 2.0 in all Visual Arts and

New Media courses and a 3.0 in all major courses to remain in their B.F.A. major. Students may repeat courses to improve their class standing. All Visual Arts and New Media students (B.A. and B.F.A.) must submit an exit portfolio documenting their senior work and complete a senior assessment report to remain on file in the department. B.F.A. students will submit the required material during ARTS 400: Senior Seminar. B.A. students are required to submit this material to their advisors prior to graduation approval. The material must be in their file to receive final approval to apply for their degree. In their final semester at Fredonia, all B.F.A. students are required to enroll in ARTS 400: Senior Seminar to present an exhibition of their work. B.A. students are also encouraged to enroll in the course, but participating is not a graduation requirement.

Awards and Enrichments

In addition to the academic scholarships available to students through the campus Financial Aid Office, the department of Visual Art and New Media recognizes aptitude and accomplishment by awarding the following competitive scholarships and awards: the Alford Bjurlin Scholarship, the George W. Booth Scholarship, the Marano-Gnirke Scholarship, the Robert W. Marvel Scholarship, the Chautauqua Craft Alliance Scholarship, Fredonia Potters Co-op Awards, the Rodney W. Welling Memorial Scholarship, the Thomas E. Malinowski Scholarship, the Daniel D. Reiff Art History Scholarship, and the Colonel David Correll Photography Scholarship are given to exceptional Visual Arts and New Media majors. Additional scholarships may be available through portfolio competitions on a regional or national level.

The studio and classroom experience is enriched by participation in the student clubs Art Forum, Media Arts Club, and AIGA. Student members of these clubs have visited major art museums and studios in New York, Toronto, Pittsburgh and Cleveland and have attended photography, sculpture, ceramic and design conferences and workshops around the country. Internships are available and encouraged for students who want practical experience in addition to course work in their chosen major. The department assists students in arranging internships either in the U.S. or abroad. The Office of International Education will assist students with the study abroad application process.

VISUAL ARTS: ART HISTORY BACHELOR OF ARTS

DEGREE REQUIREMENTS FOR THE BACHELOR OF ARTS IN ART HISTORY

42 credit hours required *plus* 8 credit hours of Visiting Artist Program

Core (15 credit hours):

ART 100	Visual Concepts	3
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ARTH 101	Art in Culture from Prehistory to 1400	3
ARTH 102	Art in Culture from 1400 to the Present	3
ARTH 350	Art History Theory and Methods	3
ARTH 355	Writing About Art	3

Subtotal: 15

Art History Electives, distributed as follows (27 credit hours):

	200-Level Art History courses	6
	300-Level Art History courses	6
	200 or 300-Level Art History Electives	6
	ARTS courses, as advised	6
ARTH 460	Gallery Practicum	1-3
	or	
ARTH 490	Learning Assistant - Art History	3
	or	
ARTH 497	Research Practicum in Art History	1-3
	or	
ARTH 499	Internship	1-15

Subtotal: 27

NOTE:

- 200-level Art History courses: one course in Ancient, Pre-Columbian, Medieval or Renaissance art, and one course in Modern, Post-modern or Contemporary Art
- 300-level Art History courses: one course in Ancient, Pre-Columbian, Medieval or Renaissance art, and one course in Modern, Post-modern or Contemporary art
- ARTH 460, ARTH 497, and ARTH 499 are variable 1-3 / 1-15 credit hour courses. Students who elect any of these three courses must successfully complete the course with 3 credit hours to satisfy the degree requirements.

Visiting Artist Program (8 credit hours):

Eight (8) semesters at 1 credit hour per semester.

Subtotal: 8

NOTE: The Visiting Artist Program is only required each semester the student is a major within the department.

Additional Degree Requirements

All Art History majors (except for double majors) are required to complete a minor or a full-semester study abroad program. Each student selects a minor in consultation with an advisor. Students may minor in Visual Arts and New Media but must complete four (4) studio art courses beyond the two (2) required for the Art History major in order to complete the minor.

All Art History majors who plan to study at the graduate level are strongly advised to complete a Senior Thesis. This senior-level paper is typically initiated in

ARTH 355: Writing about Art and completed in a later ARTH 495: Independent Study. Students should discuss this option with Art History faculty during the junior year of study. Senior Thesis topics must meet required guidelines and be approved by art history faculty.

All Art History majors are strongly advised to pursue a foreign language beyond the requirement for the College Core Curriculum (CCC). Majors interested in pursuing graduate studies in art history should reach the intermediate to advanced level, preferably in French, Italian or German. All Art History majors are also strongly advised to study abroad at some point during their undergraduate career.

TOTAL CREDIT HOURS: 50

VISUAL ARTS AND NEW MEDIA BACHELOR OF ARTS

DEGREE REQUIREMENTS FOR THE BACHELOR OF ARTS IN VISUAL ARTS AND NEW MEDIA

21-credit hour Foundation Program plus 27 credit hours of Degree Requirements

Total credit hours required: 48+ Visiting Artist Program

Foundation Program (21 credit hours):

ARTH 101	Art in Culture from Prehistory to 1400	3
ARTH 102	Art in Culture from 1400 to the Present	3
ART 100	Visual Concepts	3
ARTS 102	Foundations in 2-D Form and Content	3
ARTS 105	Foundations in Drawing	3
ARTS 240	Foundations of 3-D Form and Content	3
	or	
ARTS 270	Foundations in Clay	3
ARTS 222	Introduction to Experimental Video	3
	or	
ARTS 225	Digital Foundations	3
	or	
ARTS 221	Foundations of Time-Based Media	3

Subtotal: 21

Additional Requirements (27 credit hours):

- Visual Arts/New Media studio courses at the 300-level or above (9 credit hours) - Excluding all ARTS 490 and ARTS 497 courses
- Visual Arts/New Media studio courses at the 400-level or above (3 credit hours) - Excluding all ARTS 490 and ARTS 497 courses
- Art History elective (3 credit hours)

- ARTS studio electives as advised (12 credit hours, only 3 credit hours of ARTS 490 or ARTS 497 allowed)
- Capstone experience (by advisement)

Subtotal: 27

Visiting Artist Program (8 credit hours):

Subtotal: 8

NOTE: The Visiting Artist Program is only required each semester the student is a major within the department.

TOTAL CREDIT HOURS: 56

VISUAL ARTS AND NEW MEDIA: ANIMATION AND ILLUSTRATION BACHELOR OF FINE ARTS

ANIMATION AND ILLUSTRATION BACHELOR OF FINE ARTS DEGREE REQUIREMENTS

21-credit hour Foundation Program plus 52 credit hours of Major Requirements

Total credit hours required: 73+ Visiting Artist Program.

Foundation Program: (21 credit hours)

ART 100	Visual Concepts	3
ARTH 101	Art in Culture from Prehistory to 1400	3
ARTH 102	Art in Culture from 1400 to the Present	3
ARTS 102	Foundations in 2-D Form and Content	3
ARTS 105	Foundations in Drawing	3
ARTS 240	Foundations of 3-D Form and Content	3
	or	
ARTS 270	Foundations in Clay	3
ARTS 222	Introduction to Experimental Video	3
	or	
ARTS 225	Digital Foundations	3
	or	
ARTS 221	Foundations of Time-Based Media	3

Subtotal: 21

Major Requirements (52 credit hours):

ARTS 115	Drawing and Painting I	3
	or	
ARTS 205	Foundations in Drawing 2	3
ARTS 156	Introduction to Digital Photography	3
ARTS 212	Life Drawing I	3
ARTS 255	Color and Light	3
ARTS 241	Figure Modeling	3
ARTS 280	Introduction to Illustration	3
ARTS 285	Introduction to 2-D Animation	3

ARTS 380	Intermediate Illustration	3
ARTS 385	Intermediate 2-D Animation	3
ARTS 386	3D Modeling & Animation	3
ARTS 485	Advanced Animation/Illustration	3
ARTS 489	Animation and Illustration	3
	Capstone	
ARTS	Electives	9
ARTH	Electives	6
ARTS 400	Senior Seminar	1
		Subtotal: 52

NOTE:

- Electives may emphasize another major within the visual arts as advised.
- ARTS 490 Learning Assistant can be used for a maximum of 6 credit hours of electives under advisement.
- ARTS 497 Research Practicum can be used for a maximum of 3 credit hours of electives under advisement.

Visiting Artist Program (8 credit hours):

Eight (8) semesters at 1 credit hour per semester.

Subtotal: 8

NOTE: The Visiting Artist Program is only required each semester the student is a major within the department.

TOTAL CREDIT HOURS: 81

VISUAL ARTS AND NEW MEDIA: CERAMICS BACHELOR OF FINE ARTS

BACHELOR OF FINE ARTS DEGREE REQUIREMENTS

24-credit hour Foundation Program plus 49 credit hours of Major Requirements

Total credit hours required: 73+ Visiting Artist Program.

Foundation Program (24 credit hours):

ART 100	Visual Concepts	3
ARTH 101	Art in Culture from Prehistory to 1400	3
ARTH 102	Art in Culture from 1400 to the Present	3
ARTS 102	Foundations in 2-D Form and Content	3
ARTS 105	Foundations in Drawing	3
ARTS 240	Foundations of 3-D Form and Content	3
ARTS 270	Foundations in Clay	3
ARTS 222	Introduction to Experimental Video	3
	or	
ARTS 225	Digital Foundations	3

	or	
ARTS 221	Foundations of Time-Based Media	3
		Subtotal: 24

Major Requirements (49 credit hours):

ARTS 115	Drawing and Painting I	3
ARTS 156	Introduction to Digital Photography	3
ARTS 212	Life Drawing I	3
ARTS 241	Figure Modeling	3
ARTS 271	Pottery on the Wheel	3
ARTS 370	Intermediate Ceramics	3
ARTS 470	Advanced Ceramics	3
ARTS 494	Directed Studio Projects	1-3
ARTS 495	Independent Studio Projects	1-3
ARTS	Art Studio electives	15
ARTH	Electives	6
ARTS 400	Senior Seminar	1
		Subtotal: 49

NOTE:

- Electives may emphasize another major within the visual arts as advised.
- ARTS 490 Learning Assistant can be used for a maximum of 6 credit hours of electives under advisement.
- ARTS 497 Research Practicum can be used for a maximum of 3 credit hours of electives under advisement.
- ARTS 494 and ARTS 495 are variable 1-3 credit hour courses. Students are to complete the courses with 3 credit hours each to satisfy the degree requirements. ARTS 494 and ARTS 495 will focus on Ceramics.

Visiting Artist Program (8 credit hours):

Eight semesters at 1 credit hour each.

Subtotal: 8

NOTE: The Visiting Artist Program is only required each semester the student is a major within the department.

TOTAL CREDIT HOURS: 81

VISUAL ARTS AND NEW MEDIA: DRAWING AND PAINTING BACHELOR OF FINE ARTS

BACHELOR OF FINE ARTS DEGREE REQUIREMENTS:

21-credit hour Foundation Program plus 52 credit hours of Major Requirements

Total credit hours required: 76+ Visiting Artist Program.

Foundation Program (21 credit hours):

ART 100	Visual Concepts	3
ARTH 101	Art in Culture from Prehistory to 1400	3
ARTH 102	Art in Culture from 1400 to the Present	3
ARTS 102	Foundations in 2-D Form and Content	3
ARTS 105	Foundations in Drawing	3
ARTS 240	Foundations of 3-D Form and Content	3
	or	
ARTS 270	Foundations in Clay	3
ARTS 222	Introduction to Experimental Video	3
	or	
ARTS 225	Digital Foundations	3
	or	
ARTS 221	Foundations of Time-Based Media	3
		Subtotal: 21

Major Requirements (52 credit hours):

ARTS 115	Drawing and Painting I	3
ARTS 155	Introduction to Film Photography	3
	or	
ARTS 156	Introduction to Digital Photography	3
ARTS 215	Drawing and Painting II	3
ARTS 212	Life Drawing I	3
ARTS 312	Life Drawing II	3
ARTS 241	Figure Modeling	3
ARTS 230	Relief Printing	3
ARTS 235	Monotypes	3
ARTS 315	Drawing and Painting III	3
ARTS 340	3-D Methods and Materials	3
	or	
ARTS 370	Intermediate Ceramics	3
ARTS 415	Drawing and Painting IV	3
ARTS 494	Directed Studio Projects	1-3
ARTS 495	Independent Studio Projects	1-3
THEA 226	Scene Painting I	3
THEA 427	Scene Painting II	3
ARTH	Electives	6
ARTS 400	Senior Seminar	1
		Subtotal: 52

NOTE:

- ARTS 490 Learning Assistant can be used for a maximum of 6 credit hours of electives under advisement.
- ARTS 497 Research Practicum can be used for a maximum of 3 credit hours of electives under advisement.
- ARTS 494 and ARTS 495 are variable 1-3 credit hour courses. Students are to complete the courses for 3

credit hours each to satisfy the degree requirements.

ARTS 494 and ARTS 495 will focus on Drawing and Painting.

Visiting Artist Program (8 credit hours):

Eight semesters at 1 credit hour each.

Subtotal: 8

NOTE: The Visiting Artist Program is only required each semester the student is a major within the department.

TOTAL CREDIT HOURS: 81

VISUAL ARTS AND NEW MEDIA: FILM & VIDEO ARTS BACHELOR OF FINE ARTS

BACHELOR OF FINE ARTS DEGREE REQUIREMENTS

21-credit hour Foundation Program plus 52 credit hours of Major Requirements.

Total credit hours required: 73+ Visiting Artist Program.

Majors: Animation and Illustration, Ceramics, Drawing and Painting, Graphic Design, Film & Video Arts, Photography, and Sculpture.

Foundation Program (21 credit hours):

ART 100	Visual Concepts	3
ARTH 101	Art in Culture from Prehistory to 1400	3
ARTH 102	Art in Culture from 1400 to the Present	3
ARTS 102	Foundations in 2-D Form and Content	3
ARTS 105	Foundations in Drawing	3
ARTS 240	Foundations of 3-D Form and Content	3
	or	
ARTS 270	Foundations in Clay	3
ARTS 222	Introduction to Experimental Video	3
	or	
ARTS 225	Digital Foundations	3
	or	
ARTS 221	Foundations of Time-Based Media	3
		Subtotal: 21

NOTE: If either ARTS 221 or ARTS 222 is taken to fulfill foundation requirements, another 3 credit hours of studio art electives must be completed to fulfill the 52 credit BFA requirement.

Major Requirements

ARTH 276	Film Form	3
ARTS 221	Foundations of Time-Based Media	3
ARTS 222	Introduction to Experimental Video	3

ARTS 322	Intermediate Experimental Video	3
ARTS 323	Experimental Narrative	3
ARTS 324	Special Effects for Experimental Video	3
ARTS 340	3-D Methods and Materials	3
ARTS 155	Introduction to Film Photography or	3
ARTS 255	Color and Light	3
ARTS 422	Advanced Experimental Video	3
ARTS 494	Directed Studio Projects	1-3
ARTS 495	Independent Studio Projects	1-3
ARTS 429	Experimental Video Capstone	3
ARTS 400	Senior Seminar	1
ARTH	Art History electives	3
ARTS	Art Studio electives	15
		Subtotal: 55

NOTE:

- ARTS 490 Learning Assistant can be used for a maximum of 6 credit hours of electives under advisement. ARTS 497 Research Practicum can be used for a maximum of 3 credit hours of electives under advisement.
- ARTS 494 and ARTS 495 are variable 1-3 credit hour courses. Students must complete the courses with 3 credit hours each to satisfy the degree requirements.

Visiting Artist Program (8 credit hours):

Eight semesters at 1 credit hour each.

Subtotal: 8

NOTE: The Visiting Artist Program is only required each semester the student is a major within the department.

TOTAL CREDIT HOURS: 84

VISUAL ARTS AND NEW MEDIA: GRAPHIC DESIGN BACHELOR OF FINE ARTS

BACHELOR OF FINE ARTS DEGREE REQUIREMENTS

21-credit hour Foundation Program plus 52 credit hours of Major Requirements

Total credit hours required: 73+ Visiting Artist Program.

Foundation Program (21 credit hours):

ART 100	Visual Concepts	3
ARTH 101	Art in Culture from Prehistory to 1400	3
ARTH 102	Art in Culture from 1400 to the Present	3
ARTS 102	Foundations in 2-D Form and Content	3
ARTS 105	Foundations in Drawing	3

ARTS 240	Foundations of 3-D Form and Content or	3
ARTS 270	Foundations in Clay	3
ARTS 222	Introduction to Experimental Video or	3
ARTS 225	Digital Foundations or	3
ARTS 221	Foundations of Time-Based Media	3
		Subtotal: 21

Major Requirements (52 credit hours):

ARTS 115	Drawing and Painting I	3
ARTS 260	Graphic Design I	3
ARTS 261	Graphic Design II	3
ARTS 360	Graphic Design III	3
ARTS 361	Graphic Design IV	3
ARTS 365	Typography I	3
ARTS 366	Typography II	3
ARTH 371	History of Graphic Design	3
ARTS 460	Graphic Design V	3
ARTS 465	Typography III	3
ARTS 469	Design Realities/Professional Practice	1-3
ARTS 155	Introduction to Film Photography or	3
ARTS 156	Introduction to Digital Photography	3
ARTS 400	Senior Seminar	1
	Twelve additional credit hours of electives, 9 of which should concentrate in another discipline with the department of Visual Arts and New Media, per advisement	12
ARTH	Art History Electives	3
		Subtotal: 52

NOTE:

- ARTS 469 is a variable 1-3 credit hour course. Students must successfully complete the course with 3 credit hours to satisfy the degree requirements.
- ARTS 490 Learning Assistant can be used for a maximum of 6 credit hours of electives under advisement.
- ARTS 497 Research Practicum can be used for a maximum of 3 credit hours of electives under advisement.

Visiting Artist Program (8 credit hours):

Eight semesters at 1 credit hour each.

Subtotal: 8

NOTE: The Visiting Artist Program is only required each semester the student is a major within the department.

TOTAL CREDIT HOURS: 81**VISUAL ARTS AND NEW MEDIA:
PHOTOGRAPHY BACHELOR OF FINE
ARTS****BACHELOR OF FINE ARTS DEGREE
REQUIREMENTS**

21-credit hour Foundation Program plus 52 credit hours of Major Requirements

Total credit hours required: 73+ Visiting Artist Program.

BFA Majors: Animation and Illustration, Ceramics, Drawing and Painting, Graphic Design, Film & Video Arts, Photography, and Sculpture.

Foundation Program (21 credit hours):

ART 100	Visual Concepts	3
ARTH 101	Art in Culture from Prehistory to 1400	3
ARTH 102	Art in Culture from 1400 to the Present	3
ARTS 102	Foundations in 2-D Form and Content	3
ARTS 105	Foundations in Drawing	3
ARTS 240	Foundations of 3-D Form and Content	3
	or	
ARTS 270	Foundations in Clay	3
ARTS 222	Introduction to Experimental Video	3
	or	
ARTS 225	Digital Foundations	3
	or	
ARTS 221	Foundations of Time-Based Media	3

Subtotal: 21**Major Requirements (52 credit hours):**

ARTS 115	Drawing and Painting I	3
ARTS 155	Introduction to Film Photography	3
ARTS 156	Introduction to Digital Photography	3
ARTS 230	Relief Printing	3
ARTS 250	Black and White Technique	3
ARTS 255	Color and Light	3
ARTS 271	Pottery on the Wheel	3
ARTS 340	3-D Methods and Materials	3
ARTS 350	Experimental Photography	3
ARTS 352	Studio Lighting	3
ARTS 355	Digital Imaging	3
ARTS 459	Photographic Inquiry	3
ARTS	Studio Electives	12
ARTH	Art History Electives	3
ARTS 400	Senior Seminar	1

Subtotal: 52**NOTE:**

- ARTS 490 Learning Assistant can be used for a maximum of 6 credit hours of electives under advisement.
- ARTS 497 Research Practicum can be used for a maximum of 3 credit hours of electives under advisement.
- Electives may emphasize another concentration within the visual arts as advised.

Visiting Artist Program (8 credit hours):**Subtotal: 8**

NOTE: The Visiting Artist Program is only required each semester the student is a major within the department.

TOTAL CREDIT HOURS: 81**VISUAL ARTS AND NEW MEDIA:
SCULPTURE BACHELOR OF FINE ARTS****BACHELOR OF FINE ARTS DEGREE
REQUIREMENTS (REQUIRES ADMISSION TO
A SPECIFIC MAJOR)**

24-credit hour Foundation Program plus 49 credit hours of Major Requirements

Total credit hours required: 73+ Visiting Artist Program.

Foundation Program (24 credit hours):

ART 100	Visual Concepts	3
ARTH 101	Art in Culture from Prehistory to 1400	3
ARTH 102	Art in Culture from 1400 to the Present	3
ARTS 102	Foundations in 2-D Form and Content	3
ARTS 105	Foundations in Drawing	3
ARTS 240	Foundations of 3-D Form and Content	3
ARTS 270	Foundations in Clay	3
ARTS 222	Introduction to Experimental Video	3
	or	
ARTS 225	Digital Foundations	3
	or	
ARTS 221	Foundations of Time-Based Media	3

Subtotal: 24**Major Requirements (49 credit hours):**

ARTS 205	Foundations in Drawing 2	3
ARTS 155	Introduction to Film Photography	3
	or	
ARTS 156	Introduction to Digital Photography	3
ARTS 212	Life Drawing I	3

ARTS 321	Installation Art	3
	or	
ARTS 370	Intermediate Ceramics	3
ARTS 241	Figure Modeling	3
ARTS 340	3-D Methods and Materials	3
ARTS 440	3D Objects and Ideas	3
ARTS 494	Directed Studio Projects	1-3
ARTS 495	Independent Studio Projects	1-3
ARTH	Electives	6
ARTS	Art Studio electives	15
ARTS 400	Senior Seminar	1
		Subtotal: 49

NOTE:

- Electives may emphasize Special Effects for Film and Industry as advised.
- ARTS 494 and ARTS 495 are variable 1-3 credit hours courses and students must successfully complete the courses with 3 credit hours each. ARTS 494 and ARTS 495 will focus on Sculpture.
- ARTS 490 Learning Assistant can be used for a maximum of 6 credit hours of electives under advisement.
- ARTS 497 Research Practicum can be used for a maximum of 3 credit hours of electives under advisement.

Visiting Artist Program (8 credit hours):

Eight semesters at 1 credit hour each.

Subtotal: 8

NOTE: The Visiting Artist Program is only required each semester the student is a major within the department.

TOTAL CREDIT HOURS: 81

World Languages and Cultures

Office: 2113 Fenton Hall
(716) 673-3380

Dr. Juan De Urda Anguita, Chairperson

Email: worldlang@fredonia.edu

Website: <http://home.fredonia.edu/worldlanguages>

With its interdisciplinary and global vision of a changing world, the Department of World Languages and Cultures contributes to the international education of students. Knowledge of a second language has become essential whether one lives and works within the United States or abroad. Conscious that language and cultural manifestations are expressions of the complexities of a country's culture, the department is committed to the formation of citizens that are culturally sensitive to the nuances of everyday business and interpersonal exchanges.

The department focuses on world languages that are spoken and used throughout the world. It offers a Bachelor

of Arts in French (p. 106) and in Spanish. Fredonia students graduate not only with proficiency in French and/or Spanish, but also with a deep understanding of the multifaceted aspects of the countries where French and Spanish are spoken. In addition, the department offers beginning instruction in Arabic, Chinese, German, Italian, and Russian.

A major or minor may be earned in French and/or Spanish. Certification programs for Adolescence Education are offered in French and Spanish. Students can also design programs that go across disciplines and fields, with the assistance of their advisor.

Majors, minors, and world language concentration students are encouraged to travel to a foreign country for one or two semesters of study abroad. The department offers programs in Aix-en-Provence, France; Oaxaca, Mexico; and San Juan, Puerto Rico. Students participating in these and other programs have found the experience enormously enriching. Many students choose to travel to other countries in Latin America and the French-speaking world. The department encourages students to participate in overseas programs. Plans should be discussed early with their advisor so they can take advantage of this opportunity as early as the sophomore year.

The department sponsors the French Club and has affiliation with two national honor societies: Pi Delta Phi in French and Sigma Delta Pi in Spanish.

The Thomas Goetz-Robert Rie Scholarship for Excellence in Modern Languages is awarded each year to an upper level major in modern languages who demonstrates outstanding academic ability and commitment to his/her field of study. Recommendations are submitted by the faculty to the chair of the department.

Requirements for Transfer Credit

A student can transfer up to 21 credit hours with a minimum grade of C towards the major. A minimum of 15 credit hours must be taken in the department at Fredonia.

For a minor, a student can transfer up to 9 credit hours with a minimum grade of C towards the program.

NOTE:

1. *Depending on the language preparation in high school, a student can be placed at a more or less advanced section of a language course by the instructor. Students are encouraged to speak with their instructor the first week of classes to ensure placement at the appropriate level.*
2. *Unless otherwise specified, all courses are conducted principally in the appropriate foreign language.*

ACADEMIC INFORMATION

The typical undergraduate program at Fredonia consists of four groups of courses:

- General Education Program, consisting of courses in various branches of learning that are focused upon developing a range of skills and are required of all students, whatever their principal interest;
- courses required to complete a major;
- courses needed to complete a minor and supporting courses in subjects related to the major field, as well as courses which may be required for teacher certification; and
- electives necessary to complete the minimum of 120 semester hours of credit required for the baccalaureate degree. The student may also take special concentrations, minors, and second majors.

Academic Advising

The variety of programs both in major departments and in interdisciplinary areas at Fredonia requires that every student meet with an academic advisor periodically to review progress and plan his or her academic future. It is particularly important for a student to be aware of requirements for graduation including General Education requirements and those necessary to complete a chosen degree program.

Academic advisors can help students plan educational programs and keep up with new courses and programs, but students should not expect advisors to be knowledgeable about the content in detail of the many individual courses throughout the university and the teaching methods and evaluation procedures of the many individual teachers. Further, students are ultimately responsible for adhering to academic policies (p. 250) as stated in the University Catalog and determining that they have met degree requirements (including general education (p. 551), major, and minor or concentration requirements).

At the orientation program, new students have an opportunity to discuss educational objectives with an advisor who will be knowledgeable in an area of preference and who will help students understand their schedule for the first semester. Shortly after the start of the first semester, students are assigned an academic advisor by their department. Students can find out the name of their advisor by going on the university website at <http://home.fredonia.edu/>, signing on to "Your Connection" and going to the General Student Information screen.

Students are required to make an appointment with their advisor prior to course selection to discuss their academic

future, review their mid-semester grade report, and plan a program of study for the coming semester.

Academic advising will be successful and help students only if they actively seek advice about their education at Fredonia. Advising is one of the obligations of the university teaching profession. Students should not feel they are imposing on their advisors by discussing academic progress more than the minimum requirement of once each semester. Students are encouraged to seek advice as often as needed. It is one of the marks of a successful student.

Furthermore, if academic advising is to be successful, students should have confidence in their advisors. If students wish to change advisors, they should contact their department chairperson who will make a new assignment mutually agreeable to students and their new academic advisor.

Questions pertaining to academic advising may be directed to the Coordinator of Academic Advising & Liberal Arts Program, Office of the Registrar, 1st Floor, Reed Library, (716) 673-3188 or by checking the web site at <http://home.fredonia.edu/liberalarts> or by emailing advising.center@fredonia.edu.

Academic Advising: A Manifesto

For both faculty/professional staff advisors and students, advising is a developmental process. In high school, most students make few decisions about what courses to take. Usually, parents and guidance counselors make such decisions. In college, it is the student's responsibility, in consultation with her advisor, to become her own academic planner. First-year students may need more developmental advising but, by their sophomore year, most students will be making their own decisions about what courses to take, what to major in, what to minor in, and so on. This development will continue so that, in the junior and senior years, a student's conversations with her academic advisor will be less about meeting specific requirements for graduation and more about planning for a career or graduate study.

Faculty and professional staff, too, are constantly developing their competencies as academic advisors. New faculty/professional staff, especially those fresh from graduate school, may have little experience with advising, particularly as it pertains to Fredonia. They need information, mentoring, and, if at all possible, a reduced advising load. Evidence that a faculty/professional staff member takes advising seriously and is continuing to develop his advising skills should be an important consideration in decisions regarding reappointment, tenure, and promotion. Above all else, advisors should adopt the physicians' motto with regard to advising: "Do no harm." If an advisee asks a question and the advisor is not 100

percent confident of the answer, the advisor's response should be, "Let me check on that and get back to you." If unsure of where to find the answer, the advisor should contact the Advising Center. Chances are they either know the answer or know whom to call.

With this preamble in mind, the principles that follow are intended to guide faculty/professional staff and students as they engage in the process of academic advising, a process that we at Fredonia place great importance in, as evidenced by our advising motto: *At Fredonia, Advising is Individualized Teaching (and Learning)*.

Student Responsibilities in the Advising Process:

Students understand that it is their responsibility:

- To be knowledgeable about General Education Program courses, courses in their chosen major, plus any additional requirements for that major, and also to ensure these requirements are met.
- To use check lists of requirements made available by departments, departmental advisors, and others, so that they can keep track of their progress.
- To fulfill all requirements in their program(s). If requirements for a major or minor change, they have the right to graduate under the set of requirements in effect at the time of declaration. If this is not possible due to a certain course no longer being offered, then the department should make a reasonable substitute available to the student.
- If they have declared a second major or minor in another department, the student should find someone in that department, perhaps the department chair, to answer questions that may arise concerning that program.
- To understand the necessary timing and sequence of prerequisites to complete, so that an extra semester for one course in a sequence is not necessary.
- To make and keep appointments with the advisor.
 - To be on time for appointments and come to advising sessions prepared. The student understands it is their responsibility to fulfill any requirements that the advisor has for the student before the meeting.
 - For the course selection aspect of advising, the student should have studied the catalog, various check lists, online course offerings, and any other relevant information, and have drafted a preliminary plan, including alternate courses where appropriate. This plan should take into consideration performance in courses the student is currently taking, as reflected by mid-semester grades. (The student and advisor may discuss the feasibility of dropping or withdrawing from a

course; if so, they should keep in mind that this may have financial aid implications.) The student should bring to the advising session a list of courses needed for the major and a list of courses of general interest, plus any downloaded materials necessary for advisement.

- For the counseling aspect of advising, students should be prepared to discuss their educational and career goals, understanding that such plans should come more into focus as they progress through their undergraduate program of study. Students should come with some real questions and issues to discuss with their advisor.
- To create and maintain an Advising Portfolio. This should include: letter of admission; important communication concerning the admissions process, including transfer credits and high school transcripts; transfer credit approval forms; a record of progress and plans for meeting CCC, major, and other requirements; current university transcripts; copies of declaration forms; program reviews if applicable; etc. Anything the student receives from the university concerning his/her education should go in this portfolio.
- To ask the advisor questions. If the advisor does not have the answer, it can be expected the advisor will find the answer or direct the student how to find the answer.
- All in all, students have the right to expect that faculty/professional staff take their responsibilities as advisors seriously, and regard advising as an integral part of their role as faculty and professional staff members. The student understands that he/she may change his/her advisor with approval of the department chair.

Faculty/Professional Staff Responsibilities in the Advising Process:

Faculty and professional staff advisors understand it is their responsibility:

- To be knowledgeable about CCC requirements (of particular interest to undeclared/*Liberal Arts* students as they explore for a major), and courses in and requirements for the majors, minors, and concentrations offered by their department.
- To help students understand their degree requirements, particularly with regard to the CCC and requirements for majors, minors, and concentrations offered by their department.
- To make check lists of requirements available to students so that they can keep track of their progress the same way the advisor does.
- To inform students of any changes in requirements and advise them accordingly.

- To answer questions that may arise concerning a program from students other than their advisees, such as *Liberal Arts* students or those whose primary major may be in another department.
- For courses in the major, to know their frequencies and prerequisites, and help communicate this information to students, so that students take courses at the right time and in the proper sequence.
- To be available. This includes holding regular office hours, as well as being available for consultation via e-mail, telephone, or by appointment. Advisors should announce and hold additional office hours during the week preceding course selection.
- To be on time for appointments and come to advising sessions prepared.
 - For the course selection aspect of advising, faculty and professional staff should have studied the catalog, various check lists, course offerings, and any other relevant information to prepare to help students select their courses. Functional questions to ask and help the student answer include:
 - Does the schedule take into consideration the student's past performance and performance in the current semester, as reflected by the student's mid-semester grades? (If, for example, the student is doing poorly in Course A, which is a prerequisite for Course B, it may be advisable for the student to withdraw from Course A and/or repeat it the next semester, rather than registering for Course B. However, keep in mind that withdrawing from a course may have financial aid implications.)
 - Is the schedule balanced?
 - Are prerequisites met?
 - Does the student have any D's or F's in courses, which, if repeated, would significantly repair the student's academic record?
 - Does the student meet full-time status?
- For the counseling aspect of advising, faculty and professional staff should help students address fundamental concerns such as:
 - What are the student's career options and goals?
 - Does a re-examination of goals appear to be in order?
 - What extra-curricular activities might the student engage in that would develop critical skills in communication and/or leadership?
 - What's graduate school and is it something the student should consider?
- Has the student considered internships, study abroad or summer research programs?
- Is the student becoming increasingly self-sufficient in scheduling and meeting requirements, or remaining dependent on parents or the advisor?
- Are there problems that may warrant referral: attitudinal, financial/practical, or academic?
- To help the department maintain an Advising Folder for each advisee. This should include: important communication concerning the admissions process including transfer credits; high school transcripts; transfer credit approval forms; a record of progress and plans for meeting CCC, major, and other requirements; current university transcripts; copies of declaration forms; program reviews if applicable; etc. A copy of anything the student receives from the university concerning his or her education should go in this folder.
- To help answer questions. If the advisor does not know the answer, he/she should attempt to find the answer by consulting with colleagues and/or the department chair, and then get back to the student, or provide the student with information on who to contact about that specific question.

Department Responsibilities in the Advising Process:

The department understands that it is their responsibility:

- To provide information to the students and faculty about requirements and courses in the major, including prerequisite and other information necessary for students to take courses in the proper sequence.
- To clearly and accurately state the requirements in the majors, minors, and/or concentrations offered by the department.
- To create and provide check lists of requirements that are accurate and current, and that present the requirements in a clear and organized manner.
- Understanding that requirements for majors, minors, and concentrations may change, but that students have the right to graduate under the set of requirements in effect at the time of declaration. If this is not possible due to certain courses no longer being offered, it is the responsibility of the department to make reasonable substitutes available to students.
- To provide the best possible information on when courses will be offered, so that students, with the aid of their advisors, may plan ahead.

Additional Sources of Information:

- Degree Audit Function, available online under *Your Connection*.

- Transfer Audit Function, available online under *Your Connection*.
- Academic Policies and Procedures (p. 250), available in the online University Catalog.
- Coordinator of Academic Advising & Liberal Arts, Office of the Registrar, Reed Library, (716) 673-3188.
- General Education Program, Associate Provost for Curriculum, Assessment, and Academic Support, 809-810 Maytum Hall, (716) 673-3717.
- Financial Aid Office, 209 Maytum Hall, (716) 673-3253.

As a general rule, when a student has questions or concerns about a course, the following individuals should be consulted in the order shown:

- Professor for the course
- Faculty/Professional Staff Advisor (for major and general education concerns)
- Program Coordinator or Department Chair
- Director of School of Music
- Dean of College or School (e.g., College of Education; College of Liberal Arts & Sciences; College of Visual & Performing Arts; School of Business)
- Provost and Vice President for Academic Affairs

Academic Calendar

Fall 2016

Aug. 18 (Th)	All-campus Meeting
Aug. 19 (F)	New Student Orientation
Aug. 22 (M)	First Day of Classes
Sept. 5 (M)	Labor Day - No Classes
Sept. 13 (T)	Professional Development Day - No Classes
Oct. 13-14 (Th, F)	Fall Break
Nov. 21-25 (M-F)	Thanksgiving Break
Dec. 9 (F)	Last Day of Classes
Dec. 12-16 (M-F)	Final Exams

Spring 2017

Jan. 13 (F)	All-campus Meeting
Jan. 16 (M)	Martin Luther King, Jr. Day - Campus Closed

Jan. 17 (T)	New Student Orientation
Jan. 18 (W)	First Day of Classes
Feb. 10 (F)	Professional Development Day - No Classes
Mar. 13-17 (M-F)	Spring Break
Apr. 17 (M)	Travel Day, No Classes
May 5 (F)	Last Day of Classes
May 8-12 (M-F)	Final Exams
May 13 (S)	Commencement

Academic Organization of the Campus

Below is a listing of the Deans, Associate Provosts, and Associate Deans all reporting to the Provost. All of the undergraduate programs, graduate degree programs, and advanced certificate programs registered with the State University of New York and New York State Education Department fall under one or more of the individuals listed below.

Division of Academic Affairs

Academic Affairs

Dr. Terry Brown, Provost and Vice President
801 Maytum Hall
(716) 673-3335
terry.brown@fredonia.edu

College of Liberal Arts and Sciences
Dr. J. Andy Karafa, Dean
804 Maytum Hall
(716) 673-3173
joseph.karafa@fredonia.edu

School of Business
Dr. Russell Boisjoly, Dean
709 Maytum Hall
(716) 673-4813
russell.boisjoly@fredonia.edu

College of Education
Dr. Christine Givner, Dean
704 Maytum Hall
(716) 673-3311
christine.givner@fredonia.edu

College of Visual and Performing Arts
Dr. Ralph Blasting, Dean
807 Maytum Hall
(716) 673-3174
ralph.blasting@fredonia.edu

Graduate Studies, Sponsored Research, and Faculty Development
Dr. Judith Horowitz, Associate Provost

803 Maytum Hall
(716) 673-4708
judith.horowitz@fredonia.edu

Interdisciplinary Studies
Dr. Carmen Rivera, Associate Dean of College of Liberal Arts & Sciences
804 Maytum Hall
(716) 673-3173
carmen.rivera@fredonia.edu

Curriculum, Assessment, and Academic Support
General Education
Dr. Lisa Hunter, Associate Provost
810 Maytum Hall
(716) 673-3717
lisa.hunter@fredonia.edu
apcaas@fredonia.edu

Information Technology Services
Dr. Stephen J. Rieks, Associate Vice President for IT, Chief Information Officer
118 Maytum Hall
(716) 673-4670
stephen.rieks@fredonia.edu

Associate Deans
College of Liberal Arts and Sciences
Dr. Carmen Rivera, Associate Dean
806 Maytum Hall
(716) 673-3173
carmen.rivera@fredonia.edu

College of Education
Dr. Barbara Nolan, Associate Dean
706 Maytum Hall
(716) 673-3311
barbara.nolan@fredonia.edu

Academic Program and Course Selection

The All Programs section of this catalog lists the academic departments and the graduate and undergraduate major and minor programs housed within those departments. Students should check the online Course Offerings available during the pre-registration period each semester for an accurate list of proposed courses.

While the university guarantees each accepted student a full schedule of courses each semester pertinent to his/her academic objectives and in partial fulfillment of degree requirements, it cannot assure a desired time schedule, a preferred instructor, or a given course.

The university reserves the right to cancel any course for which the enrollment is deemed insufficient or for other administrative reasons. The university also reserves the

right to change faculty assignments and therefore cannot guarantee students the faculty of their choice.

Advisement Guides, including general requirements, format of courses, and grading procedures, are available in department offices.

Convocation

The Convocation theme is a series of lectures held each year presenting a major scholar of national reputation to the campus community. Students, faculty, staff, and community guests gather for a Convocation address on a major subject by prominent figures such as anthropologist Richard Leakey, author Dr. Maya Angelou, musician Sarah Caldwell, biologists Dr. James Watson and Dr. Ruth Hubbard, philosopher Dr. Robert Nozick, historian Dr. Christopher Lasch, environmentalist Robert F. Kennedy, Jr., astrophysicist Dr. Neil deGrasse Tyson, population geneticist Dr. Spencer Wells, and civil and children's rights advocate Marian Wright Edelman. A panel discussion on a related topic typically follows the lecture. A convocation theme is chosen based on the speaker's topic of interest and various events take place throughout the year that are consistent with this theme.

Dates and Deadlines

Fall 2016

Aug. 19 (F)	First-Year Student Orientation and Registration
Aug. 22 (M)	First Day of Classes
Aug. 22-23 (M-T)	Schedules Changes - Internet
Aug. 26 (F)	Final Day to DROP Courses*
Aug. 30 (T)	Final Day to ADD Classes*
Sept. 5 (M)	NO CLASSES - Labor Day*
Sept. 7 (W)	Final Day to Apply for December Graduation
Sept. 9 (F)	Final Day to Elect PASS/FAIL*
Sept. 13 (T)	NO CLASSES - Professional Development Day
Oct. 13-14 (Th, F)	NO CLASSES - Fall Break
Oct. 19 (W)	Mid-semester Grades Due from Faculty
Oct. 20 (Th)	Mid-semester Grades Available to Students
Oct. 21 (F)	Graduate Registration Begins for Spring 2017

Oct. 24-28 (M-F)	Undergraduate Advising Week for Spring 2017
Oct. 31 (M)	Undergraduate Registration Begins for Spring 2017
Nov. 4 (F)	Final Day to WITHDRAW from Courses*
Nov. 21-25 (M-F)	NO CLASSES - Thanksgiving Break
Nov. 28 (M)	Last Day to WITHDRAW from the University
Dec. 9 (F)	Last Day of Classes
Dec. 12-16 (M-F)	Final Exams
Dec. 21 (W)	Final Grades Due from Faculty by 11:50PM
Dec. 22 (Th)	Final Grades Available to Students after 3:00PM

Spring 2017

Jan. 17 (T)	Orientation and Registration
Jan. 18 (W)	First Day of Classes
Jan. 18-19 (W, Th)	Schedule Changes - Internet
Jan. 24 (T)	Final Day to DROP Courses*
Jan. 26 (Th)	Final Day to ADD Courses*
Feb. 1 (W)	Final Day to Apply for May Graduation
Feb. 8 (W)	Final Day to Elect PASS/FAIL*
Feb. 10 (F)	NO CLASSES - Professional Development Day
Mar. 13-17 (M-F)	NO CLASSES - Spring Break
Mar. 22 (W)	Mid-semester Grades Due from Faculty
Mar. 23 (Th)	Mid-semester Grades Available to Students
Mar. 24 (F)	Graduate Registration Begins for Fall 2017
Mar. 27-31 (M-F)	Undergraduate Advising Week for Fall 2017
Apr. 3 (M)	Undergraduate Registration Begins for Spring 2018

Apr. 7 (F)	Final Day to WITHDRAW from Courses*
Apr. 17 (M)	NO CLASSES - Travel Day
Apr. 24 (M)	Last Day to WITHDRAW from the University
May 5 (F)	Last Day of Classes
May 8-12 (M-F)	Final Exams
May 13 (Sat.)	Commencement
May 17 (W)	Final Grades Due from Faculty by 11:50PM
May 18 (Th)	Final Grades Available to Students after 3:00PM

*Deadlines are for full semester courses; mini-courses are pro-rated. Any registration activity after the established deadline will incur a \$20 fee.

All course withdrawals incur a \$20 fee.

Degree Evaluation

As students approach the completion of 75 credit hours, they are encouraged to use the online degree evaluation available through "Your Connection." Department chairpersons will work with students who have questions about the results of the audit, to make sure progress is being made towards completing degree requirements.

Fredonia Baccalaureate Goals

Fredonia's mission is to ensure that all Fredonia students, utilizing knowledge developed through a broad range of intellectual experiences, will be:

- Skilled (develop Intellectual and applied Skills, Literacies and Knowledges),
- Connected (engage Community and Diversity: Local Stewardship, Global Citizenship),
- Creative (demonstrate Scholarship, Artistry, and Innovation), and
- Responsible (activate Sustainability, Ethics, Leadership, and Professionalism)

The Baccalaureate Goals Implementation Team and the Office of Institutional Research, Planning, and Assessment will oversee the implementation of the baccalaureate goals. Through a process of assessment and review, Fredonia will continually monitor the campus's progress in meeting these goals.

Fredonia in 4

Fredonia in 4 is a four-year guarantee program for first-time freshmen by which the university pledges to adhere to a commonly understood agreement with students to schedule sufficient class offerings, provide required courses or suitable substitutes as determined by the department, and ensure qualified academic advising.

With the assistance of the Coordinator of Academic Advising & Liberal Arts, faculty and staff advisors are able to ensure that students who are willing to adhere to the requirements for doing so will graduate within four years. The spirit of the four-year agreement at Fredonia is to emphasize the university's commitment to provide all the essential ingredients that enable a student to graduate with a degree in four years. The rest is up to the student.

For more information about *Fredonia in 4*, students should contact the chairperson of their major department, or contact the Coordinator of Academic Advising & Liberal Arts, Office of the Registrar, First Floor, Reed Library, (716) 673-3188, or by emailing advising.center@fredonia.edu. See <http://home.fredonia.edu/advising>.

Liberal Arts

Liberal Arts students are those students who are exploring the major options offered at Fredonia. The *Liberal Arts program is not a major*. Exploration will occur as the student takes courses that fulfill the General Education Program required of all students. Declaration of a major is not required until the second semester of the sophomore year, the semester in which one customarily completes 60 credit hours. Most students decide on their major during the sophomore year, prior to reaching 60 credit hours.

The Coordinator of Academic Advising & Liberal Arts is the primary advisor for Liberal Arts students. The Coordinator of Academic Advising & Liberal Arts is located in the Office of the Registrar, First Floor, Reed Library. The Coordinator assigns the Liberal Arts student an advisor, who may be a faculty member or a qualified member of the professional staff.

The Liberal Arts Freshman Year Experience is a mandatory, year-long program designed to assist Liberal Arts students in their exploration and selection of a suitable major. The program has three major components: the Liberal Arts Advisement System, including Liberal Arts Liaisons; the Liberal Arts Freshman Seminar in the fall; and a Major and Career Exploration Course in the spring. For more information on the seminars, contact the Coordinator of Academic Advising & Liberal Arts in the Office of the Registrar. See <http://home.fredonia.edu/advising>.

Office of Sponsored Programs

Fredonia's Office of Sponsored Programs (OSP) provides comprehensive grants development and management support to faculty and staff. The office offers a wide range of pre- and post-award services for external grants and contracts, including proposal and budget development, export control guidance, campus administration approvals, proposal submission, contract negotiation, and account establishment.

The OSP serves as liaison to The Research Foundation for SUNY (RF), the campus's fiscal agent for grants and contracts, and is responsible for the full range of post award functions through close-out, including budget and modification approvals and all expenditures and grant-funded employee processing.

Fredonia's Institutional Review Board (IRB), the Human Subjects Review Committee, is administered by the OSP, and can be reached at Human.Subjects@fredonia.edu. The office also works closely with the campus Institutional Animal Care and Use Committee (IACUC).

For more information, please visit <http://home.fredonia.edu/sponsoredprograms> or email Human.Subjects@fredonia.edu or visit <http://home.fredonia.edu/sponsoredprograms/contact>.

Pre-Professional Programs

Students may arrange pre-professional programs to prepare for specialized training in engineering; health related areas such as dentistry, medicine, optometry, and veterinary medicine; or law. Students seeking admission into professional schools should obtain the catalog of the institution they hope ultimately to enter and develop their academic program, insofar as possible, according to the listed entrance requirements.

Advisement on pre-medical, pre-dental, and other health related programs may be obtained from the Health Professions Advising Committee through the Department of Biology, located in the Science Center. Students interested in these careers are encouraged to register with the selection committee through the biology department as early as possible to ensure appropriate advising on matters of course and major choices, and application procedures to professional school.

Advisement for pre-law is available along with LSAT preparation workshops. Students should choose a major within any department and enroll in the Pre-Law Advisement group as soon as possible, to ensure appropriate advising on course choices and law school application procedures.

For information on Pre-Medicine and Allied Sciences, see those program pages.

For information on Pre-Law Advisement, see those program pages.

For information on engineering, please check with the Director of the Cooperative Engineering Program. Contact information is provided in the Engineering (Cooperative) portion of the catalog.

Student Creative Activity and Research

The mission of the Office of Student Creative Activity and Research (OSCAR) is to promote and support student scholarly activity and creative work across the Fredonia campus. Such an endeavor is integral to the teaching and learning experience. It provides an opportunity for students to become closely affiliated with a faculty mentor and to develop skills and knowledge that will benefit them in the future. Both students and faculty gain from such activity and the institution has made a concerted effort to promote such collaborations. Funding is available for student travel to conferences and an annual exposition is held in the spring to celebrate student achievements. For more information, students should contact the Office of Student Creative Activity and Research at (716) 673-3123 or the Office of Graduate Studies, Sponsored Research, and Faculty Development at (716) 673-4708, or visit OSCAR's web page at <http://www.fredonia.edu/oscar>.

3-1-3 Program

Fredonia's 3-1-3 program provides an opportunity for some high school seniors within driving distance of the university to take courses at Fredonia while they still have the close support of family and high school. The 3-1-3 program is a time-shortened, combined high school and college course of study that can lead to a B.A. or B.S. degree in three years after high school graduation. It is possible because the university gives credit for the successful completion of selected high school courses and the high school allows successfully completed college English and social science courses to count toward the high school diploma. Therefore, the name 3-1-3 means three years of high school, three years of university study and one transitional year during which the student is enrolled simultaneously at his/her high school and at the university.

3-1-3 students are selected by the Fredonia admissions staff on the same basis as regularly admitted students.

During the last semester of the 3-1-3 program, students are invited to apply for the Honors Program at Fredonia, based on their cumulative Grade Point Average.

Interested persons should contact the Fredonia Admissions Office at (716) 673-3251 for more information on the 3-1-3 program.

ACADEMIC POLICIES

Academic Forgiveness Policies

Fredonia offers three options to help undergraduate students repair their academic records: First-Year Forgiveness, the Restart Option, and Academic Bankruptcy.

1. Students may use only one of the three options during their undergraduate career.
2. Forms are available through your Google Drive. Follow the instructions at the beginning of each form regarding completion and sharing of the document.
3. Students initiate the application process for First-Year Student Forgiveness and the Restart Option, after speaking with their academic advisor. For Academic Bankruptcy, students should first speak with a representative from the office of the Provost.
4. When a course previously-passed with a grade of D-, D, or D+ is excluded from the GPA calculation, under any of these policies, credit is lost for those courses and they will not count towards meeting any degree requirements, including the CCC.

Academic Bankruptcy

Who is this for?

- ☐ For the student who normally maintains satisfactory academic standards, but whose grades suffer for one semester due to unusual or unfortunate circumstances.

What does it do?

- ☐ *If the application to bankrupt a semester is approved, the student's grades for that semester will be excluded when calculating the student's GPA, but the student will receive credit only for those courses in which the student earned a grade of C- or above (including S grades).*

When do students apply?

- ☐ To apply for this option, the student must be in good academic standing (excluding the semester for which bankruptcy is sought) and must have re-established the pattern of satisfactory academic progress that existed prior to the semester for which bankruptcy is sought.

This policy may be applied only to one semester of work completed at the university.

The application form to apply for academic bankruptcy is available on the Registrar's web page, under "Academic Policies."

First-Year Forgiveness

Who is this for?

- ☐ *For First-Year Students (not transfers) admitted Fall 2007 and later.*

What does it do?

- ☐ *Allows up to 18 credits of "D" or "F" grades to be excluded from the g.p.a. Students will lose credit when a "D" grade is forgiven, and those courses will not count for the CCC nor for any other degree requirements.*
- ☐ *Allows up to 18 credits of "D" or "F" grades to be excluded from the g.p.a. Students will lose credit when a "D" grade is forgiven, and those courses will not count for the CCC nor for any other degree requirements.*

When do students apply?

- ☐ *A student applies for this option after changing or declaring his or her major and improving academically, but before the completion of 50 cumulative credit hours.*
- ☐ *A student applies for this option after changing or declaring his or her major and improving academically, but before the completion of 50 cumulative credit hours.*
- ☐ *In most cases, approval will be for courses that were taken to satisfy program requirements that no longer apply, due to a change in major.*
- ☐ *In general, CCC courses should be repeated rather than forgiven.*

The application form for First-Year Forgiveness is available through the Registrar's web page, under "Academic Policies."

Restart Option

Who is this for?

- ☐ *For students with an interruption in their studies at Fredonia, and who were readmitted/reinstated Fall 2008 and later.*

What does it do?

- ☐ *Allows a new grade point average to be established from the time of readmission/reinstatement. The student's academic record from the time of initial enrollment at Fredonia will be reflected on the transcript, but the student will receive credit only for those courses in which the student earned a grade of C- or above (including S grades).*

When do students apply?

- ☐ *A student applies for this option after returning to the University, and after the successful completion of at least 12 additional credits, using the online form available.*

□ Students approved for this option must successfully complete 45 credit hours of "regular" graded work (excluding S and P grades) at Fredonia prior to graduation.

The application form to apply for the restart option is available on the Registrar's web page, under "Academic Policies."

Academic Integrity Policy

I. Opening Statement

The State University of New York at Fredonia holds that the life of the mind and personal integrity go hand in hand, and are inseparable. Adherence to this philosophy is essential if we are to facilitate and promote the free and open exchange of ideas upon which our university mission relies. An essential component of the academic experience at Fredonia is the conviction that academic goals must be achieved by honorable means. It is expected, therefore, that all students attending the State University of New York at Fredonia will support and abide by all provisions of the following Academic Integrity Policy. It is further understood that by enrolling in courses, students are agreeing to the rules and regulations set forth below.

In order to protect the value of the work accomplished by each student and instructor, our academic community depends upon certain honorable standards of behavior from all its members. Fredonia trusts all students will refrain from participating in any behavior that will inhibit the pursuit of honest academic advancement. To help students avoid activities that can be construed as dishonest or as violations of academic integrity, a partial list of prohibited behaviors and activities is outlined below. This policy is not intended to limit decisions of faculty of professional programs that operate under more restrictive policies and/or have externally monitored procedures for addressing violations of academic integrity.

II. Violations of Academic Integrity Policy

Violations of academic integrity are described within four broad, overlapping categories: Fraud, Plagiarism, Cheating, and Collusion. Some examples of violations of academic integrity are described in the four categories listed below. If a student has any questions about what may or may not be an academic integrity violation, the student should discuss this with her/his professor.

A. Fraud

Behaving deceptively, misrepresenting one's self or another person, and falsifying official print and/or electronic documents are actions that seriously undermine the integrity of any social

institution and may result in criminal prosecution.

In a university setting, fraudulent behavior includes but is not limited to:

1. Forging or altering official school documents, whether in print or electronic form, such as grade reports or transcripts, enrollment documents, transfer credit approvals, etc.
2. Forging or tampering with any University correspondence or medical excuses.
3. Tampering with attendance records, such as one student signing for another student.
4. Tampering with or interfering with grading procedures.
5. Misreporting or misrepresenting earned credentials, including academic status, class standing, and GPA.
6. Taking an exam in place of another student.
7. Failing to disclose necessary information on official University forms.
8. Falsely claiming that electronic systems or computer equipment is at fault for the student's inability to complete academic course work (e.g., inability to complete assignments due to problems with software or the printers/computers in a certain lab) or to complete administrative functions (e.g., inability to make schedule changes via "Your Connection.")

B. Plagiarism

Plagiarism consists of presenting the work of others as one's own. It is unethical to copy directly the words or work of other authors or artists without giving them credit. It is also unethical to rearrange or add a few words to another author's text while leaving the majority unaltered or to take an author's unique idea or discovery and to represent it as one's own.

Specific examples of plagiarism include, but are not restricted to, the following examples:

1. Copying the work of another author and/or artist without giving proper credit in the text or reference to the artwork, presentation or performance; neglecting to cite the original in a footnote; and/or failing to identify full and proper documentation in the list of works cited or sampled for presentation or performance.
2. Implying that another author's words, works, or ideas are one's own. Quoting without the use of

quotation marks falsely implies originality and is, therefore, an act of plagiarism.

3. Incorporating material into a paper or assignment without acknowledgement, verbatim corrections, or other suggestions that were made by someone other than oneself, the instructor, or an assigned editor.
4. Taking information from one source (such as the Internet) and citing it as coming from another source (such as a required text or article).

C. Cheating

In all academic situations, any behavior that subverts the purpose of an academic assignment constitutes cheating, whether one actively commits the act of dishonesty on one's own behalf or enables someone else to do so.

Examples of cheating include, but are not limited to, the following:

1. Copying someone else's work or permitting one's own work to be copied. All work should be original to the student. Whether involvement in the copying process is active or passive, these acts constitute violations of academic integrity if a student is at all complicit.
2. Using unsanctioned materials, notes, software, and or equipment (such as a programmable calculator).
3. Intentionally providing or seeking questions to an exam that will be given in a later section or used as a make-up exam.
4. Communicating or sharing information during an exam obviously constitutes cheating, as does taking an exam for someone else.
5. Reusing work from another course without explicit instructor permission.
6. Reusing work in a repeated course without explicit instructor permission.

D. Collusion

Most colleges and universities support opportunities for collaborative learning. However, unauthorized collaboration is considered collusion. Unless collaboration is expressly permitted by the instructor, students should work independently. Even when an instructor authorizes collaboration, collusion may still occur. In all cases, work submitted should reflect a student's individual effort.

Examples of collusion include, but are not limited to, the following situations:

1. Two or more students study a problem and one student formally writes and/or types the results, the other members of the group copy the results, and each individual submits the work as his/her own.
2. A pair or larger group of students work on a series of problems or tasks, each student completes a portion of the problem set or task, the students combine their work, and each student submits the entire problem set or task as his/her own.
3. A course instructor assigns a task or problem to be completed outside of class and explicitly instructs students not to discuss the task or problem with one another. A pair or larger group of students discuss or work together on the task or problem, and each individual submits the results as his/her own.

III. Violations of Academic Integrity Procedures

A. Classroom Level

1. An instructor who suspects a violation of the Academic Integrity Policy will collect all information and materials related to the offense. The instructor will contact the student to present his/her charge(s) and the student will be given an opportunity to answer and explain. If the instructor and the student then agree that no violation has occurred, the matter is resolved and the process ends at this point.
2. If, however, the instructor finds that a violation has occurred, whether the student admits or does not admit guilt, the matter must be reported to the Department Chairperson using the Academic Integrity Incident Report Form.

B. Departmental Level

1. For all cases in which the instructor determines that the student has plagiarized, cheated, colluded, or committed any act of academic dishonesty, the instructor will submit an Academic Integrity Incident Report Form to the department chairperson. The instructor will maintain copies of all information and materials related to the offense and will disseminate the copies per request of the departmental chairperson or the Academic Integrity Review Board.
2. After appropriate consultation and review of the materials, the chairperson and the instructor will jointly decide if the case is to be dismissed. If the case is not dismissed, they may attempt to resolve the case at the Department level or send the case on to the Academic Integrity Review Board. If charges are going to be brought

against the student, the Department Chair will contact the Office of Judicial Affairs to determine if the student has a previous record of academic misconduct on file. If the student has a prior violation of the Academic Integrity Policy on file, the case must be sent on to the Academic Integrity Review Board for adjudication. The Academic Integrity Review Board will consider repeated violations of any or all of the provisions in the *Academic Integrity Policy* as grievous.

3. If the student has no prior record of academic dishonesty, the chairperson and the instructor must decide if the case is a serious enough violation to result in suspension or expulsion. If so, the case must be sent on to the Academic Integrity Review Board for adjudication. If the charges are less serious, the Department may propose departmental sanctions including but not limited to one or more of the following sanctions: a formal warning; a grade of zero being assigned to the particular performance; a failing grade being given for the course; and/or academic disciplinary probation for one semester or one year.
4. At this stage of the process, the Department Chair sends the Academic Integrity Incident Report Form with the proposed department sanctions or a referral to the Academic Integrity Review Board to the appropriate Dean. In the case of a student enrolled in a teacher education program, this report should also be sent to the Dean of the College of Education. The Academic Integrity Incident Report Form will serve as a routing slip and require appropriate signatures.

C. Notification of Departmental Sanction or Referral for Hearing by the Dean

1. The Dean will communicate the proposed departmental sanctions or referral to the Academic Integrity Review Board to the student. The Dean will also include a description of the charges to the student. A student may not drop or withdraw from a course in order to avoid a course sanction or to suspend judicial proceedings.
2. If departmental sanctions are being proposed, the student must accept the proposed sanctions within 5 working days by signing the Academic Integrity Incident Report Form (if applicable), or appeal (See Section D) of the departmental decision. If the student does not appeal, the departmental sanctions will be imposed and the Dean will send the final Academic Integrity Incident Report Form to the academic

department that originated the Academic Integrity Incident Report Form and the Office of Judicial Affairs.

3. Because a student may plagiarize and/or violate the provisions of the Academic Integrity Policy in more than one department, the Office of Judicial Affairs will maintain the final copy of the Academic Integrity Incident Report Form in the student's file.

D. Appeal Process

1. Within five (5) working days of official notification, the student may decide to appeal the departmental proposed sanctions. If so, she/he must officially respond and notify (via the student's official university email account) the Dean that sent the sanction letter. The Dean should then forward the notice of the student's intent to appeal to the Provost, the appropriate department chair, the Director of Judicial Affairs, and the Chair of the Academic Integrity Review Board, who will call together the members of the board for a formal hearing. The Director of Judicial Affairs will then schedule a meeting with the student for clarification of the appeal and hearing process. Throughout the appeal process, the charged student is assumed not responsible and in most circumstances, she/he has the right to remain in class.
2. After the same five (5) working days, if the student has not accepted the sanctions or appealed, the University will act upon the assumption that the student has accepted the departmental decisions and any sanctions therein.
3. If the department has recommended sanctions outside the departmental purview (e.g. academic disciplinary probation longer than one year, suspension or expulsion), the Chair of the Academic Integrity Review Board and Director of Judicial Affairs will be notified by the Dean and a hearing will be scheduled in a timely manner. All original materials for the hearing will be transmitted to the Director of Judicial Affairs and a copy sent to the Chair of the Academic Integrity Review Board.
4. With all decisions in the appeal process, enforcement of sanctions and notification of outcomes to all parties involved will be the responsibility of the office of the appropriate Dean and the Provost.

E. Academic Integrity Review Board

1. The Academic Integrity Review Board will be convened to hear and rule on a case under any

of the following circumstances: (1) the student who has been charged has chosen to appeal the department decision, (2) for a suspension or expulsion level case, or (3) whenever a second or subsequent academic misconduct violation is submitted. Before the hearing, the student will attend a counseling session with the Director of Judicial Affairs who will fully inform the student about the process and possible outcomes. The student may decide at this point to drop or continue with the appeal process, if that was the reason for the hearing.

2. A charged student has the right to select a willing student, faculty member, or an administrative staff member of the University to advise him/her throughout the review process. To avoid conflicts of interest, this advisor may not be selected from the members of the Academic Integrity Review Board. If the student wishes to have an attorney present at the hearing as an advisor, the Chair will need to be notified at least 72 hours in advance of the hearing. The attorney may advise the student during the hearing, but will not be permitted to respond for the student.
3. The Provost will establish a pool of eligible members to serve on the Academic Integrity Review Board. These members will undergo training before serving on a convened hearing board. Members will serve for two-year terms with the option of renewal. Terms should be staggered whenever possible to provide continuity. At least one member from each category below is required to hold a hearing. A quorum of four members including at least one student representative will be selected from the following categories:
 - a. The Chair of the Academic Integrity Review Board is a full-time tenured faculty member, appointed by the Provost and subsequently approved by the University Senate. The Chair's term will be two years with the option of renewal, pending reappointment and approval. The Chair of the Board will have the responsibility of determining whether a hearing should be held, convening the Board, and presiding over hearings.
 - b. The Director of Judicial Affairs, or other representative of the Office of Student Affairs, will provide the Board access to pertinent Student Disciplinary records and will participate as an ex officio, non-voting member of the Academic Integrity Review Board. Before witnesses speak or before questions are asked, the representative from Student Affairs will present a brief summary of the case, based on the evidence submitted and the interview with the student.
 - c. At least one, but preferably two, undergraduate (or graduate, if pertinent) student representatives. These two students should have majors in different academic units. Students may be selected from the pool of students serving as Campus Judicial Board members.
 - d. A chairperson from an academic department other than the department in which the charge originated.
 - e. At least one faculty member, but preferably two, from departments other than the department initiating the charges and the department chaired in (2.d.) above. Such members may be selected from the pool of faculty serving as members of the Campus Judicial Board.
4. Other parties and witnesses may be invited by the Chair of the Academic Integrity Review Board or by the student. These witnesses may be called before the Academic Integrity Review Board to provide testimony. Normally, the faculty member bringing the charges is also invited to the hearing to answer any questions that arise.
5. After the presentation of the summary of the case by the Director of Judicial Affairs, the student will answer to the charges by pleading responsible or not responsible. The Chair of the Academic Integrity Review Board (after prior consultation with the assembled Board) may call witnesses. The student who has been charged may also call witnesses. All participants in the hearing will be informed that deliberations are to remain strictly confidential. Hearings of the Academic Integrity Review Board will be recorded to provide a record of the proceedings and these recording will be stored in the Office of Student Affairs.
6. After the hearing, the Academic Integrity Review Board will deliberate in private and make a formal decision. In the final determination, each of the members of the acting board, including the Chair of the Board, and excluding the Director of Judicial Affairs, will cast a single and equally weighted vote. In the event of a tie vote concluding a case, the Chair of the Board will cast an additional vote. Voting will be conducted by written ballot, and will be tallied by the Chair of the Board. The results will be disclosed to acting Board members, who are not to disclose either the board's determination or any specifics related to the voting.
7. Within one week of the final determination of the case, the Chair of the Academic Integrity Review Board will complete a written hearing

report and will send electronic copies to the Provost and the Dean that referred the case. The final report of the Academic Integrity Review Board will include the following:

- a. A determination of “Not Responsible” (no violation of the Academic Integrity Policy has been found) or Responsible (the student has been found responsible for the charged violation on the basis of the evidence submitted or has admitted guilt).
 - b. If the student has been found “Responsible” for violating the Academic Integrity Policy, the penalty must be specified. Sanctions or penalties imposed should be commensurate with the offense and will take into account any previous violations of the Academic Integrity Policy as evident in the student disciplinary records on file.
8. The Provost will send an official notification letter informing the student of the hearing outcome, sanctions imposed, if any, and an explanation of the appeal process. A copy of this letter will also be sent to the Director of Judicial Affairs. If the student has been suspended or expelled, a copy of the official letter will also go to the President’s Office. On the same day the Review Board’s decision is communicated to the student by the Provost, the instructor, chairperson in whose department the charge originated, chairperson of the student’s major department, and the Vice President for Student Affairs will be informed of the board’s decision electronically (i.e. via SUNY Fredonia e-mail). If the student is a teacher education student, the Dean of the College of Education will also be notified.
 9. Should the student decide to appeal the Academic Integrity Review Board’s decision, he or she may do so in a written justification to the President of the University, but only if/when the substance of the presented case has changed (i.e., additional and significant new evidence is discovered) or if there has been some sort of procedural error that would affect the outcome of the hearing. The written appeal must be received within 5 working days following the student notification of the hearing outcome.

F. Maintenance of Academic Integrity Records

Records of all academic integrity violation cases will be kept in the Office of Student Affairs for 10 years.

Academic Policy and Procedures with Regard to Students with Disabilities

It is university policy that students with disabilities fulfill the same degree and program requirements as all students, and that reasonable accommodations may be used to assist students with disabilities in attaining those requirements. In addition, the university may offer non-accommodative services such as tutoring and counseling. Reasonable accommodations and other services are determined on a case-by-case, course-by-course, and semester-by-semester basis.

It is the responsibility of students with disabilities to identify themselves by notifying the Coordinator of Disability Support Services for Students. The student and coordinator will meet and discuss the student’s needs, on the basis of the clinical diagnosis that has established the existence of the disability, and will decide on the kinds of assistance and/or reasonable accommodations the student will need to gain equal access to the university’s programs, activities and services. It is advised that students self-identify upon admittance to the university in order to provide a seamless transition. Early self-identification can facilitate reasonable accommodations and other services that may be delayed by the process of obtaining appropriate documentation with later self-identification. To receive such services, the student must meet with the Coordinator of the DSS office and fill out an intake form. The Coordinator and the student will then meet and assess which services will be available to the student. It is important to note that Fredonia does not have a shuttle service between classes, nor does the campus provide transportation expenses to allow students to get to class.

With the student’s written request, the coordinator will inform the relevant professor(s) or office(s) of the student’s accommodation needs for the particular class or service the accommodation is needed. The coordinator will be confirming the existence of a disability and the need for the accommodations requested. The student must then identify him/herself to the professor or office providing the accommodation, and where necessary, discuss the accommodations or alternative accommodations. In the event of a disagreement between the student and the professor or office about the need for the requested accommodation, the Coordinator of Disability Support Services for Students will serve as mediator.

Fredonia is prepared to respond to the individual needs of students with disabilities. For specific information about services and facilities for students with disabilities, students should contact: Adam Hino, coordinator of Disability Support Services for Students, Reed Library (fourth floor), by telephone at (716) 673-3270, by TTY at (716) 673-4763, or by email at disability.services@fredonia.edu. Students should see the website at <http://home.fredonia.edu/tlc/disability-support>.

Academic Standing and Probation

The term “in good academic standing” means that a student is eligible or has been allowed to register for and undertake academic course work for the term in question. The mechanism of academic probation, including any accompanying constraints upon a student’s activities, is intended merely as an educational device to encourage greater effort on the part of students who appear to be having difficulty in meeting certain academic standards. Placement on academic probation may precede denial of the right to register for academic course work if certain conditions are not met, but a student on academic probation is considered to be in good academic standing. Any question concerning whether or not an individual student is in good academic standing will be determined by the campus committee on academic standards.

The Academic Standings Committee has adopted the following regulations governing academic standing:

1. A student will be placed on probation if the cumulative quality point average falls below a 2.00.
A student on academic probation is required to meet with a probation advisor (generally the chairperson of the student’s major department) a minimum of three times during the probationary semester.
2. Probationary status is determined in accordance with the above standards and is not dependent upon official notification.
3. “Good academic standing” is defined as maintaining a cumulative quality point average at or above the appropriate level in (1) above or being on probationary status. Students should also refer to the financial aid section on academic standing and its relationship to financial aid eligibility.
4. A student normally will be required to withdraw if at the end of a semester of probation the cumulative quality point average is still below the level stated above.
5. Students whose record of achievement becomes academically irreparable may be dismissed without a semester of probation.

At the close of each semester, a student whose cumulative quality point average places him/her within the range of Academic Dismissal will be notified via "Your Connection." Students may appeal this dismissal to their department chairperson/program director, through a process available on the Internet (through "Your Connection"). The Academic Standings Committee then reviews the appeals of each student. The Academic Standings Committee is comprised of the Provost and Vice President for Academic Affairs (or designee), the Associate Provost for Curriculum, Assessment, and Academic Support, the Associate Provost for Graduate Studies Office, the academic deans, the Vice President for

Student Affairs (or designee), the Assistant Vice President for Student Affairs, the Coordinator for Academic Advising & Liberal Arts, the Registrar and the Assistant Registrar. The chairpersons and directors of those departments and special programs whose students are being considered assist in this review. The decision of the Academic Standings Committee is final.

Assessment Examinations or Questionnaires

The State University of New York at Fredonia regularly assesses its academic programs as part of its constant effort to improve them. Program assessment often involves testing students to measure their accomplishments in relation to program goals, or questioning them about their experiences and reactions. Usually, the results of the tests and questionnaires do not become part of the student’s record, but rather help the university measure the success of its teaching and course requirements. In other words, student views and outcomes provide information that is essential if the university is to help students learn more effectively. Accordingly, all students are expected to take assessment examinations or answer assessment questionnaires if they are chosen to do so.

Class Attendance

At Fredonia students will experience a variety of educational styles and opportunities. Attendance is expected in all classes. Some courses will require attendance. Some courses will base a part of the grade on attendance and participation. Other courses will have no formal requirements concerning attendance. Instructors will indicate the attendance policy as a part of the course syllabus.

It is the student’s responsibility, if absent, to find out what material was covered, what assignments were given, and what announcements were made in class during the period of absence.

Because the university is concerned about the welfare of its students and wishes to provide assistance in case of absence for valid reasons, students are encouraged to notify the Office of Student Affairs in the event of an unusual series (three or more consecutive days) of absences due to serious health issues or personal reasons. The office will then notify instructors.

Each instructor is responsible for establishing a policy concerning cases in which regularly scheduled graded work is missed and for determining whether the reason for having missed such work is valid. If the instructor determines that a student has a valid reason for missing the work, the instructor may choose to give the student an opportunity to make it up or may, in exceptional cases, base the grade for the course on other work. In the event of a disagreement over the validity of the absence, the student

may appeal to the instructor's chairperson. When a student is directly participating in a university-sponsored program that takes him/her away from classes (e.g., athletics or research conference), the department sponsoring the program will provide the student with documentation indicating the activity in which the student is involved and the date(s) and time(s) of that involvement. Such participation will be considered a valid reason for missing the work. Thus, instructors should offer the student an opportunity to make up the work or may base the grade for the course on other work. In the event of a disagreement over the validity of the absence, the student may appeal to the instructor's chairperson or supervisor.

If a student anticipates having to miss regularly scheduled graded work, the student should contact the instructor ahead of time. The instructor may expect the student to complete the work before the scheduled time when that is feasible.

If a student must be absent due to religious beliefs, he/she has the right to make up examinations, etc. In the same vein, professors may feel compelled to cancel an in-person class session to attend a religious observance or professional conference. Students might be asked to complete alternate assignments for that particular class session. The members of the Fredonia faculty try to avoid such scheduling conflicts, but sometimes it cannot be helped.

Course Auditing

Subject to faculty and department approval, certain academic courses may be audited. The instructor is under no obligation to assess a course auditor's homework, class contributions, or examinations. The auditor receives no grade for the course, nor is any course transcript generated by the Registrar's office. Once enrolled, students may not change their enrollment status from audit to credit, or from credit to audit.

Any person wishing to audit a course must obtain and complete an Audit Form from the Office of Lifelong Learning – whether a fee is required or not. The completed form must have the approval and signatures of: the chair of the department offering the course, and the course instructor.

Currently-enrolled, full-time students, *currently* employed faculty and staff, and Fredonia emeriti faculty and staff, may audit courses without paying a registration fee. For all others, a non-refundable fee of \$50 will be charged. Audit privileges are not available in non-credit courses offered through the Office of Lifelong Learning and Special Programs; nor in any internship, directed study, practicum, or foreign study program/course.

Course Challenge Option

Students may enter the university already possessing the skills or knowledge taught in a particular university course. If such a course is required or is a prerequisite for other courses, and if the students can prove to the satisfaction of the department offering the course that they indeed possess the skills or knowledge in question, the requirement will be waived or the students will be placed in the course for which they qualify, without receiving credit for the prerequisite or required course.

In unusual cases, academic departments may be willing to grant college credit for a given course to students who can demonstrate prior knowledge of the course materials or skills. The course in question will not be one in which the classroom process itself is an important focus, as it is in courses dependent on small group discussion or problem-solving, computer work, laboratory experiments, group projects, and the like. To "challenge" a suitable course by demonstrating that one can pass the course without taking it, a student must first apply to the chairperson of the department offering the course. The application should include a detailed description of the manner in which the student has already met the goals and objectives of the course. If the chairperson deems the course available for challenge and if he or she believes the student's application to have merit, the department will determine the manner in which the student is to demonstrate his or her knowledge and/or proficiency. If, in the department's opinion, the student's performance is adequate, the chairperson will recommend to the Registrar that the student be awarded credit for the course. No grade will be given, and the student's quality point average will not be affected.

Course Load

For most undergraduate programs, the normal class load is 15 or 16 semester hours.

A student who wishes to carry a course load of more than 18 semester hours must secure the approval of his/her department chairperson/program coordinator, subject to the following restrictions:

- Students on academic probation are not permitted to carry a course load of more than 18 credits.
- Students in good standing with a GPA less than 3.00 may carry a course load of up to 21 credits.
- Students with a GPA of 3.00 or higher may carry a course load of up to 24 credits.

Any exceptions to the above restrictions must be approved by the Associate Provost for Curriculum, Assessment, and Academic Support, 809-810 Maytum Hall.

Course Prerequisites and Corequisites

Many courses offered by the university are open to any interested student, space permitting. However, some

courses have *pre-requisites* - other courses or test scores a student must have had before taking the course in question, in order to understand it. For other courses, there are recommendations regarding courses or experiences that might be beneficial, but not necessary, to have. A few courses have *co-requisites*, which must either be taken before or together with the course in question. Information about *pre-* and *co-requisites*, and other recommended experiences, is given in the course description section found elsewhere in this catalog. Students are responsible for ensuring that any pre-requisites have been met before enrolling in a course.

Course Repeat Policy

A student may repeat a course, and have the first grade excluded from the calculation of their cumulative quality point average if the course is an exact equivalent of the previous course taken. A course originally taken for a grade cannot be re-taken on a pass-fail basis.

A student who wishes to take a course at another college and have the credit substitute for a course already taken at Fredonia must secure prior approval from the chairperson of his or her major program (or department of advisement) and have the chairperson certify that the course to be taken is the equivalent of the course the student wishes to repeat. For this option, transfer credit is accepted only if the student earns a "C" or better for the course being repeated and transferred. In that case, the credit (not the grade) will be noted on the transcript. The option of using transfer credit for course repeat may not be utilized by students who have been academically dismissed, unless the student is reinstated and completes courses leading to a degree program at Fredonia.

When courses are repeated, the initial grade will remain on the transcript, but an "E" will appear to the right of the initial grade earned, indicating that this grade is excluded from the grade point average calculation.

Credit by Examination

The university participates in three examination programs: the College Proficiency Examination Program of the New York State Education Department, Albany, N.Y.; the Regents College Examination Program; and the College Level Examination Program of the College Entrance Examination Board, Northeastern Regional Office, 475 Riverside Drive, New York, N.Y. Enrolled students must obtain prior approval before scheduling an examination. Students should contact the testing agency directly for more information.

Dean's List

About one month after the end of each semester, the university announces the names of students who are recorded on the Dean's List. The list includes all students

who have earned a quality point average of 3.30 or higher for that semester with a course load of at least 12 credit hours. (Courses with P or S grades are not included in the 12 hours.)

Declaration of a Major Program

In order to complete the university requirements for a baccalaureate degree, every student must complete an approved departmental or interdisciplinary major program by satisfactory performance in the courses specified by the program. Students may declare a major before earning 30 semester hours of credit, except in some professional programs, and must make the declaration of program prior to earning 60 semester hours of credit. Information on the declaration of major can be obtained from the Coordinator of Academic Advising & Liberal Arts, located in Office of the Registrar, First Floor, Reed Library.

Certain major programs have a minimum quality point average requirement for admission. Students should check with the department of their intended major for specific minimum GPA and/or course requirements.

The declaration of major program, as well as changes in the major, should be made well in advance of course selection. The appropriate form is available in the Office of the Registrar and in department offices. The chairperson responsible for departmental programs or the coordinator responsible for interdisciplinary programs will assign students an advisor and will certify at the appropriate time that all program requirements have been completed.

Declaration of an Additional Major

Students who are interested in completing more than one major program must obtain the appropriate form from the Office of the Registrar and secure written approval from the department chairperson or interdisciplinary coordinator of the intended additional major. Most students will complete both majors within a single degree, and the completion of both majors will be noted on their official transcript.

Students are generally not permitted to earn multiple degrees, nor declare multiple majors, from the same academic department. Exceptions include the following: Biology with Biology Adolescence Education; Chemistry with Chemistry Adolescence Education; Communication (all majors); Computer and Information Sciences (all majors); History/Social Studies; Geochemistry, Geology with Earth Science; Mathematics with Mathematics Adolescence Education; Applied Mathematics with any other Mathematics major; Music (all majors); and Physics with Physics Adolescence Education or Industrial Management.

Additional majors must be declared at least one semester prior to the date of graduation.

Declaration of a Minor

Students who are interested in declaring a minor must obtain the appropriate form from the Registrar's office, then contact the office of the department in which the minor is requested. Students who are interested in declaring more than one minor program are to follow the procedure outlined above for each one. Minors must be declared at least one semester prior to the date of graduation.

Early Registration

Early Registration is held during the latter part of the regular spring and fall semesters preceding the semester for which enrollment is sought. The exact dates of early registration will be announced by the Registrar through e-mail and the Registrar's web page, and in campus publications. Students wishing to register must meet with their academic advisor and discuss their academic plan for the upcoming semester. Students will then register according to published guidelines.

Final Examinations

Final Exam Schedule – A tentative schedule of final examinations is available on the Registrar's web pages. Requests from instructors for deviations from the schedule (group examinations or room changes) must be approved by the Registrar. The Registrar's office will publish a final schedule, including group exams, at least three weeks prior to finals week. Once this schedule has appeared, no changes can be made.

Final examination week is part of the regular semester and should be interpreted in that context. Students who are asked to take final examinations (variously interpreted as terminal, non-comprehensive, etc.) prior to the regular examination week are put at a decided disadvantage. Faculty members who do not give final examinations during the regular period scheduled for such examinations are expected to use that period for review or to utilize the time in some formal way in a classroom setting.

All students have the right to take their final examination at the time scheduled by the Registrar's office.

Three-Finals-In-One-Day Conflict – It is university policy that students not be required to take three final examinations in one day. However, the published final examination schedule may contain some three-finals-in-one-day conflicts. In this situation, a student has the right to take one of the examinations on a different day.

- If the conflict arises due to an individual professor rescheduling his/her final examination from the time initially scheduled by the Registrar's Office, it is the responsibility of that professor to arrange for an equivalent examination for the student at a suitable time during examination week. If a suitable time is not

agreed to, the student may appeal to the chairperson of the department in which the course is taught.

- If the conflict arises due to the scheduling of a group examination for several sections of the same course, the department scheduling the group examination must make equivalent examinations available to students for whom the scheduled group examination creates a three-finals-in-one-day conflict. When a student finds that a group examination creates such a conflict, he/she shall meet with the chairperson of the department scheduling the group examination who will arrange for the equivalent examination to be given to the student at a suitable time during examination week. If a suitable time is not agreed to, the student may appeal to the dean responsible for the area in which the course is taught.
- If a conflict arises from neither of the above reasons and if a student is taking one of the three courses in his/her major field, it is the responsibility of that instructor to arrange for an equivalent examination to be given to the student at a suitable time during examination week. If a suitable time is not agreed to, the student may appeal to the department chairperson.

Students should resolve any three-finals-in-one-day conflicts before the beginning of examination week.

Grade Appeals

A student who feels that a final grade reported to him/her is incorrect has the right of appeal. This appeal must be initiated within one semester after final grades are posted, using the following procedure:

1. He or she first discusses the grade with the instructor.
2. If, after this discussion, the student is still unsatisfied, the student may take his or her case to the chairperson of the department. This appeal should be in writing, outlining the reasons why the student feels the initial grade was incorrect and supplying any relevant documentation (e.g. graded material, syllabi, etc.) in support of the grade change.
3. If the chairperson decides that the student's case merits further investigation, and after the chairperson has discussed the appeal with the instructor involved, the chairperson appoints an *ad hoc* committee composed of two members of the faculty in the department, other than the faculty member involved, and one student who is a major in the department.
4. If the chairperson decides that the student's case does not merit further investigation, the student may appeal this decision to the dean, supplying the same supporting materials as presented to the chairperson. If, after discussion with the chairperson, the dean decides that the student has a case that merits investigation, the dean may appoint an *ad hoc* committee of the same

composition to that described above to investigate the student's case.

5. The committee reviews the case, interviews the student and the instructor separately, and reaches a judgment by majority vote. The judgment is communicated to the chairperson or the dean who, in turn, reports it to the affected parties.
6. If the committee recommends a change in grade, the instructor may initiate a change, or the committee's recommendation is forwarded to the appropriate dean or Provost and Vice President for Academic Affairs for their consideration. In such cases, the Provost and Vice President for Academic Affairs may modify the grade if the committee so recommends.
7. At any time during this process prior to when a final decision is made, the student may withdraw his/her appeal, or the instructor may initiate a grade change consistent with the student's appeal. Either of these actions ends the appeal process.

For information on graduate grade appeals, please see "Graduate Grade Appeals (p. 277)" in the Graduate Studies section of the catalog.

Grading System

Student transcripts are updated at the conclusion of each semester, summer session, or special term. The symbols used to record achievement on the permanent record card of the student at the end of each semester are as follows:

A Excellent

A-

B+

B Very Good

B-

C+

C Fair

C-

D+

D Passing

D-

F Failing

I Incomplete, given when a student, because of illness or other cogent reasons, is unable to complete the requirements of the course. These requirements must be satisfied before the end of the next regular semester or an earlier date set by the instructor; otherwise the I becomes an F on the permanent record. A student wishing to be

considered for an I grade in a course must contact the instructor before the end of the semester, and submit the Request for Incomplete form available on the Registrar's Web page. If the instructor determines that an I grade is appropriate, then the instructor will determine the deadline for completing the work for the course, and the grade the student would earn if the missing work is not completed. Once the work for the course has been received by the instructor, the instructor should submit the student's revised grade for the course to the Registrar's office within two weeks.

IP In Progress. Assigned to the original thesis/capstone course and will remain on the student's transcript until (s)he completes the course.

P Satisfactory completion of courses under the Pass-Fail Option. "P" does not count as part of the cumulative quality point average or total; it does, however, count toward completion of total credit hours earned.

NP Unsatisfactory (Not Passing) completion of courses under the Pass-Fail Option. "NP" does negatively impact the cumulative quality point average.

E Indicates course has been repeated, and will appear on a student's transcript to the right of the original grade earned. This symbol is also used to exclude grades not calculated due to an approved Academic Forgiveness Policy.

S Satisfactory completion of requirements. The S does not count as part of the cumulative quality point average.

U Unsatisfactory performance or failure. The U does not count as part of the cumulative quality point average.

Note: The letters S and U are used for student teaching and certain other courses, including some independent study and skill courses. In contrast to Pass/Fail, Satisfactory/Unsatisfactory grades are given as departmental options for certain courses, and require that the instructor prepare an appropriate supplemental evaluation of each student's performance to be filed with the department.

W Indicates withdrawal from the university.

WC Withdrawal from a course.

X Indicates continuing enrollment in a course that continues past the end of the semester. An X

grade that has not been converted to a credit-bearing grade by the end of the second regular semester after the semester for which the X was given will change to an F grade.

- Y Indicates a course completed with a grade of C- or better during a semester accepted for “academic bankruptcy.” Credit is awarded for such courses but the grades are not included in the student’s average. Prior to Fall 2009, the Y represents all passed courses during a bankruptcy semester.
- Z Indicates a course completed with a grade of D+ or lower during a semester accepted for “academic bankruptcy.” Credit is not awarded, and grades are not included in the student’s average. Prior to Fall 2009, the Y represented failed courses during a bankruptcy semester.

Graduation with Honors

Students whose cumulative quality point average indicates high scholastic attainment will be awarded the degree as follows:

1. *Summa Cum Laude* - Quality Point Average 3.7 or higher.
2. *Magna Cum Laude* - Quality Point Average between 3.50 and 3.69.
3. *Cum Laude* - Quality Point Average between 3.30 and 3.49.

Students may graduate with honors only when they have completed at least 45 hours of graded work at Fredonia. Graded work includes all courses which carry quality points and excludes courses which are graded “satisfactory-unsatisfactory” or “pass-fail.”

Only those credits earned at Fredonia will be computed in the final average.

Leave of Absence Policy and Continuing Enrollment

A leave of absence may be obtained for the following reasons: medical, military service, or jury duty. In most cases, a student must have a minimum 2.0 cumulative grade point average and at least a 2.0 average in his/her major.

A leave of absence form can be obtained from the Office of Student Affairs, 606 Maytum Hall. The leave must be approved by the appropriate department chairperson and the Office of Student Affairs.

Ordinarily, a leave is for one semester or one academic year. Students wishing to return after a leave of absence must contact the Registrar’s office at least one month

before the beginning of the semester in which they wish to enroll. Students wishing to course select should consult the Registrar’s office for registration dates.

A student who voluntarily terminates enrollment from the university may return to the university through reinstatement or readmission.

Liability

The university is not responsible for loss or damage to personal property by fire, theft, or any other cause on university property or in any off-campus housing facility.

Name Changes

A student whose name is changed should report the change in writing to the Registrar along with a photocopy of a legal document (driver’s license, court order, social security card) reflecting the new name.

Observance of Regulations and Standards

All students are expected to observe the regulations and standards governing student life, both in and out of the classroom. Failure to do so may be considered grounds for suspension or dismissal. Each student should read with care the full statement on Student Rights and Responsibilities (p. 604).

Pass-Fail Option

The Pass-Fail Option permits a student, with the advisor’s approval, to take certain courses and earn a grade of P (Passing) or F (Failing), rather than a traditional letter grade (A,B,C,D). Quality points will not be used for pass-fail courses when the student receives a passing grade. However, a failing grade will carry the usual penalty for failure in a course.

The following courses may NOT be taken Pass-Fail:

- Courses at the 100-level
- Courses that are part of the professional semester
- Courses required for a major, a minor or the General Education Program

Departments may designate other courses as not applicable to the pass-fail option; such courses are identified in the online *Course Schedule* each semester.

Within the limitations given, students may enroll for courses as free electives on the pass-fail basis:

1. Completion of a minimum of 39 semester hours toward the bachelor’s degree is required before enrollment in pass-fail courses.

2. No more than 16 semester hours may be taken on a pass-fail basis; no more than two such courses may be taken in any one semester. All courses taken as pass-fail are counted towards the 16 hour maximum whether the student receives a P or an F.
3. In the event a student transfers to a department in which he or she has taken a pass-fail course, the student may petition the Registrar to rescind the pass/fail option for the course.

Pass-fail applications are available in the Office of the Registrar. A student who decides to enroll on a pass-fail basis is required to obtain his or her advisor's signature on the application within the three-week period following the beginning of the semester. He or she may not thereafter change status in the course(s).

Permission to Take Graduate Courses While an Undergraduate

Undergraduates who have completed 90 credit hours and whose grade point average is 3.0 or better may be allowed to enroll in suitable graduate courses numbered 500-599. Permission is not automatic, however; in each instance, students must request approval of the department offering the course and of the Associate Provost for Graduate Studies. The forms for this purpose may be found in the Registrar's office or online at <http://www.fredonia.edu/gradstudies/forms.asp>.

Students may use such graduate courses either to meet undergraduate degree requirements or to meet degree requirements in a Fredonia graduate program they enter at a later time. In the latter case, a student will be charged the difference between undergraduate and graduate tuition when the credit is applied to the graduate transcript. No course may be used for both purposes by the same person. In no case will an undergraduate be allowed to enroll in a course numbered 600 or above.

Plagiarism

To plagiarize is "to steal and pass off as one's own the ideas or words of another" (Webster's *Seventh New Collegiate Dictionary*). Examples of plagiarism include presenting the ideas of another in one's own words without crediting the source, copying sentences, paragraphs, or pages from a source without explicit reference to the pages from which the words were taken, and, of course, presenting another's entire work as one's own. If a student is not certain whether a particular practice may be considered plagiaristic, it is his/her responsibility to consult the instructor for whom he/she is writing the paper, exercise, or examination. The State University of New York at Fredonia strongly condemns plagiarism and takes severe action against those who plagiarize.

Program Registration

Fredonia's baccalaureate and graduate programs are registered by the New York State Education Department. For information, contact the New York State Education Department, Office of Higher Education and the Professions, Cultural Education Center, Room 5B28, Albany, NY 12230, or call (518) 474-5851.

Quality Point Average

The quality point system is used to indicate a student's overall academic average.

Each course grade of:

A	carries 4.0 quality points per semester hour
A-	carries 3.7 quality points per semester hour
B+	carries 3.3 quality points per semester hour
B	carries 3.0 quality points per semester hour
B-	carries 2.7 quality points per semester hour
C+	carries 2.3 quality points per semester hour
C	carries 2.0 quality points per semester hour
C-	carries 1.7 quality points per semester hour
D+	carries 1.3 quality points per semester hour
D	carries 1.0 quality points per semester hour
D-	carries 0.7 quality points per semester hour

Course grades of F, P, S, NP and U carry no quality points.

The quality point average for a semester is determined by dividing the total quality points earned by the number of hours carried that semester; the cumulative quality point average, by dividing the total quality points accumulated to this point in the student's university career by the total number of hours carried, including courses failed.

Hours earned for courses with P and S grades are not included in figuring the semester or cumulative average; hours failed (grade of F and NP) are.

Students should consult each individual department on its policy for calculating quality point average in the major or minor.

Registration

In addition to participating in the Early Registration period, all students must confirm registration by paying the appropriate tuition and fees, according to the directions issued by the Office of Student Accounts.

In compliance with the regulations of the Board of Trustees of the State University, students who have not

satisfied their financial obligations to the university will not be permitted to register.

Registration must be completed by the end of the first week of classes. A service charge of \$40 is imposed for registrations taking place after the third day of classes.

Readmission and Reinstatement

Students who have withdrawn from the university and wish to return may obtain an application for Readmission/Reinstatement from the Office of Student Affairs. Applications are reviewed by the appropriate academic dean, department chairperson, and the Vice President for Student Affairs or designee.

Reinstatement: Students who return to the university after an absence of one calendar year or less, and who left the university in good academic standing (defined by a GPA of 2.00 or higher, and not on academic probation) are eligible to be reinstated. A student who has been reinstated will keep the major(s), minor(s), and/or concentration he or she had at the time of separation from the university. However, such students may be given a one-semester probationary status within the major program, if the major requires a higher level of academic achievement to be considered "in good standing."

Readmission: Students who have left the university either on probation or because of Academic Dismissal, or who have been absent from the university for more than one calendar year, will need to apply for readmission. The student's application for readmission will be reviewed by the appropriate dean and the department chairperson or program director of the major into which the student seeks readmission.

All students who are returning to the university after at least a one-semester absence will have an opportunity to apply for the Restart Option. Students may apply for this option after completion of at least 12 additional credit hours at Fredonia, with a minimum 2.00 GPA subsequent to their return. This option allows a new grade point average to be established from the time of readmission/reinstatement. The student's academic record from the time of initial enrollment at Fredonia will be reflected on the transcript, but the student will receive credit only for those courses in which the student earned a grade of C- or above (including S grades). In addition, a student electing this option must complete at least 45 credit hours of graded work (excluding pass/fail) at Fredonia prior to graduation. Information on applying for the Restart Option may be obtained at the Fredonia website through the Registrar's Office web page.

It is the student's responsibility to consider and possibly apply for the Restart Option after they have completed at least one additional semester at Fredonia. Students may also wish to discuss this option with their advisor.

Requirements for the Bachelor's Degree

Students are responsible for ensuring that they have met all degree requirements, including general education requirements and requirements for majors, minors and concentrations.

Graduation from the university with the award of the appropriate degree (Bachelor of Arts, Bachelor of Science, Bachelor of Science in Education, Bachelor of Fine Arts, or Bachelor of Music) will be granted to students who fulfill the following requirements.

1. They must earn a minimum of 120 unduplicated credit hours.
2. They must complete all required courses in a particular major program, the General Education requirements of the General Education Program, and sufficient elective credits to make up the total required credit hours, with a minimum cumulative quality point average of 2.00. The student must also have a minimum cumulative quality point average of 2.00 in courses required for his/her major, minor, and concentration. Students should see department sections for any variation from this requirement.
3. Except for certain programs, students pursuing the B.A. or B.S. degree must earn a minimum of 66 hours in credits from disciplines other than their major discipline. For either the B.A. or B.S., students in multi-discipline major programs may not apply more than 45 hours in any one discipline toward credits needed for graduation.
4. All students must take a minimum of 45 semester hours at Fredonia. In order to count towards this requirement, a course must be taught by a SUNY Fredonia faculty member. This shall include courses taught by Fredonia faculty via distance education and up to 15 credits earned through study abroad under the INED subject code.
5. Under ordinary circumstances, students will have 10 consecutive years during which to complete the requirements for the undergraduate degrees in effect at the time they began their studies. If they wish to complete the degree after 10 years, their record of studies will be reviewed by the chairperson of the academic department in which their major falls, and by their academic dean, to determine how much of their earlier credit is still applicable. This rule applies not only to credit earned at Fredonia, but also to credit transferred to Fredonia from other colleges or universities. In addition, after 10 years, students will generally be required to complete the current General Education Program requirements. The CCC Director will review the student's record of studies to determine how much of his/her earlier general education credit is still applicable.

This policy notwithstanding, to the extent that certifying agencies change the requirements for a particular degree within the student's original 10-year period or later, students will be bound by the new requirements of the agency.

6. Candidates in a program leading to certification to teach in New York State must satisfactorily complete all student teaching requirements. No grade less than S gives credit in student teaching.
7. Music students must meet certain accompanying and performance standards, and secondary Instrument competencies. Details on these requirements may be secured from the School of Music.
8. Students must meet all their financial obligations to the university and any or all of its supporting agencies.
9. A student who expects to graduate at a given date must make application through the Registrar's office, not later than the third full week of classes of the final semester of attendance.
10. All students seeking an undergraduate degree must complete 45 credit hours at the upper-level (300 level courses and above). Please see your advisor for additional information regarding courses that will satisfy this requirement.

Notes:

Only 4 credit hours of physical education activities courses (100-level courses) may count toward the total number of credit hours needed for graduation.

Not more than 6 credit hours of arts ensemble courses (e.g., MUS 021-047, DANC 110) may be counted toward the total number of credit hours needed for graduation, unless this rule is overridden by a requirement/limit stipulated by the student's major.

A maximum of 24 credit hours of internship credit may count toward the number of credit hours needed for graduation.

Credit for a course may not be counted more than once, unless the course has been designated by the department as an exception to this rule.

Requirements for a Second Baccalaureate Degree

1. Some students will complete two major programs, but in most cases will only earn one degree. Fredonia students wishing to earn two separate *degrees* concurrently must complete a minimum of 150 semester hours and complete the requirements for the two degrees during the semester in which they have applied for graduation. The two degrees may not be of the same type as registered by the New York State Education Department. For example: a B.A. and a B.S.

would be appropriate, but two B.A. degrees would not, as the latter can be accomplished in the declaration of a second major.

2. Fredonia graduates seeking an additional bachelor's degree after conferral of the first degree must take a minimum of 30 semester hours at the university and must successfully complete the requirements of their additional major or program.
3. New students seeking an additional bachelor's degree must take a minimum of 45 semester hours at Fredonia, to meet the residency requirement, and must successfully complete the requirements of their additional major or program.
4. A minimum of 15 credit hours must be successfully completed in the discipline of the second degree program. Of these 15 credit hours, no more than 3 credit hours may be taken as an independent study or internship. The department chairperson of the proposed degree program will prepare a written contract outlining the required courses, prior to admission to the program.
5. The student must have a minimum cumulative quality point average of 2.00 in all courses required for the second degree and in courses required for the second major or program. Students should see the department sections for any variation from this requirement.
6. Students must meet all their financial obligations to the university and any or all of its supporting agencies.
7. A student who expects to graduate at a given date must make application through the Registrar's office, not later than the third full week of classes of the final semester of attendance.

Significance of Course Numbers

Courses numbered from 100 to 499 are open to undergraduates. In general, courses numbered 100-199 are taken in the freshman year, courses 200-299 in the sophomore year, courses 300-399 in the junior year, and courses 400-499 in the senior year. There are, however, some variations in this placement according to curriculum and other factors.

Courses numbered from 500 to 599 are graduate courses open to qualified seniors for undergraduate credit by permission of the appropriate chairperson and the Graduate Studies Office.

Courses numbered from 600 to 699 are open to graduate level students only.

Student Classification

Students are given class designation according to the number of credit hours successfully completed, as follows:

Freshman	Less than 24 hours
Sophomore	24-56 hours
Junior	57-88 hours
Senior	89+ hours

Student Identity Verification in Online and Distance Education Courses

Online classes at Fredonia are offered through the campus-supported Learning Management System (LMS). Students are required to log in to the system using their campus-assigned student eServices User I.D. account retrieved from the Student Information System Self-Service Portal (Your Connection). The credentials for Your Connection are issued to the student upon applying to the institution. When the institution receives the student's paid admissions deposit the student's eServices User I.D. and password is provisioned. Enrollment information is transferred from the campus Student Information System (SIS) to the LMS to ensure that students have access to all (and only those) courses for which they are enrolled.

Student Identity Verification

Access to the LMS is controlled by the student's eServices user I. D./password, and official communication with the student is through a campus-assigned email account. The student's eServices User I.D. account credentials are retrieved through the Student Information System Self-Service Portal (Your Connection). This interface provides Fredonia students initial access to user-specific information, including User I.D. and password information for use of electronic resources and computing facilities at Fredonia. The login credentials to Your Connection utilize the student's Fredonia I.D. (FID) as the UserID and an assigned PIN for the initial PIN. The student is forced to change the PIN immediately upon logging in for the first time. Students must provide ID when requesting password resets at the ITS Help Desk (or answer a series of challenge questions when making the request by phone). All accounts are generated by Fredonia – students do not self-enroll in any online-access accounts.

Protection of Student Privacy

All processes related to the verification of student identity for online course access are automated, protected by campus information security and privacy policies and procedures, and in compliance with FERPA regulations. Such information security provisions include secure authentications and connections to electronic resources, password integrity guidelines, password complexity and length requirements, self service password resets, required account security questions, and various levels of encryption.

Charges Associated with Identity Verification

There are no charges to students associated with identity verification.

Responsibility for Identity Verification

Information Technology Services is responsible for the consistent application of the automated electronic processes related to student identity verification for online courses.

Student Responsibility for Safeguarding Credentials

Students are responsible for safeguarding their student accounts and for all activity associated with those accounts. Sharing of login credentials with the intention of anyone other than the registered student completing course work is considered a violation of the Academic Integrity Policy and Computer and Network Usage Policy.

Student Schedule Changes

Changes in student class schedules must be made via the Internet within the first two days of the fall or spring semesters, or filed in the Office of the Registrar within the period prescribed by that office.

Note: Course Add/Drop/Withdrawal deadlines published in the university calendar are for full semester courses; deadlines are pro-rated for courses that meet less than a full semester.

Students may drop courses through the first week of the semester. Those courses dropped will be removed from the student's permanent record. After the drop deadline, students must withdraw, except for first semester freshmen, who may drop through the withdrawal deadline. A fee of \$20 will be assessed for each course drop or withdrawal that takes place after the drop deadline published by the Registrar's office.

A fee of \$20 will be assessed for each course added after the established add deadline. Transactions involving a switch from one section of a course to another will be charged one \$20 fee.

Following the drop deadline and ending with the withdrawal date published by the Registrar each semester, a student may withdraw from a course with advisor or department chairperson approval. A grade of "WC" is assigned. The withdrawal grade will be recorded on the student's permanent record but will not be counted in the student's quality point average. A fee of \$20 is assessed for each course withdrawal.

Through the second week of the semester, an instructor of a course may petition the Registrar to have a student dropped from a course. This may be done if the student has not been attending classes, and there are other students wishing to add the course. When an instructor initiates such action, the Registrar will make an effort to contact the affected student, and, if the student wishes to remain in the

course, the student will be allowed to do so, subject to approval by the instructor.

Students will not be permitted to withdraw from courses after the withdrawal deadline published by the Registrar.

Exact dates for the add, drop and withdrawal periods are given in the university calendar and are posted on the Registrar's web pages, and apply to all full-semester courses.

Transcripts of Record

Upon written request from the student, the Registrar will provide an official transcript. Students are urged to request transcripts well before the date they are needed. (For information on changes to transcripts, see Student Appeals of Grades.)

Transfer Credit

Enrolled students must secure prior approval from the chairperson of their major program (or department of advisement), from the chair of their minor, if applicable, and from the Registrar, before credit taken at another college or university will be transferred to the student's record at Fredonia. Students applying for such approval should provide the chairperson and Registrar a copy of the course description from the other college catalog. Transfer Credit Approval forms are available in the Office of the Registrar.

Students who have been required to withdraw from the university may not complete degree requirements by taking courses at another college, unless they are subsequently readmitted and enrolled in courses leading to a degree program at Fredonia.

Credit for non-collegiate sponsored instruction will be awarded upon the recommendation of the appropriate dean, following consultation with department chairpersons as appropriate. Where applicable, the guidelines found in *College Credit Recommendations* (published by the Board of Regents/State Education Department) should be followed.

Credit will be subject to these limitations:

1. It is to be considered transfer credit.
2. It is elective credit.
3. A maximum of 12 credit hours may be counted toward graduation.
4. Consistent with university policy, physical education credit should be limited to 4 credit hours.

Unit of Academic Credit

The State University of New York at Fredonia defines the credit hour in accordance with United States Department of

Education regulations, *USDE Guidelines for Preparing/Reviewing Petitions and Compliance Reports*, January 2012, p. 74.

Credit hour: A credit hour is an amount of work represented in intended learning outcomes and verified by evidence of student achievement that is an institutionally established equivalency that reasonably approximates not less than—

(1) One hour of classroom or direct faculty instruction and a minimum of two hours of out of class student work each week for approximately fifteen weeks for one semester or trimester hour of credit, or ten to twelve weeks for one quarter hour of credit, or the equivalent amount of work over a different amount of time; or

(2) At least an equivalent amount of work as required in paragraph (1) of this definition for other academic activities as established by the institution including laboratory work, internships, practica, studio work, and other academic work leading to the award of credit hours.

Upper Level Requirement

All students seeking an undergraduate degree must complete 45 credit hours at the upper-level (300 level courses and above). Please see your advisor for additional information regarding courses that will satisfy this requirement.

Withdrawal and Honorable Dismissal

A student who finds it necessary to leave the university before the end of a semester must withdraw officially through the Office of Student Affairs. Students may withdraw for any reason up to the period of three weeks prior to the end of the semester. **STUDENTS WILL BE PERMITTED TO WITHDRAW DURING THE FINAL THREE WEEKS OF THE SEMESTER ONLY DUE TO ILLNESS OR OTHER COGENT REASONS AS DETERMINED BY THE OFFICE OF STUDENT AFFAIRS.** Failure to follow the required procedure may prejudice the right to an honorable dismissal and to any refunds. Those enrolled in any federal program of Veterans benefits must also notify the Veterans Affairs Office (154 McGinnies Hall) of their withdrawal.

A student withdrawing during a term may be eligible for certain refunds. Please check the *Admissions & Financial Aid* (p. 576) section of the catalog for more information.

GRADUATE STUDIES AND STUDENT SERVICES

Office of Graduate Studies
E230A Thompson Hall
(716) 673-3808
Email: graduate.studies@fredonia.edu
Website: <http://home.fredonia.edu/gradstudies>

The State University of New York at Fredonia offers programs of graduate study leading to the degrees of Master of Arts, Master of Science, Master of Music, Master of Science in Education, Master of Arts in Teaching, and Advanced Certificates in School Building Leadership and TESOL (Teaching English to Speakers of Other Languages). Professional certification to teach in the public schools of New York may be secured concurrently with the master's degree if the student follows a program designed for this purpose. Graduate instruction at Fredonia is offered during the academic year, and in several special sessions (i.e. J-Term, May Term, Summer). Many courses are scheduled to meet in the late afternoons and evenings to accommodate the employed student.

Each graduate student will be assigned a graduate advisor who consults with him/her regarding programmatic, professional, and scholarly development. Within the framework of all programs, the student pursues graduate study consistent with his/her previous preparation and directed toward his/her own academic and professional objectives. Degree programs in Interdisciplinary Studies are individually designed by the student, submitted to individual departments for review, and approved by the Associate Provost for Graduate Studies.

Graduate Mission Statement

Graduate Studies at Fredonia supports the overall mission of our campus by offering breadth and depth of learning to students at the post-baccalaureate level through disciplinary, interdisciplinary and professional programs that will benefit the students and enrich the communities in which they live and work. Graduate programs foster scholarly inquiry, professional research, ethical practice, artistic performance, and practical innovation, encouraging students and faculty to discover lifelong connections between their intellectual and creative aspirations and civic and global opportunities for engagement.

Vision Statement

Fredonia prepares graduate students to be engaged and informed citizens of the region and world, through discipline-specific coursework, interdisciplinary collaboration, experiential research and creative activity. The university establishes opportunities for graduate students to connect their academic work and professional aspirations in meaningful ways by networking

with faculty, professionals, alumni and peers. The faculty and professional staff help our graduate students strive to meet their highest goals by challenging them to research, write, publish, innovate and teach, becoming lifelong contributors to their communities.

Governance and Policy

The Graduate Council

The Graduate Council is a standing committee of the University Senate charged with oversight of the academic integrity of graduate studies at Fredonia. In this capacity, Graduate Council supports the development of master's degrees and advanced certificate programs that provide a sound education for graduate students, lead to advanced qualification in the professions and disciplines, and generate new knowledge through research and publications by its faculty and students. The committee's primary functions are: to monitor academic standards; to approve new graduate program and course creation and revisions; to develop standards for admission; to oversee matriculation and graduation standards; and to recommend new and/or revised graduate programs and policies to the Associate Provost for Graduate Studies, Professional Development and Sponsored Programs. An annual report of all actions taken and policies recommended is sent to the Associate Provost for Graduate Studies and the Executive Committee of the University Senate.

For information on Council membership, terms, and other information, please refer to the Fredonia University Senate webpage and scroll to Graduate Council under 'standing committees.'

The Faculty

As a result of their research and scholarly attainments in their own fields of specialization, Fredonia faculty members have demonstrated their competence to offer graduate instruction. Since most classes are small, students are often able to work closely with their instructors and may join them in research projects. Information about the research interests of faculty members is available from department chairpersons, directors, and deans.

Fredonia's graduate policies develop from several levels of authority and responsibility: local, regional and national. Campus governance legislates academic policies through the University Senate and its committees under the guidance and leadership of the Provost and Vice President for Academic Affairs. Fredonia's master's programs are registered and certified by the State of New York. On a national level, accreditation bodies supervise the curriculum and quality of programs by setting standards

and benchmarks. Accredited programs are listed at the beginning of the online University Catalog.

Admission Requirements

General Admission Information

Admission to graduate study is based on completion of the baccalaureate or equivalent degree at an accredited institution with an appropriate major and depth of undergraduate preparation. Some departments may accept students who have successfully earned a degree from an accredited institution with a different major, but this decision is made on an individual basis during the departmental review of the full application and all transcripts. Applicants with majors unrelated to their desired graduate degree programs are advised to complete at least 18 credit hours in the major for which they will apply. Interested persons should contact the appropriate department for questions about appropriate undergraduate preparation.

Students who apply for admission to programs leading to professional certification to teach in New York public schools must submit proof of appropriate initial certification to teach in New York public schools. The TESOL and M.A.T. in Adolescence Science Education (all tracks) programs do not require initial certification to teach in New York public schools; interested persons should see the appropriate program sections for details. Students with a bachelor's degree or equivalent who do not hold initial certification to teach in New York public schools may complete a second baccalaureate degree program to complete the requirement for admission to programs leading to professional certification to teach in New York public schools. The program generally takes five (5) full-time semesters to complete. Interested persons should visit the Graduate Studies website for more details.

International applicants are eligible to apply for admission to all programs, including those that lead to professional certification to teach in New York public schools. International applicants should note, however, that they will not be eligible for certification to teach in New York public schools. For more information, interested persons should contact that International Education Center at (716) 673-3451 or email international.education@fredonia.edu.

All students who wish to take graduate courses and/or pursue an advanced degree or certificate must complete the application process. The online application allows applicants to work on and save their applications over several sessions and is available 24 hours a day, seven (7) days a week. The application may be accessed from the Graduate Studies home page (<http://www.fredonia.edu/gradstudies>) or directly, by typing <https://app.applyyourself.com/?id=sunyfr-g> into the address bar of any web browser. Applications may be submitted in print format by downloading the appropriate

documents from the Graduate Studies website or by calling the office at (716) 673-3808 or email graduate.studies@fredonia.edu.

International Graduate Application Requirements

In addition to the general application requirements (p. 270), international applicants are required to submit additional materials in order to complete immigration paperwork necessary to study in the United States.

International applicants must submit the following additional materials, available in the downloadable forms section of the online application and at the International Student Home section of the Graduate Studies website (<http://www.fredonia.edu/gradstudies/prospective/international.asp>):

- -FSA-3 form; English Proficiency Report: International students must show proof of English competency. Applicants whose native language is English are exempt.
- -English Proficiency Test Score Report: International applicants are required to show proficiency in the English language sufficient enough to successfully participate in graduate study. Proof of proficiency may be shown by achieving the following test scores:

TOEFL: 78 IELTS: 6.0 with no subsection below 5.5 iTEP: 3.5

Fredonia's school code for reporting the TOEFL, TOEIC, and IELTS scores electronically is 2539.

-FSA-4 form: Financial Statement: All international applicants must submit evidence of full financial support for all expenses at Fredonia as a condition of being issued immigration documents for F-1 or J-1 status (i.e., the Certificate of Eligibility, form I-20AB or IAP-66). The FSA-4 form must be signed by both the applicant and the applicant's financial sponsor. The submitted form must contain an original signature.

-Proof of financial support: Applicants must submit an original bank statement from the financial sponsor verifying the available funds. Only original financial documentation with original signatures and seals will be accepted.

While an admission decision can be made without the financial documentation, the I-20 or DS-2019 forms cannot be issued until all documents are received.

Applicants may upload the FSA-3 form to the online application, but he/she must send the FSA-4 form and supporting documentation directly to the Fredonia Graduate Studies Office at the following address:
Graduate Studies Office
E230A Thompson Hall
State University of New York at Fredonia
Fredonia, NY 14063

(716) 673-3808
(716) 673-3712 (fax)

Persons who have further questions about these requirements should contact the Fredonia International Education Center at (716) 673-3451, or send the office an inquiry from the International Education Center's website at <http://www.fredonia.edu/internationaleducation/>.

- Individual departments/programs may have additional admissions requirements that must be met. Students should check the Graduate Studies website, degree program pages in this online University Catalog, the online application, and/or departmental websites.

Non-degree Study

Reasons for applying to become a non-matriculated (non-degree) student vary, but usually fall into the following categories:

- **Personal or professional development:** Those who have earned a master's degree or higher at Fredonia or elsewhere are welcome to apply for non-degree graduate study for the purpose of personal or professional development. A maximum of 9 credit hours is allowed, but may be waived with permission of the Associate Provost for Graduate Studies by completing the form located at the web address: <http://www.fredonia.edu/gradstudies/current/progress.asp>.
- **Pre-graduate preparation:** Students who have earned a bachelor's degree and need to take graduate-level course work in order to bolster a weak undergraduate GPA or to prove capability for graduate-level work may apply for non-degree study and, if approved, take a maximum of 9 credit hours.
- **Visiting graduate students:** Graduate students who attend other schools and are interested in taking course work at Fredonia may apply for non-degree graduate study and, if approved, take a maximum of 9 credit hours.

To help maintain the quality of Fredonia's graduate programs and to ensure appropriate enrollment capacity, the university asks that applicants explain reasons for requesting non-matriculated admission and indicate from which department(s) desired classes are sought.

A maximum of 9 credit hours (6 credit hours of education course work) taken as a non-degree student is allowed. The credits may later be applied to a graduate degree program at Fredonia upon the student's request.

As a general rule, students taking graduate courses without pursuing a degree who decide to apply for a degree program must have a grade point average of at least 3.0 at the time they apply. Under unusual circumstances, chairpersons may accept students with a lower GPA into a

degree program, but in that case, the students enter with conditional status, with one semester in which to improve their records.

Application Deadlines

All applications must be accompanied by a non-refundable application fee of \$75. The application fee is assessed when an applicant submits her/his application online, and applicants may choose to pay online using a credit (MasterCard or Visa) or debit card, or may bring or send to the Graduate Studies Office a check or money order made out to Fredonia. Applicants may also call or come in to the Graduate Studies Office to make a credit (MasterCard or Visa) or debit card payment.

Completed applications must be submitted to the Graduate Studies Office as follows:

Summer/Fall Admission

The application deadline is April 1. ALL application materials must be received by this date to avoid a late fee. Applications will be accepted after April 1 and will incur an additional \$25 late fee (\$100 total). Late applications for fall admission to degree study will be accepted until August 10. Applications for non-degree study will be accepted until August 20. Applicants are advised to keep in mind that many department reviewers are off campus during the summer months; early application submission will facilitate a shorter waiting period.

Fall Admission: Speech-Language Pathology

The Speech-Language Pathology degree program is restricted to fall admission. The application deadline is February 1. ALL application materials must be received by this date and no late applications will be accepted.

J-Term/Spring Admission

The application deadline is November 1. ALL application materials must be received by this date to avoid a late fee. Applications will be accepted after November 1 and will incur an additional \$25 late fee (\$100 total). Late applications for spring admission to degree study will be accepted until January 10. Applications for non-degree study will be accepted until January 20. Applicants are advised to keep in mind that many department reviewers are off campus during the semester break; early application submission will facilitate a shorter waiting period.

J-Term Only/Summer Only

Visiting graduate students and students wishing to participate in J-Term or Summer graduate course work for personal or professional development are welcome to complete the online application, which may be accessed from the Graduate Studies home page (<http://www.fredonia.edu/gradstudies>) or directly, by typing <https://app.applyyourself.com/?id=sunyfr-g> into the address bar of any web browser. Applications may be submitted in print format by downloading the appropriate documents from the Graduate Studies website or by calling

the office at (716) 673-3808. Applications will be accepted through close of business Friday on the last week before classes start, and are not subject to a late fee.

Recommendation letters for non-degree study are not required. Completion of a baccalaureate degree at an accredited four-year institution is required. Applicants will be contacted with registration instructions upon submission of the application.

At the discretion of the Graduate Studies Office and based on extenuating circumstances, a student whose application for degree study is incomplete may be offered non-matriculated admission until a final departmental admission decision has been reached. Non-degree students are permitted to take a maximum of 9 credit hours total and are not required to submit recommendation letters. Non-matriculated admission does not guarantee later acceptance into a degree program.

Application Requirements

In addition to completion of a baccalaureate or equivalent degree at an accredited institution, the following materials are required for an applicant to be considered for graduate study at Fredonia:

- The Graduate Application must be submitted online or hard copies of application materials must be mailed or delivered in person to the Graduate Studies Office.
- A non-refundable application fee of \$75 must accompany applications submitted by published deadlines. Late applications incur a \$25 late fee for a total fee of \$100. The application fee may be paid by credit or debit card, check, or money order (made out to the State University of New York at Fredonia). Payment may be submitted with the online application or sent to the Graduate Studies Office.
- Applicants must submit a Statement of Intent, a one-page (minimum) essay explaining one's academic/professional/personal goals and how Fredonia is expected to help meet these goals. A strong statement of intent will also showcase an applicant's talents and experiences that make him/her an attractive candidate for graduate study at Fredonia. It is always a good idea for a trusted colleague, friend, or family member to proofread the statement of intent. A high-quality, grammatically correct statement is expected.
- A current résumé must accompany the graduate application. Applicants who wish to be considered for graduate assistantships must provide contact information for three (3) professional references. Additional materials may be required for those who wish to be considered for graduate assistantships; interested persons should see the graduate assistantship section of the Graduate Studies website for more information.

- A minimum of two current letters of recommendation are required. Letters must have been written during the one year prior to application submission (six months is preferred). Letters must be written by individuals who can attest to the applicant's qualifications for advanced study. The online recommendation center is the easiest and most secure way to solicit recommendations. Each recommendation must include both a scholarly criteria rating and a narrative evaluation. If the applicant does not wish to take advantage of the online recommendation process, recommendation letter forms (which must accompany all paper recommendation letters) are available in the downloadable forms section of the online application, at the Graduate Studies website, and in the Graduate Studies Office. For degree programs that lead to recommendation for teaching certification, one letter may be submitted by a teaching supervisor. If the applicant has been out of school for several years, letters from work supervisors may be acceptable. Recommendation letters for non-degree study are not required.
- Submission of ALL official transcripts covering prior graduate as well as all undergraduate preparation from all institutions attended (except Fredonia) is required. This includes college credit that was accepted for transfer to a student's main degree granting institution (i.e. community college credit). Applicants must submit transcripts even if he/she submitted them as part of his/her undergraduate application process to Fredonia. There are no exceptions. Applicants may log on to their application account at any time to see if their transcripts have been received by the Graduate Studies Office. Official transcripts are those which arrive at the Fredonia Graduate Studies Office in a sealed envelope with the institution registrar's signature or seal across the flap. Applicants may submit transcripts directly as long as they are submitted in a sealed envelope with the institution registrar's signature or seal across the flap.

For students in programs leading to professional certification to teach in the public schools of New York, proof of the appropriate initial or provisional certification is required.

An applicant will find information about the status of his/her application by logging on to his/her online application account. Applicants will be able to see when a supporting document (i.e. transcripts, international paperwork) has been received by the Graduate Studies Office, the status of their online and offline recommendations, and the stage of their application review. The application review process generally takes four to six weeks. At the final stage of the review process, applicants will be able to view their admission decision online and will receive official decision letters from the Graduate Studies Office.

Graduate Tuition and Fees

Fees and rates listed below represent current charges for matriculated students attending fall and spring semesters. All charges are subject to change. Interested persons should refer to the Student Accounts web pages at <http://www.fredonia.edu/admin/studentaccounts> for updated charges.

Graduate Degree Tuition and Fees

Graduate students are considered full-time when they take nine (9) credit hours per semester, or six (6) credit hours per semester if they hold a teaching assistantship. Certain types of financial aid (e.g. the TEACH grant) may have different credit hour requirements for full time status designation. Students who plan to take student loans should consult individually with a financial aid counselor to ensure optimal financial aid distribution.

Graduate tuition is charged by credit; tuition is capped at 12 credit hours.

12+ credit hours per semester:

*New York State Resident Tuition	\$5,435.00
Out-of-State Resident Tuition	\$11,105.00
Fees	\$809.50

Fewer than 12 credit hours per semester, charged per credit hour:

*New York State Resident Tuition	\$453.00
Out-of-State Resident Tuition	\$925.00
Fees	\$67.30

All rates and fees are subject to change. Persons should see the Student Accounts web page for the current university charges at: www.fredonia.edu/admin/studentaccounts.

* State University policy requires that a student be a resident of New York State for one year prior to registration in order to qualify for in-state resident tuition charges. Students should contact the Student Accounts Office for complete information governing residency requirements.

Note: Non-matriculated graduate students are charged tuition according to the level of the course. During the fall and spring semesters only, students taking 12 or more hours will be charged according to the course level combination with a minimum charge equal to the full-time undergraduate rate and the maximum capped at the full-time graduate rate, determined also by their residency status.

College Fee

This is a uniform, mandatory charge for all students, established by the State University of New York.

Student Services and Programs Charge

The Student Services and Programs Charge combines all university fees for student services, programs and activities in one composite amount for all students. As a result, there are no general university fees and no additional mandatory fees once a student arrives on campus (although some departments may assess individual departmental fees). The Student Services and Programs Charge includes support for the following programs and activities:

Advanced Technologies for Classroom Use
AIGA/Art Forum
Alumni Affairs
Bicycle Use on Fredonia Campus
Blue Devil Fitness Center
Campus Community Bus
Campus Internet Access
Campus Microcomputer Labs
Campus Fine Arts
Fredonia Ticket Office
Counseling Center
Coupons for Discounts at Area Merchants
Cross Country Skis at College Lodge
Family Weekend Events
Fredonia College Jazz Workshop
Fredonia Radio Systems
Intercollegiate Athletic Sports Program
Intramural and Recreational Program
Legal Services
Homecoming Weekend Events
Microcomputer Support
On-Campus Student Employment
On-site Medical Care
Health Education Programs
Medical Laboratory Work
Over-the-Counter Medications
Prescription Medications
Wellness Checkup
Orientation Program
Parking Services
Parking Shuttle Service
Student Government
Student Organizations and Clubs
Student Scholarships
The Leader (university newspaper)
University Special Events
University Transcripts
Upper Class Buddy Program
Van Service to Hospital/Clinic
WNYF-TV

The Student Services and Programs Charge waiver policy can be found at www.fredonia.edu/admin/policy.

Miscellaneous Fees, Fines or Deposits

All of the major university expenses have been outlined. However, individual courses may require payment of a lab fee that will be reflected on the student's semester e-Bill. Students should consult the Course Offerings online for specific courses and charges. Students majoring in Music Education, Music Applied Studies, Theory of Music, Performance, Music Composition, Sound Recording Technology, Music Therapy, Music History/Literature and Musical Theatre (B.F.A.), are assessed a \$250 Music Fee each semester. Students enrolled in music courses that are not majoring in the above, will be assessed a \$50 non-music major course fee.

In addition, the State University authorizes charges for such items as returned checks (\$20), late registration (\$40), First-Year orientation (\$150), Transfer orientation (\$80), late payment/administrative (\$30), and drop/add fees (\$20). Fines are authorized for parking violations, the late return or loss of library materials, and failure to return physical education or infirmary equipment. All fees are subject to change.

State University Refund Policy

Tuition. A student withdrawing from the university or individual courses during the fall or spring semester is eligible for the following tuition refunds:

- 100 percent for withdrawal during the first week of classes
- 70 percent for withdrawal during the second week of classes
- 50 percent for withdrawal during the third week of classes
- 30 percent for withdrawal during the fourth week of classes
- 0 percent for withdrawal beyond the fourth week of classes

A full refund of tuition may be granted if a student must withdraw for reasons beyond his/her control with the approval of the University President or his/her designee.

The *College Fee* is not refundable after registration.

Refunds for the *Student Services and Programs Charge* are granted based on the week of withdrawal following the same schedule listed above for tuition.

Please note that Thanksgiving and Spring Break do not count as a week during the semester in the Title IV aid calculation.

As a rule, students should always check with the Financial Aid office when considering a withdrawal from courses or the university.

Refund/Repayment of Financial Aid Due to Discontinuance of Study

When a student has received Title IV federal funds (such as: Subsidized/Unsubsidized Stafford loans, Perkins Loan, PLUS Loan, PELL grant, SEOG grant, TEACH grant) and discontinues study prior to the completion of the semester for which the Title IV funds were disbursed, a Title IV repayment calculation must be completed.

A student's charges will be reduced based on the refund policy. The purpose of the repayment calculation is to determine the amount of Title IV federal aid the student is eligible for and insure that the student has not been over awarded federal financial aid due to the student's withdrawal. The initial step in the calculation is to identify all of the Title IV federal aid that the student was awarded in the semester that the student withdrew. If a student is subject to the 30-day delayed disbursement, as a first time borrower, and withdraws during the first 30 days, the student is not eligible for the Stafford Loan, and it will not be included in the calculation.

The next step is to determine the number of days the student was enrolled for the semester and divide that by the total number of days in the semester to calculate the percentage of Title IV federal aid earned by the student. If this percentage is greater than 60 percent, the student is eligible for 100 percent of their Title IV federal funds. (Note: Any break of five or more consecutive days is excluded from the calculation. For example: Thanksgiving and Spring Break would be excluded.) If the percentage of Title IV federal aid earned is less than or equal to 60 percent, the percentage is then multiplied by the amount of Title IV federal aid the student has been awarded for the semester. This determines the amount of Title IV federal aid that the student is eligible for and can be applied toward their charges for the semester they withdrew.

A comparison is done between the amount of Title IV aid that the student is eligible for and the amount that has already been disbursed into the account. If the disbursed amount is less than the eligible amount, any additional funds up to the eligible amount may be disbursed to the student's account and then to the student if any excess funds are available. If loan proceeds are to be utilized as a late disbursement, the student (or parent for a PLUS Loan) will be notified. If the disbursed amount is greater than the eligible amount, the student has been over awarded due to their discontinuance of study. When a student has been over awarded, the amount of earned aid is subtracted from the amount of disbursed aid to determine the amount that the student is not eligible for. Any Title IV federal aid that the student is not eligible for must be returned to the appropriate federal program. Title IV federal aid is returned in the following order: Unsubsidized Stafford Loan, Subsidized Stafford Loan, Perkins Loan, PLUS Loan, PELL grant, Federal SEOG grant, TEACH grant and other Title IV program aid excluding Federal Work-Study.

For additional information regarding the repayment of Title IV federal aid, persons should contact the Student Accounts Office at (716) 673-3236, 306 Maytum Hall, or email student.accounts@fredonia.edu.

Graduate Diversity Fellowship Program

Pursuant to appropriations contained within the New York State Budget, the State University of New York offers graduate fellowships to students who have been admitted to graduate or professional study and who will contribute to the diversity of the student body in the graduate or professional program in which enrollment is sought. In awarding scholarships, programs may give consideration to students who are of a race or ethnicity that is under-represented in its graduate and professional programs but may not make awards solely on that basis.

To be eligible, applicants must be (1) U.S. citizens or have permanent resident status, and (2) must demonstrate how they will contribute to the diversity of the student body in the program for which they are applying, including by having overcome a disadvantage or other impediment to success in higher education. Economic disadvantage, although not a requirement, may be the basis for eligibility under this category. Membership in a racial/ethnic group that is under-represented in the graduate or professional program involved may serve as a plus factor in making awards, but may not form the sole basis of such an award and every student applicant shall be evaluated on his or her own merits.

A maximum \$5,000 per academic year may be awarded to a recipient enrolled in at least 6 credit hours per semester. Awards may be used for course work completed during summer or other special sessions at the discretion of the Graduate Studies Office.

Application instructions and further details may be found at <http://www.fredonia.edu/gradstudies/prospective/funding.asp>. Interested applicants may also call the Graduate Studies Office at (716) 673-3808 or email graduate.studies@fredonia.edu.

Advisement and Registration

A faculty advisor is assigned to each accepted graduate student according to his/her program of study. Students should consult their advisors as soon as possible and prior to the initial registration to ensure appropriate enrollment. Students should meet with their advisors regularly thereafter to discuss the progress of his/her studies, and the advisor should approve the student's overall program. Registration instructions will be available to students online and as a part of their acceptance information. Students must register during the time periods listed in the university calendar

(<https://home.fredonia.edu/registrar/calendar>) to avoid a late registration fee.

Graduate students must maintain continuous enrollment status to be eligible for registration in subsequent semesters. Continuous enrollment status is defined as either currently registered for course work or on approved academic leave. Graduate students who fail to maintain continuous enrollment must apply for reinstatement to their degree program.

Full and Part-time Status

Fredonia generally recommends a full-time academic course load of 9 graduate-level credit hours per semester. Course load varies by degree program. Graduate assistants may be categorized as full-time students with a course load of 6 credit hours per semester. Some state and federal financial aid programs require recipients to register for a minimum of 12 credit hours per semester (or a minimum of 6 credit hours per semester if recipient is a graduate assistant) to maintain funding. Students should contact the Financial Aid Office for details and personalized counseling.

Academic Credit and Course Load

The unit of academic credit is the semester hour, which normally represents one hour of lecture or recitation each week per semester. Seminars, research courses, and laboratories bear academic credit appropriate to the work expected of the student in the course.

The maximum course load for a full-time graduate student is 15 credit hours per semester during the academic year, 6 credit hours in each summer session, and 4 credit hours during J-Term. Students employed full-time may not carry more than 6 credit hours per semester during the academic year. Graduate assistants normally carry a course load of 6 to 9 semester hours during the fall and spring. These limits may be waived in consultation with the student's advisor, and permission of the department chair, Dean of the College of Education (for education programs only), and the Associate Provost for Graduate Studies. The form is available on the Graduate Studies website: <http://www.fredonia.edu/gradstudies/current/progress.asp#Forms>.

Upon recommendation of the chairperson of a student's major department and with the approval of the Associate Provost for Graduate Studies, work experience directly related to the student's academic program may be given academic credit via the appropriate departmental, school, or college Independent Study course number. Decisions about such credit are subject to the requirements for independent study in the department and include approval prior to the work experience except in unusual circumstances. In all cases, graduate students seeking approval for prior experience are asked to submit documentation of their experience, including letters of

support from supervisors and additional evidence of the applicability of the experience to the standards, content, and breadth of the graduate program. A maximum of 6 credit hours may be awarded and applied toward fulfillment of graduate degree program requirements.

Graduate Course Numbers

Graduate courses at Fredonia are numbered 500-599 and 600-699. Under exceptional circumstances, a maximum of 6 credit hours of 300- or 400-level courses outside the major area of specialization may be included. The recommendation of the faculty advisor and the approval of the department chairperson, Dean of the College of Education (education majors only), and the Associate Provost for Graduate Studies is required prior to the student's enrollment in the course. Undergraduate courses taken in the major area of specialization will not receive graduate credit.

Courses numbered 600-699 are advanced graduate courses open to graduate students only. Qualified undergraduates who have completed 90 credit hours with a minimum cumulative GPA of 3.0 may be allowed to enroll in graduate courses numbered 500-599.

With the approval of the Associate Provost for Graduate Studies, qualified undergraduates may apply to enroll in a limited number of 500-level graduate courses, either for credit to be applied to their undergraduate programs or toward a Fredonia graduate program they enter at a later time. In the latter case, a student will be charged the difference between undergraduate and graduate tuition when the credit is applied to the graduate transcript.

Permission of the chairperson of the department offering the course and approval of the Associate Provost for Graduate Studies Office is required. The form is available at the following web address:
<http://www.fredonia.edu/gradstudies/current/progress.asp#Forms>.

Courses may not be used for both undergraduate and graduate credit. Undergraduates are not allowed to enroll in courses numbered above 599.

Schedule Changes

Changes in student class schedules generally require the completion of a drop/add form, available in the Registrar's Office, and the signature(s) of the instructor(s) of the affected courses. Forms must be filed in the Office of the Registrar by published deadlines (<http://www.fredonia.edu/registrar/calendar.asp>). Dropped courses will be removed from the student's permanent record. A fee will be assessed for any course adjustment made after the published deadline.

Course Withdrawal

A student who wishes to withdraw from a course may do so starting in the second week of the semester until the seventh full week of the semester. A 'WC' grade will be entered for the course. Course withdrawal requires the approval of the student's advisor or major department chairperson. The withdrawal grade will be recorded on the student's permanent record but will not be counted in the student's quality point average.

Exact dates for the drop/withdrawal period apply to all full-semester courses and are always available online (<http://www.fredonia.edu/registrar/calendar.asp>).

Academic Leave of Absence

The purpose of the Academic Leave policy is to ensure quality by providing continuity in the student's degree program and to provide a mechanism for obtaining appropriate academic leave. Academic Leave is defined as an appropriate, approved period of non-enrollment during a graduate student's degree program. Academic Leave will only be considered after a student has completed a minimum of one semester of graduate course work.

Students must apply to their academic departments for a one- or two-semester academic leave. If a student does not obtain permission from the department for an academic leave, he/she will be deemed inactive at the end of one non-enrolled semester and will be required to apply for reinstatement with no guarantee that he/she will be accepted back into the program. Students approved for an academic leave will not be required to apply for reinstatement.

The Associate Provost for Graduate Studies will be the final signatory for a student's request for academic leave. The Academic Leave form may be found at the following web address:
<http://www.fredonia.edu/gradstudies/current/progress.asp#Forms>.

Withdrawal from Program

The university reserves the right to require any student who does not maintain minimum academic standards, or who is not in good academic standing, to withdraw. Graduate students who find it necessary to leave the university before the end of a semester must officially withdraw from Fredonia through the Graduate Studies Office using the form available at the following link: <http://www.fredonia.edu/studentaffairs/withdrawal.asp>.

Students may withdraw for any reason up to a period of three weeks prior to the end of the semester. Students will be permitted to withdraw during the final three weeks of the semester only due to illness or other appropriate reasons as determined by the Office of Student Affairs. Failure to follow the required procedure may prejudice the

right to an honorable dismissal and jeopardize any refunds. As a rule, all students should check with the Office of Financial Aid prior to withdrawing from the University. Those enrolled in any federal veterans' benefits program must also notify the Veterans Affairs Office (Nixon Hall) of their withdrawal.

Students who withdraw during a semester may be eligible for certain refunds. For more information, students should contact the Student Accounts office at (716) 673-3236 or email business@fredonia.edu.

Reinstatement

Students who fail to maintain continuous enrollment status and have not been granted approval to take an academic leave will be considered inactive at the end of one non-enrolled semester and must apply for reinstatement to their degree program. Students who do not enroll in their initial admission semester and did not indicate on their enrollment confirmation that they intended to defer admission will be considered inactive at the end of one non-enrolled semester and must apply for reinstatement to their degree program.

Reinstatement applications are available at the following web address:
<http://www.fredonia.edu/gradstudies/current/progress.asp#Forms>.

Graduate Degree Requirements

1. **Curricular requirements:** Completion of published curricular requirements for the degree with a minimum cumulative quality point average of 3.00 in all graduate work completed at Fredonia. A student's graduate degree requirements (required course work, total credit hours, etc.) are those in effect at the time the student is admitted to the degree program.
2. **Time limit requirement:** Completion of all degree requirements within a five-year period beginning in the admission semester, unless an extension has been recommended by the chairperson of the major department, and has been approved by the Dean of the College of Education (education majors only) and the Associate Provost for Graduate Studies. A graduate student is expected to make steady and reasonable progress, as determined by the department in which he/she is enrolled, toward the completion of his/her degree requirements. The Academic Standings process will identify students who are not making reasonably steady progress, and they may receive warning letters, be placed on academic probation, and/or be required to withdraw from their programs.
3. **Capstone Research Experience:** All degree programs require a thesis, comprehensive examination, capstone project or portfolio, or other evidence of the student's advanced mastery of his/her field. Some degree programs may require the formation of a graduate committee in the student's major and related fields of study for the purpose of assessing the capstone project. Committee members are often appointed by the chairperson of the major department.
- Information concerning the capstone requirements for individual programs is listed in each department section. Students must familiarize themselves with the guidelines of the department, school, college, and/or university. It is with the student's responsibility to know and meet the requirements of their individual majors. Students should consult their faculty advisor for information about their final project.
- Each master's thesis must be prepared in accordance with a set of uniform instructions and time limits available in the student's department or on the Graduate Studies website at <http://home.fredonia.edu/gradstudies/preparing-graduation#Capstone>. In general, signature-ready thesis work is due in the student's department three weeks before the desired graduation date (approximately April 20 for May graduation). Department deadlines may vary.
4. **Thesis:** A copy of each thesis must be reviewed in advance and approved by the Associate Provost for Graduate Studies before the graduate student is approved for graduation. If changes are required, a student will need to make them before degree conferral. Graduate students beginning work on thesis research or thesis writing should obtain the university-wide thesis guidelines well in advance.
5. **Fulfillment of Residence requirement:** A candidate for the master's degree must have completed at least 21 semester hours of graduate work in residence, i.e. in courses offered by Fredonia rather than credits transferred from other institutions. Students should refer to Residence Credit below.
6. **Additional Master's Degree (enrollment in Master's program beyond the first earned Master's Degree):** If a student already has a Master's Degree and wants to enroll in another program, it should be noted that the minimum requirement for a graduate degree at Fredonia is 30 credit hours. See individual program information for the exact number of credits required. Credit from previous degrees may not be applied toward the new degree program. In addition, the credit hours for courses that are waived by departmental advisors must be obtained by taking approved substitute courses of equal credit so that the minimum credit hours required for degree completion are met.
7. **Recommendation of the department:** The department in which the student is majoring will forward a recommendation form to the Graduate Studies Office upon student completion of all requirements and thesis.
8. **Application for degree:** The application for the graduate degree must be filled out by the degree

candidate and filed with the Registrar's Office at least three months prior to the expected date of completion of all degree requirements.

Completion of a Degree Program

The application for graduation (Application for Degree) must be filed with the Office of the Registrar three months before the expected completion of the degree. Students should refer to the academic calendar for published deadlines (<http://www.fredonia.edu/registrar/calendar.asp>).

Upon receipt of the student's final capstone project, his/her department will forward the Recommendation for Award of Master's Degree form to the Associate Vice President for Graduate Studies and Research, which initiates the final audit and conferral of degree. Degrees are awarded in May, August, and December.

The potential degree candidate list for May is prepared in March. Students and their advisors hold joint responsibility to ensure that the student's name has been included on the list. A student who completes his/her degree work in December will obtain his/her formal degree conferral at the following May Commencement.

Residency Requirement

Students accepted in graduate degree programs must complete at least 21 semester hours of residence credit. Residence credit is defined as credit granted by Fredonia for course work taught by Fredonia faculty or other staff approved by the appropriate university officials, whether on or off campus.

Transfer Credit

A student may transfer a maximum of 9 credit hours of graduate course work completed at another institution. Credit will be accepted for course work that forms a related part of the student's total Fredonia graduate program. Students are advised to secure prior approval before registering for credit courses at other colleges or universities; credit may also be awarded for course work completed without prior approval.

The request for transfer credit approval form is available at the following link:

<http://www.fredonia.edu/gradstudies/current/progress.asp#Forms>. The form must include the course catalog number and title, and be accompanied by a description of each course proposed for transfer credit. Credit toward the degree will be given only for courses in which the student earns grades of A or B. Transfer credit will not be included in the computation of the graduate student's average. Courses transferred into a degree program cannot be more than five years old by the time the degree requirements are completed, unless an extension has been granted by the Associate Provost for Graduate Studies.

Graduate Academic Policies

These policy statements differ somewhat from the general academic policies of the university. Students with policy questions should set up an appointment to visit with the Associate Provost for Graduate Studies.

Grading System

All courses taken for graduate credit are evaluated by the letter grades A, A-, B+, B, B-, C+, C, C-, D, F (failure), S (satisfactory), U (unsatisfactory), I (incomplete), and X (continuing enrollment). D and F grades do not carry credit toward a master's degree but are included in the cumulative average. The S grade (satisfactory) is reserved for courses that are not readily evaluated by the usual letter designations. Any course in which S or U (unsatisfactory) grades are used would be so designated by the department when offered. S grades carry no quality points and hours earned with an S grade are not included in figuring the semester or cumulative average. Hours failed with a U grade are added into the total hours for the grade point average.

A maximum of 6 credit hours with grades of S may apply to the requirements for the master's degree. Each semester hour of A carries four quality points; B, three quality points; C, two quality points; and D, one quality point. Incompletes must be removed before the end of the succeeding semester; otherwise the I automatically will become an F on the permanent record. An X grade that has not been converted to a credit-bearing grade by the end of the second regular semester after the semester for which the X was given will automatically change to an F grade. The responsibility for finishing incomplete work rests with the student.

Graduate Deferral of Acceptance

Accepted students may defer acceptance for up to one academic year – except in certain programs structured according to a summer-intensive schedule (consult with the program coordinator early on). An approved deferral carries the stipulation that any new admission and/or program requirements, as deemed necessary by the program coordinator, chair, and dean that may be implemented during the period of deferral, will be communicated in a timely manner to the student. Students must meet these admission changes prior to course registration.

Graduate Academic Standing

The purpose of the Graduate Academic Standing policy is to address both academic and non-academic graduate student deficiencies in a consistent, fair, and timely manner. **Academic deficiencies** comprise poor course performance, a course grade below 3.0 GPA, a cumulative GPA below 3.0, or other academic deficiencies as

identified by the student's department and program. **Non-academic deficiencies** comprise poor professional disposition, ethical violations, or other personal issues that interfere with program performance.

Departments are charged with identifying students with deficiencies by midterm of each semester and at the conclusion of each semester. The program coordinator from each graduate degree-granting or advanced certification program will report to their respective department chair the names of students with the specific known deficiencies. These lists are then forwarded to the appropriate dean and then to the Associate Provost for Graduate Studies. As well, program coordinators should ensure that remediation plans for each probationary student are in place and submitted to Chair, Dean, and Associate Provost, in accordance with department, college, and university policy.

Graduate students pursuing a degree are required to maintain a minimum grade point average of 3.0. At the end of each semester as part of a graduate Academic Standings process, the records of all degree students are reviewed. Each student with a cumulative average below 3.0 will be placed on academic probation for one semester. The purpose of the probationary semester is to give the student sufficient warning of academic danger. A student is considered to be in good academic standing even while on probation. If, at the end of their next semester, students have not re-established the required average, they will be required to withdraw from the university.

There may be exceptional circumstances that would affect a student's ability to regain the required academic average at the end of one semester. Students under such circumstances may seek the support of his/her advisor and the chairperson of the major department in appealing the required withdrawal.

Graduate Assistants will maintain an overall minimum 3.0 GPA per semester of funding. Students whose semester GPA falls below that or who carry grades of Incomplete beyond the mid-point of the following semester will potentially incur tuition repayment charges. GAs may not use a tuition waiver to repeat courses for which they did not earn a passing grade.

Students who fail to establish minimum expectations for good standing within 5 years, including reinstatement, may be subject to academic dismissal. Exceptional circumstances will be reviewed by the program coordinator, chair, dean and the Associate Provost for Graduate Studies.

Graduate Grade Appeals

A graduate student holds the rights to be treated in a nondiscriminatory manner and to file a grade appeal. If the graduate student claims that an earned grade is based on discrimination, the student must file the discrimination

claim first. Upon resolution of the discrimination claim, the student may then file the grade appeal.

A student who believes that a course grade or other grade reported for him/her is incorrect has the right of appeal by the following procedure within one semester after final grades are posted.

He/she must first discuss the grade with the instructor.

If the student is still unsatisfied after the discussion with the instructor, he/she may appeal in writing to the department chairperson. The appeal must outline the reasons the student feels the initial grade was incorrect and must include any relevant documentation (e.g. graded material, syllabi, etc.) in support of the grade change.

If the department chairperson decides that the student's case has merit, he/she will appoint an ad hoc committee composed of two members of the faculty in the department (other than the faculty member involved) and one other graduate student in the department. The committee will review the case, interview the student and the instructor separately, and reach a judgment by majority vote. This judgment will be communicated to the department chairperson and he/she will notify the student and the instructor of the decision.

If the department chairperson decides that the student's case does not merit further investigation or if the student disagrees with ad hoc committee's judgment, the student may appeal this decision to the Associate Provost for Graduate Studies and the college Dean. The student must supply the same supporting materials as those given to the department chairperson. If, after discussion with appropriate faculty and/or administrators, the Associate Provost for Graduate Studies and the college Dean decide that the student has a case that merits investigation, the Associate Provost for Graduate Studies, in consultation with the college Dean, may appoint an ad hoc committee of the same composition as that described above for the purpose of investigating the student's case.

The investigative committee will review the case, interview the student and the instructor separately, and reach a judgment by majority vote. This judgment will be communicated to the Associate Provost for Graduate Studies who will notify the student, instructor, and department chairperson and dean.

If a change of grade is recommended by the committee, the instructor may initiate the change, or the committee's recommendation will be forwarded to the Associate Provost for Graduate Studies and the Provost and Vice President for Academic Affairs for their consideration. The Provost and Vice President for Academic Affairs may modify the grade if the committee so recommends.

At any time during this process prior to the time a final decision is made, the graduate student may withdraw his/her appeal; likewise, the instructor may initiate a grade change consistent with the student's appeal at any time during the process. Either of these actions ends the appeal process.

Graduate Course Repeat Policy

Graduate students may retake up to two (2) courses during a single degree program in order to improve the final course grade(s). The Graduate Course Repeat Petition may be obtained from the Graduate Studies website at <http://www.fredonia.edu/gradstudies/current/progress.asp#Forms>. Approval of the department chairperson, the Dean of the College of Education (education majors only), and the Associate Provost for Graduate Studies is required. If the petition is approved, neither the previous course grade nor its earned credit will count toward the student's cumulative GPA or overall credit hours. A single course may be retaken only once and must be completed within two (2) years after the completion of the original course. Tuition waivers may not be used to pay for a repeated course. Exceptional circumstances will be reviewed by the coordinator, chair, dean and the Associate Provost for Graduate Studies. However, students who cannot complete courses in a timely manner as determined by the program may be subject to academic dismissal.

It is important to note that although the initial grade will remain on the student's academic transcript, the overall quality point average will be re-calculated based on the new grade earned for the repeated course.

Policy on Continuous Enrollment

Purpose

The purpose of the Continuous Enrollment policy is to provide a mechanism for allowing continuous usage of university resources (library, advising, network privileges, etc.) during periods of sustained research and scholarship and to account for student enrollments and faculty involvement in capstone and thesis projects not completed within the semester in which the student is registered for the final capstone course.

Definitions

"Continuous Enrollment" is defined as a 1-credit hour graduate course (GRAD 695) for which a graduate student is required to register for during each semester following a capstone course until completion of thesis/capstone work.

Grading

A grade of 'IP' (In Progress) will be assigned to the original thesis/capstone course and will remain on the student's transcript until the student either completes the work or fails to complete the thesis/capstone work within five (5) years of admission to the degree program. A final grade for the original thesis/capstone course will replace the 'IP' grade upon completion of the work. A grade of 'S'

(Satisfactory) or 'U' (Unsatisfactory) will be assigned to each GRAD 695 course for which the student enrolls.

Student Responsibilities

The student and capstone/thesis advisor must complete the Continuous Enrollment Contract form (available online on the Graduate Studies website at <http://home.fredonia.edu/gradstudies>), indicating the specific work that remains to be done and an agreed-upon date for completion. The form must be sent to the Graduate Studies office; a copy will be sent to the Registrar, to the student's department chair, and the appropriate Dean's office.

Registration will be required at the beginning of either Summer Session 2, Fall or Spring if the student has not completed the capstone/thesis course in the previous academic term. Example: a student supposed to complete the capstone by May needs extra time to complete. No registration required during Summer Session 1, but if the student has not turned the work in by Summer Session 2, this policy would take effect to maintain access to library and computing services. Students will need to re-register for GRAD 695 every year that the capstone/thesis work is ongoing.

Restrictions

A student is not eligible for academic leave for the purpose of thesis/capstone completion once work on thesis/capstone research has begun. If a student must suspend work on the research for compelling reasons, the student must formally withdraw from the graduate degree program and apply for reinstatement when he/she is prepared to complete the thesis/capstone project. Withdrawing from a graduate degree program curtails student usage of university resources, including the faculty advisors involvement in the research project. Reinstatement to a graduate program following a leave of absence requires Department, Dean and Associate Provost for Graduate Studies approval.

Statute of Limitations Policy

No course taken more than 7 years prior to application for a current master's degree program will be considered for credit toward the new degree.

Departments are responsible for scrutinizing past graduate credit earned at Fredonia to determine the appropriateness of transferring such credit toward a current graduate degree. Any coursework for which the student earned a grade lower than 'B' will not be accepted. Other credit will be accepted at the discretion of the student's department.

The student must fill out a Transcript Evaluation Request form, available on the Graduate Studies website. The student's degree program department chair will sign the form and forward it to the dean of the College of Education (or other appropriate dean), and then the Associate Provost for Graduate Studies will sign and forward the original to

the Registrar's Office. A copy of the fully signed form will be sent back to the department.

The department may consult with the Associate Provost for Graduate Studies if they wish to include credit older than 7 years.

General Information for Graduate Students

Graduate students are welcome to attend all campus activities including special lectures and concerts. The Student Services and Programs Charge often defrays completely the admission charge to many functions. Recreational facilities, including the natatorium and fitness facilities, are available to graduate students at no charge. Interested persons should see the student activities section for links to facilities and their operating hours.

Registered Graduate Degree Programs

Fredonia's registered graduate degree programs are listed on the following chart, consistent with the inventory of registered degree and certificate programs maintained by the New York State Education Department. The chart contains the official approved program titles, degrees, and HEGIS code numbers. Enrollment in other than registered or otherwise approved programs may jeopardize a student's eligibility for certain student aid awards.

Graduate Programs	HEGIS Code	Degree
Adolescence Science Education	0834	M.A.T.
Bilingual ITI	0899.60	Adv.Cert.
Biology	0401	M.S.
Chemistry	1905	M.S.
Curriculum & Instruction in Inclusive Education		
English	1501	M.A.
English 7-12	1501.01	M.A.
Interdisciplinary Studies	4901	M.A./M.S.
Literacy Education (B-Grade 6)	0830	M.S. Ed.
Literacy Education (Grades 5-12)	0830	M.S. Ed.
Mathematics 7-12	1701.01	M.S. Ed.
Music Education K-12	0832	M.M.
Music Performance	1004	M.M.
Music Theory-Composition	1004.10	M.M.

Music Therapy	1099	M.M.
Natural Science 7-12	0834	M.S. Ed.
School Building Leadership	0828	Adv.Cert.
School District Leadership	0827	Adv.Cert.
Speech Language Pathology	1220	M.S.
TESOL	1508	M.S.Ed.
TESOL	1508	Adv.Cert.
TESOL ITI	0899.60	Adv.Cert.
TESOL ITI Special Education	0899.60	Adv.Cert.

Deactivated Programs*	HEGIS Code	Degree
Accounting	0502	M.S.
Adolescence Social Studies	2201.01	M.S.Ed.
Biology 7-12	0401.01	M.S. Ed.
Chemistry 7-12	1905.01	M.S.Ed.
Elementary Education N-6	08002	M.S.Ed.
English 7-12	1501.01	M.S.Ed.
Mathematics	1701	M.A.
School Administrator and Supervisor	0828	Adv.Cert.
Speech & Hearing Handicapped	0815	M.S.Ed.

*Deactivated programs are defined as programs that Fredonia will not allow students to enter. However, past students who are making good academic progress can still graduate from these programs with the appropriate degree.

Teacher Education Certification

Certification Information

The Dean of the College of Education serves as Fredonia's Chief Certification Officer and is responsible for reviewing all applications for certification to ensure compliance with local and New York State requirements. Any questions or concerns related to the process of acquiring certification should be directed to Dean of the College of Education Christine Givner, 704 Maytum Hall, (716) 673-3311. Additional information can be obtained by contacting the College of Education Office of Student Services at (716) 673-4768 (<http://www.fredonia.edu/coe/student-services.asp>).

COURSES

AADM - Arts Administration

AADM 400 - Arts Administration Practicum

Supervised direct working experience serving on the support staff of the Michael C. Rockefeller Arts Center. Individual or team assignments may include front-of-house management, usher corps coordination, public relations, publicity, marketing research, database management, and project planning and implementation.

Credits: 1-3

Offered: Every semester.

AADM 410 - Ticket Office Practicum

Supervised direct working experience in the Michael C. Rockefeller Arts Center's Ticket Office. Processing and sale of individual and subscription tickets, group sales, donations and related activities with an emphasis on customer service and customer relationship management. The course may be taken for a maximum of 3 credits; these credits may be done all in one semester or spread out during more than one semester.

Credits: 1-3

Offered: Every semester.

AADM 480 - Independent Study

Independent study of topics not covered in regular course offerings and pertinent to student's program of study or future career.

Credits: 1-3

Offered: Offered on occasion.

AADM 490 - Arts Administration Internship

Upper level experiential learning opportunity through on-campus or off-campus placements. Nature of work will vary from placement to placement. This course is generally reserved for majors and students are responsible for finding and negotiating their own placement. Course requires students to complete a Learning Contract in accordance with college guidelines before the start of the internship.

Credits: 1-15

Offered: Every semester.

ACCT - Accounting

ACCT 201 - Principles of Financial Accounting

A study of the nature and purpose of accounting in modern business organizations with emphasis on business income and financial position measurement. At least sophomore standing required for enrollment.

Credits: 3

Offered: Every semester.

ACCT 202 - Principles of Managerial Accounting

A study of the objectives, preparation and uses of managerial accounting information. Emphasis is on the measurement, allocation, and reporting of costs to identify and solve business problems.

Credits: 3

Prerequisite: ACCT 201. Offered: Every semester.

ACCT 250 - Accounting Processes

The course examines the relationship between economic events and the accounting view of those events. It emphasizes business processes, double-entry bookkeeping, and computer-based accounting information systems.

Credits: 3

Prerequisite: ACCT 202 and (CSIT 104 or CSIT 151) or BUAD 161. Corequisite: ACCT 301. Offered: Every year.

ACCT 301 - Intermediate Accounting I

An in-depth study of the theory and application of generally accepted accounting principles. Emphasis is given to the environment of financial accounting including the standard setting process and the conceptual framework. Specific topics include the time value of money, receivables, inventories, long-term assets, and current liabilities, intangibles, and contingencies.

Credits: 3

Prerequisite: Undergraduate level ACCT 202 Minimum Grade of C-. Corequisite: ACCT 307. Offered: Every year.

ACCT 302 - Intermediate Accounting II

A challenging course including the rigorous study of theory and application of generally accepted accounting principles to complex accounting topics including stockholders' equity, revenue recognition, earnings per share, pensions, leases, accounting for taxes, accounting changes and error analysis, and cash flows.

Credits: 3

Prerequisite: ACCT 301. Offered: Every year.

ACCT 303 - Cost Management

A study of the concepts and techniques of management and cost accounting including cost-volume-profit analysis, various product costing methods, cost behavior and allocation, and other internal accounting information needs for management decision-making. Computer software is used in solving application problems.

Credits: 3

Prerequisite: ACCT 202. Offered: Every year.

ACCT 304 - Taxation I

An in-depth study of U.S. taxation of individuals including tax policy considerations and the historical development of tax law. The provisions of the Internal Revenue Code and related regulations will be used extensively.

Credits: 3

Prerequisite: Undergraduate level ACCT 202 Minimum Grade of C-. Offered: Every year.

ACCT 305 - Taxation II

An in-depth discussion of federal income taxation of multi-national corporations and partnerships. Tax issues connected to formation, operation, distributions, and liquidation will be examined. Other topics discussed include: special tax assessments like the alternative minimum tax, the personal holding company tax, and the accumulated earnings tax, S corporations, taxation of international transactions, and tax research.

Credits: 3

Prerequisite: ACCT 304. Offered: Every year.

ACCT 307 - Accounting Information Systems I

The course examines the relationship between economic events and the accounting view of those events. It emphasizes business processes, double-entry bookkeeping, and computer-based accounting information systems.

Credits: 3

Prerequisite: ACCT 202 and CSIT 104 or CSIT 151.
Corequisite: ACCT 301. Offered: Every year.

ACCT 311 - Business Law I

A general study of the functions and procedures of law. Included will be a detailed analysis of legal principles governing contracts, torts, agency and business organizations. The course represents the first half of the Business Law sequence. It is designed to provide accounting students with the required knowledge and theory for the CPA examination, by paying particular attention to practical business law problems involving the application of legal principles.

Credits: 3

Prerequisite: ENGL 100. Offered: Every year.

ACCT 312 - Business Law II

A continuation of the study of law begun in ACCT 311. Topics covered include Uniform Commercial Code subjects such as commercial paper, secured transactions, and sales, and other areas of law including bankruptcy, debtor/creditor relations, product liability, estate and trust law, and property, accountant liability and international law. Continuing attention is given to particular issues involving application of the principles discussed.

Credits: 3

Prerequisite: ACCT 311. Offered: Every year.

ACCT 401 - Advanced Accounting

Extension of financial accounting to the study of additional accounting entities such as partnerships and consolidated and multi-national firms. Topics include accounting for mergers and acquisitions, consolidated financial statements, international transactions, and an introduction to fund accounting.

Credits: 3

Prerequisite: ACCT 301. Offered: Every year.

ACCT 405 - Auditing

A study of the standards, procedures, strategies, and reporting used in the financial audit process. The environment in which the auditor functions is considered, including regulatory requirements, professional ethics, legal liability, and the business entity. The completion of a computerized audit case is required in the course.

Credits: 3

Prerequisite: ACCT 302. Offered: Every year.

ACCT 407 - Accounting Information Systems II

A study of the concepts underlying Accounting Information Systems (AIS), including current developments in the information systems field, particularly with respect to databases, networking, and enterprise systems. Terminology, reports, documents, procedures, systems development and controls inherent in a modern AIS will be studied.

Credits: 3

Prerequisite: ACCT 302 and ACCT 303 and CSIT 251 and (ACCT 307 or ACCT 250). Offered: Every year.

ACCT 430 - Independent Study

A course for highly motivated students to undertake, under guidance, special studies of areas of accounting which are not normally covered in other courses. Permission of instructor.

Credits: 1-3

Offered: Offered on occasion.

ACCT 440 - Accounting Theory & Research

A study of financial accounting designed to enhance the student's understanding of and appreciation for the evolution of contemporary financial accounting theory and contemporary financial report issues. Recent contributions to theory, research and practice will be investigated and discussed. Individual research will be conducted with results presented for critical analysis.

Credits: 3

Prerequisite: ACCT 302. Offered: Every year.

ACCT 450 - Senior Seminar

Seminar dealing with contemporary problems in the field of accounting. The course is designed so that students may utilize what they have learned in previous accounting courses. The seminar also serves to introduce students to interdisciplinary approaches in problem-solving and lead to possible areas of graduate or professional work. Topics will vary from semester to semester. Permission of instructor or senior standing.

Credits: 1-3

Offered: Offered on occasion.

ACCT 455 - Adv Auditing&Fraud Examination

A study of internal control in an information technology environment; audit sampling; integrated, internal, operational, and compliance audits; non-audit assurance services; and fraud examination.

Credits: 3

Prerequisite: ACCT 405 and ACCT 407. Offered: Every year.

ACCT 480 - Internship

The course provides credit to students for professional experiences which are closely related to their field of study. Enrollment is to be arranged with an appropriate instructor. Permission of departmental internship coordinator and junior standing.

Credits: 1-9

Offered: Every semester.

ACCT 500 - Accounting Theory

Seminar in financial accounting designed to enhance the student's understanding of and appreciation for the evolution of contemporary financial accounting theory and empirical research on financial reporting issues. Recent contributions to theory, research and practice will be investigated and discussed. Individual research will be conducted, with results presented for critical analysis.

Credits: 3

Prerequisite: ACCT 302. Offered: Every year.

ACCT 510 - Research Seminar in Accounting

Introduces students to accounting research by combining a study of the methodology, execution, statistical analysis and reporting of applied research and the practical application of research methods to a real-world business situation. The course provides a forum for exploration, discussion, and debate of current issues and events in the field. Students will propose, design, and execute an applied research project that will culminate with the presentation of the final research report.

Credits: 3

Prerequisite: (ECON 200 or BUAD 200) and ACCT 500. Offered: Every year.

ACCT 520 - Accounting Information Systems

An introduction to the concepts underlying Accounting Information Systems, especially those that relate to managerial decision-making and accounting. Students will discuss current developments in the information systems field particularly with databases, networking, and enterprise systems. Terminology, reports, documents, procedures, systems development and controls inherent in a modern AIS will be studied and practiced with hands-on applications.

Credits: 3

Prerequisite: BUAD 261 and ACCT 302 and ACCT 303. Offered: Every year.

ACCT 530 - Advanced Auditing

An advanced examination of the latest function of public accountants, focusing on technology, risk, and changing audit approaches, including statistical sampling, computer auditing, evaluation of audit risk, ethics, and international aspects of auditing. Generalized audit software will give students experience with applications relevant to applications used in the field.

Credits: 3

Prerequisite: ECON 200 and ACCT 405. Offered: Every year.

ACCT 540 - Tax Accounting

An introduction to the coordination of financial and tax accounting. Topics covered include cash and accrual methods, installment reporting, inventories, LIFO, changes in accounting methods, accounting periods, time value of money, and annual/transactional accounting concepts.

Credits: 3

Prerequisite: ACCT 302 and ACCT 305. Offered: Offered on occasion.

ACCT 550 - Advanced Cost Management

Applications-based analysis of current management accounting topics and techniques including activity-based management, value chain analysis, capacity management, quality control, target costing, and benchmarking. A case analysis approach is utilized.

Credits: 3

Prerequisite: ACCT 303. Offered: Offered on occasion.

ACCT 560 - Seminar in Accounting

An examination of problems and issues of current concern in accounting. Recent contributions to theory, research, and practice will be investigated and discussed.

Credits: 3

Prerequisite: ACCT 500. Offered: Offered on occasion.

ACCT 570 - Tax Procedure and Research

A survey of tax procedure topics including IRS and Treasury Department rulemaking, confidentiality and disclosure, audits and appeals, returns and statutes of limitations, civil tax litigation, penalties and interest, tax crimes, and the standards and hazards of tax practice. Research topics include sources of tax law (administrative, legislative and judicial) and research resources (public and private).

Credits: 3

Prerequisite: ACCT 305. Offered: Every year.

ACCT 580 - Internship in Accounting

An opportunity for students to gain professional experience in public, corporate, or not-for-profit accounting while completing the graduate degree. Internships must be approved and coordinated through the School of Business. No more than 3 hours of internship credit may be applied to the graduate degree.

Credits: 3

Prerequisite: ACCT 500. Offered: Every semester.

AMST - American Studies**AMST 202 - Introduction to American Studies**

An introduction to the interdisciplinary study of American cultures, their historical development and contemporary status. Focusing on literary and cultural representations of specific aspects of the American experience, the course will examine the constructed nature of American self-perceptions and of U.S. history. The course contextualizes U.S. cultures within the Americas and the global arena. Particular course emphasis is selected by the instructor.

Credits: 3

Offered: Every year.

AMST 210 - American Popular and Mass Cultures

An introduction to the methodologies of studying American cultures, with a special focus on popular and mass cultures. Particular course emphasis will be determined by the individual instructor, but topics will stress the multiplicity of American cultures. While literary works will make up the majority of class texts, the course will utilize an interdisciplinary approach integrating materials from fields such as history, anthropology, women's studies, ethnic studies, geography, sociology, music, art, among others.

Credits: 3

Offered: Every other year.

AMST 215 - Holidays and American Cultures

The course will examine the invention, celebration, and meanings of American holidays from the colonial era to the present. Issues to be considered include the ways in which holidays have shaped cultural values and American identity and vice versa; the ways in which holidays have both reflected and shaped views of gender, race, class, and ethnicity; and the relationships between holidays and religious belief, nationalism, consumer culture and political ideology. The course will take a multicultural and interdisciplinary approach.

Credits: 3

Offered: Every year.

AMST 289 - Comparative North America

A survey of North American history that employs the methodology of comparative history to interpret the histories of the United States, Canada, and Mexico within a conceptual framework sensitive to continental similarities and differences. The course takes a thematic approach, and special attention is given to the political institutions and economic structures that have fostered transnational cooperation and continental integration. The social and cultural dimensions of discord and conflict also are examined.

Credits: 3

Offered: Every other year.

AMST 296 - American Identities

An exploration of the historical construction of American gender, ethnicity/race, and class, their present status, and their literary and cultural representations. Focusing on intersections between these categories of identity, the course will utilize an interdisciplinary approach, integrating materials from fields such as literary studies, history, women's studies, ethnic studies, geography, sociology, music, and art.

Credits: 3

Offered: Every semester.

AMST 338 - 19th Century American Culture

Examines how social, political, and economic changes have affected American culture and Americans' lives. Topics include consumption patterns; recreational activities; architectural styles; high and popular culture; holidays; family life; and social and cultural rituals.

Credits: 3

Prerequisite: HIST 105 or HIST 133. Offered: Every other year.

AMST 340 - 20th Century American Culture

Examines how social, political, and economic changes have affected American culture and Americans' lives. Topics include consumption patterns; recreational activities; architectural styles; high and popular culture; holidays; family life; and social and cultural rituals.

Credits: 3

Prerequisite: HIST 106 or HIST 133 or AMST 202 or AMST 210. Offered: Every other year.

AMST 347 - United States Immigration

Immigration to the U.S., with an emphasis on comparing the experiences of European, African, Latin American, and Asian immigrants. Topics will include immigrants' lives, work, and communities; assimilation and cultural persistence; and the development of U.S. immigration policy.

Credits: 3

Prerequisite: HIST 105 or HIST 106 or HIST 133. Offered: Every other year.

AMST 399 - Special Topics

Variable-content course. Consult online Course Offerings and program notices for specific topic covered each semester.

Credits: 3

Offered: Offered on occasion.

AMST 400 - Concepts/Methods of American Studies

Development of American Studies as a discipline; current splits in concepts and methods of American Studies; practice in making imaginative connections among elements in American culture and testing these connections by appropriate methods.

Credits: 3

Prerequisite: AMST 202 or ENGL 200. Offered: Every year.

AMST 401 - Independent Study

Intensive individual study of some aspect of American Studies involving production of paper or project. Request for enrollment must be made prior to registration in the form of a written proposal, signed by the supervising faculty member, and forwarded to the Coordinator of American Studies.

Credits: 3

Prerequisite: AMST 202 or ENGL 200. Offered: Offered on occasion.

AMST 402 - Senior Project

Clearly defined independent project utilizing methods and materials of American Studies, culminating in complete written report and analysis. Variable credit to allow internships, study abroad, and similar field projects. Before registration, student must submit detailed description of proposed project, approved by the faculty member(s) who will supervise it, to American Studies Coordinator with request for specific number of credit hours.

Credits: 3-15

Prerequisite: AMST 202 or ENGL 200. Offered: Offered on occasion.

ANTH - Anthropology

ANTH 115 - Introductory Anthropology

An introduction to the basic concepts and findings of anthropology's four major subdivisions: physical anthropology, archaeology, linguistics, and cultural anthropology. Traces human biological and cultural evolution. Discusses and analyzes various cultural systems.

Credits: 3

Offered: Every semester.

ANTH 210 - Physical Anthropology

Anthropological view of human origins, the primate fossil record, biological aspects of humanity, non-human primates, human biological diversity, and the interplay between culture and biology.

Credits: 3

Prerequisite: ANTH 115. Offered: Offered on occasion.

ANTH 211 - Archaeology

Survey of archaeology, including major theories and methods. Emphasis upon interpretation of major findings, both prehistoric and historic.

Credits: 3

Prerequisite: ANTH 115. Offered: Offered on occasion.

ANTH 219 - Cultural Anthropology

The acquisition, nature, and impact of culture. An examination and comparison of a variety of cultural systems.

Credits: 3

Prerequisite: ANTH 115 or SOC 116. Offered: Every other year.

ANTH 300 - Sex and Gender

Description and analysis of sex and gender roles and relationships from a variety of societies at different levels of socio-cultural complexity. Note: Also listed as SOC 306 and WOST 302.

Credits: 3

Prerequisite: ANTH 115 or ANTH 219 or SOC 116. Offered: Every semester.

ANTH 301 - Plagues And Peoples

Explores the impact of disease on human populations in terms of demographic, cultural and social changes. The rise of health care delivery systems as a response to epidemics. Examples include the bubonic plague of the 14th and 17th centuries, cholera, influenza, polio and AIDS. Note: Also listed as SOC 312.

Credits: 3

Prerequisite: ANTH 115 or ANTH 219 or SOC 116. Offered: Every year.

ANTH 311 - Anthropology of the Supernatural

Survey of various belief systems. Topics include: cults, sacred beings, rituals, shamanism, witchcraft, and magic.

Credits: 3

Prerequisite: ANTH 115 or ANTH 219 or SOC 116. Offered: Offered on occasion.

ANTH 321 - Anthropology of Indian America

Survey of past and present Amerindian peoples and cultures of North America. Both aboriginal cultures and responses to European presence are emphasized for each region.

Credits: 3

Prerequisite: ANTH 115 or ANTH 219 or SOC 116. Offered: Offered on occasion.

ANTH 322 - Anthropology of Africa

Survey course dealing with evolution of culture in Africa. Examination of range of variation of traditional African cultures and factors currently modifying them.

Credits: 3

Prerequisite: ANTH 115 or ANTH 219 or SOC 116.

Offered: Every year.

ANTH 324 - Anthropology of the Caribbean

Survey of the prehistory, history, and present day nature of the various cultures of the Caribbean region. Special emphasis placed upon: economic life, family patterns, political movements, and expressive culture.

Credits: 3

Prerequisite: ANTH 115. Offered: Every year.

ANTH 331 - Anthropology of American Utopias

An examination of the background conditions producing utopias and an ethnographic/historical analysis of selected utopian ventures (e.g. Amish, Shakers, Counterculture Communes).

Credits: 3

Prerequisite: ANTH 115 or ANTH 219 or SOC 116 or HIST 105 or HIST 106. Offered: Every year.

ANTH 342 - Food and Culture

This course offers a critical look at the role of foodways in human prehistory, history, and contemporary life. Food is examined as an integral part of culture in terms of creating social bonds, identity, economies, and political systems. These issues are explored through diverse topics such as gender, food taboos, ethnicity, industrialization, human health, and the environment. The course includes discussion of attempts to address problems related to food by looking at policy, technologies, and movements towards sustainable food systems.

Credits: 3

Prerequisite: ANTH 115 or ANTH 219 or SOC 116. Offered: Every year.

ANTH 350 - Special Topics

Special topics in anthropology not covered in detail by regular courses. Topic announced in online Course Offerings.

Credits: 1-3

Offered: Offered on occasion.

ANTH 470 - Directed Study

Reading and research course intended primarily for upper-level students. Deals with specialized concerns not covered in regular courses. Permission of instructor.

Credits: 1-3

Offered: Every semester.

ANTH 473 - Museum Internship

Supervised placement in a museum. Allows a limited number of advanced anthropology students to work with museum staff members on research, curation, and education projects. Permission of department.

Credits: 3

Offered: Offered on occasion.

ARBC - Arabic**ARBC 115 - Elementary Arabic I**

For students with no previous preparation. Study of fundamental vocabulary and speech patterns. Initial stress on listening comprehension and oral ability. Progressively greater emphasis on reading and writing skills.

Credits: 3

Offered: Offered on occasion.

ARBC 116 - Elementary Arabic II

Study of fundamental vocabulary and speech patterns. Initial stress on listening comprehension and oral ability. Progressively greater emphasis on reading and writing skills.

Credits: 3

Prerequisite: ARBC 115. Offered: Offered on occasion.

ART - Art**ART 100 - Visual Concepts**

The course is intended to introduce first-year visual arts and new media students to visual culture and the individual disciplines of the visual arts as well as develop and master personal study habits as they approach college-level learning. Topics will include art concepts, media techniques and terminology, and visual cultural analysis, as well as time-management, writing within the discipline, college resources and support networks.

Credits: 3

Offered: Every year.

ART 120 - Visiting Artists Program

Required for all art studio and art history majors each semester. Art faculty, guest artists and designers, and speakers provide lectures, and lead critiques and panel discussions relating to contemporary problems.

Credits: 1

Offered: Every semester.

ART 390 - Special Topics

Selected areas of art supplementing the regular program.

Credits: 1-6

Offered: Offered on occasion.

ARTH - Art History**ARTH 101 - Art in Culture from Prehistory to 1400**

A chronological survey of art from prehistory to the end of the Middle Ages (c. 1400), with an emphasis on art in the western tradition. The course will focus on the dynamic relationship between artistic form and cultural context.

Credits: 3

Offered: Every semester.

ARTH 102 - Art in Culture from 1400 to the Present

A chronological survey of art from the Renaissance (c. 1400) to the present, with emphasis on the western tradition. The course will focus on the dynamic relationship between artistic form and cultural context.

Credits: 3

Offered: Every semester.

ARTH 175 - Computers and Society

Introduction to the role of modern microcomputers in personal, entertainment and corporate communications. Discussion of the role computers have played in social change and how this is reflected in popular culture. Also addresses the use of computers in the creative environment including digital audio, video, multimedia production, the Internet and the World Wide Web.

Credits: 3

Offered: Every year.

ARTH 205 - Women in Art

A thematic and topical course exploring women's roles as both productive subjects and depicted objects in western visual culture.

Credits: 3

Prerequisite: ART 115 or ARTH 101 or ART 116 or ARTH 102 or WOST 201. Offered: Every other year.

ARTH 211 - Survey of Medieval Art

An introduction to the history of western art from the late Roman Empire (c. 300) through the Middle Ages (c. 1400), including architecture, manuscript illumination, metalwork, sculpture, and textile production. The focus of the course is on the interactions of images and audiences in producing meaning within specific historical circumstances.

Credits: 3

Offered: Offered on occasion.

ARTH 215 - Survey of Renaissance Art

An introduction to the history of western art from the end of the Middle Ages (c. 1400) through the High Renaissance (c. 1600), focusing on painting, printmaking, and sculpture from Italy and the Netherlands. The course locates the artistic movement of the Renaissance within the dramatic cultural and social changes that mark the Early Modern period in European history and seeks to place the material within a global context.

Credits: 3

Offered: Offered on occasion.

ARTH 220 - Survey of 19th Century Art

A survey of 19th century European and American art and visual culture including such movements as Romanticism, Realism, Impressionism and Post-Impressionism.

Credits: 3

Offered: Offered on occasion.

ARTH 225 - Modern Art 1900-1950

The course will explore aesthetic responses to early-20th century political, industrial, social and economic change. Particular emphasis will be placed upon the production and reception of 20th century European and American "avant-garde" art including; Constructivism, Cubism, German Expressionism, Dadaism, Futurism and Surrealism.

Credits: 3

Offered: Every year.

ARTH 229 - Art/Reality - 19th Century America

Painting and sculpture between 1820 and 1920 - when it evolved from objective realism to modernist abstraction - is explored in the context of changing artistic and cultural values. Permission of the department.

Credits: 3

Offered: Offered on occasion.

ARTH 230 - Black Art and Visual Culture in the U.S. 1850 - Present

The course examines the shifting constructs of race, power, and representation in American art and mass media from the colonial era to the present day. Its primary focus will be an analysis of works produced by Black American artists, but students will also examine how white artists and intellectuals have attempted to define and represent "blackness" from the 19th to the 21st century.

Credits: 3

Prerequisite: ARTH 102 or ART 116. Offered: Offered on occasion.

ARTH 276 - Film Form

An introductory-level lecture course designed to introduce students to the formal issues involved in the production and perception of moving images. The course provides students with an understanding of aesthetic concepts that support the making of films, digital cinema, videos or video games. It reinforces the use of aesthetic vocabulary and demonstrates how audiences interact with, and are manipulated by, film language and syntax. Therefore, the course is useful for students who wish to enhance their skills in the making of films and videos as well as for students who wish to refine their ability to deconstruct motion pictures for critical and analytical purposes.

Credits: 3

Offered: Every year.

ARTH 280 - Survey of Pre-Columbian Art: Mesoamerica

An introduction to art and architecture produced by the Precolumbian cultures of Mesoamerica. The course will survey the most important ancient civilizations of Middle America (Olmec, Monte Alban, Teotihuacano, Maya, Toltec, and Aztec) from the earliest complex settlements to the time of the Spanish conquest.

Credits: 3

Offered: Every other year.

ARTH 290 - Art History Abroad

An introduction to the history of art that examines a specific geographical area and chronological span during a study abroad experience. The course provides the student a thorough grounding in the major art works and artists involved, adding the concrete dimension of direct observation and personal experience of the places and motifs that informed various movements. The two to three week study/travel abroad includes readings, discussion, a daily journal, and a written interpretation of themes and ideas in art.

Credits: .5-3

Offered: Offered on occasion.

ARTH 310 - Ancient Art

A thematic or topical course on the art of the Mediterranean basin between 3000 BC and 300 AD. Specific course contents will vary and may include Egyptian funerary monuments, Greek and Roman sculpture, and topics such as ritual/magical uses of images, gender and sexuality in representations of the body, and the continuing legacy of the Classical tradition.

Credits: 3

Prerequisite: ART 115 or ARTH 101. Offered: Offered on occasion.

ARTH 311 - Medieval Art

A thematic or topical course in European art between 300 and 1400 AD: specific course contents will vary and may include medieval manuscripts, Byzantine icons, Gothic cathedrals, and topics such as the cult of the saints, the lives of medieval women, and interactions with the Islamic world.

Credits: 3

Prerequisite: ART 115 or ART 226 or ARTH 101 or ARTH 211. Offered: Offered on occasion.

ARTH 315 - Renaissance Art

A thematic or topical course on European art in the 15th and 16th centuries. Specific course contents will vary and may include early Netherlandish painting, Italian painting and sculpture, early print-making, and topics such as the changing social status of the artist, the impact of European exploration and conquest, and the lives of Renaissance women.

Credits: 3

Prerequisite: ART 227 or ARTH 102 or ARTH 215. Offered: Offered on occasion.

ARTH 318 - Baroque Art

Art and architecture of Baroque and Rococo Europe during the 17th and 18th centuries, with a focus on Italy, France, the Netherlands, and England.

Credits: 3

Prerequisite: ART 116 or ARTH 102. Offered: Offered on occasion.

ARTH 329 - Art Since 1945

An in-depth examination of art and related concepts and theories since the mid-20th century.

Credits: 3

Prerequisite: ART 116 or ART 221 or ARTH 102 or ARTH 225 or ARTH 101. Offered: Every other year.

ARTH 345 - Film Criticism

The course teaches students how to use qualitative methods in film criticism and analysis. Lectures are designed to provide students with an understanding of the role of the critic and the process of criticism. Among the methods taught are narrative criticism, contemporary non-narrative criticism, genre criticism, auteur criticism, evaluating issues when adapting a novel into film, and a method of identifying documentary styles and formulas (established by Eric Barnouw).

Credits: 3

Prerequisite: ARTH 276 or FILM 220 or COMM 155. Offered: Every year.

ARTH 350 - Art History Theory and Methods

An introduction to and examination of the various investigative and interpretive methods used by art historians. The course is divided into two equal parts, the first on traditional methodologies along with their contemporary critiques, and the second on a range of "new" art histories. At the end of the course, students will be both competent in traditional methods and cognizant of contemporary debates within art history as a discipline.

Credits: 3

Prerequisite: (ART 115 and ART 116) or (ARTH 101 and ARTH 102). Offered: Every other year.

ARTH 351 - Readings in Art History

The nature of art history, the themes and ideas it investigates, and readings in some key classic authors, are the main topics of the course.

Credits: 3

Prerequisite: (ART 115 and ART 116) or (ARTH 101 and ARTH 102). Offered: Offered on occasion.

ARTH 355 - Writing About Art

Offers studio art, design and art history majors practical experience in art-related research and writing. Students will be introduced to various methods of scholarly research and critical writing styles related to their individual interests within their major concentration.

Credits: 3

Prerequisite: (ART 115 and ART 116) or (ARTH 101 and ARTH 102). Offered: Every other year.

ARTH 359 - New Media Writing

The course will study writing for new media projects like web sites, CD-based interactive products and video games as well as traditional projects such as films. The course is designed to look at various structures and approaches that emphasize "visual writing". Students will devise, design, and "pitch" a project proposal.

Credits: 3

Offered: Every year.

ARTH 371 - History of Graphic Design

Graphic design from the 19th century to the present with emphasis on European and American sources. Discussion of illustration, photography and the impact of technology in design. Examination of events, ideas, movements, designers and other individuals that have historical significance and influence on contemporary graphic design. Students without prerequisite may enroll with instructor's permission.

Credits: 3

Offered: Every other year.

ARTH 376 - Film and Special Effects

Course examines both traditional and contemporary visual effects techniques including the creative and planning processes required for the execution of various types of effects, such as models and miniatures, mattes, composite effects, computer animation, and process projection. Course also provides a forum on the creative problem-solving and planning techniques used by effects makers, including a wide range of kinds of equipment and uses.

Credits: 3

Offered: Every year.

ARTH 380 - Topics: Ancient Mesoamerican Art

A thematic or topical course on the art of Ancient Mesoamerica. Specific course content will vary and may include focal issues related to art produced by the Olmec, Mixtec, Teotihuacano, Maya, Toltec, and Aztec civilizations. The time frame covered will vary from circa 1500 BCE to 1500 CE.

Credits: 3

Prerequisite: (ART 115 and ART 116) or (ARTH 101 and ARTH 102). Offered: Every other year.

ARTH 390 - Special Topics: Art History

Selected areas of history of art supplementing the regular program.

Credits: 1-3

Prerequisite: ART 115 or ART 116 or ARTH 101 or ARTH 102. Offered: Offered on occasion.

ARTH 440 - Visual Culture

An in-depth examination of 20th and 21st century visual culture and related concepts and theories. The specific period and thematic emphasis of this art history course may vary and include the study of one or more artistic forms such as painting, sculpture, architecture, photography, film, and design.

Credits: 3

Prerequisite: ART 116 or ART 221 or ARTH 102 or ARTH 225. Offered: Offered on occasion.

ARTH 460 - Gallery Practicum

The course allows the student firsthand knowledge of the duties involved in operating a gallery. Such duties may include but are not limited to assisting the director in picking a schedule, contacting artists, creating the advertising and mounting the exhibitions. Students may only enroll with instructor's permission.

Credits: 1-3

Offered: Offered on occasion.

ARTH 490 - Learning Assistant - Art History

This course is designed for students to become familiar with the instructing process. The student will assist the instructor of an art history course in the classroom throughout the semester. Course work includes attendance at all scheduled classes for the course, assisting students during lab or study sessions as well as taking an active role in classroom critiques, discussions and studio maintenance. Permission of the instructor of the accompanying course is required.

Credits: 3

Offered: Every semester.

ARTH 494 - Directed Study: Art History

Directed research in specific areas of art history, stressing depth of inquiry. Subject of study chosen in consultation with department, and students may only enroll with instructor's permission.

Credits: 1-3

Offered: Every semester.

ARTH 495 - Independent Study: Art History

Independent research in specific areas of art history, stressing depth of inquiry and development of topic. Subject of study chosen in consultation with department, and students may only enroll with instructor's permission.

Credits: 1-3

Offered: Every semester.

ARTH 497 - Research Practicum in Art History

Students work with Art History scholars and/or faculty to assist with on going research projects. Students gain valuable research skills along with insights into the academic professions. Art History majors only and students may enroll with instructor's permission.

Credits: 1-3

Prerequisite: (ARTH 101 and ARTH 102) or (ART 115 and ART 116). Offered: Every semester.

ARTH 499 - Internship

The course allows the student to receive credit for professional experiences related to some aspect of their field of study. Enrollment is to be arranged with an appropriate instructor, by permission only.

Credits: 1-15

Offered: Offered on occasion.

ARTS - Art - Studio

ARTS 102 - Foundations in 2-D Form and Content

Introductory course investigating the principles and elements of visual design. Unity, emphasis, balance, scale, line, form, texture, rhythm and color are explored through two-dimensional studio problems.

Credits: 3

Offered: Every semester.

ARTS 105 - Foundations in Drawing

Theory and practice in a variety of graphic media. Conte, ink, pencil, and charcoal used in studio problems to acquaint beginning student with full range of drawing possibilities.

Credits: 3

Offered: Every semester.

ARTS 115 - Drawing and Painting I

First course in the Drawing and Painting program which is structured to prepare students for lives as professional artists. The course expands on material included in the foundation courses. Students will explore more technical, aesthetic and conceptual approaches in both drawing and painting. Research papers are required.

Credits: 3

Prerequisite: (ARTS 102 and ARTS 105) or (ART 150 and ART 155). Offered: Every semester.

ARTS 120 - Multimedia Applications

The course introduces students to the core applications used in creating multimedia content. The applications range from Microsoft applications to the Adobe suite of programs for video and graphics production. Alternative software will also be explored as the course will attempt to remain current with market and industry standards for personal and business use.

Credits: 3

Offered: Offered on occasion.

ARTS 150 - Camera Basics

A practical introduction to the theory and application of 35 mm camera controls. Emphasis will be placed on the technical skills required to create imagery on 35mm film. Instructional methods will include lectures, field experience and laboratory work. No course prerequisites, but students must have a 35mm camera. Students must complete ARTS 150 AND ARTS 155 to enroll in any 300-level courses in Photography.

Credits: 1

Offered: Offered on occasion.

ARTS 155 - Introduction to Film Photography

A practical introduction to the theory and application of 35 mm camera controls and black and white darkroom techniques. An emphasis will be placed on the technical skills required to visually express oneself through the photographic medium. Lectures, darkroom laboratory, and field experience. Students must have a 35mm camera.

Credits: 3

Offered: Every semester.

ARTS 156 - Introduction to Digital Photography

A practical introduction to the aesthetic and technical theories and techniques of DSLR camera controls and imaging software. An emphasis will be placed on the technical skills required to visually express oneself through the digital photographic medium. The course will consist of lectures, demonstrations, lab time, field experience and oral critiques. A DSLR with manual setting is required.

Credits: 3

Offered: Every semester.

ARTS 159 - Photographic Explorations

Photographic Explorations is an introduction to the workings of light and cameras, interpretation and perception, philosophical and psychological experience to explore image culture. In addition to learning techniques for producing light- and lens-based images, students will become acquainted with historical and contemporary uses of these techniques. Through a combination of classroom talks and hands-on projects, students will explore the principles of photography. The course is designed to serve students with no prior background in photography and is not intended for visual arts or photography majors. A camera that can take electronic still images is required (this can range from a digital SLR to camera phone).

Credits: 3

Offered: Every semester.

ARTS 205 - Foundations in Drawing 2

A continuation of ARTS 105 Foundations in Drawing with further emphasis on using learned skill sets to create visual content. Exploration of contemporary uses of drawing. Introduction to color.

Credits: 3

Prerequisite: ARTS 105. Offered: Every year.

ARTS 212 - Life Drawing I

Intensive drawing course related to the human figure. The figure is explored in various mediums and in both realism and abstraction. Research papers and readings out of the textbook are required.

Credits: 3

Prerequisite: ARTS 105 or ART 150. Offered: Every semester.

ARTS 215 - Drawing and Painting II

Students expand on theories explored in Drawing and Painting I. Assignments concentrate on the introduction of more personally significant content into the students' work. Thematic series are introduced as a way of exploring complex concepts. While there will be some flexibility between deciding whether to use drawing or painting, some assignments will require both. Research papers are required.

Credits: 3

Prerequisite: ARTS 115 or ART 285. Offered: Every semester.

ARTS 220 - Web Page Design

The course is designed to introduce to the student the basic principles of designing web pages for the World Wide Web. Mixing traditional design concepts with web-based tools, students will learn how to code pages for the web across platforms. Students will also gain practice in the use of HTML, Java and CGI/Perl scripting.

Credits: 3

Prerequisite: MEDA 120 or ARTS 120. Offered: Offered on occasion.

ARTS 221 - Foundations of Time-Based Media

This Foundations of Time--Based Media course is designed to help students develop their aesthetic and technical understandings of time as a creative tool and medium. Fundamental principles of time including duration, sequencing and movement will be established through hands-on creative projects and exercises. Screenings of historical and contemporary examples will also be an informative aspect of the learning process. Development of effective art criticism skills will allow for creative group interactions and the defining of one's personal aesthetic vision.

Credits: 3

Offered: Every semester.

ARTS 222 - Introduction to Experimental Video

An introductory-level studio art course for students interested in exploring time-based mediums including video and sound in a fine arts context. Students will produce projects that stress the understanding of technical and aesthetic foundations of time-based media. The development of content through analytical thinking and conceptual explorations will be a foundation to all projects. Works of contemporary and historical video and film artists are viewed and discussed.

Credits: 3

Offered: Every year.

ARTS 225 - Digital Foundations

A studio production course that explores a variety of digital tools for art production. The course offers a broad overview of contemporary digital technologies using avant-garde art movements of the 20th century as a framework to explore digital tools. The course covers a variety of software applications used in contemporary artistic practices and may include image manipulation, digital painting, sound art, video art, and web design.

Credits: 3

Offered: Every year.

ARTS 230 - Relief Printing

An introduction to the various techniques of linocuts. Students learn traditional techniques as well as monoprints, mixed media experimentation and reduction prints. The development of individual expression is stressed.

Credits: 3

Prerequisite: ARTS 105 or ART 150. Offered: Every year.

ARTS 235 - Monotypes

An introduction to monotypes and collagraphs. Students are directed to experiment with a wide range of approaches to the two techniques.

Credits: 3

Prerequisite: ARTS 105 or ART 150. Offered: Every year.

ARTS 239 - Contemporary Intaglio

An introduction to theory and application of contemporary intaglio printmaking utilizing etching, monoprinting, and digital imaging. Contemporary intaglio approaches utilize less toxic processes and techniques that have been developed recently. Emphasis is placed on the technical skills required to visually communicate utilizing the printmaking medium.

Credits: 3

Prerequisite: ARTS 105 or ART 150. Offered: Every year.

ARTS 240 - Foundations of 3-D Form and Content

An introductory course that explores basic design considerations, materials, and techniques relating to three-dimensional expression. Classroom discussion and studio projects stress an individual interpretive approach to concept development. Slide lectures and assigned reading expose students to a contemporary perspective of 3-D expression both past and present.

Credits: 3

Offered: Every semester.

ARTS 241 - Figure Modeling

A beginning course in methods and materials appropriate for sculptural expression of the human form. Clay, plaster, mold making, and casting techniques are covered. Technical and conceptual development of form is stressed. Theory and practice of the human form in art is introduced through lecture and research requirements.

Credits: 3

Offered: Every semester.

ARTS 250 - Black and White Technique

An exploration of more advanced techniques of exposure, development and printing of black and white film and print materials, with special emphasis on tonal control. Increased emphasis is also placed on aspects of composition, perception, content and presentation in black and white photography. Students must have a 35mm camera.

Credits: 3

Prerequisite: ARTS 155 or ART 305. Offered: Every year.

ARTS 255 - Color and Light

Explores aesthetic and technical knowledge necessary to understand the art of color photography including color perception, materials and processes, and aesthetics of color. Emphasis is placed primarily on aspects of color theory, the use of color in photographic and digital image creation, the implementation of color workflow and color management systems and color printing. Throughout the semester, issues of form, composition and light will be discussed in the context of students' own production.

Credits: 3

Prerequisite: ARTS 156. Offered: Every semester.

ARTS 260 - Graphic Design I

Introduction and orientation to concepts and skills necessary for visual communication. Fundamentals of language and principles of graphic design structure with an emphasis on media for development of ideas and imagery. Introduction to fundamentals and language of typography.

Credits: 3

Prerequisite: (ARTS 102 and ARTS 105) or (ART 150 and ART 155). Offered: Every year.

ARTS 261 - Graphic Design II

Continued exploration of formal creation and manipulation with an emphasis of systems. Emphasis on the visualization of abstract ideas using text, image and form as well as hierarchy of information. Introduction of role of research and audience in the creation of design solutions.

Credits: 3

Prerequisite: ARTS 260 or ART 259. Offered: Every year.

ARTS 270 - Foundations in Clay

The elements and principles of 3-D design are explored through introduction to basic techniques for the construction of ceramic objects without the use of the potters wheel. Projects in terra cotta clay explore the relationship of form and surface unique to the ceramic medium.

Credits: 3

Offered: Every semester.

ARTS 271 - Pottery on the Wheel

The rudiments of wheel forming pottery lead to the creation of bowls, vases, jars, and teapots in ceramics. Glazing and firing techniques for stoneware clay are covered.

Credits: 3

Offered: Every semester.

ARTS 280 - Introduction to Illustration

An introduction to editorial illustration. The class will explore technical, aesthetic and conceptual principles, as well as research and historical examples. Projects include thumbnail sketches, semi-comps, and refined drawings for final presentation on paper.

Credits: 3

Prerequisite: ARTS 102 or ARTS 105 or ART 155.

Offered: Every year.

ARTS 285 - Introduction to 2-D Animation

A broad introduction to fundamental principles of motion utilizing traditional and digital 2D animation techniques. Topics explored include basic filmmaking terms and editing, a variety of traditional animation methods including flip books, line drawn, rotoscope, cutout, and collage animation as well as history of the medium.

Credits: 3

Prerequisite: ARTS 102 or ART 155. Offered: Every year.

ARTS 290 - Special Topics: Studio Art

Selected studio media and techniques.

Credits: 1-3

Offered: Offered on occasion.

ARTS 312 - Life Drawing II

Continued concentration on drawing the figure with more emphasis on use of color medium. Research papers will deal with contemporary and traditional artists whose work dealt with the figure.

Credits: 3

Prerequisite: ARTS 212 or ART 252. Offered: Every semester.

ARTS 315 - Drawing and Painting III

Students begin to learn professional practices in application of their chosen medium, construction of support structures, creation of artwork reflecting their interpretation of their roles in society and preparation of their artwork for exhibitions. Students will also research, write and discuss historical and contemporary theories and trends in art. Students decide whether to work in drawing or painting or both.

Credits: 3

Prerequisite: ARTS 215 or ART 287. Offered: Every year.

ARTS 320 - Media Performance I

Course is designed to introduce students to the elements of live performance within a multimedia environment. Elements of live artistic performance (such as music, theatre, poetry, etc.) will be combined with computer-mediated elements to achieve a new style of interactive performance.

Credits: 3

Prerequisite: (MEDA 215 and MEDA 152) or (ARTS 222 and ARTS 225). Offered: Every year.

ARTS 321 - Installation Art

A studio-based course exploring the broad field of Installation Art as a means of visual expression. A range of materials and methods will be used to create installations that transform the viewer's experience of space. Lectures, demonstrations, and readings introduce students to Installation Art.

Credits: 3

Prerequisite: ARTS 240 or ARTS 270. Offered: Every year.

ARTS 322 - Intermediate Experimental Video

An intermediate level studio course designed to further develop conceptual and technical skills as related to experimental video making. The course builds upon Introduction to Experimental Video Art with an emphasis on defining and using self-imposed limitations and parameters to aid in the accelerated execution and completion of projects. Students will have the opportunity to collaborate in cross-discipline projects and explore alternative methods of screening and distributing finished projects.

Credits: 3

Prerequisite: MEDA 152 or ARTS 222. Offered: Every year.

ARTS 323 - Experimental Narrative

Students will explore techniques and theories of experimental narrative structure as a counter argument to the dominant and established Hollywood system. Students will gain a deeper understanding of processes and thematic structure that can help advance a narrative direction in their experimental work. Through a series of assignments and projects, students will explore techniques that bridge experimental and the traditional narrative experience. Screenings and readings will reinforce the course work.

Credits: 3

Prerequisite: ARTS 222. Corequisite: ARTS 322 or ARTS 422. Offered: Every other year.

ARTS 324 - Special Effects for Experimental Video

An upper-level studio art course that introduces concepts and techniques of special effects to the experimental video making process. Hands-on assignments will cover practical effects in front of the camera and digital post-production effects including advanced compositing of video elements. Emphasis will be placed on obtaining professional results with minimal resources.

Credits: 3

Prerequisite: (ARTS 222 or MEDA 152) and (ARTS 322* or ARTS 422*). Cross-Listed as: * Indicates that the course can be taken in the same semester. Offered: Every other year.

ARTS 325 - Interactivity for the Web

A studio production course that offers the opportunity to investigate web art production methods with particular attention to interactivity, navigation, sequence and audience participation. Emphasizes the conceptual and creative potential of the web and the effects of virtual interactivity on the user.

Credits: 3

Prerequisite: MEDA 215 or ARTS 225. Offered: Every year.

ARTS 327 - Audio and Desktop Multimedia

A course designed for students with a strong interest and background in composition, multimedia, audio and MIDI. A project-oriented course focusing on audio design, analysis, and integration as it applies to multimedia authoring, motion video, and web content creation.

Credits: 3

Prerequisite: (MEDA 152 and MEDA 205) or (ARTS 222 and ARTS 225). Offered: Offered on occasion.

ARTS 334 - Book Arts

An introduction to various techniques and forms of artist books. Students learn traditional binding as well as contemporary approaches for artist books

Credits: 3

Prerequisite: ARTS 102 and ARTS 105. Offered: Every year.

ARTS 340 - 3-D Methods and Materials

This course offers an opportunity to investigate both traditional and innovative approaches to object making. Materials and processes may include hot and cold casting, welding, papermaking, and hand formed cement, among others. Cross-media explorations are encouraged. Technical exploration, craftsmanship, and underlying intent is scrutinized and fostered through class critique, peer review, and required research.

Credits: 3

Prerequisite: ARTS 240 or ARTS 241 or ART 257 or ART 258. Offered: Every semester.

ARTS 341 - Figure Modeling II

Continuation of ARTS 241 - Figure Modeling; increased emphasis on technique and expressive content.

Credits: 3

Prerequisite: ARTS 241 or ART 258. Offered: Every year.

ARTS 350 - Experimental Photography

Students will study the working methods of early pioneers of photography, as well as examine present-day software development that fabricates and alters these processes. Historical working methods and contemporary mimicking approaches will be discussed in lectures, examined through readings and will be put into practice through hands-on experience with the materials. Students will expand their photographic vision through the use of experimental photographic processes as well as broaden their knowledge of the history of photography as it has led to new creative processes in combination with digital technology.

Credits: 3

Prerequisite: ARTS 255. Offered: Every year.

ARTS 352 - Studio Lighting

An introduction to the use of artificial lighting in Photographic Illustration. This is a technical class where emphasis will be placed on the use and control of studio lighting equipment. It is accomplished by lecture, demonstration, practical experience and critique.

Credits: 3

Prerequisite: ARTS 156. Offered: Every other year.

ARTS 355 - Digital Imaging

Theoretical and practical introduction to electronic imaging as a creative medium. Understanding of the principals, methods, techniques and vocabulary of the most widely used digital imaging processes with an emphasis on personal expression. Topics explored will include photographic manipulation, collage, fabrication and experimental media as forms of visual expression. Lectures, laboratory work and individual and collaborative projects. Students with Macintosh imaging experience may enroll without the prerequisite with permission of the instructor.

Credits: 3

Prerequisite: ARTS 255. Offered: Every year.

ARTS 360 - Graphic Design III

Introduction to the process of sequencing and organizing images and information across multiple platforms. Provides students with an understanding of tools and technologies used in the creation, reproduction, and distribution of visual messages including books, interfaces, and time based work.

Credits: 3

Prerequisite: ARTS 261 or ART 260. Offered: Every year.

ARTS 361 - Graphic Design IV

Emphasis is placed on conceptual development, symbolic language, and the design of systems across different media. Problem definition and content interpretation is focused on as is the role of the audience in design. Professional practices are introduced including collaboration in the creation of design solutions.

Credits: 3

Prerequisite: ARTS 360 or ART 359. Offered: Every year.

ARTS 365 - Typography I

Principles of typographic composition, structure and hierarchy. Terminology, typographic history, technical issues related to typography. Typography as a medium of visual communication. Student exercises focus on the relationship between visual and verbal language and technical details of typographic specification and computer layout. Advanced placement review; or permission of instructor.

Credits: 3

Prerequisite: ART 260 or ARTS 261. Offered: Every year.

ARTS 366 - Typography II

Exploration of design using text type and typographic technology. Students investigate narrative and expressive use of typographic form and format/informational organization problems.

Credits: 3

Prerequisite: ARTS 365 or ART 361. Offered: Every year.

ARTS 370 - Intermediate Ceramics

Investigates the intermediate studio problems in the ceramics process. Hand-Building or wheel forming procedures are utilized to explore a variety of experimental approaches to the ceramic form, with a continued emphasis on the search for appropriate surface treatments and firing techniques.

Credits: 3

Prerequisite: ARTS 270 or ART 273 or ARTS 271 or ART 274 or ARTS 241 or ART 258. Offered: Every semester.

ARTS 380 - Intermediate Illustration

Exploration of visual narrative structure employed in sequential art such as comics, storyboard art, and graphic novels through interpretive exercises and history of the medium. Students will gain experience in visual editing, character and story development, and sequential drawing (both with traditional media and digital drawing tablets and software).

Credits: 3

Prerequisite: (ARTS 280 and ARTS 285) or (ART 380 and ART 252). Offered: Every year.

ARTS 385 - Intermediate 2-D Animation

An intermediate studio concentration on digital line drawn and cel animation, including motion graphics and compositing. Emphasis on story development, character realization, the lip-synch process, multi-layer animation, and title design will be explored through short animation exercises.

Credits: 3

Prerequisite: (ARTS 280 and ARTS 285) or (ART 281 and ART 282). Offered: Every year.

ARTS 386 - 3D Modeling & Animation

An intermediate-level studio course, which builds on Intermediate 2D Animation and Intermediate Illustration, with a concentration on modeling, lighting and some animation. In addition to exploration of 3D modeling and animation, the history of traditional 3D animation is investigated to further understand 3D space and design.

Credits: 3

Prerequisite: ARTS 385. Offered: Every other year.

ARTS 390 - Special Topics: Studio Art

Selected studio media and techniques.

Credits: 1-3

Offered: Offered on occasion.

ARTS 396 - Studio Art Preliminary Internship

The course allows the student to receive credit for introductory internship experiences, generally on-campus, related to some aspect of their field of study. Enrollment is to be arranged with an appropriate instructor, by permission only.

Credits: 1-3

Offered: Offered on occasion.

ARTS 400 - Senior Seminar

Formal and technical preparation for senior exhibits. Career development includes a writing component to aid the student in developing a resume, cover letter and artist's statement.

Credits: 1

Offered: Every semester.

ARTS 415 - Drawing and Painting IV

Students continue to expand on the topics covered in Drawing and Painting III while fine-tuning technical and intellectual processes in clarifying their visual language. Students will learn processes in documenting and preparing artwork for graduate schools and exhibitions. Students will also continue to research, write and discuss historical and contemporary theories in art while researching issues related to their preparation as they begin their lives as professional artists. These concepts are expanded upon in Directed Study: Drawing and Painting

Credits: 3

Prerequisite: ARTS 315 or ART 387. Offered: Every semester.

ARTS 422 - Advanced Experimental Video

An advanced studio art course where students continue the development of their own personal artistic voice through a complex project or series of integrated projects. New video production and post-production techniques will be explored as a class and independently. Development of skill sets required for an independent video artist will be emphasized.

Credits: 3

Prerequisite: ARTS 222. Offered: Every year.

ARTS 425 - Advanced Interactivity

Allows students time to expand upon the knowledge learned in Art and Interactivity for the Web. Independent projects will be produced to solidify knowledge of interactive art, web development and multimedia production.

Credits: 3

Prerequisite: MEDA 265 or ARTS 325. Offered: Every year.

ARTS 429 - Experimental Video Capstone

An advanced course pursuing the refinement and execution of artistic video projects. Further focus on the development of theory and context behind individual student projects will be stressed through discussion and writing. Development of professional practices, including artist statements and demo reels will be required.

Credits: 3

Prerequisite: ARTS 322 or ARTS 422 or ARTS 323 and ARTS 324. Offered: Every year.

ARTS 440 - 3D Objects and Ideas

An advanced sculpture course that allows students to define and develop a personal body of work representing a serious exploration in their chosen mediums. Emphasis is placed on the continued development of technical craft and the refinement of thematic concerns. Appropriate information pertaining to theory and practice is provided. Professional practices including portfolio preparation, resumes, and artist statements are discussed.

Credits: 3

Prerequisite: (ARTS 340 and ARTS 240) or ARTS 241 or (ART 357 and ART 257) or ART 258. Offered: Every semester.

ARTS 459 - Photographic Inquiry

Personal exploration in image development. Refinement of individual conceptual concerns and development of the professional portfolio. Issues will include professional practice, critical analysis and hybrid media. Students explore theoretical and critical concepts through relevant and interrelated readings, lectures, discussions, presentations along with individual and group critiques.

Credits: 3

Prerequisite: ARTS 350 or ARTS 352 or ARTS 355 or (ART 305 and ART 310). Offered: Every year.

ARTS 460 - Graphic Design V

Emphasis is placed on conceptual development, symbolic language, and the design of systems across different media. Problem definition and content interpretation is focused on as is the role of the audience in design. Professional practices are introduced including collaboration in the creation of design solutions.

Credits: 3

Prerequisite: ARTS 361 or ART 360. Offered: Every year.

ARTS 461 - Graphic Design VI

Advanced problem solving in independent and investigative concepts. Exploration of actual, theoretical

and conceptual concerns of visual communication. Professional practices and portfolio preparation are addressed, explored.

Credits: 3

Prerequisite: ARTS 460 or ART 401. Offered: Offered on occasion.

ARTS 465 - Typography III

Typographic theory exploring traditional and nontraditional forms, both historical and contemporary typographic achievements. Analysis of expressive characteristics and experimental uses of letter forms and text.

Credits: 3

Prerequisite: ARTS 366 or ART 362. Offered: Every year.

ARTS 469 - Design Realities/Professional Practice

Comprehensive investigation and research into topics of production and practice in design. Content directed in three primary areas: pre-press preparation and materials, legal affairs, and the professional studio. Issues to be addressed include electronic file management, paper specification, supplier relationships, copyright and plagiarism, business contracts, ethics, studio ownership, management and record keeping. Requires compilation of individual journal and written research/analysis of specific course topic.

Credits: 1-3

Prerequisite: ART 401 or ARTS 460. Offered: Every year.

ARTS 470 - Advanced Ceramics

Handbuilding or wheel forming procedures are utilized to explore a variety of sculptural approaches to the ceramic form with a continued emphasis on the search for appropriate surface treatments and firing techniques. Students are guided toward the identification and expression of personal ideas in the medium.

Credits: 3

Prerequisite: ARTS 370 or ART 373. Offered: Every semester.

ARTS 485 - Advanced Animation/Illustration

An upper level studio course under the Animation/Illustration sequence, which follows Intermediate 2-D Animation and Intermediate Illustration. Students will be encouraged as artists to produce a mature body of work through readings, technical exercises, oral and written presentations, and independent research. Work produced in this class may or may not carry over to the Animation/Illustration Capstone (ARTS 489).

Credits: 3

Prerequisite: ARTS 380 and ARTS 385 or (ART 381 and ART 382). Offered: Every other year.

ARTS 489 - Animation and Illustration Capstone

An advanced class where students work individually or in teams on a semester- long animation or series of illustrations. In addition to the main project, the class will include readings, discussions and animation screenings. The course will also discuss resume and career preparation, portfolio and demo reel creation, graduate school application, and exhibiting work in a professional manner.

Credits: 3

Prerequisite: ART 481 or ARTS 485. Offered: Every year.

ARTS 490 - Learning Assistant

This course is designed for students to become familiar with the instructing process. The student will assist the instructor of an individual studio or art history course in the classroom throughout the semester. Course work includes attendance of all scheduled classes for the course, assisting students during lab or study sessions as well as taking an active role in classroom critiques, discussions and studio maintenance. Permission of the instructor of the accompanying course is required.

Credits: 3

Offered: Every semester.

ARTS 491 - Workshops

Workshops offered in specialized areas, such as ceramics or painting, primarily during the summer to give students an opportunity for intensive study in one aspect of a larger field.

Credits: 3

Offered: Offered on occasion.

ARTS 494 - Directed Studio Projects

Directed studio work in all media. Student meets with designated faculty member on a regular basis throughout the semester. Sound background in area of investigation required. Student must file acceptable plan for proposed project, and may only enroll with instructor's permission.

Credits: 1-3

Offered: Every semester.

ARTS 495 - Independent Studio Projects

Independent studio work in all media. Sound background in area of investigation required. Student must file acceptable plan or proposed project, and may only enroll with instructor's permission.

Credits: 1-3

Offered: Every semester.

ARTS 496 - Studio Art Internship

The course allows the student to receive credit for professional experiences related to some aspect of their field of study. Enrollment is to be arranged with an appropriate instructor, by permission only.

Credits: 1-15

Offered: Offered on occasion.

ARTS 497 - Studio Practicum

Students work with a professional artist or designer, which would include a Visual Arts and New Media faculty member, in a studio and/or office with on-going research projects. Students gain valuable perspective into the work of a professional artist or designer along with insights into the professions. Open to Visual Arts and New Media studio majors only and students may only enroll with instructor's permission.

Credits: 1-3

Offered: Offered on occasion.

BIOL - Biology

BIOL 100 - Studying for Success-Biology

The 1-credit course is designed to provide science students with time-management and study skills as they make the transition to the college level learning environment. Properly implemented, the methods will provide freshmen with the opportunity to succeed and potentially excel in college science courses. Many of the skills will likely be applicable to other courses. The strategies introduced include: time-management, daily and weekly study plans, methods of reading text, how to effectively study for a test, and test taking strategies. Students will also be introduced to some of the basic concepts in biology.

Credits: 1

Offered: Every year.

BIOL 105 - Freshman Seminar on Sexual Concerns

Introductory course intended exclusively for freshmen of all majors. The course will include an overview of basic biological concepts related to human sexuality. Major topics of presentation will include information about the male and female reproductive systems, microbiology, immunology, pregnancy, sexually transmitted diseases, and a variety of approaches to protect against disease and unwanted pregnancy.

Credits: 1

Offered: Every year.

BIOL 109 - Biology, Health, and Medicine

The course will provide an introduction to biology as the cellular level with an emphasis on human biology.

Students will learn the molecular basis of vaccines and pharmaceutical drugs. To understand vaccines and drugs, students will first learn basic principles of cell biology, biochemistry, genetics, microbiology, and immunology. The course will also incorporate discussions on ethical issues relating to medicine.

Credits: 3

Offered: Offered on occasion.

BIOL 110 - Human Biology

Overview of biological aspects of human nature. Survey of basic human physiology, reproduction, and development. Introduction to genetics and the record of human evolution provides starting point for discussion of adaptive significance of human intelligence and social organization.

Credits: 3

Offered: Every semester.

BIOL 111 - Introduction to Biology

Introductory course for non-science majors only. Intended to develop an understanding of the operation of biological systems and an acquaintance with basic biological concepts and principles.

Credits: 3

Offered: Every semester.

BIOL 115 - Environmental Biology

Study of basic relationships between the environment and humans. Discussion of constraints and relationships in nature from points of view of the physical and life sciences and investigation of how people make decisions to utilize the environment as a resource from the viewpoint of the social sciences. Attempts to link natural and social sciences for awareness of multifaceted nature of environmental problems.

Credits: 3

Offered: Every semester.

BIOL 131 - Introductory Ecology and Evolution

The course will introduce first semester life science majors to the main themes used to study biology. Three main themes that extend throughout the curriculum include a detailed investigation of the scientific method, evolutionary theory, the concepts of ecology and the diversity of life.

Credits: 3

Offered: Every year.

BIOL 132 - Introductory Ecology and Evolution Laboratory

Introductory Ecology and Evolution Laboratory is designed to complement the Introductory Ecology and Evolution lecture course. The lab exercises are designed to expose students to the main themes that are discussed in the lecture portion of the course: the scientific method, ecology, evolution and the diversity of life.

Credits: 1

Offered: Every year.

BIOL 133 - Introductory Cell and Molecular Biology

The course will provide an introduction to cell and molecular biology. The material in this course should complement the topics covered in BIOL 131. The course is also designed to prepare students for Genetics, Biochemistry, and other upper-level biology courses. Students are expected to learn the basic concepts of cellular chemistry, types of cells, cell division, and the central dogma of molecular biology.

Credits: 3

Offered: Every year.

BIOL 134 - Introductory Cell and Molecular Biology Laboratory

This course provides students with an introduction into the ways that scientists study questions in cell and molecular biology. This laboratory is designed to complement BIOL 133 and it is recommended that students take the lecture course.

Credits: 1

Offered: Every year.

BIOL 220 - Principles of Human Nutrition

This course will cover the principles of biological science involving the interactions between macro- and micronutrients and human physiological processes. A special emphasis will be placed on how nutrition can have an impact on human health and disease. Topics discussed will come from the disciplines of biochemistry, human physiology, medicine and exercise physiology.

Credits: 3

Prerequisite: CHEM 116 and CHEM 125 and BIOL 133.
Offered: Every Spring Semester.

BIOL 222 - Introduction to Tropical Biology

We will explore the complex biology of the world's tropics and the critical environmental problems. We will also examine the history of Costa Rica and how the environment, natural history, culture, history and politics have shaped the country. This course is co-requisite with BIOL 223, in which you will spend 2 weeks in Costa Rica.

Credits: 2

Offered: Every other year.

BIOL 223 - Introduction to Tropical Biology Study Abroad Costa Rica

This course is a 2 week study abroad program in Costa Rica which must be taken after the completion of BIOL 222, which is the lecture portion of the course. In this field portion we will directly study the complex biology of the tropics and witness critical environmental problems. The student will be immersed in the environment, natural history, culture, history and politics of Costa Rica.

Credits: 1

Offered: Every other year.

BIOL 237 - Genetics

The principles of genetic analysis and the nature of the gene. The course will cover Mendelian and molecular genetics. Key concepts covered will include the chromosomal and molecular basis of inheritance and replication, mutation and expression of genetic information.

Credits: 3

Prerequisite: BIOL 133. Offered: Every year.

BIOL 238 - Genetics Laboratory

Exercises will focus on the analysis of the inheritance of genes. DNA isolation and manipulation experiments will be performed. Students will perform experiments in classical and molecular genetics.

Credits: 1

Prerequisite: BIOL 133. Corequisite: BIOL 237. Offered: Every year.

BIOL 243 - Organismal Biology

The goal of the course is to develop an expanded knowledge of organismal biology. Coverage will include evolution, population genetics, and taxonomy. The course will also take a comparative approach examining anatomical and physiological adaptations of organisms in Domain Eukarya.

Credits: 3

Prerequisite: BIOL 131. Offered: Every year.

BIOL 244 - Organismal Biology Laboratory

The laboratory course provides expanded knowledge of hypothesis testing, evolution, taxonomy, and phylogeny construction. The course will also take a comparative approach examining anatomical and physiological adaptations of organisms in Domain Eukarya.

Credits: 1

Prerequisite: BIOL 131. Corequisite: BIOL 243. Offered: Every year.

BIOL 245 - Human Anatomy and Physiology I

The first course in a two-course sequence. Examines the structural and functional characteristics of the human body. From discussions of concepts of physiological control and levels of organization, this course concentrates on the components of the musculoskeletal system, the integument and an extensive description and analysis of neural and endocrine systems of control. Lab exercises support lecture topics, and involve hands-on activities including dissection and physiological measurement. This course is required for medical technology majors and exercise science majors and is an appropriate course for students planning careers in postgraduate allied health careers (e.g. pharmacy, physician's assistant, physical therapy).

Credits: 4

Prerequisite: BIOL 133 and BIOL 134 and CHEM 125 and CHEM 115. Offered: Every Fall semester.

BIOL 246 - Human Anatomy and Physiology II

The second course in a two-course sequence, the first being BIOL 245 Human Anatomy Physiology I. Concentrates on discussions of the structural and functional characteristics of the major organ systems of the body, including cardiovascular, respiratory, digestive, urinary and reproductive. Emphasis on the integrative nature of these systems to the maintenance of physiological function. Lab exercises support lecture topics, and involve hands-on activities including dissection and physiological measurement.

Credits: 4

Prerequisite: BIOL 245. Offered: Every Spring Semester.

BIOL 250 - Basic Concepts in Biology

Examination of selected areas of general biology for interested lower division major or non-major. Emphasis on developing basic background in such areas as botany, zoology, and the relationships between these fields and human society. Examples of courses offered include Field Natural History and Fungal Pathogens. Course may not be used as Biology major elective. Topics are determined by student interests.

Credits: .5-6

Prerequisite: BIOL 111 or BIOL 131. Offered: Offered on occasion.

BIOL 251 - Basic Concepts in Biology

Examination of selected areas of general biology for interested lower division major or non-major. Emphasis on developing basic background in such areas as botany, zoology, and the relationships between these fields and human society. Examples of courses offered include Field

Natural History and Fungal Pathogens. Course may not be used as Biology major elective. Topics are determined by student interests.

Credits: 1-3

Prerequisite: BIOL 111 or BIOL 131. Offered: Offered on occasion.

BIOL 256 - Introduction to Clinical Science

A course designed to acquaint sophomores with various career opportunities available in medical technology. Educational requirements and professional responsibilities are also discussed. Small group discussions of clinical literature, and a tour of a hospital lab are featured.

Credits: 1

Offered: Every year.

BIOL 275 - Health Professions Careers

The course is designed to assist students in learning the requirements for admission into health professional schools. We will review the admissions requirements for medical, dental, optometry and veterinary medical colleges and discuss how students can best develop a competitive admissions application. We will also discuss the history of the different health professions.

Credits: 1

Offered: Every year.

BIOL 296 - Ecology of National Parks

This course will utilize a national park and the surrounding ecosystem as a case study to explore the science of ecology and ecosystem biology. The course will address the methods scientists use to explore natural systems. The course will also engage students in the use of basic research techniques and data analysis. We will emphasize ecological issues that have meaning for the management of public lands and thus address the application of scientific models outside of the discipline.

Credits: 3

Corequisite: ENGL 296. Offered: Every other year.

BIOL 310 - The Human Genome

The course will focus on human genes, their inheritance and the Human Genome Project. The broad subject area of genetics will be covered including studies of genes and genomes in other species to facilitate a better understanding of human genetics. For non-majors only.

Credits: 3

Prerequisite: BIOL 110 or BIOL 111. Offered: Offered on occasion.

BIOL 330 - Ecology

Introduction to ecology emphasizing general principles at individual, population, and community levels. Examples of various approaches (observation and experimentation, field and laboratory studies, and modeling and computer simulations) are considered.

Credits: 3

Prerequisite: BIOL 243 or BIOL 144. Offered: Every year.

BIOL 331 - Ecology Laboratory

Laboratories designed to give a diversity of experience, building upon principles of individual, population, and community ecology. A quantitative approach to the study of ecology is emphasized. Labs include plant and animal studies and field and laboratory experiments, as well as long- and short-term studies.

Credits: 1

Offered: Every year.

BIOL 333 - Biochemistry

The structure and function of proteins and the regulation of metabolic pathways will be the central concepts presented in the course. Students should gain an understanding of the fundamental principles of the biology of protein molecules.

Credits: 3

Prerequisite: CHEM 215 and (CHEM 225 or CHEM 230).

Offered: Every year.

BIOL 334 - Biochemistry Laboratory

Introduction to laboratory practice using biochemical techniques to isolate and characterize proteins. Enzyme kinetics and bioinformatics are also covered.

Credits: 1

Prerequisite: BIOL 333*. Cross-Listed as: * Indicates that the course can be taken in the same semester. Offered: Every year.

BIOL 336 - Mammalian Physiology

An integrative approach to systems physiology. After an initial discussion on mechanisms of cellular regulation of homeostasis, individual physiological systems, e.g. respiratory, cardiovascular, are examined. Organ and system action are related to demonstrate integration of function within the body. Major emphasis will be on normal human functions.

Credits: 3

Prerequisite: BIOL 133 and CHEM 215. Offered: Every year.

BIOL 337 - Mammalian Physiology Lab

A laboratory course designed to complement BIOL 336 Mammalian Physiology. Laboratory exercises examine, through experimentation, the integrative functions of organs and systems within the body. Labs include excitable cell physiology, cardiovascular, excretory and exercise physiology. Wherever possible, human models are utilized.

Credits: 1

Corequisite: BIOL 336. Offered: Every year.

BIOL 338 - Microbiology

The course includes a basic study of microbial taxonomy, morphology, biochemistry, and reproduction. Great emphasis is placed on medical microbiology, infectious diseases, microbial genetic regulation, and the application of microorganisms in recombinant gene technology. Laboratory includes identification of microbes by colonial and microscopic features, biochemical properties, and antibiotic sensitivities. Two lectures, one laboratory.

Credits: 3

Prerequisite: BIOL 333 and (BIOL 237 or BIOL 335).

Offered: Every year.

BIOL 343 - Conservation

Study of relationships of people with nature; extensive treatment of world and national problems related to use of natural resources. Basic approach is ecological, but impact of economic, sociological, political, and ethical concepts on human ecology examined. Note: Students in any Biology degree program may earn elective credit for only one of BIOL 343, 345 or 360.

Credits: 3

Prerequisite: BIOL 111. Offered: Offered on occasion.

BIOL 344 - Parasitology

A survey of the more important protozoan and helminth parasites of humans. Special emphasis is given to epidemiology, pathogenesis, diagnosis, and treatment of common parasitic diseases.

Credits: 1

Prerequisite: BIOL 131 and BIOL 133. Offered: Every year.

BIOL 345 - Emerging Infectious Diseases

The course will examine infectious diseases whose incidence in humans has increased within the past two decades. The course will focus on the etiological agents, infectious disease process, epidemiology, and the factors associated with the emergence and reemergence of these infectious diseases.

Credits: 3

Offered: Offered on occasion.

BIOL 360 - AIDS and STDs

Discussion of the many ways AIDS and STDs (sexually transmitted diseases) have affected people and the societies in which they live. The course includes information about human physiology, immune defense mechanisms, and microbiology. Detailed biological discussions focus on the transmission of AIDS and STDs, disease symptoms, treatment, and prevention, as well as information on the historical accounts, global and regional impact, ethical, legal and public policy considerations, economic impact of AIDS and STDs, and the psychosocial impact on the individual, family and community. For non-majors only.

Credits: 3

Prerequisite: BIOL 111 or BIOL 131 or BIOL 110.

Offered: Offered on occasion.

BIOL 365 - Bioethics and New Embryology

Bioethics is a multidisciplinary study that examines the ethical treatment of patients in a medical environment. The field of bioethics emerged in the 1960s and is an important facet of both biology and philosophy. The field of bioethics developed in an environment of mutual discussion between people of faith and more secular philosophers. Technological advancements such as in vitro fertilization (IVF), genetic engineering, and stem cell research have opened the door to many healthy debates about technological capabilities and the development of the embryo. To make informed judgments and participate effectively in debating these issues each person should understand the science behind the ethical debates. Advances in biology and medicine mean that there are important personal issues that arise concerning questions about the start and end of life. The course is not about deciding what is right or wrong, but to stimulate a significant discussion about issues such as: Should we encourage/regulate IVF? Should we allow individuals to choose the sex of their child before it is implanted? Should we test and alter genes of an embryo? When does human life begin? Should we be allowed to genetically engineer embryos to provide the characteristics we desire (eye color, intelligence, etc)? Is therapeutic cloning acceptable and reproductive cloning off limits?

Credits: 3

Prerequisite: BIOL 237. Offered: Every year.

BIOL 375 - Genes, Health, and Society

The genetic makeup and environment in which humans develop makes each person unique. How do variations in these factors contribute to our physical and mental health? From a historical perspective, students will discuss how scientists and physicians study genes and genomes as well as how society reacts to the hope, hype, and fear surrounding these breakthroughs.

Credits: 3

Prerequisite: BIOL 110 or BIOL 111 or BIOL 133.

Offered: Every year.

BIOL 380 - Cell and Molecular Biology

This course is designed as an introduction to modern cell biology. Cell biology is the meeting point of biochemistry, genetics, cytology and physiology and is vital to anyone with an interest in molecular biology. A cell biologist must not only be able to examine structures within a cell, but must understand the underlying molecular processes that govern the formation and regulation of those structures, as well as the interaction of those structures with each other and the environment both inside and outside the cell.

Credits: 3

Prerequisite: BIOL 237 and BIOL 238. Offered: Every Fall semester.

BIOL 381 - Cell and Molecular Biology Lab

This laboratory course is designed to familiarize students with some of the techniques used in cell biology research. Much of the emphasis will be on the use of fluorescence microscopy, but will take advantage of many tools that have been developed for use on the fluorescent microscope. We will also use biochemical techniques to examine proteins and cellular contents. During the semester, students will learn to identify particular functions and processes within the eukaryotic cell.

Credits: 1

Prerequisite: BIOL 237 and BIOL 238. Corequisite: BIOL 380. Offered: Every Fall semester.

BIOL 397 - Biochemistry Seminar I

Current biochemical research papers are analyzed in a journal club (open discussion) format. This course will help students to develop critical reading skills and underscore how an array of biochemical techniques are applied to address a research problem. Faculty from both biology and chemistry participate in this seminar.

Credits: 1

Offered: Offered on occasion.

BIOL 410 - Tropical Biology

A lecture and field course on the natural history and ecology of the neotropics. Students examine several terrestrial and marine tropical ecosystems, including lowland rain forests, elfin forests, mangrove communities, and coral reefs. Each student completes a field project and journal. One lecture per week during the semester followed by a two-week field experience in Costa Rica during winter break. Students are responsible for travel expenses. Restricted to majors with junior or senior standing.

Credits: 3

Offered: Every other year.

BIOL 412 - Sociobiology

The course covers social behavior from the perspective of evolutionary theory. Topics include sex, aggression, altruism, parent-offspring conflict, and the origin of cooperative societies.

Credits: 3

Prerequisite: BIOL 330. Offered: Every other year.

BIOL 417 - Comparative Animal Physiology

How animals maintain homeostasis in a non-homeostatic world. After a general introduction to mechanisms of cellular regulation and energetics the class will discuss specific physiological systems (respiratory, cardiovascular, osmoregulatory, etc.) and compare the modes and strategies employed by different animal groups in responding to changes in external environment. Particular attention directed to adaptations to marginal habitats, e.g. marine intertidal, deep sea hydrothermal vents, hot desert.

Credits: 3

Prerequisite: BIOL 336. Offered: Offered on occasion.

BIOL 419 - Genes and Genomes

The course will focus on the study of DNA and genes from the paper by Watson and Crick to the Human Genome Project. The genetic and molecular approaches used to identify genes and the impact of genome study on society and current scientific research will be discussed.

Credits: 3

Prerequisite: BIOL 237 or BIOL 335. Offered: Every other year.

BIOL 420 - Population/Community Ecology

Reading and discussion of primary literature relating to population and community ecology. Topics include population growth, life history patterns, competition, plant-animal interactions, and community organization.

Credits: 3

Prerequisite: BIOL 330. Offered: Offered on occasion.

BIOL 421 - Biological Conservation

An examination of species diversity with an emphasis on human activities which affect these patterns. Major topics will include the effects of land use practices, habitat fragmentation, invasive species and pollution on the current distribution and extinction patterns of plants and animals.

Credits: 3

Prerequisite: BIOL 330. Offered: Every other year.

BIOL 422 - Physiological Ecology

Reading and discussion of primary literature relating to animal interactions with the environment. Examination of potential effects of specific habitats (e.g. deserts, deep sea) and the physiological responses of various animals to these environmental challenges.

Credits: 3

Prerequisite: BIOL 330. Offered: Offered on occasion.

BIOL 424 - Aquatic Biology

Classification and biology of major groups of organisms that inhabit freshwater environments, characteristics of aquatic habitats, pollution of aquatic environments, and the role of physical and chemical factors in aquatic ecosystems.

Credits: 3

Prerequisite: BIOL 243. Offered: Every other year.

BIOL 426 - Current Environmental Topics

The focus of the course is on global environmental issues. The issues examined have been making the news during the last year and at the time the course is taught. Changes in climate, overpopulation, pollution, conservation, development, genetically modified organisms, invasive species, illegal species trade, etc. are some of the ongoing issues that are covered in the course. The format of the course invites participation, discussion and critical thinking.

Credits: 3

Prerequisite: BIOL 330. Offered: Every year.

BIOL 427 - Fisheries Science

The course is an overview of ichthyology, fisheries biology, and fisheries conservation. Students will be introduced to the taxonomic diversity of fish, fish adaptations, techniques and models used in the study of fish populations, community interactions, and issues concerning fisheries conservation and management. Special emphasis will be placed on understanding Great Lakes fisheries.

Credits: 3

Prerequisite: BIOL 330. Offered: Every other year.

BIOL 429 - Field Biology

A field-oriented course with emphasis on developing and testing scientific hypotheses. Activities include identification of local flora and fauna, using a wide variety of field techniques, statistical analysis, and writing scientific reports. Some Saturday field trips required.

Credits: 3

Prerequisite: BIOL 330. Offered: Offered on occasion.

BIOL 431 - Senior Seminar

Reading, discussion, and analysis of current topics of biological significance using original source material from primary biological periodicals. Students prepare and present a seminar based on an extensive review of the available literature.

Credits: 1

Offered: Every semester.

BIOL 434 - Animal Behavior

The course will provide background to the discipline of animal behavior and examine the levels of questioning in this field. It will discuss the influence of genetics and the environment on behavior (nature vs. nurture). It will then magnify our focus to the roots of behavior, the proximate causes of behavior, specifically its neural and hormonal control. It will examine the cases of bird song, electric fish EODs, shark electroreception, moth hearing and bat echolocation. It will then focus on those behaviors that make up the many tasks animals must accomplish to survive and reproduce.

Credits: 3

Prerequisite: BIOL 243 or BIOL 144. Offered: Every year.

BIOL 435 - Developmental Biology

A study of animal development integrating descriptive, experimental, cellular, and molecular studies of gametogenesis, fertilization, cleavage, gastrulation, induction, and maturation. Labs examine development from an historical perspective including: descriptive, experimental and molecular embryology incorporating hypothesis testing through the use of micromanipulation, cell culture and immunohistochemistry. Two lectures, one laboratory.

Credits: 3

Prerequisite: BIOL 333 or CHEM 333. Offered: Every year.

BIOL 437 - Molecular Genetics Laboratory

Molecular genetics is a broad term that describes a collection of techniques that biologists use to study and manipulate the physiology, biochemistry, and genetics of a cell at a molecular level. This course is designed to help students build their molecular "toolkit" and teach them how to bring the concepts learned in lecture courses to bear on a research project.

Credits: 2

Prerequisite: BIOL 237 and BIOL 238 and BIOL 333 or CHEM 333 and BIOL 334 or CHEM 334. Offered: Every year.

BIOL 438 - Molecules and Medicine

The course will cover material on traditional drugs used in medicine and discuss the transition to new drugs that have been designed to interact with a specific target. An emphasis will be on understanding the molecular details of drug-target interactions and the mechanism of actions of pharmaceutical drugs. Students will discuss ethical issues relating to medicine and pharmaceuticals. Students will read primary literature and review articles as the primary sources of information in the course.

Credits: 3

Prerequisite: BIOL 333. Offered: Every other year.

BIOL 440 - Undergraduate Research

Independent study and research of mutual interest with faculty member in such areas as morphology, physiology, evolution, development, population dynamics, genetics, biochemistry, cell and subcellular biology, microbiology, ecology, behavior and conservation. Course may be repeated; maximum of 12 credits count toward the B.S. degree, only 3 of which may be included in a Biology major. Note: Students may earn Biology elective credit for only one of BIOL 440/1 or 458. Permission of department required.

Credits: 1-3

Offered: Every semester.

BIOL 441 - Undergraduate Research

Independent study and research of mutual interest with faculty member in such areas as morphology, physiology, evolution, development, population dynamics, genetics, biochemistry, cell and subcellular biology, microbiology, ecology, behavior and conservation. Course may be repeated; maximum of 12 credits count toward the B.S. degree, only 3 of which may be included in a Biology major. Note: Students may earn Biology elective credit for only one of BIOL 440/1 or 458. Permission of department required.

Credits: 1-3

Offered: Every semester.

BIOL 443 - Plant Physiology

Study of the life processes and responses of plants, including water relations and transport, photosynthesis and general metabolism, mineral and organic nutrition, photoperiodic responses and rhythms, growth and differentiation, and plant relationships with the environment.

Credits: 3

Prerequisite: BIOL 133. Offered: Offered on occasion.

BIOL 447 - Evolution

Consideration of the theoretical framework of evolutionary biology and the mechanisms of evolution. Special topics include microevolution, macroevolution, and coevolution.

Credits: 3

Prerequisite: BIOL 237 or BIOL 243 or BIOL 335.

Offered: Every other year.

BIOL 450 - Modern Concepts in Biology

An in-depth examination of selected areas of biology for interested upper-division students. Topics are determined by faculty and student interests and emphasize methods and recent research developments. Examples of topics currently offered on a rotating basis include:

Biomembranes, Hormone Mechanisms, Molecular Biology, Cell/Hybridoma Culture, and Biology of Terrestrial Vertebrates.

Credits: 1-4

Offered: Every semester.

BIOL 451 - Modern Concepts in Biology

An in-depth examination of selected areas of biology for interested upper-division students. Topics are determined by faculty and student interests and emphasize methods and recent research developments. Examples of topics currently offered on a rotating basis include:

Biomembranes, Hormone Mechanisms, Molecular Biology, Cell/Hybridoma Culture, and Biology of Terrestrial Vertebrates.

Credits: 1-3

Offered: Every semester.

BIOL 453 - Basic Hematology

Introduction to the study of blood, its cellular components, and various blood diseases. Laboratory exercises include a variety of manual techniques involved with blood cell counts and determinations.

Credits: 1

Prerequisite: BIOL 131 and BIOL 133. Offered: Every year.

BIOL 457 - Biostatistics

A review of statistical tests frequently used in the biological sciences. Emphasis is placed on understanding experimental design and what statistics can and cannot do. Uses of computer statistical packages are also considered.

Credits: 3

Prerequisite: STAT 250. Offered: Every other year.

BIOL 458 - Lab Supervision in Biology

A supervisory experience in teaching of the biology department's laboratories under the guidance of a faculty member. Student experiences may include; preparing materials for the lab, and demonstrating procedures and techniques to students. Note: Students may earn Biology elective credit for only one of BIOL 440/1 or 458. Permission of department required.

Credits: 1

Offered: Every semester.

BIOL 461 - Immunology and Serology

Study of the mechanisms of the immune response including cellular basis of immunity and molecular basis of antigen-antibody reactions. Regulation of antibody production and cell-mediated reactivity examined. Current clinical applicability considered in discussion of tumor, transplantation, allergy-related, and autoimmune immunobiology. Several laboratory exercises included involving serological/immunological determinations detecting antigen-antibody interactions. Three lectures.

Credits: 3

Prerequisite: BIOL 333 and (BIOL 237 or BIOL 335).

Offered: Every year.

BIOL 465 - Advanced Experimental Biochemistry

State-of-the-art biochemical and molecular techniques are taught within this hands-on, laboratory-based course. Potential topics include the polymerase chain reaction (PCR), oligonucleotide synthesis, DNA/protein sequencing and analysis (BLAST, DNASIS), pulse-field gel electrophoresis, gas chromatography-mass spectroscopy (GC-MS), nuclear magnetic resonance (NMR) spectroscopy, high performance liquid chromatography (HPLC), immunochemistry, and/or other contemporary techniques.

Credits: 2

Prerequisite: BIOL 334. Offered: Every year.

BIOL 466 - Current Issues in Developmental Biology

Course focuses on recent developments in the rapidly expanding field of developmental biology. With the advent of the tools available to molecular biologists, the course will study recent advances in the genetic understanding of various aspects of embryological development and regeneration. The course will present a variety of topics including: fertilization, gastrulation, maternal effect genes, pattern formation, and evolutionary aspects of development. Junior standing in major required.

Credits: 3

Offered: Every other year.

BIOL 468 - Biomembranes

The objectives of the course include: identification of different types of membranes based upon composition, morphology and cellular functions, and examination of experiments which have provided understanding of how membranes function in cells and organisms. Topics include membrane composition, electron microscope techniques, membrane transport, membrane proteins and enzymes, receptors, hormone interaction, cell recognition, secretion, and biogenesis of membranes.

Credits: 3

Prerequisite: BIOL 333. Offered: Every other year.

BIOL 469 - Eukaryotic Gene Regulation

In-depth examination of the ways in which eukaryotic cells regulate their protein composition at the levels of genome replication, transcription, post-transcriptional modifications, and translations. Topics include chromatin structure, transcription factors, and DNA sequence elements, several cell-type specific transcriptional events and how they are regulated, as well as how transcriptional regulation gone awry can cause cancer.

Credits: 3

Prerequisite: BIOL 237 or BIOL 335. Offered: Offered on occasion.

BIOL 470 - Hormone Mechanisms

Course will examine the basic physiological, cellular and molecular pathways which regulate metabolism, growth, and neurological activities of organisms, especially mammals. Discussions will follow text information and general models will be supported with primary research literature to show developments from recent experiments.

Credits: 3

Prerequisite: BIOL 333. Offered: Every other year.

BIOL 472 - Microbial Pathogenesis

Course focuses on the molecular basis of microbial pathogenesis. Through the application of molecular techniques to the study of the microbe-host interaction, scientists are gaining a fundamental understanding of the virulence mechanisms of microbial pathogens. Using primary literature the course will illustrate how the integration of the molecular basis of virulence mechanisms with the clinical aspects of disease has enhanced understanding of the pathogenesis of infectious diseases.

Credits: 3

Offered: Offered on occasion.

BIOL 473 - Animal Communication

The course will provide a background for the field of animal communication including a discussion of

definitions of animal communication. It will then survey the production, transmission and reception of auditory, visual, and chemical signals. Optimality theory and signal detection theory will be introduced as they apply to animal communication. It will spend some time on how signals come to be and why they have the design they do (signal evolution). Finally, it will investigate signaling in a variety of situations such as between potential mates, other conspecifics, as well as environmental and autocommunication signaling.

Credits: 3

Prerequisite: BIOL 330. Offered: Every other year.

BIOL 475 - Advanced Biochemistry

A continuation of BIOL 333, the course explores biochemical concepts and pathways with an emphasis on problem solving. Cellular control and coordination of biochemical pathways is emphasized in light of an advanced understanding of protein biochemistry. Lecture only.

Credits: 3

Prerequisite: BIOL 333. Offered: Every year.

BIOL 480 - Molecular Biology of Disease

The course will cover topics relating to the genetic and biochemical etiology of human disease. Through examination of the primary literature, students will become familiar with the techniques used to study and treat diseases at the molecular level. Specific topics covered include inborn errors in metabolism, cholesterol homeostasis, protein folding diseases, cancer, gene therapy, and stem cell therapy. Students will formulate an independent research proposal based on examination of current literature on a disease of their choosing.

Credits: 3

Prerequisite: BIOL 333. Offered: Every year.

BIOL 490 - Biology Internship

Approved biology-related experiences in academia, government, industry or other foundations. Requires the permission of the department and faculty sponsor.

Credits: 1-15

Offered: Every semester.

BIOL 491 - Senior Capstone - Research

BIOL 491-Senior Capstone Each Biology major will perform a capstone experience in their senior year. The experience can take the form of research, an internship or course, and will provide significant learning experiences in problem solving and written and oral communication. Capstone Research: The student will fulfill expectations for capstone research via two semesters of UGR (3 credits/semester) during the senior year, or a 10 week

summer research position during the summer before the senior year. The faculty mentor will bear responsibility for the evaluation of the learning and inquiry experience. A formal paper will be expected. Oral presentation will occur during a capstone UGR/internship symposium. Note: Students opting for a capstone experience that does not involve significant laboratory or field work will be required to take at least one lab or field course as part of their 12 hours of upper level Biology electives.

Credits: 1-6

Offered: Every semester.

BIOL 492 - Senior Capstone - Internship

BIOL 492-Senior Capstone Each Biology major will perform a capstone experience in their senior year. The experience can take the form of research, an internship or course, and will provide significant learning experiences in problem solving and written and oral communication. Capstone Internship: The student will fulfill expectations for capstone internship via a 3 credit internship experience (120 hours). Acceptable experiences include job apprenticeships (not unlike the clinical internships of MT students) involving very active learning. Research projects performed off-campus (not including REUs) are also acceptable as capstone internship experiences. A site supervisor will provide evaluations to the faculty mentor; the faculty mentor will bear responsibility for the final evaluation of the learning experience. A formal paper will be expected. Oral presentation will occur during a capstone UGR/internship symposia. Note: Students opting for a capstone experience that does not involve significant laboratory or field work will be required to take at least one lab or field course as part of their 12 hours of upper level Biology electives.

Credits: 1-6

Offered: Every semester.

BIOL 493 - Senior Capstone - Course

BIOL 493-Senior Capstone Each Biology major will perform a capstone experience in their senior year. The experience can take the form of research, an internship or course, and will provide significant learning experiences in problem solving and written and oral communication. Capstone Course: We will offer capstone 'sections' of UL courses on a rotating basis. Some of these courses will be modifications of currently existing courses; other will be new courses. Examples may include Molecular Biology of Disease, Cancer Biology, and Evolution. Courses will be designed to include significant inquiry based learning, problem solving, and written and oral presentation' enrollment will be limited and carefully controlled. Students will write a formal paper and offer a formal presentation. Note: Students opting for a capstone experience that does not involve significant laboratory or field work will be required to take at least one lab or field

course as part of their 12 hours of upper level Biology electives.

Credits: 0-6

Offered: Every semester.

BIOL 497 - Biochemistry Seminar II

Students prepare oral presentations based on an assessment of current biochemical research papers. The course will help students to further develop critical reading and scientific communication skills. Faculty from both biology and chemistry participate in the seminar.

Credits: 1

Prerequisite: BIOL 397. Offered: Every year.

BIOL 499 - Independent Study - Undergraduate

In Independent Study, students will perform literature reviews and learn how to design experiments and collect and analyze data. Student expectations will vary based upon the biological discipline and the number of credits. Junior/Senior standing in the major.

Credits: 1-3

Offered: Every semester.

BIOL 501 - Biochemistry

Advanced discussion of biological chemistry; chemistry of carbohydrates, lipids and proteins, and nucleic acids; bioenergetics; the structure and mechanism of enzyme action; protein biosynthesis; molecular genetics; selected topics in immunochemistry, and biochemical endocrinology.

Credits: 3

Prerequisite: CHEM 216. Offered: Offered on occasion.

BIOL 502 - Methods in Biochemistry

Theory and laboratory experiments demonstrating the techniques and applications of contemporary biochemistry including electrophoresis, chromatography, centrifugation, radioisotope methods, DNA sequencing, enzymology, spectrophotometry and gas chromatography.

Credits: 3

Prerequisite: BIOL 501. Offered: Offered on occasion.

BIOL 510 - Tropical Biology

A lecture and field course on the natural history and ecology of the neotropics. Students examine several terrestrial and marine tropical ecosystems, including lowland rain forests, elfin forests, mangrove communities, and coral reefs. Each student completes a field project and journal. One lecture per week during the semester followed by a two-week field experience in Costa Rica

during winter break. Students are responsible for travel expenses.

Credits: 3

Offered: Every other year.

BIOL 512 - Sociobiology

The course covers social behavior from the perspective of evolutionary theory. Topics include sex, aggression, altruism, parent-offspring conflict, and the origin of cooperative societies. Graduate students will write a research intensive review article, using primary literature. Papers should provide a thorough review of a specific sociobiological hypothesis applied to limited taxa. I expect you to cover all up-to-date primary sources that pertain to your topic. The paper should be about 10 pages long. Topics must be approved by the instructor. Graduate students will present their term papers to the class during the final two class periods. Presentations should use PowerPoint and last 15 minutes plus 3-5 minutes for questions.

Credits: 3

Offered: Every other year.

BIOL 517 - Comparative Animal Physiology

How animals maintain homeostasis in a non-homeostatic world. After a general introduction to mechanisms of cellular regulation and energetics, discussion will include specific physiological systems (respiratory, cardiovascular, osmoregulatory, etc.) and compare the modes and strategies employed by different animal groups in responding to changes in external environment. Particular attention directed to adaptations to marginal habitats, e.g. marine intertidal, deep sea hydrothermal vents, hot desert.

Credits: 3

Prerequisite: BIOL 336. Offered: Offered on occasion.

BIOL 519 - Genes and Genomes

The course will focus on the study of DNA and genes from the paper by Watson and Crick to the Human Genome Project. The genetic and molecular approaches used to identify genes and the impact of genome study on society and current scientific research will be discussed.

Credits: 3

Offered: Every other year.

BIOL 520 - Population and Community Ecology

Reading and discussion of primary literature relating to population and community ecology. Topics include population growth life history patterns, competition, plant-animal interactions, and community organization.

Credits: 3

Prerequisite: BIOL 330. Offered: Offered on occasion.

BIOL 522 - Physiological Ecology

Reading and discussion of primary literature relating to physiological and ecosystem ecology. Topics include resource acquisition, energetics, nutrient cycling, and energy flow.

Credits: 3

Prerequisite: BIOL 330. Offered: Offered on occasion.

BIOL 524 - Aquatic Biology

The course covers the classification and biology of major groups of organisms found in fresh water, characteristics of aquatic habitats, pollution of aquatic environments, and the role of physical and chemical factors in aquatic ecosystems.

Credits: 3

Prerequisite: BIOL 330. Offered: Every other year.

BIOL 526 - Current Environmental Topics

The focus of the course is on global environmental issues. The issues examined have been making the news during the last year and at the time the course is taught. Changes in climate, overpopulation, pollution, conservation, development, genetically modified organisms, invasive species, illegal species trade, etc. are some of the ongoing issues that are covered in the course. The format of the course invites participation, discussion and critical thinking.

Credits: 3

Offered: Every year.

BIOL 527 - Fisheries Science

The course is an overview of ichthyology, fisheries biology, and fisheries conservation. Students will be introduced to the taxonomic diversity of fish, fish adaptations, techniques and models used in the study of fish populations, community interactions, and issues concerning fisheries conservation and management. Special emphasis will be placed on understanding the Great Lakes fisheries.

Credits: 3

Prerequisite: BIOL 144. Offered: Every other year.

BIOL 534 - Animal Behavior

The course will first provide background to the discipline of animal behavior and examine the levels of questioning in this field. The class will discuss the influence of genetics and the environment on behavior (nature vs. nurture). It will magnify its focus to the roots of behavior, the proximate causes of behavior, specifically its neural and hormonal control. The class will examine the cases of bird song, electric fish EODs, shark electroreception, moth hearing and bat echolocation, and then focus on those

behaviors that make up the many tasks animals must accomplish to survive and reproduce.

Credits: 3

Offered: Offered on occasion.

BIOL 538 - Molecules and Medicine

The course will cover material on traditional drugs used in medicine and discuss the transition to new drugs that have been designed to interact with a specific target. An emphasis will be on understanding the molecular details of drug-target interactions and the mechanism of actions of pharmaceutical drugs. Students will discuss ethical issues relating to medicine and pharmaceuticals. Students will read primary literature and review articles as the primary sources of information in the course.

Credits: 3

Prerequisite: BIOL 501. Offered: Every other year.

BIOL 543 - Plant Physiology

Study of the life processes and responses of plants, including water relations and transport, photosynthesis and general metabolism, mineral and organic nutrition, photoperiodic responses and rhythms, growth and differentiation, and plant relationships with the environment. Laboratory includes problems and exercises in whole plant physiology as well as at the molecular level. The laboratory stresses methods rather than results. Two lectures, one laboratory.

Credits: 3

Offered: Offered on occasion.

BIOL 544 - Radiation Biology

Lectures on techniques required for application of radioactive isotopes to biological research. Experimental isotope tracer techniques deal with in vitro and in vivo labeling as well as autoradiographic studies. Variety of living systems used.

Credits: 3

Offered: Offered on occasion.

BIOL 547 - Evolution

Consideration of the theoretical framework of evolutionary biology and the mechanisms of evolution. Special topics include microevolution, macroevolution and coevolution.

Credits: 3

Offered: Every other year.

BIOL 550 - Current Concepts in Biology

An in-depth examination of selected areas of biology for interested upper-division students. Topics are determined by faculty and student interests and emphasize methods

and recent research developments. Examples of topics currently offered on a rotating basis include: Biomembranes, Molecular Genetics, Cell and Hybridoma Culture, Enzymes, Ethology, Hormone Mechanisms, Bioenergetics, Microbial Genetics, Field Biology, and Advanced Developmental Biology, PCR, DNA Synthesis and Immunology.

Credits: 1-4

Offered: Offered on occasion.

BIOL 551 - Current Concepts in Biology

An in-depth examination of selected areas of biology for interested upper-division students. Topics are determined by faculty and student interests and emphasize methods and recent research developments. Examples of topics currently offered on a rotating basis include: Biomembranes, Molecular Genetics, Cell and Hybridoma Culture, Enzymes, Ethology, Hormone Mechanisms, Bioenergetics, Microbial Genetics, Field Biology, and Advanced Developmental Biology, PCR, DNA Synthesis and Immunology.

Credits: 1-3

Offered: Offered on occasion.

BIOL 557 - Biostatistics

Statistical tests frequently used in the biological sciences. Emphasis is placed on understanding what statistics can and cannot do, the meaning of a statistical test, and how to choose an appropriate statistical test. Uses of micro-computer and mainframe statistical packages (SPSS or MINITAB) are also considered.

Credits: 3

Offered: Every other year.

BIOL 564 - Mammalogy

Consideration of taxonomy, ecology, and physiology of mammals; world fauna examined although emphasis on local species. Field population studies, collection and preservation of specimens, and studies in physiological adaptations of mammals.

Credits: 3

Offered: Offered on occasion.

BIOL 566 - Current Issues in Developmental Biology

Course focuses on recent developments in the rapidly expanding field of developmental biology. With the advent of the tools available to molecular biologists, the course will study recent advances in the genetic understanding of various aspects of embryological development and regeneration. The course will present a variety of topics including: fertilization, gastrulation, maternal effect genes, pattern formation, and evolutionary aspects of development.

Credits: 3

Offered: Every year.

BIOL 567 - Biomembranes

The objectives of this course include: identification of different types of membranes based upon composition, morphology and cellular functions, and examination of experiments which have provided understanding of how membranes function in cells and organisms. Topics include membrane composition, electron microscope techniques, membrane transport, membrane proteins and enzymes, receptors, hormone interaction, cell recognition, secretion, and biogenesis of membranes.

Credits: 3

Prerequisite: BIOL 333. Offered: Every other year.

BIOL 569 - Eukaryotic Gene Regulation

In-depth examination of the ways in which eukaryotic cells regulate their protein composition at the levels of genome replication, transcription, post-transcriptional modifications, and translation. Topics include chromatin structure, transcription factors, and DNA sequence elements, several cell-type specific transcriptional events and how they are regulated, as well as how transcriptional regulation gone awry can cause cancer.

Credits: 3

Prerequisite: BIOL 241 and BIOL 335. Offered: Offered on occasion.

BIOL 570 - Hormone Mechanisms

The course will examine the basic physiological, cellular and molecular pathways which regulate metabolism, growth, and neurological activities of organisms, especially mammals. Discussions will follow text information and general models will be supported with primary research literature to show developments from recent experiments.

Credits: 3

Prerequisite: BIOL 333. Offered: Every other year.

BIOL 572 - Microbial Pathogenesis

The course focuses on the molecular basis of microbial pathogenesis. Through the application of molecular techniques to the study of the microbe-host interaction, scientists are gaining a fundamental understanding of the virulence mechanisms of microbial pathogens. Using primary literature the course will illustrate how the integration of the molecular basis of virulence mechanisms with the clinical aspects of disease has enhanced understanding of the pathogenesis of infectious diseases.

Credits: 3

Prerequisite: BIOL 333 and BIOL 335. Offered: Offered on occasion.

BIOL 573 - Animal Communication

The course will first provide a background for the field of animal communication including a discussion of definitions of animal communication. The class will then survey the production, transmission and reception of auditory, visual, and chemical signals. Optimality theory and signal detection theory will be introduced as they apply to animal communication. The class will spend some time on how signals come to be and why they have the design they do (signal evolution), and will investigate signaling in a variety of situations such as between potential mates, other conspecifics, and autocommunication signaling.

Credits: 3

Offered: Every other year.

BIOL 580 - Molecular Biology of Disease

The course will cover topics relating to the genetic and biochemical etiology of human disease. Through examination of the primary literature, students will become familiar with the techniques used to study and treat diseases at the molecular level. Specific topics covered include inborn errors in metabolism, cholesterol homeostasis, protein folding diseases, cancer, gene therapy, and stem cell therapy. Students will formulate an independent research proposal based on examination of current literature on a disease of their choosing.

Credits: 3

Offered: Every year.

BIOL 600 - Seminar

Presentation of detailed study of topic of current interest in the biological literature. Attendance and one seminar presentation required for three semesters of all candidates for the master's degree. Students completing thesis research must present their results orally prior to their scheduled thesis defense.

Credits: 1-3

Offered: Every other year.

BIOL 601 - Seminar

Presentation of detailed study of topic of current interest in the biological literature. Attendance and one seminar presentation required for three semester of all candidates for the master's degree. Students completing thesis research must present their results orally prior to their scheduled thesis defense.

Credits: 1

Offered: Every other year.

BIOL 611 - Cell Regulation

Integrated study of regulation at various levels within the cell. Molecular control of cellular activity and its interconnection with biochemistry including regulation of enzyme activity, nucleic acid and protein biosynthesis, metabolic control by hormones, and membrane regulatory functions.

Credits: 3

Prerequisite: BIOL 501. Offered: Offered on occasion.

BIOL 646 - Reproductive Physiology

Treatment of reproductive mechanisms in higher vertebrates; particular attention to mammals. Topics include biology of sex, structure-function relationship in male and female reproductive systems, gametogenesis, gonadal steroids, nongonadal endocrine control mechanisms, cyclic reproductive phenomena, insemination and fertilization, viviparity, pregnancy, parturition and lactation, fertility and sterility, and effects of environment and nutrition on reproductive processes.

Credits: 3

Prerequisite: BIOL 501. Offered: Offered on occasion.

BIOL 650 - Special Topics in Biology

Comprehensive reviews of current state of biological investigation for advanced graduate students. Analysis of frontiers of scientific advancement in molecular biology, quantitative ecology, and physiology.

Credits: 1-3

Offered: Offered on occasion.

BIOL 690 - Thesis Research

Directed research culminating in the preparation of a thesis.

Credits: 1-9

Offered: Every semester.

BIOL 691 - Thesis

Directed research culminating in the preparation of a thesis.

Credits: 1-9

Offered: Every semester.

BIOL 699 - Independent Study - Graduate

Primarily intended for thesis graduate students wishing to perform a thorough and directed literature review in support of their graduate research. Graduate students will develop the independent study activities with the assistance and approval of their research professor; formal assessment mechanisms to be determined by the professor. May be appropriate for non-thesis graduate students wishing to

perform a thorough and directed literature review under the supervision of a professor, leading to the development of a formal paper.

Credits: 1-3

Offered: Every semester.

BUAD - Business Administration

BUAD 100 - Freshman Seminar

A one-credit course intended to help incoming freshmen succeed in Business Administration and Accounting at Fredonia. The course provides an introduction to the nature of university education and an orientation to the functions and resources of the Business Administration department and the university as a whole.

Credits: 1

Offered: Offered on occasion.

BUAD 101 - Understanding Business

An introduction to the art and science of mobilizing, in pursuit of profit, scarce resources in order to satisfy customers' demand for quality products and services. Topics such as evolution of American business enterprises, social responsibility, production management, human resource management, marketing, accounting, and international business will be introduced. The course is designed primarily for non-majors, although open to Business Administration freshman/sophomore students.

Credits: 3

Offered: Offered on occasion.

BUAD 200 - Fundamentals of Statistics for Business and Economics

An introductory study of statistical methods as applied to business and economic problems. Topics covered include: frequency distributions, measures of central tendency, measures of dispersion, probability, probability distributions, sampling distributions, estimation, and statistical inference. Note: Credit for at most one of the following courses may be applied towards a student's requirements for graduation: BUAD 200, ECON 200, EDU 200, POLI 200, SOC 200, and STAT 200.

Credits: 3

Offered: Offered on occasion.

BUAD 235 - Introduction to Business Communication

The highly practical course focuses on the critical communication skills involved in effective written and oral communication while emphasizing applications of communication concepts in the world of business. Students will be able to engage in application exercises, build their

exploratory skills, and confront problems of diversity. The course is cross listed with COMM 235.

Credits: 3

Prerequisite: ENGL 100 or Waiver - SUNY Basic Comm of an or better. Offered: Every semester.

BUAD 300 - Statistical Analysis

A study of the techniques and tools used in analyzing business and economic data with equal emphasis on estimation techniques and interpretation of results. Simple and multiple regression methods, simple time series analysis, non-parametric techniques, analysis of variance, and surveying are reviewed. Use of computer software for statistical analysis is included. Note: Students must earn a minimum C- grade in the prerequisite courses.

Credits: 3

Prerequisite: (ECON 200 or BUAD 200 or EDU 200 or POLI 200 or SOC 200 or STAT 200 or PSY 200) and (MATH 120 or MATH 121 or MATH 122). Offered: Every semester.

BUAD 310 - Legal Environment of Business

A one semester survey course of legal issues affecting individuals and businesses. Topics covered include dispute resolution, contract law, torts, agency law, and laws governing the creation, operation, and termination of business organizations. Various public law topics will be examined, as well as principles of international law, and theoretical considerations.

Credits: 3

Prerequisite: ENGL 100. Offered: Every semester.

BUAD 315 - Principles of Business Finance

An examination of the conceptual and institutional framework within which the financial manager operates. Topics cover management and valuation of assets, including management of funds and working capital, financial planning and capital budgeting in a national and global environment.

Credits: 3

Prerequisite: (ECON 200 or BUAD 200 or EDU 200 or POLI 200 or SOC 200 or STAT 200) and ACCT 201 and ECON 201 and ECON 202. Offered: Offered on occasion.

BUAD 319 - Health Care Finance

An introductory course on the application of financial management techniques in the health care industry. Particular emphasis is placed on understanding the unique problems facing the industry in the financial relationships among hospitals, patients, physicians and other providers, insurance, capital suppliers and governmental agencies.

Credits: 3

Prerequisite: BUAD 320. Offered: Offered on occasion.

BUAD 320 - Managerial Finance

The techniques of managerial finance as a decision science, in the context of owner wealth maximization and alternative business goals, are presented. The topics include time value of money, risk analysis, capital budgeting, capital structure, dividend theory, financial analysis, working capital management and foreign exchange risk management. NOTE: Students must earn a minimum C- grade in the prerequisite courses listed below.

Credits: 3

Prerequisite: ACCT 201 and ACCT 202 and ECON 201 and ECON 202 and (BUAD 200 or ECON 200 or POLI 200 or PSY 200 or SOC 200 or STAT 200) and (MATH 120 or MATH 122). Offered: Every semester.

BUAD 321 - Management and Organizational Behavior

An in-depth study of the theories and processes of management focusing on organizational behavior, hierarchical versus network organizational structure, and organizational culture. Issues within the organization such as motivation and leadership, diversity and group dynamics, and external environmental influences including technology, ethics, diversity and global considerations, are examined.

Credits: 3

Offered: Offered on occasion.

BUAD 323 - Organizational Behavior

The historical and current development of management principles is covered including theories of motivation for individuals, groups and organizations, leadership, organizational design and performance evaluation. NOTE: Students must earn a minimum C- grade in the prerequisite courses listed below.

Credits: 3

Prerequisite: ACCT 201 and ACCT 202 and ECON 201 and ECON 202 and (BUAD 200 or ECON 200 or POLI 200 or PSY 200 or SOC 200 or STAT 200). Offered: Every semester.

BUAD 325 - Principles of Marketing

An introduction to the field of marketing and marketing management. Emphasis on the marketing function of pricing, promotion, distribution, and product design both domestically and internationally. Students will learn to employ state-of-the-art information to plan, price, distribute, advertise, and promote products and services in the 21st century global economy as symbolic analysts and knowledge workers. The course will focus on how skilled marketers apply their knowledge and creative ideas to insure competitive success and market position and to fuel the high-tech information society.

Credits: 3

Prerequisite: ECON 201 and ECON 202. Offered: Offered on occasion.

BUAD 327 - Operations Management I

A fundamental course providing insight into the broad body of knowledge that informs operations management in today's diverse work environments. The concepts of operations management (OM), including both the application of qualitative and quantitative decision making tools, computer models, and effective control applications of operational systems will be explored. Note: Students must earn a minimum C- grade in the prerequisite courses listed below.

Credits: 3

Prerequisite: (ECON 200 or BUAD 200 or EDU 200 or POLI 200 or SOC 200 or PSY 200 or STAT 200) and ACCT 201 and ACCT 202 and ECON 201 and ECON 202 and (MATH 120 or MATH 122). Offered: Every semester.

BUAD 328 - Marketing Foundations

The course develops an understanding of the marketing environment of business, and explores the interrelationships between product, price, promotion, the global marketplace and how they affect business decisions. NOTE: Students must earn a minimum C- grade in the prerequisite courses listed below.

Credits: 3

Prerequisite: ACCT 201 and ACCT 202 and ECON 201 and ECON 202 and (ECON 200 or BUAD 200 or POLI 200 or PSY 200 or SOC 200 or STAT 200 or EDU 200). Offered: Every semester.

BUAD 330 - Human Resource Management

A study of the Human Resource function. Topics covered include recruitment, selection, hiring, performance evaluation, compensation, motivation, training and development, legal environment such as Occupational Safety and Health Administration, Equal Employment Opportunity Commission and sexual harassment issues, and industrial relations. Emphasis on how managers can deal with and use the Human Resources function.

Credits: 3

Prerequisite: BUAD 323. Offered: Every year.

BUAD 335 - Business Consulting

This course provides an opportunity for students to apply business administration theories and practices learned in the classroom to real life business situations. Acting as consulting firms, student groups will provide professional advice to the management of their chosen local, small-business establishments regarding any actual problems

facing their operations. Senior standing is required for enrollment.

Credits: 3

Prerequisite: BUAD 320 and BUAD 323 and BUAD 327 and BUAD 328. Offered: Every year.

BUAD 340 - Marketing Research

This specialized marketing methodology course helps students understand the fundamentals and techniques of marketing research, and conduct, analyze and present market studies by using various analytical tools. Emphasis is placed on building the student's ability to (1) use statistical software, such as SPSS, to analyze collected data; and (2) interpret the results and provide business decision alternatives based on their analyses. The classes are held in the classroom and/or computer labs.

Credits: 3

Prerequisite: BUAD 328 and BUAD 300. Offered: Every year.

BUAD 342 - Consumer Behavior

An integrative marketing course that examines individual psychological and social environments in which consumers attempt to satisfy felt needs and wants. Both marketing and personal perspectives are explored in class resulting in greater student appreciation and understanding of the complexity of human behavior in the new high-tech cross-cultural setting around the world.

Credits: 3

Prerequisite: BUAD 328. Offered: Every year.

BUAD 350 - Special Topics

Topics in Business Administration not covered in detail by regular courses and not offered on a regular basis. Junior/Senior standing required.

Credits: 1-3

Offered: Offered on occasion.

BUAD 354 - Entrepreneurship

Investigation of the components, tools and practices of entrepreneurship. The course focuses on identifying new venture opportunities (both private and non-profit); evaluating the viability of a new venture; writing a business plan; building an "E-team" that possesses the attributes necessary for success; understanding value propositions, strategic market entry, competitive positioning, and business models necessary to achieve business goals.

Credits: 3

Prerequisite: BUAD 320 and BUAD 328. Offered: Every year.

BUAD 372 - Financial Investments

Characteristics of bonds, stocks, securities market, investment banking are reviewed. Sources of investment information; analysis of securities; and efficient market theory are also reviewed.

Credits: 3

Prerequisite: BUAD 320 and BUAD 300*. Cross-Listed as: * Indicates that the course can be taken in the same semester. Offered: Every year.

BUAD 374 - Small Business Finance

Explorations are presented of the appropriate internal controls, working capital management, owner distributions, operating and capital budgets in pursuit of alternative small business goals. A project requiring valuation of either a small business expansion or acquisition is included.

Credits: 3

Prerequisite: BUAD 320. Offered: Offered on occasion.

BUAD 376 - Business and Culture

A survey of various aspects of culture and their impact on doing business in the international arena. Topics include verbal and non-verbal communication, negotiation, foreign exchange, and country-specific research. Emphasis on cultural awareness and understanding in business.

Credits: 3

Offered: Offered on occasion.

BUAD 378 - Business and Ethics

The ethical problems and responsibilities faced by business managers acting as agents are investigated. Various ethical constructs such as utilitarianism, intuitionism, the social contract, naturalism and virtue ethics are used for this exploration. Particular problems of deception, coercion and social responsibility are examined.

Credits: 3

Prerequisite: ACCT 202 and ECON 201 and ECON 202 and (BUAD 200 or STAT 200 or ECON 200 or EDU 200 or SOC 200 or PSY 200 or POLI 200). Offered: Every year.

BUAD 411 - Marketing Management

This course focuses on developing integrated marketing programs that address customer needs, competitive activities, channel and supplier behaviors, macro environmental factors, and market evolutions. Emphasis is placed on decision making related to marketing segmentation and a responsive marketing mix. Three major course components serve as a bridge to the marketing profession: the analysis of contemporary marketing cases,

evaluation of alternative marketing strategies and the preparation of a comprehensive marketing plan for a client.

Credits: 3

Prerequisite: BUAD 328. Offered: Every year.

BUAD 416 - Portfolio Management

Portfolio formation as based upon various objectives, notions of market efficiency and the associated empirical investigations that underlie modern portfolio theory, and differing methods of portfolio measurement are presented.

Credits: 3

Prerequisite: BUAD 372. Offered: Every other year.

BUAD 417 - Corporate Finance I

An examination of problems related to the investment, acquisition, and distribution of financial resources. Stress is placed upon integrating the areas into one system to facilitate and evaluate the operation of the finance function. Topics include cash flows, risk analysis, capital budgeting and structure, and international financial management.

Credits: 3

Prerequisite: BUAD 320. Offered: Every semester.

BUAD 418 - Corporate Finance II

A continuation of the study of problems related to the management of financial resources. Topics such as capital budgeting and cost of capital are covered in greater depth. Other topics such as leasing and mergers which are not covered in prior courses are introduced.

Credits: 3

Prerequisite: BUAD 317 or BUAD 417. Offered: Every year.

BUAD 427 - Operations Management II

This course applies the concepts learned in BUAD 327 with emphasis on the nature of the production, operations, and material functions and their interrelationship with quality. Discussions, problems, computer applications, case studies and a live project are used to understand many of the qualitative and quantitative methods of analysis currently used to manage and improve production/operations functions. Students are expected to draw upon their BUAD 327 knowledge and apply relevant aspects of that knowledge to a live project. When available, the course includes plant/production tours and guest speakers.

Credits: 3

Prerequisite: BUAD 327 and BUAD 300. Offered: Every semester.

BUAD 430 - Independent Study

Under faculty guidance, this course allows a student to independently study a subject or research a specific topic in business administration.

Credits: 1-6

Offered: Offered on occasion.

BUAD 440 - Advanced Human Resource Management

The application of Human Resource Management concepts to specific business problems through case analysis relating to the Human Resource Management topics covered in BUAD 330.

Credits: 3

Prerequisite: BUAD 330. Offered: Offered on occasion.

BUAD 445 - Integrated Marketing Communications

This advanced marketing course analyzes the components of integrated marketing communications which includes all communication functions, both internal and external, of an organization employing new information technologies. Class discussions will explore determining domestic and international consumer needs and wants, creating advertising and promotional messages, media strategy, and message strategy. Students will gain practical experience in developing a comprehensive marketing plan.

Credits: 3

Prerequisite: BUAD 328. Offered: Every year.

BUAD 446 - Sales Management

This advanced marketing course of study includes how modern sales managers employ state-of-the-art technology to identify, process, and solve sales management problems. Class assignments and discussions reveal contradictory perspectives to complex marketing problems. The course will also cover sales force structure in new lean-management organizations, determining needed characteristics and recruiting of new sales representatives, and processing, hiring, training, and ethically managing a multi-national sales force in the 21st century. Individual and group presentations, both written and oral, will be required.

Credits: 3

Prerequisite: BUAD 328. Offered: Every year.

BUAD 450 - Senior Seminar

This course provides students an opportunity for in-depth exploration of specific contemporary topics/issues in business administration. Students are expected to make class presentations of their assigned study. Departmental permission or senior standing is required for enrollment.

Credits: 1-3

Offered: Offered on occasion.

BUAD 463 - Information Technology Project Management

A survey of general management processes for planning, managing and controlling IT projects. Both technical and behavioral aspects of project management are discussed. The focus is on management of development for enterprise-level systems. Topics include defining project scope, cost and resource management, scheduling using PERT/CPM, quality management, risk management and project integration management. Lab instruction in a modern project management software tool complements the course.

Credits: 3

Prerequisite: BUAD 363. Offered: Every year.

BUAD 472 - International Finance

Reviews the financial risks associated with international business, especially risks caused by floating exchange rates. The review includes classifications of risks, the hedging strategies used to manage them, and international institutional arrangements that result.

Credits: 3

Prerequisite: BUAD 300 and BUAD 417. Offered: Offered on occasion.

BUAD 474 - Financial Intermediaries Management

Explorations of the historical function of bank-type financial intermediaries, the associated regulation-deregulation-reregulation cycle, and associated current management issues and techniques.

Credits: 3

Prerequisite: (BUAD 300 or ECON 300) and BUAD 417. Offered: Offered on occasion.

BUAD 480 - Internship

This course provides academic credit for professional experiences in the field of business administration. Departmental approval, senior/junior standing, and minimum 2.0 cumulative grade point average are required for enrollment. Grading mode is S/U.

Credits: 1-9

Offered: Every semester.

BUAD 499 - Strategic Management

A capstone course emphasizing top multi-national management issues through utilization of knowledge and skills developed in previous courses. Problem analysis and decision-making in case studies and group projects simulate the process of strategy formulation in the firm.

Credits: 3

Prerequisite: BUAD 320 and BUAD 323 and BUAD 327 and BUAD 328. Offered: Every semester.

BUAD 510 - Modern Financial Instruments

Explores modern financial instruments - stocks, bonds, options, futures, swaps - and the financial environment thereof. Discusses the forces that determine changes in financial markets and institutions, and the implications for the utilization of financial instruments for the management of funds in firms and/or financial institutions.

Credits: 3

Prerequisite: BUAD 317. Offered: Every year.

BUAD 520 - Information Technology Management and E-Commerce

The course focuses on technology management and development of an Internet-based business or extension of an existing business. The course integrates concepts from economics, organizational strategy, entrepreneurship, and Web design.

Credits: 3

Prerequisite: BUAD 261. Offered: Offered on occasion.

BUAD 530 - Advanced Financial Management

An introduction of the concepts, frameworks, tools, and techniques employed in financial analysis, forecasting and planning, working capital management, valuation, capital budgeting, cost of capital, and mergers. Topics also include sources and methods of financing, types of securities, financial strategy, and the timing of financial policies in domestic and international settings.

Credits: 3

Prerequisite: BUAD 317. Offered: Offered on occasion.

BUAD 550 - Organizational Communication

A course in organizational communication to provide extensive theoretical background upon which to examine, evaluate, diagnose, and recommend solutions to organizational communication problems. The course allows students to explore particular areas of interest and encourages the critique of existing theories while applying them to real-world situations in order to frame sets of practical skills.

Credits: 3

Prerequisite: BUAD 321. Offered: Every year.

BUAD 560 - Marketing Strategy

An introduction to marketing strategy and the elements of marketing analysis: customer, competitor, and company analysis. Students will enhance their problem-solving and decision-making abilities utilizing the elements of marketing mix: product strategy, pricing, advertising and

promotion, and distribution. A case study approach is employed.

Credits: 3

Prerequisite: BUAD 325. Offered: Offered on occasion.

BUAD 570 - Advanced Corporate Management

A study of the Modern Theory of Organization. The nature of organizational theory, traditional theories, and the evolution of modern systems theory are explored. Factors related to formal and informal organizational processes and the basic linking process of Decision Theory are analyzed.

Credits: 3

Prerequisite: BUAD 499. Offered: Offered on occasion.

BUAD 590 - Business Ethics

A study of the concept of an ethic and the nature of a corporation's relation to an ethic. The course explores the nature of ethics in a corporation functioning in a competitive global environment. Case studies are utilized to understand ethics in a practical environment.

Credits: 3

Prerequisite: BUAD 321. Offered: Every year.

CDS Comm Disorders Sciences

CDS 100 - Freshman Seminar in Speech Language Pathology

Freshman Seminar in Speech Pathology is a 1 credit course that is intended to help incoming Communication Disorders and Sciences freshmen succeed at SUNY Fredonia and become lifelong learners. The course introduces first year students to the academic and social aspects of college life, and is designed to empower students to become successful learners at the collegiate level. Freshman Seminar in Speech Pathology provides both an introduction to the nature of college education and a general orientation to the functions and resources of the college as a whole.

Credits: 1

Offered: Every year.

CDS 115 - Introduction to Sign Language

Introduces the student to three major areas of learning to use a signed language. First, deaf culture is explored. Second, manual communications as a language is surveyed. Third, the practical application of sign language as a method of communication is stressed and practiced. In class and out of class practice is emphasized.

Credits: 3

Offered: Every year.

CDS 150 - Introduction to Communicative Disorders

Introduction to and overview of the field of communicative disorders (speech, language and hearing). Interactions with related disciplines in the humanities, and in the behavioral, biological and physical sciences, as well as study of the normal communication processes.

Credits: 3

Offered: Every year.

CDS 201 - Voice/Articulation/Resonance

Survey of voice and speech production. Introduction to International Phonetic Alphabet. Techniques of analysis and improvement of simple deviancies of voice, articulation, and resonance. Vocal hygiene is stressed.

Credits: 3

Offered: Offered on occasion.

CDS 206 - Fundamentals of Acoustics

The course is designed to introduce Communication Disorders and Sciences students to the fundamental concepts of general acoustics. The nature of sound waves, simple harmonic motion, relative measure of power, complex waves, Fourier analysis, resonance and filtering distortion and sound transmission will be covered. Emphasis will be placed on the analysis and measurement of speech production and perception. High school physics and/or PHYS 120 is recommended.

Credits: 3

Offered: Every year.

CDS 208 - Geriatric Communication Disorders

Provides students in related programs with information about the communication problems and disorders associated with aging. Focuses on the normal communication process, speech, language and hearing disorders of the aged and the psychosocial consequences of disordered communication. Management approaches, services available and the evolving role of the health professional are discussed.

Credits: 2

Offered: Offered on occasion.

CDS 215 - Intermediate Sign Language

Prior completion of an introductory course in sign language required. Intermediate Sign Language extends the three major areas introduced in Introduction to Sign Language. First, deaf culture is analyzed by reviewing selected literary works. Second, manual communications as a language is critically analyzed. Third, the practical application of sign language as a method of communication is stressed and practiced. The course

emphasizes a transition from signing English to American Sign Language.

Credits: 3

Prerequisite: SPA 115 or CDS 115. Offered: Every year.

CDS 225 - Introduction to Language

This course introduces linguistics as the scientific study of language. Topics include: how languages differ from other systems of communication, the sound systems, word formation, grammar, and meaning. Students will be introduced to the phenomena found in languages, to the ways we can best describe these phenomena in order to explain them, and to the insights such linguistic descriptions can give us into the nature of language in general.

Credits: 3

Offered: Every year.

CDS 250 - Speech and Language Development

Introduction to normal language and speech development in children. Provides theoretical and practical frame of reference for students entering child-centered professions. Foundations of language and speech acquisition, developmental processes requisite to normal speech and language, and means of facilitating normal communicative abilities.

Credits: 3

Offered: Every year.

CDS 268 - Phonetics

Study of general articulatory phonetics, introduction to acoustic phonetics and phonology. Students transcribe English and non-English sounds following International Phonetic Alphabet (IPA).

Credits: 3

Offered: Every year.

CDS 280 - Speech-Language Pathology I

An overview of the neural bases of speech/language and neurogenic communication disorders such as aphasia, right hemisphere syndrome, dementia, traumatic brain injury, dysarthria, and apraxia of speech (specific disorders covered may vary from semester to semester). Fluency disorders, both developmental and acquired, will also be included. Emphasis will be on etiology and characteristics of these disorders, and assessment and treatment applications.

Credits: 3

Prerequisite: SPA 250 and SPA 268 or CDS 250 and CDS 268. Offered: Every year.

CDS 310 - Speech and Hearing Mechanism

Examines the anatomical and physiological characteristics of the speech and hearing mechanisms. Specific focus on the integration of the respiratory, phonatory, supraglottal and hearing systems as they relate to speech production and perception.

Credits: 3

Offered: Every year.

CDS 316 - Speech Science

Study of the interrelationships between acoustic, physiological, and aerodynamic factors influencing voice and speech production, including study of processes of respiration, phonation, resonance, articulation, and their interrelationships.

Credits: 3

Prerequisite: SPA 310 and SPA 268 or CDS 310 and CDS 268. Offered: Every year.

CDS 322 - Hearing Problems and Tests

Introduction to acoustics, anatomy, physiology and pathology of the auditory system. Study and performance of audiology as applied in clinical environments. Emphasis on theoretical and applied research to differentiate normal from abnormal audition.

Credits: 3

Prerequisite: SPA 310 or CDS 310. Offered: Every year.

CDS 323 - Speech Sound and Language Disorders

Assessment and intervention principles and practices appropriate for working with articulation and language problems of children.

Credits: 3

Prerequisite: SPA 250 or CDS 250. Offered: Every year.

CDS 376 - Literacy Development

This course provides an overview of the field of literacy including literacy acquisition processes, theoretical approaches to the acquisition of literacy and the social implications of being literate. Students will be able to identify cultural, educational, and linguistic issues related to the acquisition of literacy.

Credits: 3

Offered: Every year.

CDS 390 - Designing Surveys

Survey design and methodology will be presented via lectures, discussions, and in-class activities. Topics covered will include initiating a survey, planning the project, designing the sample, composing questions, creating item scales, building questionnaires, self

administered surveys, collecting interview data, processing the data, and analyzing survey data. It is expected that students have had an introductory course in statistics, e.g., STAT 200 or STAT 250. Junior or senior standing or permission of the instructor.

Credits: 3

Prerequisite: STAT 250 or ECON 200 or PSY 200 or SOC 200. Offered: Offered on occasion.

CDS 398 - Clinical Methods in Evaluation

An introduction to diagnostic methodologies for management of the communicatively impaired. Students will gain knowledge with a variety of published standardized tests with respect to the following areas: appropriate test selection, knowledge of test rationale/content, administration procedures and recording test responses, accurate scoring and interpretation, diagnosis, informal assessment, goal development and report writing. In addition, students will gain knowledge in the referral process and qualification criteria for services.

Credits: 3

Prerequisite: SPA 250 and SPA 268 and SPA 310 or CDS 250 or CDS 268 or CDS 310. Offered: Every year.

CDS 399 - Clinical Methods in Intervention

Students will gain knowledge with a variety of therapy models with respect to various disorder types, settings, and methodologies for management of the communicatively impaired. Course content will include therapy implementation, goal/objective selection, lesson plan writing, charting progress, progress report writing, Individual Education Plan (IEP) writing, behavior management, collaboration, team meetings, and criteria for dismissal.

Credits: 3

Prerequisite: SPA 398 or CDS 398. Offered: Every year.

CDS 400 - Foundations of Speech Language Pathology in Educational Settings

Study of the legal bases, common practices, principles, and issues related to the effective delivery of speech and language services in educational settings.

Credits: 2

Offered: Every year.

CDS 410 - Clinical Procedures: Observation and Analysis

Guided observation and study of assessment and intervention procedures for children and adults with a variety of communication disorders. Videotaped and real-time sessions will be utilized for demonstration and analysis. Written projects will prepare the student to

analyze methodologies and develop therapeutic goals, objectives, procedures and materials. The course will fulfill the American Speech Language-Hearing Association (ASHA) requirement for a minimum of 25 observation hours.

Credits: 3

Prerequisite: SPA 398 and SPA 399 or CDS 398 and CDS 399. Offered: Every year.

CDS 418 - Speech-Language Pathology II

The study and application of assessment procedures and intervention strategies of speech and swallowing communication disorders including cleft lip and palate, voice and dysphagia. Case study discussions and collaborative learning will be emphasized.

Credits: 3

Prerequisite: SPA 310 or CDS 310. Offered: Every year.

CDS 419 - Aural Habilitation and Rehabilitation

Application of therapeutic measures and strategies to optimize the communication ability of the hearing impaired. Emphasis is on fetal development, genetics, psychosocial and counseling issues, amplification, visual and auditory training and third part reimbursement.

Credits: 3

Prerequisite: SPA 322 or CDS 322. Offered: Every year.

CDS 420 - Advanced Speech Pathology

Seminar devoted to assigned readings and to approved individual research. Strengthens student knowledge in specific areas in preparation for more advanced studies.

Credits: 3

Prerequisite: SPA 280 and SPA 418 or CDS 280 and CDS 418. Offered: Offered on occasion.

CDS 490 - Independent Study

Study of a particular problem in speech pathology and audiology. Periodic meetings with instructor; writing a substantial paper.

Credits: 1-3

Offered: Every semester.

CDS 495 - Seminar in Speech-Language Pathology/Audiology

Detailed study of selected topics in speech pathology or audiology. Content will change from semester to semester but will focus on a relatively narrow topic or issue of current interest.

Credits: 1-3

Offered: Every other year.

CDS 500 - Child Language Disorders

This course examines the development, and assessment of language in infants, toddlers, preschoolers, and school age children; including an introduction in language intervention.

Credits: 3

Offered: Every year.

CDS 501 - Professional Seminar

The student will gain knowledge of and experience with current clinical approaches, strategies, new regulations and writing skills. Each fall semester the course will address content identified from assessment data collected from students and supervisors in the spring and summer semesters.

Credits: 0

Offered: Every year.

CDS 502 - Clinical Practice, Communication Disorders

An application of the student's knowledge from the classroom to a clinical situation. Students are assigned to speech-language assessment and therapy sessions on a rotation basis at the university clinic and local off campus clinics, under the supervision of an ASHA certified speech-language pathologist. Attendance at periodic staff meetings required. Completion of minimal three sections of CDS 502 are required.

Credits: 3

Offered: Every semester.

CDS 510 - Pediatric Audiology

An introduction to pediatric parameters as they relate to clinical audiology. Study and performance of audiology as applied in pediatric, clinical environments. Emphasis of theoretical and applied research to differentiate normal from abnormal pediatric audition.

Credits: 3

Prerequisite: SPA 550 or CDS 550. Offered: Every year.

CDS 520 - Multicultural Issues in Communication Disorders

Attempts to prepare the speech/language pathologist to fairly and effectively understand cultural constraints involved in communication disorders, to learn culturally sensitive diagnostic procedures and to determine therapeutic techniques that are consistent with minority populations and their beliefs and values about communication.

Credits: 3

Offered: Offered on occasion.

CDS 525 - Speech and Hearing Problems in the Classroom

Methods to assist classroom teacher to improve speech habits and correct minor defects. Recognition of speech defects, cooperation with speech pathologist, medical personnel, and family. Demonstration and lectures of classroom management of speech and hearing problems. Not open to majors in Speech-Language Pathology.

Credits: 3

Offered: Offered on occasion.

CDS 530 - Augmentative and Alternative Communication

Assessment and therapy techniques for augmentative/alternative communication (AAC). Overview of diagnoses that often require AAC. Assessment and therapy considerations for motoric, linguistic, cognitive and sensory skills and for communicative, language and literacy needs in context. Specific high and low tech systems will be explored.

Credits: 3

Offered: Offered on occasion.

CDS 540 - Diagnostic Theories and Practices

A study of assessment models, strategies, and rationales employed in speech-language pathology and audiology. An application of student's knowledge base to the assessment process.

Credits: 3

Offered: Every year.

CDS 551 - Neuroscience for Communication Disorders

An introduction to neuroanatomy, neurophysiology and neuropathology of speech, language, swallowing, and hearing will be presented via lectures, discussions, videos, and CD-ROMs. The course will provide students with a solid foundation for further course work, as well as for clinical practice with neurologically-impaired populations.

Credits: 3

Offered: Every year.

CDS 552 - Medical Speech-Language Pathology

The roles, responsibilities, and essential skills of speech-language pathologists employed in medical settings will be presented via lectures, discussions, videos, CD-ROMs, and in-class activities. Topics covered will include medical settings and personnel, medical examination, neurological assessment, imaging studies, speech-language assessment, tracheotomy and ventilator-dependent patients, and head/neck cancer.

Credits: 3

Prerequisite: SPA 551 and SPA 598 or CDS 551 and CDS 598. Offered: Every year.

CDS 554 - Early Intervention

An in-depth review of recommended practices in assessment and treatment for the birth to 3 year-old population and the role of the speech-language pathologist as a team member. The student will gain experience with approaches and strategies to be utilized in the neonatal unit, the home and other natural environments.

Credits: 3

Offered: Every year.

CDS 555 - Dysphagia

This course will cover the assessment, treatment, and prevention strategies for swallowing disorders (dysphagia) in the pediatric and adult populations.

Credits: 3

Offered: Every year.

CDS 556 - Corporate Speech Pathology

Roles, responsibilities, and essential skills of corporate speech-language pathologists will be presented via lectures, discussions, demonstrations, videos, CD-ROMs, in-class activities. Topics covered will include starting a practice, essential business vocabulary, traditional speech-language pathology in corporate settings, marketing plans, billing and paperwork, essential equipment, cross-cultural communication, diagnostics in corporate settings, corporate speech training, pronunciation training, and accent reduction.

Credits: 3

Offered: Offered on occasion.

CDS 557 - Counseling for the Speech Language Pathologist

Examines principles and theories of counseling for working with persons with communication disorders and their families throughout the lifespan and from varied cultural backgrounds. Students will learn how to structure and conduct interviewing and counseling, as practiced by speech language pathologists. Emphasis is placed on helping students to gain comfort and skill in coping with their clients' emotions and giving clients constructive feedback. Students demonstrate their understanding of the counseling process through case study presentations.

Credits: 3

Offered: Every year.

CDS 558 - Seminar: Traumatic Brain Injury

The study of Traumatic Brain Injury (TBI) is an important area of focus with significant differences to other

neurological communication disorders. It is a seminar course with focus on assessment and remediation of language and cognitive problems for children and adults with TBI.

Credits: 3

Offered: Offered on occasion.

CDS 560 - Studies in Hearing Research

Advanced study of acoustics, anatomy and physiology, and pathology of auditory system. Study of classic, historical, and contemporary theoretical and applied research germane to the basis and development of audiology. Emphasis of reported research to differentiate normal from abnormal audition.

Credits: 3

Offered: Every year.

CDS 565 - Instrumentation in Communicative Disorders

The course will focus on the application of instrumentation in the assessment and treatment of various communicative disorders. Appropriate measurement technique and interpretation of results will be covered. Focus on "hands-on" experience with current instrumentation and software will be emphasized.

Credits: 3

Offered: Every year.

CDS 570 - Contemporary Issues with the Hearing Impaired

The course will assess contemporary issues related to testing, evaluating and resolving educational and social issues with hearing-impaired children and adults. Field experiences, guest speakers, selected video tapes and other varied course strategies will, where appropriate, be used in the course.

Credits: 3

Offered: Every year.

CDS 575 - Craniofacial Anomalies

Etiology, symptomatology and management of communication disorders related to cleft lip, cleft palate and associated disorders. Focus on interdisciplinary management.

Credits: 3

Offered: Every year.

CDS 582 - Fluency Disorders

Identifying aspects of fluent speech, normally nonfluent speech and disfluent speech. Discussion and application of parameters addressing the nature, characteristics,

prevention, etiology, treatment, and contributing factors of stuttering. Addresses both the physiological and psychological aspects of stuttering.

Credits: 3

Offered: Every year.

CDS 583 - Speech Sound Disorders and Language Intervention

This course is a continuation of CDS 500 Child Language Disorders. The course is divided into two modules: Speech Sound Disorders and Language Intervention. The Speech Sound Disorders module covers assessment and intervention of phonological and articulation disorders. The language intervention module will explore the various approaches to language intervention and evidence base practice.

Credits: 3

Prerequisite: CDS 500. Offered: Every year.

CDS 584 - Speech Sound Disorders and Language Intervention

The course is divided in two modules: Speech Sound Disorders and Language Intervention. The Speech Sound Disorders module includes the assessment and intervention of phonological and articulation disorders. The language intervention module includes various approaches to language intervention and evidence base practice.

Credits: 3

Offered: Every year.

CDS 585 - Auditory Processing Disorders

Auditory Processing Disorders (APD) is a specialty area that remains novel to most professionals and students in speech pathology and audiology. The course will illustrate how APDs impact the accurate perception of auditory information, and reading/language skills. Course materials include the neurology of central auditory nervous system, definitions/etiologies of APD, evaluation and remediation strategies, and how coexisting disorders such as Attention, Learning and Language Disorders may influence an individual's auditory processing abilities.

Credits: 3

Offered: Every year.

CDS 589 - Professional Issues

The course is aimed at preparing graduate students to understand factors that influence professional practice, including government and economic, professional delivery, setting-specific, and quality service. Standards of ethical conduct, certification, specialty recognition, licensure, and other relevant professional credentials are covered.

Credits: 2

Offered: Offered on occasion.

CDS 595 - Graduate Seminar in Speech

Detailed study of selected graduate topics in speech pathology and audiology. Content will change from semester to semester but will focus on a relatively narrow topic or issue of current interest.

Credits: 3

Offered: Offered on occasion.

CDS 598 - Voice Disorders

Course will cover assessment and treatment strategies for benign, malignant and neurogenic vocal pathologies. Case study format will be emphasized.

Credits: 3

Offered: Every year.

CDS 599 - Experimental Phonetics

Measurement, description, and analysis of speech, its production and perception. Students become familiar with sound spectrograph as well as other research instrumentation typically employed in research. Designed for students in speech pathology and audiology, and linguistics.

Credits: 3

Offered: Every year.

CDS 602 - Topical Seminar in Speech Language Pathology and Audiology

Detailed study of selected topics in speech pathology or audiology. Content will change from semester to semester but will focus on a relatively narrow topic or issue of current interest. May be repeated for credit.

Credits: 1-3

Offered: Every year.

CDS 605 - Advanced Clinical Methods and Practice

A speech-language pathology externship in which graduate students are assigned to a health care facility, rehabilitation center, speech and hearing clinic or an educational setting. Students perform diagnostics and therapy with patients at the facility under the supervision of a licensed and ASHA certified staff speech language pathologist. Students enrolled in CDS 605 must have completed all CDS 502 clinical courses.

Credits: 6-12

Offered: Every semester.

CDS 606 - Research Design in Communication Disorders and Sciences

An introduction to research design and statistical methods necessary to critically read and evaluate research. Study of scientific principles, methods and controls used in research, and design and evaluation of group and single-subject studies. Emphasis will be placed on the application of evidence-based practice in clinical settings.

Credits: 3

Offered: Every year.

CDS 608 - Neurogenic Language Disorders

The etiology, characteristics, assessment, prevention, and treatment of neurogenic language and cognitive-communication disorders (e.g., aphasia, right hemisphere syndrome, traumatic brain injury, dementia) will be presented via lectures/discussions, case analysis, demonstrations and in-class activities. Emphasis will be placed on differential diagnosis and treatment planning.

Credits: 3

Prerequisite: SPA 551 or CDS 551. Offered: Every year.

CDS 609 - Independent Study

Provides advanced graduate students the opportunity to work individually on problems of special concern not available through other course offerings under direction of qualified department member.

Credits: 1-3

Offered: Every semester.

CDS 611 - Motor Speech Disorders

The etiology, characteristics, assessment, and treatment of the dysarthrias and apraxia of speech will be presented during lectures/discussions, videos, CD-ROMs, demonstrations, and in-class activities. The course will provide Speech-Language Pathology students with a solid foundation in normal motor speech processes, which will serve as a basis for the assessment and treatment of disordered speech production.

Credits: 3

Offered: Every year.

CDS 619 - Comprehensive Exam

A written comprehensive exam evaluating knowledge base in assessment, intervention, etiologies, prevention and characteristics of ASHA standard courses.

Credits: 0

Offered: Every year.

CDS 629 - Directed Studies in Research Methodology - Thesis Research

A minimum acceptable for the degree is 3 credit hours

Credits: 1-6

Offered: Every semester.

CDS 632 - Graduate Student Teaching

Field based clinical practicum in a public school, rehabilitation center, Board of Cooperative Educational Services (BOCES) or other appropriate educational setting. Cooperating speech-language pathologists supervise students in providing assessment and treatment services to clients with communication disorders.

Credits: 6

Offered: Offered on occasion.

CHEM - Chemistry**CHEM 100 - Chemistry Freshmen Seminar**

The course is designed for Freshmen Chemistry majors in order to help them develop the skills required to succeed as a science major and get the most out of their college experience. Students will be introduced to the Chemistry faculty and staff, current chemistry majors and the department facilities in addition to career options and campus resources. A major emphasis will be focused on effective learning styles and study skills.

Credits: 1

Offered: Every year.

CHEM 105 - Food Chemistry

Introductory course for non-science majors only. Chemical aspects of the collection, preparation, storage, cooking, and consumption of food. Not applicable toward a major or minor in Chemistry.

Credits: 3

Offered: Every year.

CHEM 107 - Chemistry for Consumers

Introductory course for non-science majors; emphasis in practical aspects of chemistry in everyday life. Topics include nuclear chemistry, foods, gardening, pest control, health chemistry, and home products. Not applicable toward a major or minor in Chemistry.

Credits: 3

Offered: Every semester.

CHEM 113 - Chemistry and the Environment

Basic chemical principles are presented, emphasizing their relationship to environmental problems. The course

considers the chemical nature of various substances and their impact on the environment. Not applicable toward a major or minor in Chemistry.

Credits: 3

Offered: Every year.

CHEM 114 - Introduction to Chemistry

An introduction to chemical principles, emphasizing formulas, equations, bonding, atomic structure, nomenclature, periodic properties, and chemical calculations. Intended for students who have not taken chemistry in high school and/or who plan to take CHEM 115-116 but feel unprepared to do so. Not applicable toward a major or minor in Chemistry.

Credits: 3

Offered: Offered on occasion.

CHEM 115 - General Chemistry Lecture I

Nuclear, electronic, and molecular composition and structure and principles of chemical bonding used to describe nature and reactivity of atoms, ions, and molecules. Includes laws governing behavior of gases, liquids, and solids.

Credits: 3

Offered: Every semester.

CHEM 116 - General Chemistry Lecture II

Continuation of CHEM 115. Thermodynamics, chemical kinetics, chemical equilibrium, properties of acids and bases, aqueous solutions, electrochemistry, and nuclear chemistry.

Credits: 3

Prerequisite: CHEM 115. Offered: Every semester.

CHEM 125 - General Chemistry Laboratory I

Some fundamental principles in experimental investigation of chemical substances and phenomena. Includes consideration of chemical and physical properties and typical reactions of inorganic and organic compounds. Equilibria, thermochemistry, oxidation-reduction, rates of chemical reactions, and volumetric, gravimetric, and qualitative analysis investigated. One laboratory period per week.

Credits: 1

Offered: Every semester.

CHEM 126 - General Chemistry Laboratory II

Some fundamental principles in experimental investigation of chemical substances and phenomena. Includes consideration of chemical and physical properties and typical reactions of inorganic and organic compounds.

Equilibria, thermochemistry, oxidation-reduction, rates of chemical reactions, and volumetric, gravimetric, and qualitative analysis investigated. One laboratory period per week.

Credits: 1

Offered: Every semester.

CHEM 130 - Honors General Chemistry Laboratory

Directed studies designed to foster independence of thought and improve laboratory technique. Emphasis on quantitative determinations by acid-base, complexation, and spectroscopic methods. Open to Chemistry majors and others by permission of department. One laboratory period per week.

Credits: 1

Prerequisite: CHEM 115 and CHEM 125. Offered: Every year.

CHEM 154 - Nature of Science

The aim of the introductory course is to increase student understanding of how scientists think and work. Discussions will focus on the hows, whys, scope, and limits of today's scientific methodology. It will also explore famous experiments from the history of science, including those described by Galileo, Newton, Cavendish, and Young. The course fulfills one of the Part 7 Natural Sciences requirements of the College Core Curriculum, but is not applicable toward a major or minor in Chemistry.

Credits: 3

Offered: Every year.

CHEM 170 - Scientific Revolutions

Examines the role of science in Western European culture from roughly 1540-1905. Focuses mainly on the lives and the scientific and cultural contributions of six revolutionary figures of science: Copernicus, Galileo, Newton, Lavoisier, Darwin, and Einstein.

Credits: 3

Offered: Every year.

CHEM 215 - Organic Chemistry Lecture I

Structure and reactions of the most important classes of organic compounds: hydrocarbons and principal functional groups of the compounds of carbon. Structure, occurrence, properties of organic compounds of biological significance.

Credits: 3

Prerequisite: CHEM 116. Offered: Every semester.

CHEM 216 - Organic Chemistry Lecture II

Structure and reactions of the most important classes of organic compounds: hydrocarbons and principal functional groups of the compounds of carbon. Structure, occurrence, properties of organic compounds of biological significance.

Credits: 3

Prerequisite: CHEM 116. Offered: Every year.

CHEM 225 - Organic Chemistry Laboratory I

Techniques for determination of physical and chemical properties, synthesis, and isolation from natural sources, of organic compounds. Nuclear magnetic resonance and infrared spectroscopy incorporated in experiments. One laboratory period per week.

Credits: 1

Offered: Every year.

CHEM 226 - Organic Chemistry Laboratory II

Techniques for determination of physical and chemical properties, synthesis, and isolation from natural sources, of organic compounds. Nuclear magnetic resonance and infrared spectroscopy incorporated in experiments. One laboratory period per week.

Credits: 1

Offered: Every year.

CHEM 230 - Advanced Organic Laboratory

The utilization of instrumental methods and advanced laboratory techniques in organic chemistry. Includes hands-on use of various instrumental methods including infrared, nuclear magnetic resonance, and gas chromatography. One three-hour laboratory period per week.

Credits: 1

Prerequisite: CHEM 225. Offered: Every year.

CHEM 291 - Directed Laboratory Research

This course provides an entry-level research experience for students having freshman or sophomore standing. Study and research areas include analytical, inorganic, organic, physical, and polymer chemistry, as well as biochemistry. Permission of a faculty mentor is required. Prerequisites vary depending upon the specific areas of study and research, and are determined by the supervising faculty mentor.

Credits: 1-3

Offered: Every semester.

CHEM 292 - Directed Laboratory Research

This course provides an entry-level research experience for students having freshman or sophomore standing. Study and research areas include analytical, inorganic, organic, physical, and polymer chemistry, as well as biochemistry. Permission of a faculty mentor is required. Prerequisites vary depending upon the specific areas of study and research, and are determined by the supervising faculty mentor.

Credits: 1-3

Offered: Every semester.

CHEM 295 - Introduction to Research

This one-credit course is intended to provide students with a sense of how contemporary scientific research is carried out, with special emphasis on the chemical literature. Course topics to be emphasized include: the primary chemical literature; the plagiarism and citation; organizing, preparing and presenting a scientific seminar; and procuring the laboratory chemicals and equipment needed for a research project. One lecture per week.

Credits: 1

Prerequisite: CHEM 215. Offered: Every year.

CHEM 302 - Chemistry in Today's Society

For non-majors only. Discussion of chemistry topics of major relevance to society, including some useful industrial processes, pollution, energy sources, and the detection of hazardous materials, especially those of local concern. Not applicable toward a major or minor in Chemistry.

Credits: 3

Offered: Offered on occasion.

CHEM 305 - Laboratory Supervision in Chemistry

Students enrolling in this course serve as laboratory assistants under supervision of a faculty member. Students selected by department after completing application form (available from chairperson). Four hours of work per week expected for each hour of credit elected; may be taken more than once. Does not count toward major requirements.

Credits: 1-2

Offered: Every semester.

CHEM 314 - Principles of Physical Chemistry

A one semester introduction to physical chemistry intended primarily for Biology and Biochemistry majors. It emphasizes thermodynamics and kinetics, especially as applied to biological phenomena. Also included will be discussions of transport processes, solutions and electrolytes. Quantum chemistry will be briefly discussed.

The course is only for biochemistry majors pursuing the biological emphasis track.

Credits: 3

Prerequisite: MATH 121 or MATH 123 and CHEM 116.
Offered: Offered on occasion.

CHEM 315 - Introduction to Physical Chemistry

An introductory course that provides an overview of the sub-disciplines of physical chemistry, specifically thermodynamics, kinetics, and quantum mechanics. Such topics are relevant to a vast array of scientific endeavors including such multidisciplinary areas as biochemistry and environmental sciences. The course is intended to provide an understanding of the relevant topics without in-depth analyses and discussions.

Credits: 3

Prerequisite: CHEM 116 and MATH 123 and PHYS 231 and PHYS 233. Offered: Every year.

CHEM 316 - Advanced Physical Chemistry

An in-depth treatment of physical chemistry topics including derivations, analysis, and discussion within the areas of kinetics, thermodynamics, and quantum mechanics. Applications to chemical systems and implications for spectroscopic analysis of molecular structure.

Credits: 3

Prerequisite: CHEM 116 and MATH 123 and PHYS 231 and PHYS 233. Offered: Every year.

CHEM 317 - Analytical Chemistry, Quantitative Analysis

Gravimetric, volumetric, and elementary instrumental determinations. Emphasis on volumetric analysis. neutralization, oxidation-reduction, complexometric, and electrochemical methods. Introduction to computer methods in chemistry.

Credits: 3

Prerequisite: CHEM 116. Offered: Every year.

CHEM 318 - Analytical Chemistry, Instrumental Analysis

Continuation of CHEM 317. Application of instrumental methods to quantitative chemical analysis, including spectroscopy, potentiometry, chromatography, nuclear and chemical methods.

Credits: 3

Prerequisite: CHEM 317. Offered: Every year.

CHEM 325 - Physical Chemistry Laboratory I

Laboratory experiments designed to accompany CHEM 315. One laboratory period per week.

Credits: 1

Offered: Every year.

CHEM 326 - Physical Chemistry Laboratory II

Laboratory experiments designed to accompany CHEM 316. One laboratory period per week.

Credits: 1

Offered: Every year.

CHEM 327 - Analytical Chemistry I Laboratory

Laboratory experiments designed to accompany CHEM 317.

Credits: 1

Offered: Every year.

CHEM 328 - Analytical Chemistry II Laboratory

Laboratory experiments designed to accompany CHEM 318.

Credits: 2

Offered: Every year.

CHEM 333 - Biochemistry

The structure and function of proteins and the regulation of metabolic pathways will be the central concepts presented in the course. Students should gain an understanding of the fundamental principles of the biology of protein molecules. BIOL 237 Genetics recommended as prerequisite.

Credits: 3

Prerequisite: CHEM 216 and CHEM 226. Offered: Every year.

CHEM 334 - Biochemistry Laboratory

Introduction to laboratory practice using biochemical techniques to isolate and characterize proteins. Enzyme kinetics and bioinformatics are also covered.

Credits: 1

Offered: Every year.

CHEM 341 - Introduction to Environmental Chemistry

This course provides an introduction to the underlying chemistry occurring within natural systems. The course will cover topics in air, water, and soil chemistry, including discussions of anthropogenic impacts to established dynamics.

Credits: 3

Prerequisite: CHEM 215*. Cross-Listed as: * Indicates that the course can be taken in the same semester. Offered: Every other year.

CHEM 371 - Internship in Chemistry

Approved practical experience in industrial, environmental, commercial, forensic, or other laboratories. Internships may accompany paid working time arrangements.

Credits: 1-3

Offered: Every semester.

CHEM 372 - Internship in Chemistry

Approved practical experience in industrial, environmental, commercial, forensic, or other laboratories. Internships may accompany paid working time arrangements.

Credits: 1-3

Offered: Every semester.

CHEM 391 - Independent Lab Research

For students having junior standing. See CHEM 491-492 for list of study and research areas.

Credits: 1-3

Offered: Every semester.

CHEM 392 - Independent Lab Research

For students having junior standing. See CHEM 491-492 for list of study and research areas.

Credits: 1-3

Offered: Every semester.

CHEM 397 - Biochemistry Seminar I

Current biochemical papers are analyzed in a journal club (open discussions) format. The course helps students to develop critical reading skills and underscore how an array of biochemical techniques are applied to address a research problem. Faculty from both departments participate in the seminar.

Credits: 1

Offered: Every year.

CHEM 405 - Industrial Chemistry

Application of chemical principles to chemical and environmental processes. Topics include mass and energy balances over complex systems, reaction kinetics and thermodynamics, combustion, behavior of real gases, and waste minimization. Directed toward students with career interests in industry and/or chemical or environmental engineering.

Credits: 3

Prerequisite: CHEM 315. Offered: Offered on occasion.

CHEM 407 - Organometallics

Introduction to the chemistry of transition metal organometallics. Descriptions of the bonding, synthesis, structures, and reactions of major classes of organometallic compounds, as well as their role in organic synthesis and catalysis.

Credits: 3

Prerequisite: CHEM 216. Offered: Every other year.

CHEM 412 - Advanced Organic Chemistry

The discussion of certain types of reactions for the synthesis of compounds having significance to organic or bioorganic chemistry. Examples include addition/elimination; oxidation/reduction; free radical; carbanionic; pericyclic; and other types of reactions.

Credits: 3

Prerequisite: CHEM 215 and CHEM 216. Offered: Every other year.

CHEM 417 - Polymer Chemistry

An overview of polymers, with an emphasis on their chemistry, properties, and significance. Focus on the synthesis, characterization, and fabrication, and physical chemistry of polymers.

Credits: 3

Prerequisite: CHEM 216 and CHEM 315. Offered: Every other year.

CHEM 462 - Inorganic Chemistry

Topics include introduction to molecular symmetry and group theory. Discussions of electronic structure of atoms and their periodic properties followed by detailed considerations of ionic and covalent bonding. Acid-base theories presented in addition to general chemistry of the elements with emphasis on transition metals. Introduction to organometallic chemistry and bio-inorganic chemistry included.

Credits: 3

Prerequisite: CHEM 315. Offered: Every year.

CHEM 465 - Advanced Experimental Biochemistry

State-of-the art biochemical and molecular techniques are taught within the hands-on, laboratory-based course. Potential topics include the polymerase chain reaction (PCR), oligonucleotide synthesis, DNA/protein sequencing and analysis (BLAST, DNASIS), pulse-field gel electrophoresis, gas chromatography-mass spectroscopy (GC-MS), nuclear magnetic resonance (NMR) spectroscopy, high performance liquid chromatography (HPLC), immunochemistry, and/or other contemporary techniques. Minimum of 2 credits of this course.

Credits: 2

Prerequisite: BIOL 334. Offered: Every year.

CHEM 472 - Inorganic Chemistry Laboratory

Laboratory studies of inorganic and organometallic compounds and ions. Synthetic experiments require inert atmosphere (vacuum line, dry box, and Schlenk) techniques; characterization by spectral, solid-state, and electrochemical methods. One laboratory period per week.

Credits: 1

Prerequisite: CHEM 315 and CHEM 325. Offered: Every year.

CHEM 473 - Environmental Aquatic Chemistry

Explores the interrelationships of chemistry within the aquatic environment. Topics will include (1) energy flow and transformations, (2) chemical cycles in the environment, (3) fate and transport of chemical in surface and subsurface water, soil, and air, (4) aquatic chemistry, including the carbon dioxide cycle, precipitation reactions, complexation reactions, and redox chemistry, (5) phase interactions, (6) aquatic microbial biochemistry, (7) water pollution, and (8) water treatment.

Credits: 3

Prerequisite: CHEM 215. Offered: Every other year.

CHEM 474 - Environmental Atmospheric Chemistry

Introduces the chemistry occurring within both natural and polluted atmospheres, with an emphasis on fundamental principles. Topics include: gas-phase chemistry, aerosol formation and heterogeneous chemistry, meteorology, and current environmental issues (ozone holes, global warming, etc.). Class activities will include discussions of technical papers drawn from contemporary scientific literature and simulations of environmental problems through computer models.

Credits: 3

Prerequisite: CHEM 215. Offered: Every other year.

CHEM 475 - Advanced Biochemistry

A continuation of BIOL 333, the course explores biochemical concepts and pathways with an emphasis on problem solving. Cellular control and coordination of biochemical pathways is emphasized in light of an advanced understanding of protein biochemistry. Lecture only.

Credits: 3

Prerequisite: BIOL 333. Offered: Every year.

CHEM 481 - Special Topics in Chemistry

Topics of special or current interest offered periodically.

Credits: 1-3

Offered: Every year.

CHEM 490 - Independent Study

Topics of special interest. Non-laboratory work in association with faculty supervisor. May require course prerequisites as determined by instructor.

Credits: 1-3

Offered: Every semester.

CHEM 491 - Independent Laboratory Research

For students having senior standing. Study and research areas include analytical, inorganic, organic, physical, and polymer chemistry. Prerequisites depend upon areas of study and research.

Credits: 1-3

Prerequisite: CHEM 395. Offered: Every semester.

CHEM 492 - Independent Laboratory Research

For students having senior standing. Study and research areas include analytical, inorganic, organic, physical, and polymer chemistry. Prerequisites depend upon areas of study and research.

Credits: 1-3

Prerequisite: CHEM 395. Offered: Every semester.

CHEM 495 - Seminar: Advances in Chemistry

Topics of current research interest; presentations by seniors, graduate students, faculty, and visitors. Every student is required to present one seminar during one of the two semesters. Emphasis on detailed knowledge of subject matter, techniques for searching the professional literature, and procedures for the preparation and presentation of a professional seminar. Majors only.

Credits: 1

Prerequisite: CHEM 216. Offered: Every semester.

CHEM 496 - Seminar: Advances in Chemistry

Topics of current research interest; presentations by seniors, graduate students, faculty, and visitors. Every student is required to present one seminar during one of the two semesters. Emphasis on detailed knowledge of subject matter, techniques for searching the professional literature and procedures for the preparation and presentation of a professional seminar. Majors only

Credits: 1

Prerequisite: CHEM 216. Offered: Every semester.

CHEM 497 - Biochemistry Seminar II

Students prepare oral presentations based on an assessment of current biochemical research papers. The course will

help students to further develop critical reading and scientific communication skills. Faculty from both biology and chemistry participate in the seminar.

Credits: 1

Offered: Every year.

CHEM 499 - Senior Thesis

Preparation of an extensive written account of the student's original laboratory research including an in-depth literature survey, background discussion, presentation of data and results, and conclusions. Open to majors only.

Credits: 1

Offered: Every year.

CHEM 507 - Organometallics

Introduction to the chemistry of transition metal organometallics. Descriptions of the bonding, synthesis, structures, and reactions of major classes of organometallic compounds, as well as their role in organic synthesis and catalysis.

Credits: 3

Offered: Offered on occasion.

CHEM 511 - Physical Organic Chemistry

Molecular orbital theory, resonance, acid-base theory and mechanisms of organic reactions including unimolecular and bimolecular substitution reactions and intramolecular rearrangements.

Credits: 3

Prerequisite: (CHEM 215 and CHEM 216) and (CHEM 315 and CHEM 316). Offered: Offered on occasion.

CHEM 512 - Advanced Organic Chemistry

The utilization of certain types of reactions for the synthesis of compounds having significance to organic or bioorganic chemistry. Examples include addition/elimination; oxidation/reduction; free radical; carbanionic; pericyclic; and other types of reactions.

Credits: 3

Offered: Offered on occasion.

CHEM 515 - Applied Spectroscopy

Detailed studies of the use of modern instrumental methods for the identification of organic and organometallic compounds. Emphasis on mass, nuclear magnetic resonance, infrared, and electronic spectroscopies.

Credits: 3

Offered: Offered on occasion.

CHEM 521 - Advanced Physical Chemistry - Thermodynamics

Application of theory of thermodynamics to chemical systems, including methods of quantum statistics.

Credits: 3

Prerequisite: CHEM 326 and (MATH 121 or MATH 123).

Offered: Offered on occasion.

CHEM 522 - Advanced Physical Chemistry - Quantum Chemistry

Basic concepts of wave mechanics and the application to topics of interest to chemists.

Credits: 3

Offered: Offered on occasion.

CHEM 530 - Understanding Chemistry

Students will broaden and deepen their understanding of some of the fundamental concepts in chemistry and also explore how these concepts are best learned by adolescents.

Credits: 3

Offered: Summer, JTerm.

CHEM 562 - Advanced Inorganic Chemistry

Advanced discussion of topics of importance to contemporary inorganic and organometallic chemistry, including group theory; acid-base behavior; structure, bonding, and reaction mechanisms of metal complexes; and bio-inorganic chemistry.

Credits: 3

Offered: Offered on occasion.

CHEM 573 - Environmental Aquatic Chemistry

Explores the interrelationships of chemistry within the aquatic environment. Topics will include (1) energy flow and transformations, (2) chemical cycles in the environment, (3) fate and transport of chemical in surface and subsurface water, soil, and air; (4) aquatic chemistry, including the carbon dioxide cycle, precipitation reactions, complexation reactions, and redox chemistry; (5) phase interactions, (6) aquatic microbial biochemistry, (7) water pollution, and (8) water treatment.

Credits: 3

Offered: Offered on occasion.

CHEM 574 - Environmental Atmospheric Chemistry

Introduces the chemistry occurring within both natural and polluted atmospheres, with an emphasis on fundamental principles. Topics include: gas-phase chemistry, aerosol formation and heterogeneous chemistry, meteorology, and current environmental issues (ozone holes, global

warming, etc.). Class activities will include discussions of technical papers drawn from contemporary scientific literature and simulations of environmental problems through computer models.

Credits: 3

Offered: Every other year.

CHEM 581 - Special Topics in Chemistry

Topics of special or current interest offered periodically. Credit and prerequisite vary with nature of course offerings which may include physical inorganic chemistry, organometallic chemistry, spectroscopy, photochemistry, heterocyclic chemistry, synthesis, polymer chemistry, topics in biochemistry chemistry, quantum chemistry, computers, or selected topics in chemical education.

Credits: 1-3

Offered: Offered on occasion.

CHEM 690 - Independent Study

Extensive study on advanced level of chemistry not covered in detail in formal courses. Paper or other demonstration of accomplishment required.

Credits: 1-3

Offered: Offered on occasion.

CHEM 691 - Research I

Projects in areas of analytical, physical, organic, inorganic, and biochemistry.

Credits: 1-3

Offered: Offered on occasion.

CHEM 692 - Research II

Projects in areas of analytical, physical, organic, inorganic, and biochemistry.

Credits: 1-3

Offered: Offered on occasion.

CHEM 693 - Research III

Projects in areas of analytical, physical, organic, inorganic, and biochemistry.

Credits: 1-3

Offered: Offered on occasion.

CHEM 694 - Research IV

Projects in areas of analytical, physical, organic, inorganic, and biochemistry.

Credits: 1-3

Offered: Offered on occasion.

CHNS - Chinese

CHNS 115 - Elementary Chinese I

For students with no previous preparation. Study of fundamental vocabulary and speech patterns. Initial emphasis on listening comprehension and oral ability. Progressively greater emphasis on reading and writing ability.

Credits: 3

Offered: Every year.

CHNS 116 - Elementary Chinese II

Continuation of CHNS 115. Further introduction to fundamental vocabulary and speech patterns. Continued emphasis on listening comprehension and oral ability. Progressively greater emphasis on reading and writing ability. Discussion of selected cultural aspects.

Credits: 3

Prerequisite: CHNS 115. Offered: Every year.

COMM - Communication

COMM 101 - Fundamentals of Communication

The course provides a broad introduction to the field of communication focusing on both interpersonal and mediated communication. The course goal is to help one think critically about everyday interactions and to "discover" the degree in which the content and forms of communication contribute to creating meaning, and shaping personal and social realities. The process of meaning-making will be examined to help one become a more effective communicator, especially in situations where communicators experience "difference" with others within and across cultures.

Credits: 3

Offered: Every semester.

COMM 102 - Mass Media and Society

An introductory course dealing, humanistically, with the process and effects of mass communication. Topics include: (1) a description of the industries of mass communication based on their mutual dependence; (2) related media industries such as advertising, public relations, news services; and (3) the influence and results of mass communication studying mass media research. Consideration of the ethical standards for the media.

Credits: 3

Offered: Every year.

COMM 105 - Public Speaking

Basic principles involved in public communication. Emphasis on the techniques involved in audience analysis,

critical thinking and argumentation, listening, ethics, and message structure and delivery for public presentations.

Credits: 3

Offered: Every semester.

COMM 110 - Desktop Motion

Students will learn the applications and techniques necessary to create animations and graphics for video in Apple's Motion, part of the Final Cut Pro Suite. The course covers basic graphic editing, such as manipulating layers and objects, as well as more advanced techniques. This includes using replicators, particle emitters, sequence replicators, keyframes, and virtual cameras and lighting. Along with working within the Motion software, students will also learn how to incorporate Motion files into video editing software and DVD authoring software.

Credits: 1

Offered: Every year.

COMM 111 - Web Design

Five week mini-course dealing with the skills and concepts involved in creating and publishing pages on the World Wide Web. Emphasis is placed on learning Adobe Dreamweaver, one of the most commonly used HTML editors. Students will also become familiar with techniques to incorporate other media into a web page.

Credits: 1

Offered: Every semester.

COMM 112 - Desktop Video

Five week mini-course dealing with skills and concepts involved in preparing video for computer multimedia presentation. Digitizing, non-linear editing of video and sound, effects and transitions, incorporation of computer graphics, and computer animation.

Credits: 1

Offered: Every semester.

COMM 113 - Flash

Five week mini course introducing students to Adobe Flash, a vector based multimedia web design application. Students will learn to create projects for the web incorporating animated graphics, photographs, audio and video.

Credits: 1

Offered: Every semester.

COMM 114 - Electronic Darkroom

Five week mini-course covering the basics of computer imaging, retouching, and color painting. Emphasis is placed on learning the powerful features of Adobe

Photoshop for manipulating images and ways to integrate image editing into multimedia applications.

Credits: 1

Offered: Every semester.

COMM 115 - Advanced Electronic Darkroom

Five week mini-course in advanced techniques for manipulating still images using Adobe Photoshop. Topics covered include using the pen tool, special effects, creative layering, masks, paths and shapes.

Credits: 1

Prerequisite: COMM 114. Offered: Every year.

COMM 116 - Desktop Publishing

Five week mini-course introducing the use of desktop computers to prepare and produce print and electronic publications such as newsletters, brochures, charts, magazines, and books. Material covered includes page design and layout, typography, integrating graphics and text software, pre-press, and professional publishing practices.

Credits: 1

Offered: Every semester.

COMM 118 - Desktop Audio

Learn to create and edit audio on a MacIntosh computer. Work with the latest audio software and hardware for hard disc recording and CD production techniques in a desktop computer environment.

Credits: 1

Offered: Every semester.

COMM 120 - WCVF/WDVL/WNYF/Applied Communication Association/PRSSA Operations

Extracurricular participation in the staffing of the college's radio station, WCVF, and WDVL; television station, WNYF; or department societies.

Credits: 0

Offered: Every semester.

COMM 130 - Foundations in Journalism

The study of multiple forms of journalism expression with emphasis on print, radio, television and Internet news coverage. Strengths and weaknesses of each medium are examined. Multiple communication theories applicable to journalism and media convergence are emphasized.

Credits: 3

Offered: Every semester.

COMM 155 - Rhetoric of Vision and Sound

A foundational course for communication majors. Explores the ways the elements of production (lighting, color, framing, sound) are used in media to shape the meaning of the content and communicate ideas and emotions.

Credits: 3

Offered: Every semester.

COMM 199 - Communication Orientation

A course designed to introduce new majors to the department and faculty, and to suggest areas of study and activity.

Credits: 1

Offered: Every semester.

COMM 200 - Electronic Media Writing

Writing for the ear and writing in relation to visual images. Weekly writing exercises and discussions relative to audio and video news, documentary, sports, advertising and other non-fiction formats.

Credits: 3

Prerequisite: ENGL 100. Offered: Every semester.

COMM 221 - Interpersonal Communication

The course focuses on the description, explanation and analysis of communicative behavior related to interpersonal relations. As a skills-based course, the students will apply the course concepts to aid in comprehension and appreciation of how communication works in relationship development, maintenance, and termination.

Credits: 3

Prerequisite: COMM 101. Offered: Every year.

COMM 222 - Principles of Public Relations

Students learn the basic theories, history, ethical codes, and practices of public relations; how to write according to Associated Press style; and also how to prepare basic written documents such as news releases and news advisories.

Credits: 3

Prerequisite: COMM 101. Offered: Every semester.

COMM 230 - News Gathering

The course will emphasize the news gathering process/reporting across media, as well as some basic news writing. Areas covered will include identifying subjects for stories/research, basic research techniques, interviewing, beat coverage, computer-assisted/data-based research, background, special considerations of various coverage areas, and challenges specific to individual media. Special

emphasis will also be given to the ethical and legal implications of various news gathering methods.

Credits: 3

Prerequisite: COMM 130. Offered: Every year.

COMM 231 - Storytelling: Words, Images, Sound

Storytelling will emphasize the presentation aspect of journalism: how information is conveyed to the reader/viewer/listener. Among the topics covered will be identifying good stories, leads and story structures across media, identifying the heart of a story and the best way to tell it, how words, images and sounds interact, and how to engage the audience. Special emphasis will also be given to fairness and ethical implications of how a story is told.

Credits: 3

Prerequisite: COMM 130. Offered: Every year.

COMM 232 - Critical Analysis of Journalism

Introduces students to terms, issues and debates in contemporary media theory. Students will read theoretical texts exploring, for example, the nature of truth, the rise of objectivity, and ambiguity of signs (language, image, sound). The relationship of U.S. journalism to global media will also be a focus in the course, allowing students to understand the functions of critique in contemporary journalism. Additional topics include an exploration of alternative journalism practices in the U.S. and globally such as the impact of the community and public journalism movements, the role of the feminist and ethical press, and the impact of the Internet.

Credits: 3

Prerequisite: COMM 130 or COMM 102. Offered: Every year.

COMM 235 - Introduction to Business Communication

The highly practical course focuses on the critical communication skills involved in effective written and oral communication while emphasizing applications of communication concepts in the world of business. Students will be able to engage in application exercises, build their exploratory skills, and confront problems of diversity. The course is cross-listed with BUAD 235.

Credits: 3

Prerequisite: ENGL 100 or Waiver - SUNY Basic Comm of an or better. Offered: Every semester.

COMM 244 - Introduction to Social Media

This course will introduce students to the various means of social networking and its effect on the practice of public relations. Students will engage in hands-on applications.

Credits: 3

Prerequisite: COMM 222. Offered: Every year.

COMM 251 - Audio Production I

Introduction to audio production equipment and its operation. Focus on listening skills; sound design; developing an ability to understand and use sound effectively and the ethical use of persuasive techniques. Principles of writing for the ear examined and practiced; editing, announcing, and interviewing introduced.

Credits: 3

Prerequisite: COMM 155*. Cross-Listed as: * Indicates that the course can be taken in the same semester. Offered: Every semester.

COMM 253 - Digital Audio Production

Students in this class will master the basics of Pro Tools, Soundtrack Pro, and Adobe Audition. Students will learn to utilize the audio software systems to produce audio productions for radio television and video productions.

Credits: 3

Prerequisite: COMM 251. Offered: Every year.

COMM 254 - Video Field Production

Basic skills and techniques for shooting video outside the studio in ENG and EFP configurations, and for editing on non-linear video editing systems, camera lighting, sound and editing skills applicable to news, commercials, documentary, narrative, and art of music video.

Credits: 3

Prerequisite: COMM 155. Offered: Every semester.

COMM 255 - Studio Production

Basic skills in studio production techniques: lighting, camera work, shading, film-chain operation, audio setup and monitoring, videotape recorder operation, floor management, and technical directing. Final projects require students to work in teams to produce and direct their own programs.

Credits: 3

Prerequisite: COMM 155*. Cross-Listed as: * Indicates that the course can be taken in the same semester. Offered: Every semester.

COMM 257 - Video Games: Their Evolution and Impact

In this class, we explore all of these dynamics, studying the history of video games and the impact games have had culturally. Modes of instruction will include historical readings, literature on the impacts of video games, and online discussion. As games represent a personal textual experience, students will be required to play video games from different historical eras and keep an online journal detailing their playing experiences. Links to websites hosting these historically significant games will provided

in class (i.e. Zork, Pong, Pac-Man, Pitfall, the Mario games, etc.). Students will also be expected to submit a substantial research paper at the end of the course exploring some aspect of the history and cultural impact of video games.

Credits: 3

Offered: Summer, JTerm.

COMM 259 - Special Topics in Communication

A 200-level course focusing on a topic not covered in the existing curriculum. Topic(s) announced by the department each semester.

Credits: 1-3

Offered: Offered on occasion.

COMM 295 - Research Methods

Study of both qualitative and quantitative approaches to inquiry and their applications in theoretic and applied communication research. Emphasis will be devoted to basic statistical analysis and interview and survey methods as they apply to evaluating communication practices and assessing communication needs.

Credits: 3

Prerequisite: COMM 101. Offered: Every year.

COMM 301 - Group Communication

The course will study communication in the small task group emphasizing communication in decision-making and problem solving. Course instruction will review theories that explain the role of communication in group maintenance, cohesion, conflict management, leadership, socialization, and personality management. Attention will be given to the communication practices for conducting meetings, idea generation, goal setting, project analysis and group discussion formats. The goal of the course is to develop proficiency in assessing group situations by applying communication theory and practices to maximize group effectiveness, productivity, and member satisfaction.

Credits: 3

Prerequisite: COMM 101. Offered: Every year.

COMM 302 - Rhetoric and Criticism

The study of human discourse with a focus on how oral and written language is used to influence audiences in public venues such as politics, advertising, and social movements. The main goal of the course is to develop critical thinking skills using traditional and contemporary rhetorical theories and methods of analysis. Developments in rhetorical and western intellectual thought will be examined for their influence and contributions to rhetorical theory. Students will acquire skills that prepare them to be active consumers of persuasive messages and effective, ethical creators of such messages.

Credits: 3

Prerequisite: COMM 101 and ENGL 100. Offered: Every semester.

COMM 303 - Health Communication

This is a Communication Studies course, and as such its goal is to familiarize students with the broader discipline of Health Communication so that they will gain a greater understanding of health and medical interactions, become more savvy health communication consumers, and be more knowledgeable in providing social support in the care of others. The course will explore the major domains within the discipline and highlight a number of different approaches to studying the subject matter. It will examine health campaigns in the interpersonal, organizational, and mass communication contexts.

Credits: 3

Offered: Every Spring Semester.

COMM 307 - History of Television

This course will take a look at American life in the last six decades through an analysis of the medium of television. From its origins in radio to its future in digital convergence, we will examine television as it both shapes and reflects American society. Discussions will include television genres, history, structure, technological advancements and its impact on society and democracy.

Credits: 3

Prerequisite: COMM 102. Offered: Every year.

COMM 308 - Documentary History and Criticism

The course introduces students to the historical development and critical theories of the documentary genre. Students will be exposed to the different modes of documentary representation and the theoretical implications of each style.

Credits: 3

Prerequisite: COMM 155 or FILM 220. Offered: Every year.

COMM 309 - Film Analysis

A study of contemporary filmmakers' work in feature length films. Particular focus on production elements that create aesthetic values and reflect current times and concerns.

Credits: 3

Prerequisite: COMM 155. Offered: Every year.

COMM 312 - Multimedia Integration

Course concentrates on authoring multimedia projects which integrate graphics, animation, digital video, and audio. It combines both multimedia theory and

production. Students will learn how to structure information, anticipate user experience and create transparent interfaces.

Credits: 3

Prerequisite: COMM 110 or COMM 111 or COMM 112 or COMM 114 or COMM 115 or COMM 116 or COMM 118 or COMM 354 or COMM 351 or MEDA 120. Offered: Every semester.

COMM 313 - Political Communication

This course addresses U.S. politics as a communication process. It examines the communication of campaigns as well as the communication of governance at all levels. The course addresses the evolution of political communication practices throughout history and the critical analysis of speeches, debates, ads, news, entertainment, social media and other types of political communication. The primary goals of this course are to equip students to become more critical consumers of political communication and to encourage and prepare students to become more civically engaged through the use of effective communication practices.

Credits: 3

Offered: Offered on occasion.

COMM 314 - Multimedia Supervision

Course trains students to be proctors in the Sheldon Lab. Through class workshops students will become familiar with the basics of the MAC operating system and with all of the software applications in the Sheldon Lab. Students will gain experience in supervising a computer lab. Must be taken concurrently with COMM 475, Section 7, Communication Studio Supervision. At least one of the prerequisite courses listed or consent of instructor.

Credits: 1

Prerequisite: COMM 110 or COMM 111 or COMM 112 or COMM 114 or COMM 115 or COMM 116 or COMM 118 or COMM 113 or COMM 351 or COMM 354. Offered: Every semester.

COMM 315 - Selected Topics in Journalism

This course will focus on special areas within the field of journalism such as arts, sports, governmental affairs, investigative journalism, and science. A different topic will be offered each semester. Each student will develop a portfolio or substantial collection of work, which will be included in a class compilation that will be produced digitally for public consumption. Community engagement will be a regular and required aspect of this course.

Credits: 3

Offered: Every semester.

COMM 320 - WCVF/WDVL/WNYF/ACA/PRSSA Management

Extracurricular participation as a manager on the elected board of directors of the university's radio stations, television station, Applied Communication Association, or Public Relations Student Society of America.

Credits: 0

Offered: Every semester.

COMM 321 - Environmental Communication

Environmental Communication investigates communication about the environment, focusing on ways that organizations, corporations, politicians, advocacy leaders, scientists, citizens, and so on describe, persuade, and shape human interactions with the environment. Students study foundational environmental communication theories, worldviews, and processes, examining how these influence speakers' listeners'—producers' & consumers'—attitudes and actions toward the natural world. In our current cultural setting, it is crucial that citizens are able to assess competing claims and appeals about the environment; consequently, students will learn to become more critical producers and consumers of a broad range of environmental discourses.

Credits: 3

Offered: Every Spring Semester.

COMM 322 - Public Relations Writing

Students learn basic research and planning principles associated with public relations writing and how to prepare an assortment of public relations documents. Associated Press (AP) style is reinforced and students learn how to construct news releases, media advisories, fact sheets, position statements, features and fliers. Students will begin portfolio building.

Credits: 3

Prerequisite: COMM 222. Offered: Every year.

COMM 344 - Public Relations Case Analysis

Analysis of classic and contemporary public relations cases in industry, labor, education, government, social welfare and trade associations.

Credits: 3

Prerequisite: COMM 222. Offered: Every semester.

COMM 345 - Broadcast Writing and Presentation

This course will help students develop their broadcast journalism skills with an emphasis on scriptwriting/producing and on-camera presentation. Students will learn to write for broadcast news and also how to do stand-ups, report and anchor for newscasts

Credits: 3

Prerequisite: COMM 230 and COMM 231. Offered: Every Fall semester.

COMM 346 - Print/Digital Editing and Design

Techniques in print and Internet journalism, focusing on story structure as well as layout and design. News gathering techniques in the field and online are emphasized. Students will create an in-class newspaper and Internet site highlighting stories produced in class. Editing skills for the copy editor with emphasis on news judgment, news style and legal considerations are also covered.

Credits: 3

Prerequisite: COMM 230 and COMM 231. Offered: Every year.

COMM 347 - Print/Digital Narrative

The study and practice of writing for print and the Internet. Techniques in crafting both short and long format stories for publication are emphasized. Various writing styles are covered, including hard news, feature reporting and news commentary. Students will be expected to contribute stories to the campus newspaper for possible publication.

Credits: 3

Prerequisite: COMM 230 and COMM 231. Offered: Every year.

COMM 348 - Audio/Video Advanced Tools

Introduction to audio and video production techniques with immersion into digital software used in professional news gathering. Conversion of radio, television and web news writing is emphasized. Students will research, cover, write and produce news reports to be delivered across multiple media platforms.

Credits: 3

Prerequisite: COMM 231. Offered: Every year.

COMM 349 - Audio/Video Advanced Production

Builds on skills students mastered in COMM 348. Writing and production techniques are emphasized. Students will center efforts on producing quality news reports under extreme deadline pressure. Course focuses on critical analysis of student work. Professional standards are encouraged and maintained. Students are expected to produce news reports, which will be submitted to campus media outlets, including WNYF-TV, The Leader and the Fredonia Radio Systems.

Credits: 3

Prerequisite: COMM 348. Offered: Every year.

COMM 350 - Telecommunication Technology

Examination of the historical, technical, economic and regulatory status of communications technologies such as cable television, satellites, telephone, and computer communications. Discussion of general communication systems theory of video, audio and data communication including analog and digital signal transmission.

Credits: 3

Prerequisite: COMM 102. Offered: Every other year.

COMM 351 - Audio Production II

Refining skills and techniques acquired in COMM 251; more emphasis on announcing and interviewing; understanding the ethical and legal perspectives of audio material; introduction to the design, scripting, production and promotion of audio content for any application (e.g. radio, TV, film, web).

Credits: 3

Prerequisite: COMM 251. Offered: Every semester.

COMM 358 - Television News

Electronic news gathering and studio news techniques in the context of a weekly news program. Legal and ethical issues in news gathering.

Credits: 4

Prerequisite: COMM 354 and COMM 255. Offered: Every year.

COMM 359 - Special Topics in Communication

A 300-level course focusing on a topic not covered in the existing curriculum. Topic(s) announced in online Course Offerings each semester.

Credits: 1-3

Offered: Offered on occasion.

COMM 361 - Script Writing Video/Film/Radio

Techniques of developing concepts, treatments, outlines and scripts for dramatic fictions in the media of video, film and radio. Emphasis on traditional, modern and post-modern dramatic structure with units on character, dialogue, setting, visual narration, etc.

Credits: 3

Prerequisite: (COMM 251 and COMM 255) or COMM 354. Offered: Every semester.

COMM 366 - Postproduction

A balance between editing concepts such as continuity, pacing, dramatic focus, etc. and editing skills such as SMPTE code, signal monitoring, and digitized non-linear techniques. Students will learn the rules and methods by which an editor constructs fiction or a representation of

actual events. Applicable to video or digital film. Weekly editing assignments. Lab required.

Credits: 3

Prerequisite: COMM 254 or COMM 354. Offered: Every semester.

COMM 368 - Video Camera and Lighting Techniques

A course that covers knowledge, methods and techniques essential to the work of a director of photography. Covers concepts of directing the camera, visual techniques, compositional methods and technical aspects of videography and lighting.

Credits: 3

Prerequisite: COMM 354. Offered: Every year.

COMM 373 - Gender and Communication

Using a variety of theoretical models and critical approaches, students examine everyday communication practices to identify how gender, communication and culture create a complex and dynamic web of meaning with significant implications for individuals and society.

Credits: 3

Prerequisite: COMM 101 or WOST 201. Offered: Offered on occasion.

COMM 375 - Mass Media Theory

The course will examine the historical context of media theory covering the emergence of United States media technology, economics, cultural implications, and political influences to provide a basis for examining the evolution of media theories. Emphasis will be placed on mass media theories and address their implications to the media industry, the influences on American society and culture, and the evolution of democratic institutions. The course will be taught as a seminar involving readings, group discussions, and a research report.

Credits: 3

Prerequisite: COMM 102. Offered: Every other year.

COMM 379 - Persuasion

Examination of a wide body of humanistic, and social scientific literature concerning persuasion and persuasive techniques. Emphasizes evaluation and potential application of persuasion theory in communicative transactions.

Credits: 3

Prerequisite: COMM 101. Offered: Every year.

COMM 385 - International Media

An introduction to the study of international and domestic media systems around the world. Students will understand

and appreciate how different countries and cultures use the media in unique ways and learn of different systems of ownership, financing, regulation, and programming. Key international media issues will also be discussed. Media examples (primarily films) will be used to show how cultures are portrayed by their media.

Credits: 3

Offered: Every year.

COMM 386 - International Films

Students will view, discuss, and critique a variety of contemporary films from a variety of countries. Emphasis will be placed on examining how contemporary cultures are portrayed through film. Films will be compared and contrasted.

Credits: 3

Offered: Every year.

COMM 395 - Radio News and Podcasting

Theory and practice of radio journalism including writing and reporting news and journalism law and ethics. Students produce weekly radio newscasts during the second half of the semester.

Credits: 4

Prerequisite: COMM 351 or COMM 230 or COMM 231.

Offered: Every other year.

COMM 400 - Telecommunications Management

Analysis of the various techniques and problems involved in management of telecommunication industries including broadcast, cable television, telephony, and Internet. Topics examined include general theories of management, industry structures, audience research, content, sales and marketing, business and finance, and industry ethics.

Credits: 3

Prerequisite: COMM 102. Offered: Every other year.

COMM 401 - Television Studio Production II

This course is designed to advance student skills beyond basics in television studio production. The class will attempt to convey the excitement -- and the reality -- of the community networking movement through productions specifically designed for broadcast on the FSU campus closed circuit channel, as well as on the village of Fredonia cable access television channel. It will convey a semester-long, realistic simulation of a working production house. All projects will require students to work as a team to produce their own programs.

Credits: 4

Prerequisite: COMM 358 and COMM 307. Offered: Every year.

COMM 420 - Communication Law and Ethics

Assessment of the regulatory framework and major legal issues of the mass media. Examination of ethical issues in the media as well as principles and concepts of ethical theory.

Credits: 3

Prerequisite: COMM 102 or COMM 130. Offered: Every semester.

COMM 422 - Public Relations Campaigns

This capstone experience focuses on strategic public relations management. Students will develop a campaign for a real client, with an emphasis on formative research, objectives, strategy, tactics, and evaluation, as well as engage in a news conference and client presentation.

Credits: 3

Prerequisite: COMM 322 and COMM 344 and COMM 295. Offered: Every year.

COMM 424 - International Public Relations

This course provides a structured and practical framework for understanding the complexities of international public relations. In an increasingly multinational and multicultural economy, the course will guide students through the challenges of communication and problem solving across a range of organizations in cross-cultural settings. General course principles will include foundational theories to draw upon when considering public relations in a global context, strategies for effective intercultural communication in reaching diverse publics, and trends affecting the public relations profession throughout the world. The course will make extensive use of international public relations cases and utilize the international community of Fredonia to allow for direct exploration of the values and interests of diverse publics. This course also highlights the different approaches professionals must consider in specific global PR contexts.

Credits: 3

Prerequisite: COMM 222. Offered: Every year.

COMM 430 - Communication Theory

Provides a comprehensive investigation into various theoretical and metatheoretical perspectives which currently direct theory building and research in communication. Emphasis on critical thinking as literature in the field is investigated and evaluated in light of accepted scientific criteria.

Credits: 3

Prerequisite: COMM 105 and COMM 101 and COMM 295. Offered: Every year.

COMM 440 - Journalism Convergence Capstone

The capstone experience will encourage students to put together everything they have learned in the journalism major and to do it across media. Students will prepare a project for their portfolio emphasizing the media track and the subject areas of emphasis they have chosen, but will work with other students to integrate their work across print, broadcast and Internet platforms. The work will also be posted on a departmental web site, where the resulting work will be available to the general public.

Credits: 3

Prerequisite: (COMM 346 and COMM 347) or (COMM 358 and COMM 395). Offered: Every year.

COMM 441 - Multitrack Radio Production

Examination and practice of advanced sound design, production with ancillary equipment, and multitrack recording techniques for broadcast applications.

Credits: 3

Prerequisite: COMM 351. Offered: Offered on occasion.

COMM 451 - Audio Documentaries/Soundscapes

Exploration and execution of steps involved in writing and producing a documentary: preliminary research, program concept, aesthetic and ethical issues, target audience, outline, research, interviews, treatment, script, and production.

Credits: 4

Prerequisite: COMM 351. Offered: Every other year.

COMM 452 - Documentary I

The first semester of a two-semester capstone course in non-fiction video production. Topics include treatments, preproduction, interviewing, genres of documentaries, and ethics. Students produce several documentaries in different styles and prepare proposals for a larger project

Credits: 4

Prerequisite: COMM 200 and COMM 366. Offered: Every Fall semester.

COMM 454 - Fiction I

A production course focused on fiction from script analysis to production of videos representing several genres from traditional to post modern. Units on directing, script breakdowns, pre-production and production of several short fiction video programs.

Credits: 4

Prerequisite: COMM 251 and COMM 361 and COMM 366. Offered: Every Fall semester.

COMM 456 - Radio Programming/Production

Theory and practice of programming and promoting a radio station: formats, sources, techniques; and development and production of a weekly radio series.

Credits: 4

Prerequisite: COMM 351. Offered: Every other year.

COMM 457 - Television Apprenticeship

Provides a variety of experience in both studio and field production. Simulation of actual work situation with weekly assignments. Requires commitment to responsibilities and substantial production skills.

Credits: 1-3

Prerequisite: COMM 255. Offered: Every semester.

COMM 459 - Special Topics in Communication

A 400-level course focusing on a topic not covered in the existing curriculum. Topic(s) announced in Course Offering Bulletin each semester.

Credits: 1-3

Offered: Offered on occasion.

COMM 460 - Organizational Communication

An advanced study of communication patterns in social organizations. In particular, communication environments within business and industry are analyzed. Application of procedures commonly used to evaluate and improve communication in organizations.

Credits: 3

Prerequisite: COMM 101. Offered: Every year.

COMM 462 - Documentary II

Second semester of a two-semester capstone course. In small groups, students produce well-crafted documentaries incorporating the theoretical, technical and practical skills learned in COMM 452. Must be taken immediately after COMM 452.

Credits: 4

Prerequisite: COMM 308 and COMM 452. Offered: Every Spring Semester.

COMM 464 - Fiction II

A course on fiction videos including pre-production, production, post-production and distribution of longer fiction videos. Emphasis on single camera, multiple take methods. Students all execute one or more production roles for a complex digital video with high production values. Must be taken immediately after COMM 454.

Credits: 4

Prerequisite: COMM 454. Offered: Every Spring Semester.

COMM 465 - Intercultural Communication

The course focuses on assisting students in interacting effectively and appropriately with people from various cultural backgrounds and on understanding dimensions of intercultural communication related to domestic and international contexts. Students will explore the formation of their own cultural identity and examine the complex relationship between culture, communication, context and power in intercultural communication.

Credits: 3

Offered: Every year.

COMM 466 - Sound Design

Students will study the technical and creative audio components needed to create the audio elements for mass media projects, focusing on audio production for video projects. The class will use several softwares including Pro Tools, Final Cut Pro, and Sound Track Pro, and Quicktime movies in the audio projects. Units will include audio and video field production techniques, post production techniques, Foley, and ADR (Looping).

Credits: 4

Prerequisite: COMM 251. Offered: Every year.

COMM 470 - Fredonia Radio Systems/WNYF/Leader Practicum

The practicum is for students interested in gaining practical journalism experience working at various campus news outlets. With a focus on convergence, students will work news editorial positions, producing product for either the Fredonia Radio Systems, WNYF-TV or The Leader campus newspaper. Teamwork and management skills are emphasized. Students are expected to write a paper highlighting their experience and present a portfolio of practical work at the end of the practicum.

Credits: 3

Prerequisite: COMM 230. Offered: Every semester.

COMM 475 - Communication/Studio Supervision

Advanced students are given opportunities to demonstrate knowledge of and practice application of skills in educational setting or specific subjects.

Credits: 1-3

Offered: Every semester.

COMM 480 - Communication Internship

Participation in off-campus professional, subject-related experience. Requires a Learning Contract proposal prepared in consultation with agency representative and

with faculty sponsor describing experience, its relationship to course of study, and how it will be monitored and evaluated. Internships are graded satisfactory/unsatisfactory. Proposal must be approved in advance by internship coordinator in communication department. Appropriate courses in specialization are required.

Credits: 1-15

Offered: Every semester.

COMM 490 - Independent Study

Approved study of particular aspect of communication, or participation in approved project not otherwise available through course work. A lab fee may be assessed if project is using department equipment.

Credits: 1-15

Offered: Every semester.

COMM 590 - Independent Study

Approved study of particular aspect of communication, or participation in approved project not otherwise available through course work. A lab fee may be assessed if project is using department equipment.

Credits: 1-6

Offered: Offered on occasion.

CRMJ - Criminal Justice

CRMJ 100 - Introduction to Criminal Justice

An introduction to the organization and activities of the U.S. criminal justice system. Topics include: criminal law, policing, courts, and corrections.

Credits: 3

Prerequisite: SOC 116*. Offered: Every semester.

CRMJ 230 - Criminal Law

The course will consist of a general approach to legal principles of statutory interpretation of Criminal Law applicable in all United States jurisdictions. Students will learn the elements of criminal offenses including mens rea, actus reus, concurrence, causation and proximity. Students will study statutory definitions of crimes, (e.g. murder, sexual assault, burglary, and robbery). Inchoate crimes and defenses will also be considered.

Credits: 3

Prerequisite: CRMJ 100. Offered: Every year.

CRMJ 240 - Law Enforcement Policy and Practice

An examination of the structure and functioning of police and police organizations in the United States. Topics

covered include patrol, police discretion, ethics, police community relations and police accountability.

Credits: 3

Prerequisite: CRMJ 100. Offered: Every semester.

CRMJ 331 - Criminal Procedure

The course studies the criminal law processes necessary for successful criminal investigation including physical and testimonial evidence gathering, arrest, and presentation of an accused to court for trial proceedings. Students are required to apply contemporary U.S. Supreme Court decisions relevant to such topics as arrest, search and seizure, and interrogations.

Credits: 3

Prerequisite: CRMJ 100. Offered: Every year.

CRMJ 332 - Homeland Security

The course involves the study of homeland security, mission and composition. Students will examine the various methods and institutions implicated in the quest to increase security and defend against terrorism. Consideration of the methods and practices for border security in the United States will be included.

Credits: 3

Prerequisite: CRMJ 100. Offered: Every year.

CRMJ 333 - Criminal Investigations

This course involves the study of crime scene investigations. The course will not involve students in actual investigations (and therefore does not require a science background) but rather the procedural structure and strategic steps to be taken in securing the crime scene in developing a checklist of factors to be considered in a comprehensive investigation.

Credits: 3

Prerequisite: CRMJ 100. Offered: Every year.

CRMJ 340 - Introduction to Corrections

A study of societal reactions to crime from an historical, socio-political, social psychological and economic perspective. The functions of retribution, rehabilitation, incapacitation and deterrence are examined.

Credits: 3

Prerequisite: CRMJ 100. Offered: Every semester.

CRMJ 350 - Special Topics

Special topics in Criminal Justice not covered in detail by regular courses.

Credits: 3

Prerequisite: CRMJ 100. Offered: Offered on occasion.

CRMJ 355 - Organized Crime

This course will explore the evolution of and theories behind organized crime. We will look at different organized crime groups such as Colombian drug cartels, Mexican drug trafficking organizations, the Russian Mafia, the Italian-American Mafia, Yakuza, Triads, Tongs, Motorcycle Gangs as well as Hispanic and African-American Gangs. At the conclusion we will also look into legislative responses to organized crime and how intelligence may help in combating organized crime groups.

Credits: 3

Prerequisite: CRMJ 100. Offered: Every other year.

CRMJ 360 - Criminal Justice Ethics

The course will consider ethics as it relates to the criminal law. The definition of justice and the application of the definition will be discussed. Honor, integrity, and individual responsibility will be considered as these concepts relate to policy formulation and application of laws in the criminal justice system.

Credits: 3

Prerequisite: CRMJ 100. Offered: Every other year.

CRMJ 361 - Capital Punishment

This course provides an introduction to the theory and practice of capital punishment (aka the death penalty) in the United States. More specifically the course will look at the history of the death penalty in the United States, punishment philosophies behind the use of this form of punishment, methods of execution, and legal issues regarding capital punishment in general.

Credits: 3

Prerequisite: CRMJ 100. Offered: Every other year.

CRMJ 370 - Criminology

The course will examine the types of criminal behavior and crime patterns, the social and organizational context of crime, statistical information about crime and various theories of crime.

Credits: 3

Prerequisite: CRMJ 100 and SOC 116. Offered: Every semester.

CRMJ 375 - Serial and Mass Murder in the U.S.

This course will examine the topic of serial and mass murder in the United States. It will cover some history of the phenomenon but its main focus will be on contemporary events. Serial murder will be distinguished from other forms of multiple homicides. Various forms of serial and mass murder will be described utilizing specific instances of serial and mass murder. Problems associated

with addressing the problems of serial and mass murder, beginning with their definitions, will be recognized. Other topics that will be covered include female serial murderers, killing cults, health care professionals and serial murder, and serial murderers in foreign countries.

Credits: 3

Prerequisite: CRMJ 100. Offered: Every other year.

CRMJ 380 - Transnational Crime

This course will examine the topic of transnational crime in our globalized world. Students will be introduced to various types of transnational crimes including drug trafficking, stolen property, counterfeiting, human trafficking, fraud and cyber-crime, commercial vices, extortion and racketeering, money laundering and corruption, and international terrorism.

Credits: 3

Prerequisite: CRMJ 100. Offered: Every other year.

CRMJ 400 - Senior Seminar

A capstone course in which students will do readings, discussions, and analysis of current topics of interest in the field of criminal justice. Using primary sources, students will prepare and present in-depth examinations of specific issues. Senior standing in the major is required. This course will be taught using a blended course format. Instruction for one third of this course will be delivered online.

Credits: 3

Prerequisite: SOC 300 and (CRMJ 370 or CRMJ 320).

Offered: Every semester.

CRMJ 440 - Corrections Administration

Course examines the organization and administration of correctional institutions and programs. Management concepts and elements of the administration process are presented. Attention is given to the problems of staffing and personnel management and development, implementing correctional policy and ideology, and responding to client needs during their incarceration.

Credits: 3

Prerequisite: CRMJ 100 and CRMJ 340. Offered: Every other year.

CRMJ 441 - Police Administration

This course familiarizes students with the principle issues facing contemporary American police administration. Students will gain an appreciation of the complex responsibilities associated with administering a police organization in a free society.

Credits: 3

Prerequisite: CRMJ 100 or CRMJ 240. Offered: Every other year.

CRMJ 470 - Criminal Justice Internship

Supervised placement in legal and/or criminal justice work setting. On a limited basis, opportunity to observe and engage in various facets of criminal justice system. Permission of department.

Credits: 1-15

Offered: Every semester.

CRMJ 472 - Directed Study

Individualized study under the supervision of a faculty member. Permission of the department is required.

Credits: 1-3

Offered: Every semester.

CSIT Computer Info Sciences

CSIT 100 - Freshman Seminar

Introduction to computing environments available on campus; e-mail, Internet access and web; campus computing policies; computing and information technology ethics; other campus resources and their effective use; building a support network with faculty, staff and peers; improving study skills inside and outside the classroom. Corequisite: Freshman standing.

Credits: 1

Offered: Every year.

CSIT 101 - Programming with 3-D Graphics and Multimedia

Introductory programming course using a high-level, object-oriented language, such as ALICE. The course covers object-oriented and event driven programming concepts, in addition to algorithms and elementary programming techniques that are needed to develop elementary graphics and multimedia applications. Prerequisite: N.Y.S. Algebra II and Trigonometry (or Math B), or equivalent.

Credits: 3

Offered: Every year.

CSIT 104 - Introduction to Microcomputer Software

Introduction to microcomputers; elementary concepts and operations of spreadsheets and database management systems; analysis of a variety of problems, their design, and implementation of solutions using commercially available window-based software. Three units of high school mathematics required.

Credits: 3

Offered: Every semester.

CSIT 105 - Visual BASIC I

Object-oriented and event-driven programming, concepts using Visual Basic (VB); VB development environment; intrinsic controls and programming structures: data types, declarations, input/output, decision-making and loops; formatting; functions and subroutines. Three units of high school mathematics required.

Credits: 3

Offered: Every semester.

CSIT 106 - Scientific Programming Using C/C++

Scientific problem solving; structured program development: simple algorithm design, arithmetic operations, data types and their declarations; control statements, loops, input and output including text files; arrays, functions, mathematical functions and round off error estimation. Applications to engineering, sciences and mathematics. Credit will not be given for both CSIT 106 and 121. Background assumed: N.Y.S. Algebra II and Trigonometry (or Math B), or equivalent.

Credits: 3

Prerequisite: MATH 120 or MATH 122. Offered: Offered on occasion.

CSIT 107 - Web Programming I

An introductory course in client-side web technologies: HTML, cascading style sheets and JavaScript; designing and publishing a web site. Other topics include history of the Internet and World Wide Web, HTML editors, and graphics.

Credits: 3

Offered: Every semester.

CSIT 120 - Computer Science Overview

A comprehensive overview of the scope and dynamics of computer science. Survey of the field of computer science. Topics include: history of computing, computer organization and components, operating systems, programming languages, introduction to programming and program development, data structures, problem solving, software engineering, computer ethics, and computer applications. Background assumed: N.Y.S. Algebra II and Trigonometry (or Math B), or equivalent.

Credits: 3

Offered: Every semester.

CSIT 121 - Computer Science I

Hands-on exposure to the following major topics: Problem solving, algorithm design and development, structure of the program, top-down design and functional decomposition, debugging, elementary data types,

expressions, I/O functions and formats, repetition and control structures, user-defined functions, pass by value, pass by reference, built-in functions, arrays, strings.

Credits: 3

Offered: Every semester.

CSIT 151 - Introduction to Information Systems

The course introduces information technology used in day-to-day business operations. It covers business applications software for office management, communication, project management, relational databases, eCommerce, web development, data transmission and networks, etc. The course also covers such basic information systems concepts as querying simple databases, data analysis and database design. Laboratory instruction is used to complement the course with hands-on experience with a set of above applications. The course is designed for students who will work as end-users, user-managers, leaders, or information systems professionals.

Credits: 3

Offered: Every semester.

CSIT 201 - Computer Security and Ethics

Introduces desktop, internet, and network security issues and how they interact with the ethical values of individuals, organizations, and society. Includes methods of avoiding, detecting, and analyzing network intrusions as well as the ethics related to computer security and privacy. Background assumed: N.Y.S. Integrated Algebra and Geometry, or Math A, or equivalent.

Credits: 3

Offered: Every year.

CSIT 203 - Multimedia Systems

The course introduces multimedia systems from a theoretical and practical perspective. Topics covered include: computer manipulation of images, music, animation, and video, including theoretical aspects of lighting, color, elementary acoustics principles, motion, perspective, graphical and sound file formats, and network transmission. Various software packages will be introduced: for raster and vector graphics; for 2-D- and 3-D-modeling and animation; for sound recording and editing. Using these software packages and applying the principles learned in the course, students will practice creating, processing, and modifying graphics and sound. Students will gain practical hands-on experience through the course work and understand the operating principles of multimedia systems. No programming background is assumed.

Credits: 3

Offered: Offered on occasion.

CSIT 205 - Visual BASIC II

Advanced visual Basic programming techniques with graphical user interface and Active X controls. Topics include: multiple forms and other GUI elements, database concepts and interacting with databases, server side web programming, dynamic and static data types, arrays, files, lists, stacks and queues, concept of classes and related notions, designing Windows API calls and Windows registry functions and advanced event-driven business applications. The course provides a computer laboratory component to ensure practice with the above concepts.

Credits: 3

Prerequisite: CSIT 105 or CSIT 121. Offered: Every year.

CSIT 207 - Web Programming II

An advanced course in server-side web programming. Topics include: cookies, file and database access, portals and web applications; server side scripting. Knowledge of HTML, and of C++, Java, or Visual Basic are required.

Credits: 3

Prerequisite: CSIT 107 and (CSIT 105 or CSIT 121).
Offered: Every semester.

CSIT 208 - Computer Game Design and Implementation

This course will provide an introduction to current and future techniques for computer game design and implementation. Topics will cover graphics game engines, motion generation, behavioral control for autonomous characters, layered game architecture, interaction structure, and interface issues of multi-user play. The course will emphasize a practical approach to the development of games. A variety of game development technologies will be considered. No programming background is assumed.

Credits: 3

Offered: Offered on occasion.

CSIT 221 - Computer Science II

Hands-on exposure to major topics in data structures and control, including file I/O; abstract data types; static and dynamic data structures; pointers and pointer operations; templates, memory addresses; garbage collection; memory leak; function and operator overloading; constructors and destructors; deep and shallow copying; class concepts; multi-dimensional and dynamic arrays; linked lists; doubly-linked lists; stacks, queues and their implementations and applications. The course provides a computer laboratory component to ensure practice with the above concepts.

Credits: 3

Prerequisite: CSIT 121. Offered: Every semester.

CSIT 224 - Problem Solving Using Objects

Object-oriented design methodologies; object-oriented programming; class concepts, encapsulation; operator overloading, polymorphism, inheritance; virtual, constant and friend functions; constructors and destructors; dynamic and delayed binding; abstract classes and interfaces; function overloading; and exception handling; advanced OO programming and applications.

Credits: 3

Prerequisite: CSIT 221. Offered: Every year.

CSIT 225 - Java Programming

Basic programming constructs: primitive types, expressions, and statements; class hierarchies; elementary predefined classes such as String and Math; object-oriented programming; packages and interfaces; exception handling; I/O and file access; graphics; applets; studio processing and other applications.

Credits: 3

Prerequisite: CSIT 221. Offered: Offered on occasion.

CSIT 231 - Systems Programming

UNIX commands, shells, utilities, editors; file types and modes; shell scripts; make-files; memory and storage management; C programming tools; processes, IPC (signals, sockets, pipes); development tools; streams; networking; UNIX internals, system administration and other topics as time permits.

Credits: 3

Prerequisite: CSIT 221. Offered: Every semester.

CSIT 241 - Discrete Mathematics for Computer Science I

Study of mathematical topics needed for further study of computer science at the advanced undergraduate level, including: logic, sets, proof techniques, matrices, basic number theory, modular arithmetic, functions, linear transformations, relations, basic combinatorics.

Credits: 3

Prerequisite: (MATH 108 or MATH 120 or MATH 122) and (CSIT 105 or CSIT 121). Offered: Every semester.

CSIT 242 - Discrete Mathematics for Computer Science II

A continuation of CSIT 241. Topics include combinatorics, digraphs, and trees; recurrence relations; switching circuits and logic gates; automata, grammars and languages; other topics as time permits.

Credits: 3

Prerequisite: CSIT 221 and CSIT 241. Offered: Every year.

CSIT 251 - Information Systems Structures

Overview of information systems (IS) for operational, tactical and strategic functions of business organizations; IS practices and challenges for business competitiveness; data, information and knowledge processing; information systems theory and quality decision, systems analysis and design, database management, network and network management; electronic commerce and social and ethical issues; IS and IT planning and implementation.

Credits: 3

Prerequisite: CSIT 151 or BUAD 161 or CSIT 104.

Offered: Every semester.

CSIT 291 - Special Topics

Selected topics in computer and information sciences based on instructor or student interest requiring basic understanding of computer information systems operations.

Credits: 0-3

Offered: Offered on occasion.

CSIT 300 - Internship

Participation in an approved professional experience in the area of computer science. Students must submit a proposal describing the work experience, its relationship to subject matter in computer science, and how it will be monitored and evaluated. Permission of the department required.

Credits: 1-12

Offered: Every semester.

CSIT 305 - Computer Laboratory Assistantship

Non-credit course for students interested in performing computer-related services for the Computer and Information Sciences program. Duties include: proctoring in computing laboratories; assisting with the labs in CSIT 121 or CSIT 221; helping the faculty director and/or systems manager with basic laboratory maintenance. Grading is on an S/U basis. Permission of the department required.

Credits: 0

Offered: Every semester.

CSIT 307 - Web and Mobile App Design

An introduction to cross platform and hybrid mobile application aesthetic design. This course emphasizes prototyping mobile applications and powering their functionality through iterative development. The course includes a comprehensive project including the design and implementation of a web-based software product based on predefined specifications

Credits: 3

Prerequisite: CSIT 107 and CSIT 207. Offered: Offered on occasion.

CSIT 311 - Assembly Language and Computer Organizations

Introduction to the basic concepts of computer organization, digital logic, data representation, and machine instructions repertoire; memory access and storage; instruction execution; assembly language; computer organization; levels of computer structures; data representation and transfer; digital arithmetic; memory structure and addressing methods; cache; secondary memory structure and organization.

Credits: 3

Prerequisite: CSIT 121. Offered: Every semester.

CSIT 312 - Computer Structures

Introduction to basic concepts of computer system and architecture; internal and external memories, I/O and operating system support; instruction execution; computer structure, organization and function; digital arithmetic; memory structure and addressing methods; cache; secondary memory structure and organization; system software structure; purpose and functions of system programs; file systems; process and resource management. For Computer Information Systems majors; Computer Science majors may not count this course to meet major requirements.

Credits: 3

Prerequisite: CSIT 105 or CSIT 121. Offered: Every semester.

CSIT 316 - Introduction to Human-Computer Interaction

The course introduces techniques, ideas, and models involved in designing, implementing, and evaluating interactive technologies for human use. It explores principles of design and usability, with an emphasis on the human-side of interaction. Accordingly, in addition to human and computing factors, the role of task (goals) and context are highlighted as key to understanding interaction phenomena at the individual, group, organizational, and societal levels. These include issues related to internationalization, such as cultural, ethical, and social aspects of interaction. Students will learn how to gather requirements, to design usable interfaces, and both implementation and evaluation processes. They will gain hands-on experience with contemporary interaction design techniques, and will have the opportunity to analyze and critique various computing interfaces including web sites, computer systems, video games, mobile devices, and more.

Credits: 3

Prerequisite: CSIT 121 or CSIT 151. Offered: Offered on occasion.

CSIT 321 - Paradigms of Programming Languages

Brief history of programming languages; language design issues; syntax and translation; data types; sequence control; the procedural paradigm; the object-oriented paradigm; the functional paradigm; the logical paradigm.

Credits: 3

Prerequisite: CSIT 224. Offered: Every semester.

CSIT 333 - Mobile Applications Development

This course introduces system development for the Android, iPhone or Windows mobile operating systems from both the practical software implementation and the theoretical software design perspectives. Topics covered include: Overview of mobile systems development, scope of mobile software, mobile development environments, user interface design, receivers/alerts and services coordination, hardware interaction, multimedia integration, and networking/location-based services utilization.

Credits: 3

Prerequisite: CSIT 205 or CSIT 221. Offered: Offered on occasion.

CSIT 335 - Data Communication and Networks I

Computer networking overview; OSI model and network layers; Ethernet and other local area network technologies; routing and data flow control; point-to-point, broadcasting, local and wide area networks; internetworking; modern network management protocols; network administration. Some programming assignments and practical work may be assigned to gain understanding of the network protocols.

Credits: 3

Prerequisite: CSIT 205 or CSIT 221. Offered: Every year.

CSIT 341 - Data Structures

Review of basic data structures and algorithmic complexities; recursion; topological order; Sorting and searching; Huffman codes; tries; binary trees; binary search trees; tree traversals; general trees, heaps, balanced trees; priority queues; hashing; graphs, graph algorithms.

Credits: 3

Prerequisite: CSIT 205 or CSIT 221. Offered: Every semester.

CSIT 351 - Business Systems Development

Review of business programming language principles and techniques; interfacing with computing environment; sorting, table handling, indexing and searching; preparation and handling of data; file organization, and file update; business system analysis, design and implementation; introduction to business information systems.

Credits: 3

Prerequisite: CSIT 205 or CSIT 251. Offered: Every year.

CSIT 390 - Directed Study

An intensive project-oriented course utilizing emerging technologies. Departmental approval is required.

Credits: 1-3

Offered: Offered on occasion.

CSIT 400 - Directed Independent Study

Independent study of a selected list of readings approved by a faculty advisor. Permission of the department required.

Credits: 1-3

Offered: Offered on occasion.

CSIT 411 - Programming for Embedded Microcontrollers

Programming and development for embedded microcontrollers. Embedded architecture, programming considerations related to embedded systems development. Memory utilization, I/O, synchronous and asynchronous serial communication. Utilization of timers, and interrupts. Development considerations for comparators, A/D converters, USARTs and other on-board peripheral devices. Debugging, and utilization of test equipment such as multimeters and oscilloscopes. Students will build a series of embedded projects of increasing complexity. Some very basic electronic design principles are also included.

Credits: 3

Prerequisite: CSIT 221. Offered: Every other year.

CSIT 413 - Computer Architecture

Review of computer organization and digital logic principles; system buses and peripherals, main and cache memory overview; pipelined processing; RISC and CISC concepts; Superscalar and IA-64 architecture; performance evaluation; microarchitecture level and the control unit. Term projects in digital system design are emphasized.

Credits: 3

Prerequisite: CSIT 311 or CSIT 312. Offered: Every year.

CSIT 425 - Software Engineering

Basic concepts and major issues of software engineering; current tools and techniques providing a basis for analysis, design, development, maintenance, and evaluation of software systems; structured walkthrough and software testing; verification and validation; technical, managerial, administrative, and operating issues; privacy, security, and legal issues; developing a team project using software engineering principles.

Credits: 3

Prerequisite: CSIT 221 or CSIT 205. Offered: Every year.

CSIT 431 - Introduction to Operating Systems

System software organization, purpose and functions of computer operating systems, batch processing systems: translation, loading and execution; serial and parallel I/O processing; spooling; interrupt facilities; memory protection and management; file systems; multi-access and special-purpose systems; process scheduling; accounting procedures and resource management; classical and popular operating systems.

Credits: 3

Prerequisite: (CSIT 311 or CSIT 312) and CSIT 341 and CSIT 231. Offered: Every semester.

CSIT 433 - Compiler Construction

Finite automata; languages and grammars; review of language structure, translation, linking, loading, execution; run-time storage organization; compilation of simple structures; compiler design principles, organization and implementation; lexical analysis; symbol tables; parsers and semantic analysis; code generation and optimization; error diagnostics.

Credits: 3

Prerequisite: (CSIT 311 or CSIT 312) and CSIT 341. Offered: Every other year.

CSIT 435 - Data Communication and Networks II

Network protocol stack layers, network bandwidth and traffic management, data transmission fundamentals; data encoding and multiplexing, switching and error handling; ATM, Diffserv, RSVP, MPLS and related modern protocols; network applications; carrier transport networks, reliability and security, encryption and compression; wireless networks; advanced network programming. Term projects are emphasized for network performance analysis and QoS application design.

Credits: 3

Prerequisite: CSIT 311 or CSIT 312 or CSIT 335. Offered: Every year.

CSIT 436 - Advanced Network Programming

Designing client-server applications with sockets; traffic analysis; building concurrent and multi-service servers; designing network protocols; measuring and analyzing performance of protocols. Students will complete a number of programming and network analysis experiments during the semester.

Credits: 3

Prerequisite: CSIT 435. Offered: Offered on occasion.

CSIT 437 - Advanced Operating Systems

Review of contemporary operating systems, OS design principles and strategies; examination of communication and synchronization protocols; concurrent processes and process scheduling including their statistical analysis; distributed operating systems; client-server computing model; distributed resource management; multiprocessor OS; failure recovery and fault tolerance; data security; applications.

Credits: 3

Prerequisite: CSIT 431. Offered: Every year.

CSIT 441 - Analysis and Design of Algorithms

Introduction to design and analysis of algorithms: time and space complexity, verification of correctness; advanced algorithm design strategies: iterative, divide and conquer, greedy method, dynamic programming, branch and bound, etc.; specific examples drawn from sorting, searching, string searching, graph problems, matrices, polynomial arithmetic, cryptography; hard problems and approximation algorithms: Knapsack, bin packing, and graph coloring problems, etc.

Credits: 3

Prerequisite: CSIT 242 and CSIT 341. Offered: Every other year.

CSIT 443 - Theory of Computation

Regular expressions and finite automata; context-free grammars and pushdown automata; pumping arguments; closure properties; decision algorithm; Turing machines; computability and decidability; halting problem; and elementary complexity theory.

Credits: 3

Prerequisite: CSIT 242 and CSIT 341. Offered: Every other year.

CSIT 451 - Introduction to Files and Databases

Large scale information organization; basic concepts and terminologies of file management techniques; storage hierarchies, external storage devices; mass storage systems; common file structures and organization methods; physical file organization; list, inverted, and tree structured file organization methods; file systems; concepts of data modeling; data languages; search, retrieval and processing methods; introduction to relational databases and database management systems.

Credits: 3

Prerequisite: CSIT 341. Offered: Offered on occasion.

CSIT 455 - Relational and Object Databases

Review of data modeling and databases (DB); entity/relationship and relational models; relational

algebra; relational databases; database architecture; data integrity; SQL design; SQL and QBE languages; functional dependencies; normalization; data protection and SQL concurrency; data and database security; object-oriented databases; distributed and client/server systems; introduction to DB administration.

Credits: 3

Prerequisite: CSIT 221 or CSIT 205. Offered: Every year.

CSIT 456 - Information and Decision Support Systems

Information and computer information systems; information hierarchy; decisions and decision-making; functional components of a decision support system; intelligent/knowledge-based decision-making and knowledge management; architecture of decision systems; distributive and group decision-making; executive information systems; expert and fuzzy systems; reasoning and explanation; knowledge elicitation and representation; logistics and long-term decision-making.

Credits: 3

Prerequisite: CSIT 341 and CSIT 351. Offered: Every other year.

CSIT 461 - Introduction to AI and Knowledge Engineering

Overview of artificial intelligence tools and techniques; searching methods; applications of AI: game playing, expert systems and knowledge-based systems; components of a knowledge-based system; knowledge acquisition, representation, and formalization; numerical and symbolic processing; information theoretic and decision theoretic algorithms; inference engine; machine learning; reasoning and explanation; basic concepts and major issues of knowledge engineering; current tools and techniques for analysis, design, development of the knowledge based systems; applications in robotics, medical diagnosis, smart decision systems, etc.

Credits: 3

Prerequisite: (CSIT 205 or CSIT 221) and CSIT 241. Offered: Every other year.

CSIT 462 - Computer Graphics

Introduction to computer graphics; graphics hardware, systems and APIs; raster and vector graphics; basic 2D primitives; points, lines, arcs, polygons and poly-lines; basic 3D shapes; raster algorithms for drawing 2-D primitives; 2D and 3-D geometrical transformations; projections; rendering, lighting, and animation; representation of curves and surfaces; solids modeling; applications of the above concepts.

Credits: 3

Prerequisite: CSIT 221 or CSIT 205. Offered: Every other year.

CSIT 463 - Introduction to Digital Image Processing and Computer Vision

Introduction to digital image and signal processing, computer vision and pattern recognition; image acquisition, registry and display; elementary image processing algorithms: sampling, preprocessing, smoothing, segmentation, and sharpening; transformations; filtering; image coding and restoration; analog and digital images and image processing systems; feature extraction and selection; elementary pattern classification and vision systems; robotics; machine learning.

Credits: 3

Prerequisite: CSIT 205 or CSIT 221. Offered: Every other year.

CSIT 471 - Information Systems Management

Overview of information systems (IS) for business organizations; IS systems management; strategic uses of IT, and I-commerce; IS planning, using and managing essential technologies: databases, distributed systems, telecommunications, information resources; managing IS operations; managing systems development; systems for supporting knowledge-based work; practices and challenges for business competitiveness; information systems theory and quality decision theory; electronic and mobile commerce; social and ethical issues; IS and IT implementation.

Credits: 3

Prerequisite: CSIT 205 or CSIT 221. Offered: Every other year.

CSIT 473 - Data Warehousing and Mining

Overview of data and information sharing; principles of information sharing; information security; data mining, data warehousing, and data marts; data modeling; data collection, problems, quality, and integrity; databases and content management; business intelligence; online analytical processing; data visualization, multidimensionality, and real-time analytics; examples of data warehousing and data mining - geographic information systems, web intelligence, resource management, multimedia-based databases, knowledge bases, etc.

Credits: 3

Prerequisite: CSIT 205 or CSIT 221. Offered: Every other year.

CSIT 475 - Electronic Commerce

Topics include Internet technology for business advantage, managing e-commerce funds transfers, business opportunities in e-commerce, Website development, social, political and ethical issues associated with e-commerce, and business plans for technology ventures. The purpose of

the course is to educate the students about the technology required of e-commerce. Lab instruction in Internet application development complements the course.

Credits: 3

Prerequisite: (CSIT 205 or CSIT 221) and CSIT 207.

Offered: Offered on occasion.

CSIT 490 - Seminar on Selected Topics

Studies, discussions, workshops and seminars on selected topics in computer science. Written reports and a formal presentation are required.

Credits: 1-3

Offered: Offered on occasion.

CSIT 496 - Special Topics

A variable-topics course in computer and information sciences. Topics normally not covered in the Computer Science or Computer Information Systems degree programs, but suitable to explore at length at the senior level. Project and a formal presentation are required.

Credits: 1-3

Offered: Offered on occasion.

CSIT 497 - Thesis

Faculty-supervised research on a computer and information sciences topic of interest to the faculty member and the student. Minimum of 80 hours of productive work required. A thesis documenting problem statement, approach, methodology, and results will be submitted upon completion.

Credits: 3

Prerequisite: CSIT 341 or CSIT 351. Offered: Offered on occasion.

CSIT 499 - Senior Project

Faculty-directed work on a computer and information sciences project of interest to the faculty member and student. Minimum of 80 clock hours of productive work required. A report of presentation discussing approach, methodology, and results will be submitted upon completion.

Credits: 3

Prerequisite: CSIT 341 or CSIT 351. Offered: Offered on occasion.

CSIT 536 - Advanced Network Programming

Designing client-server application with sockets; traffic analysis; building concurrent and multi-service servers; designing network protocols; measuring and analyzing performance of protocols. Students will complete a number of programming and network analysis experiments

during the semester. Background assumed: Data Communication and Networks II or equivalent.

Credits: 3

Offered: Offered on occasion.

CSIT 537 - Advanced Operating Systems

Review of contemporary operating systems (OS), OS design principles and strategies; examination of communication and synchronization protocols; concurrent processes and process scheduling including their statistical analysis; distributed operating systems; client-server computing model; distributed resource management; multiprocessor OS; failure, recovery and fault tolerance; data security; applications. Background assumed: Introduction to Operating Systems or equivalent.

Credits: 3

Offered: Offered on occasion.

CSIT 541 - Algorithms

Topics include: time and space complexity; verification of correctness; advanced algorithm design strategies (iterative, divide-and-conquer, greedy methods, dynamic programming, branch-and-bound, etc., with specific examples drawn from sorting, searching, graph theory, matrix and polynomial arithmetic, and cryptography); hard problems and approximation algorithms, with examples such as napsack, bin-packing, and graph coloring problems; introduction to parallel algorithms as time permits. Background assumed: Mathematical Structures and Proof and Data Structures.

Credits: 3

Offered: Offered on occasion.

CSIT 542 - Advanced Data Structures

Typical topics include: Red-Black trees; AVL trees; B trees; B+ trees; B* trees; tries; splay trees; spatial data structures; self-organizing lists; summation techniques; recurrence relations, including establishing bounds and expanding recurrences; hashing and other complex indices; complexity of searching on various structures. Background assumed: Data Structures.

Credits: 3

Offered: Offered on occasion.

CSIT 580 - Computational Biology

The course exposes students to a wide range of state-of-the-art research and techniques in the field of computational biology. This is a modern discipline dealing with the discovery and implementation of algorithms facilitating the understanding of biological processes. Various statistical, heuristic, and machine learning methods are used for this purpose, as well as graphical tools to visualize the objects. The course is intended to

present some biological problems related to the human genome and the computational methods to resolve them. It will cover an introduction to computational biology, the use of computational methods to search for, classify, analyze, and model protein sequences, i.e. to convert the masses of information from biochemical experiments into useful information.

Credits: 3

Offered: Offered on occasion.

CSIT 591 - Selected Topics in Computer Science

A variable topics course in computer science. Topics normally not covered in Computer Science or Computer Information Systems undergraduate degree programs but suitable to explore at length at graduate and senior level. Project and a formal presentation are required. Prerequisite: CSIT 341 or equivalent background knowledge and permission of instructor.

Credits: 3

Offered: Offered on occasion.

CSIT 613 - VLSI Design

The course focuses on the design of CMOS VLSI (Very Large Scale Integrated) chips using integrated circuit cells as building blocks and employing hierarchical design methods. Focus will be on the design of digital systems. Design issues at layout, schematic, logic and RTL levels will be studied. Shareware and freely available design software will be used for laboratory exercises. An overview of VLSI computer-aided design (CAD) tools and theoretical concepts in VLSI architectures will also be discussed. Prerequisite: Completed at least one course in logic design or computer architecture at the undergraduate level.

Credits: 3

Offered: Offered on occasion.

CSIT 625 - Advanced Topics in Software Engineering

The course focuses on modern software project development techniques. Topics include Universal Modeling Language (Use Case, Sequence, and Class diagrams), code reusability, design patterns, component development and versioning software. Students will produce a significant, multifaceted software product.

Credits: 3

Prerequisite: CSIT 425. Offered: Offered on occasion.

CSIT 636 - Network Security

The course deals with the security aspect of information and data exchange on shared internetworks. The requirements of secure transfer include secrecy, integrity, authentication and non-repudiation. The mechanisms to fulfill these requirements are introduced including

encryption algorithms that provide privacy, message authentication, and non-repudiation. Practical implementation of security on top of the three layers of the OSI reference model is highlighted. The various forms of attacks including intrusions, worms, viruses, Trojan horses and distributed attacks are discussed along with the defense mechanisms of firewalls and intrusion detection and prevention techniques. Background assumed: Data Communication and Networks II.

Credits: 3

Offered: Offered on occasion.

CSIT 639 - Special Topics: Systems Structures

The advances in computer science are rapid. The course is designed to cover current issues in computer systems structures. Current topics in one or more fields of computer architecture, system software, network, wireless computing, etc. will be covered in detail.

Credits: 3

Offered: Offered on occasion.

CSIT 649 - Selected Topics in Theory of Computation

The course is designed to cover current issues in theory of computations. Current topics of instructor's choice in the field of computer systems theory, computations and algorithms, will be selected. Background assumed: Theory of Computation

Credits: 3

Offered: Offered on occasion.

CSIT 665 - Pattern Recognition

Statistical pattern recognition; syntactic pattern recognition; neural networks; applications. Topics include: Bayesian classifiers; linear classifiers; nonlinear classifiers; context-dependent classification; system evaluation; feature selection; clustering. Background assumed: Probability and Statistics.

Credits: 3

Offered: Offered on occasion.

CSIT 669 - Selected Topics in Information Structures and Systems

Designed to cover current issues in information systems and structures. Current topics in one or more fields of computer architecture, computer information architecture, artificial intelligence and knowledge engineering, databases, systems and systems software, software engineering, data protection, concurrency and security, etc.

Credits: 3

Offered: Offered on occasion.

CSIT 670 - Data Compression for Multimedia Applications

Introductory course on data compression, which is an essential concept for communication and networking, with specific emphasis on multimedia. Topics include: information theory, source coding, dictionary and quantization techniques, image and sound compression.

Credits: 3

Prerequisite: CSIT 341. Offered: Offered on occasion.

CSIT 672 - Multimedia Systems

Topics may include: basic multimedia concepts; human perception; hardware requirements for multimedia applications; creating and processing images and sound by computer; multimedia and web; compression; main features of a graphical modeling language (e.g., VRML language); authoring tools, principles of working with an authoring system; creating an interactive multimedia application. Background assumed: Computer Graphics course or approval of instructor.

Credits: 3

Offered: Offered on occasion.

DANC - Dance

DANC 100 - Introduction to Dance

Will provide the student with a basic knowledge in various aspects of dance as a performing art. The practical part of the course will focus on body alignment, dance technique, flexibility, execution, and recollection of short dance combinations. The scholarly part of the course will cover dance history, critiques on dance performances and will explore many dance related topics from the perspective of a dancer as well as an audience.

Credits: 3

Offered: Every semester.

DANC 101 - Theatre and Dance Productions

Designed to give practical experience in all aspects of dance and theatre productions including rehearsals, lighting and costume design, crew work, and stage management. Offered in coordination with THEA 101 and 102.

Credits: 1

Offered: Every semester.

DANC 102 - Theatre and Dance Productions

Designed to give practical experience in all aspects of dance and theatre productions including rehearsals, lighting and costume design, crew work, and stage management. Offered in coordination with THEA 101 and 102.

Credits: 1

Offered: Every semester.

DANC 105 - Folk Dance

Designed to cover the basics of folk dancing in many countries of the world.

Credits: 1

Offered: Offered on occasion.

DANC 106 - Square Dance

An introductory course for the beginning square dancer. Emphasis is on modern square dancing, although other forms are covered.

Credits: 1

Offered: Offered on occasion.

DANC 110 - Dance Productions

Designed to give practical experience in all aspects of dance and theatre productions including rehearsals, lighting and costume designs, crew work, and stage managing. Offered in coordination with Theatre Practice. May be repeated for credit.

Credits: 1

Offered: Every semester.

DANC 111 - Modern Technique I

Introductory course in modern dance for the novice, covering various techniques. Attendance at all dance concerts on campus required.

Credits: 2

Offered: Every year.

DANC 112 - Ballet I

An introduction to classical ballet technique. The course covers the basics of barre and center floor work, as well as terminology and history. Emphasis is on correct alignment, coordination, and the quality of movement. May be repeated once for credit.

Credits: 2

Offered: Every year.

DANC 113 - Jazz Dance I

The course covers the basic principles, technique, and history of jazz dance including traditional techniques, Fosse style, and a focus on jazz dance for Musical Theatre. May be repeated once for credit.

Credits: 2

Offered: Every year.

DANC 114 - Tap Dance I

An introductory course in tap dance. Emphasis on correct execution of single movements and combinations of steps, with proper timing and terminology. May be repeated once for credit.

Credits: 2

Offered: Every year.

DANC 113 - Jazz Dance I

The course covers the basic principles, technique, and history of jazz dance including traditional techniques, Fosse style, and a focus on jazz dance for Musical Theatre. May be repeated once for credit.

Credits: 2

Offered: Every year.

DANC 111 - Modern Technique I

Introductory course in modern dance for the novice, covering various techniques. Attendance at all dance concerts on campus required.

Credits: 2

Offered: Every year.

DANC 112 - Ballet I

An introduction to classical ballet technique. The course covers the basics of barre and center floor work, as well as terminology and history. Emphasis is on correct alignment, coordination, and the quality of movement. May be repeated once for credit.

Credits: 2

Offered: Every year.

DANC 211 - Modern Technique II

The course explores styles in modern dance technique at the intermediate level. It covers technique, vocabulary, and history, through participation and academic study. May be repeated twice for credit.

Credits: 2

Prerequisite: DANC 111. Offered: Every year.

DANC 212 - Ballet II

Continuation of the classical ballet technique at the intermediate level, with attention to the execution and mastery of the classical movement repertoire. The course focuses on adagio, allegro, and center floor work, as well as on the performance aspect of this discipline. May be repeated twice for credit.

Credits: 2

Prerequisite: DANC 112. Offered: Every year.

DANC 213 - Jazz Dance II

The course explores styles in jazz technique (e.g., Luigi, Giordana, Fosse) at the intermediate level. Emphasis will be on proper technique and performance, as well as vocabulary, and history. May be repeated twice for credit.

Credits: 2

Prerequisite: DANC 113 or DANC 131. Offered: Every year.

DANC 214 - Tap Dance II

The course explores styles of tap dance technique at the intermediate level. Emphasis will be on proper technique and performance, as well as vocabulary, and history. May be repeated twice for credit.

Credits: 2

Prerequisite: DANC 114 or DANC 121. Offered: Every year.

DANC 231 - African-Caribbean Dance

An introductory course in the structure and design of African and Caribbean dance techniques. This course will illustrate the linkage between African and Afro-American dance, music, and rhythmic styles. May be repeated twice for credit.

Credits: 2

Offered: Offered on occasion.

DANC 241 - Dance Improvisation

The course involves creative movement problem-solving through the study of basic elements in dance and choreography. Attendance at some campus productions is required. May be repeated twice for credit.

Credits: 2

Prerequisite: DANC 111. Offered: Every year.

DANC 250 - Dance Ensemble

Designed to develop proficiency in dance performance through the rehearsal and presentation of various dance forms. At least one departmental concert is presented annually. Admission is by permission of instructor following audition. May be repeated for credit for a maximum of 8 semester hours. Student must also be registered in a Dance Technique class (Ballet, Modern Jazz, or Tap).

Credits: 1

Offered: Every semester.

DANC 251 - Dance Repertory

Designed to develop proficiency in dance performance through the presentation of various dance forms choreographed by invited guest artists. (At least one

departmental concert is presented annually.) Admission is by permission of instructor following audition. May be repeated for a maximum of eight credit hours.

Credits: 1

Offered: Every semester.

DANC 260 - Dance Kinesiology

A study of the sensory, skeletal, and muscular structures of the dancer's body, and their use in the development of dance technique. Particular attention is given to the student's understanding of their own structural attributes, and prevention of injury. Alternative training methods will also be explored.

Credits: 3

Prerequisite: DANC 111 or DANC 112 or DANC 113 or DANC 114. Offered: Every other year.

DANC 264 - Choreography I

An introduction to the content and structure of solo dance composition as an art form. Improvisation and compositional devices including rhythm, dynamics, space, design, phrasing, and production are covered.

Credits: 3

Prerequisite: DANC 211 or DANC 241. Offered: Every year.

DANC 311 - Modern Technique III

The course explores styles in modern dance technique at an intermediate/advanced level. It is a continuation of DANC 211 with an emphasis on the mastery of execution, and artistic expression of intermediate/advanced modern dance combinations. May be repeated twice for credit.

Credits: 2

Prerequisite: DANC 211. Offered: Every year.

DANC 312 - Ballet III

Continuation of classical ballet technique at the intermediate/advanced level, with attention to the execution and mastery of the classical movement repertoire. The course intensifies the work covered in DANC 212 with the addition of variations and beginning pointe shoe work. May be repeated twice for credit.

Credits: 2

Prerequisite: DANC 212. Offered: Every year.

DANC 313 - Jazz Dance III

This course explores styles in jazz technique at an intermediate/advanced level. It is a continuation of DANC 213 and covers technique, vocabulary, and history, with emphasis on mastery of execution and artistic expression. May be repeated twice for credit.

Credits: 2

Prerequisite: DANC 213. Offered: Every other year.

DANC 321 - Dance for the Musical Theatre

Designed to familiarize the intermediate dancer with the techniques of musical theatre dance for the stage. Jazz, ballroom, and tap techniques are also covered. Classic musical theatre choreography is explored.

Credits: 2

Prerequisite: (DANC 114 or DANC 121) and DANC 211. Offered: Every other year.

DANC 341 - Selected Topics in Dance

Directed or Independent Study in dance-related topics. By advisement only. May be repeated for credit.

Credits: 1-3

Offered: Every semester.

DANC 353 - Western Dance History

A survey of the chronological development of social dance, ballet, and modern dance from pre-history to the present time, focusing on the history of dance as an art form in the greater context of the social, political, and economic climates of each era. Particular attention will be paid to the development of students' critical thinking, writing and research skills, and attendance at all dance concerts on campus is required.

Credits: 3

Prerequisite: DANC 100 or DANC 111 or DANC 112 or DANC 113 or DANC 114. Offered: Every other year.

DANC 364 - Choreography II

An introduction to the content and structure of group dance composition as an art form. Improvisation and compositional devices including rhythm, dynamics, space, design, phrasing, and production elements are covered.

Credits: 3

Prerequisite: DANC 363 or DANC 264. Offered: Every other year.

DANC 370 - Dance Studio Management

The course provides students with a road map for the annual cycle of a dance studio and other various aspects of this community-oriented enterprise. The focus will be on the administrative portion of the operation as opposed to the artistic side. Etiquette, communication skills, procedures, and financial aspects of the dance studio business will be discussed in detail. In addition, other useful applications such as drafting a business plan, developing policies, completing tax forms and other hands-on exercises will be put into practice. At the end of the

course the student will have a clear understanding of the timeline and the dynamics of a dance studio business.

Credits: 3

Prerequisite: POLI 277 and COMM 116 and CSIT 104 or CSIT 151. Offered: Every other year.

DANC 460 - Senior Project

A capstone course for graduating dance majors. Students will propose to the faculty a senior project that will take place over a two-semester time period. Possible senior projects include performance or choreographic projects, research projects, dance videography projects, or other topics upon advisement. Students will take this course twice in subsequent semesters.

Credits: 1

Offered: Offered on occasion.

DANC 461 - Practicum in Dance

Teaching of a beginning technique class for returning professionals or graduate students. By audition only.

Credits: 3

Offered: Offered on occasion.

DANC 462 - Practicum in Dance

Teaching of a beginning technique class for returning professionals or graduate students. By audition only.

Credits: 3

Offered: Offered on occasion.

DANC 460 - Senior Project

A capstone course for graduating dance majors. Students will propose to the faculty a senior project that will take place over a two-semester time period. Possible senior projects include performance or choreographic projects, research projects, dance videography projects, or other topics upon advisement. Students will take this course twice in subsequent semesters.

Credits: 1

Offered: Offered on occasion.

DANC 561 - Practicum in Dance

Internship in dance teaching for graduate dance students. By audition only. May be repeated.

Credits: 3

Offered: Offered on occasion.

DANC 562 - Practicum in Dance II

Internship in dance teaching for graduate dance students. By audition only. May be repeated.

Credits: 3

Offered: Offered on occasion.

DIST - Distance Learning

DIST 499 - Distance Learning Special Topics

This distance learning course is offered via transmission from another institution and is synchronous instruction.

Credits: 1-3

Offered: Offered on occasion.

ECON - Economics

ECON 101 - Introductory Economics

An introductory study of the workings of economic society. Provides an overview of the conditions and problems of the American and other economic systems. Encompasses both microeconomics (e.g., supply and demand, cost and profit, competition and monopoly) and macroeconomics (e.g., unemployment and inflation, fiscal and monetary policies). Emphasis is on basic economic concepts, institutions, and broad historical sweep.

Credits: 3

Offered: Offered on occasion.

ECON 102 - Current Economic Issues

An introduction to current economic problems and public policy issues and the techniques used by economists to address the issues. The topics covered in a semester may vary, but will include issues such as: environmental quality and pollution control; poverty and welfare reform; big business and government regulation; labor market discrimination; health care reform; taxation, government spending, and the national debt; international trade policy; inflation and unemployment.

Credits: 3

Offered: Offered on occasion.

ECON 200 - Fundamentals of Statistics for Business Administration and Economics

An introductory study of statistical methods as applied to business and economic problems. Topics covered include: frequency distributions, measures of central tendency, measures of dispersion, probability, probability distributions, sampling distributions, estimation, statistical inference, and simple linear regression. Emphasis on the use and abuse of statistics. Note: Credit for at most one of the following courses may be applied towards a student's requirements for graduation: BUAD 200, ECON 200, EDU 200, POLI 200, SOC 200, and STAT 200.

Credits: 3

Offered: Every semester.

ECON 201 - Principles of Macroeconomics

Study of the organization and functioning of the contemporary American economic system. Topics covered include national income, aggregate demand, aggregate supply, unemployment, inflation, money and banking, monetary and fiscal policies, and international trade and finance.

Credits: 3

Offered: Every semester.

ECON 202 - Principles of Microeconomics

Study of the organization and functioning of the contemporary American economic system with emphasis on the problems of resource allocation. Topics covered include supply and demand, elasticity, price and output determination in various market situations, competition and public policy, income distribution, and alternative economic systems.

Credits: 3

Offered: Every semester.

ECON 300 - Statistical Analysis

Continuation of ECON 200. A study of the techniques and tools used in analyzing business and economic data with equal emphasis on estimation techniques and interpretation of results. Topics covered include simple and multiple regression, time series analysis, non-parametric techniques, analysis of variance, and surveying. Use of computer software for statistical analysis is included

Credits: 3

Prerequisite: ECON 200 or BUAD 200 or EDU 200 or POLI 200 or SOC 200 or PSY 200 or STAT 200. Offered: Every semester.

ECON 305 - Intermediate Microeconomic Theory

Analysis of economic behavior of consumers, producers, and markets. Major topics include utility maximization and production theories, market structures (pure competition, monopoly, monopolistic competition, and oligopoly) and theories of factors of production, income distribution, resource allocation, and economic efficiency.

Credits: 3

Prerequisite: ECON 201 and ECON 202 and (MATH 120 or MATH 122). Offered: Every year.

ECON 310 - Intermediate Macroeconomic Theory

A theoretical analysis of the determinants of employment, income, consumption, investment, the general price level, wage rates and interest rates; the role of government, the impact of monetary and fiscal policies within the framework of various contemporary aggregate models of closed and open economies.

Credits: 3

Prerequisite: ECON 201 and ECON 202 and (MATH 120 or MATH 122). Offered: Every year.

ECON 312 - Women in the Economy

Exploration of the economic status of women, particularly in the United States. Emphasis is placed on women's labor market experiences and how the experiences are explained by economic theory. A major part of the course stresses current economic issues and policies specifically aimed at women including poverty, welfare, labor market mobility, and the status of the family.

Credits: 3

Prerequisite: ECON 201 or ECON 202. Offered: Offered on occasion.

ECON 315 - Money/Banking/Monetary Economics

Study of money and the financial system. In particular, the operation, functions, structure and regulations of the banking system, and organization and functions of central banking. Special emphasis given to the study of monetary theories, monetary management, and the effectiveness of monetary policy.

Credits: 3

Prerequisite: ECON 201 and ECON 202. Offered: Every year.

ECON 320 - International Trade/Finance

Study of international economic relations and international finance - determination of trade patterns and competitiveness, tariff and non-tariff barriers, economic integration, multinational corporations, exchange rates, balance of payments problems and policies, and international monetary system.

Credits: 3

Prerequisite: ECON 201 and ECON 202. Offered: Every year.

ECON 321 - Multinational Corporations

Economic analysis of the operations of multinational corporations and the implications of global production, resource allocation, and distribution of goods and services. Emphasis on capital and technology transfer, intercontinental flow of information, transaction costs, transfer pricing and tax policies.

Credits: 3

Prerequisite: ECON 201. Offered: Offered on occasion.

ECON 325 - Labor and Employment

Applications of microeconomic theory to labor markets. Topics include labor supply and demand, investment in education and training, wage determination, working

conditions, non-wage compensation, racial and gender discrimination, unions, and government regulation of wage-setting institutions.

Credits: 3

Prerequisite: ECON 202. Offered: Every other year.

ECON 330 - Public Sector Economics

Analysis of governmental policies involving taxes and expenditures and how effectively these policies attain their objectives. Topics include externalities and public goods, income redistribution, health and unemployment insurance, and the impact of taxes on labor supply, savings and wealth.

Credits: 3

Prerequisite: ECON 201 and ECON 202. Offered: Offered on occasion.

ECON 335 - Economic Development

Problems of economic growth and development of less developed countries with emphasis on economic and non-economic obstacles to growth and development, financing of development, strategy of development policy, development planning and project evaluation, industrial and agricultural development, and the role of international trade in growth and development.

Credits: 3

Prerequisite: ECON 201 and ECON 202. Offered: Offered on occasion.

ECON 340 - Urban and Regional Economics

Study of the economics of urban and regional development. Emphasis on principles of regional analysis, location theories, population movements, urban base, problems of urban renewal, economics of poverty, transportation, pollution, and housing.

Credits: 3

Prerequisite: ECON 202. Offered: Offered on occasion.

ECON 345 - Comparative Economic Systems

Comparative study of organization, operation and performance of some important economic systems. Emphasis on the socio-cultural and political environment, and on the institutional factors explaining the differences in the performance of various systems.

Credits: 3

Prerequisite: ECON 101 or ECON 102 or ECON 201 or ECON 202. Offered: Every other year.

ECON 350 - Managerial Economics

Microeconomic analysis applicable to the problems of businesses with emphasis on the determination of prices,

outputs and inputs. Other topics include demand and cost measurements, forecasting, and cash flow analysis. The course utilizes different constrained optimization and quantitative techniques. Note: Credits for this course may not be applied towards the economics major requirements.

Credits: 3

Prerequisite: (MATH 120 or MATH 122) and (BUAD 200 or ECON 200 or EDU 200 or POLI 200 or PSY 200 or SOC 200 or STAT 200). Offered: Every semester.

ECON 360 - Health Care Economics

Application of economic analysis to the health care industry. Emphasis on the demand and supply of health care services, and private and group health insurance (HMO, PPO, Medical Care, Medicaid). Analysis of for-profit and non-profit production of health care services under different market structures. Other topics include problems of allocation of medical care resources and analysis of health care policies.

Credits: 3

Prerequisite: ECON 201 and ECON 202. Offered: Offered on occasion.

ECON 363 - Game Theory

The course will use rational choice theory to analyze how individuals and groups make decisions in strategic and non-strategic situations. Strategic situations are the result of the interdependent decisions of several individuals, e.g., nuclear deterrence or business competition. Problems covered include how computers beat humans at chess to the evolution processes of society. How do group norms arise where individual competition is the usual course of action? A low level of mathematical background is required.

Credits: 3

Prerequisite: POLI 200 or BUAD 200 or ECON 200 or EDU 200 or POLI 200 or PSY 200 or SOC 200 or STAT 200. Offered: Every other year.

ECON 370 - Evolution of Economic Thought

Study of the historical development of those ideas intended to provide a deeper understanding of present economic realities. Emphasis is placed on fundamental areas such as the economist's methodology, value and distribution theory, free trade, economic growth, and macroeconomics, and how the topics have been addressed by major thinkers in the field of economics.

Credits: 3

Prerequisite: ECON 201 and ECON 202. Offered: Offered on occasion.

ECON 380 - Environmental/Natural Resource Economics

Economic analysis of natural resource and environmental issues and policies. Social cost-benefit analysis, theories of externalities and intertemporal resource allocation and their application to renewable and exhaustible natural resources are emphasized. Topics include pollution control, efficient and equitable resource management, energy issues, ecological and environmental quality, and global sustainability.

Credits: 3

Prerequisite: ECON 202. Offered: Every other year.

ECON 381 - Special Topics in Economics

Examination of topics in economic issues, problems, theory and policy not covered in any other course offered by the department.

Credits: 1-3

Prerequisite: ECON 201 and ECON 202. Offered: Offered on occasion.

ECON 395 - Comparative Human Resources

Comparative study of labor market characteristics among U.S., Canada, Mexico, Japan, OECD countries and a selection of emerging market economies. Emphasis on those factors that enhance economic integration and influence human resource policies. Comparative policy analysis of medical care, immigration, education and employment training, minimum wages, work standards, unemployment insurance, retirement systems and collective bargaining.

Credits: 3

Prerequisite: ECON 201 or ECON 202. Offered: Offered on occasion.

ECON 400 - Econometrics and Business Applications

Analysis and application of regression covering topics on econometric problems and techniques of estimation (both single and multi-equation models). The science and art of econometric model building and forecasting with its wide application in finance, marketing, banking, and other fields in business and economics are discussed. Use of the computer is an integral part of the course.

Credits: 3

Prerequisite: BUAD 300 or ECON 300. Offered: Every other year.

ECON 405 - Industrial Organization

Study of the sources and consequences of market power in the U.S. economy. Deals with economic definitions, measures of market power and legal standards for monopoly and oligopoly; examines major court decisions

that have shaped antitrust policy; also covers economic regulation as a response to market power.

Credits: 3

Prerequisite: ECON 305 or ECON 350. Offered: Offered on occasion.

ECON 410 - Mathematical Economics

Introduces students to mathematical techniques used in economic analysis, including optimization theory, consumer and producer problems and general equilibrium models.

Credits: 3

Prerequisite: ECON 305 or ECON 350 or MATH 223. Offered: Offered on occasion.

ECON 425 - Financial Markets/Institutions

Study of the operation of the capital and money markets, determinants and structure of interest rates. Broad analysis of financial intermediaries, and regulation of the financial systems.

Credits: 3

Prerequisite: ECON 315. Offered: Every other year.

ECON 430 - Independent Study

Individualized study under the supervision of a faculty member.

Credits: 1-3

Offered: Every semester.

ECON 450 - Senior Seminar

Application of research and writing skills to the critical analysis of selected broad current economic problems and issues, integrating several areas of study in economics and other disciplines.

Credits: 3

Prerequisite: ECON 305 or ECON 310. Offered: Every year.

ECON 480 - Internship

Provides students the opportunities to earn credits for professional experience gained through learning-by-doing techniques.

Credits: 1-6

Offered: Every semester.

ECON 481 - Internship

Provides students the opportunities to earn credits for professional experience gained through learning-by-doing techniques.

Credits: 1-6

Offered: Every semester.

EDU - Education

EDU 100 - Tutoring Theory Practice

The course is designed to lead practicing tutors into an examination, through readings and discussion of what tutoring is, why and how it works and what tutoring can and cannot accomplish in a college setting. Because the course is designed to run concurrently with practical tutoring, candidates need to apply to and be accepted by College Tutoring Services. Acceptance is based on transcript, faculty evaluation and interviews and takes place during the semester prior to that during which the course is taken. In order to earn 2 credit hours, students must attend a series of five workshops with planned activities and discussion designed to lead to greater cultural self-awareness and therefore awareness of other peoples' cultural selves.

Credits: 1-2

Offered: Every semester.

EDU 101 - First Field Experience

Adolescence Education majors are introduced to teaching by enrolling in a 25-hour observation participation experience.

Credits: 0

Offered: Offered on occasion.

EDU 105 - Introduction to Contemporary Inclusive Education

Introduction to childhood and early childhood education, its principles and practices. Organization of elementary schools, planning, teaching styles, classroom management, and instructional materials are among the topics considered. Direct teaching experiences with children are an integral part of the course.

Credits: 3

Corequisite: EDU 106. Offered: Every semester.

EDU 106 - Practicum in Inclusive Education I

Provides participants an opportunity to observe classroom operations, observe and describe the many roles of teachers, conduct focused observations and interviews, conduct two formal lessons with individuals, and small or large groups of children on a teaching learning project.

Credits: 0

Corequisite: EDU 105. Offered: Every semester.

EDU 110 - Education Literature/Composition

An integration of how one writes and how one can effectively teach writing to students. Using the writing

workshop approach, the courses examines principles, teaching methodologies, and techniques pertaining to the writing process from both the perspective of writer and teacher.

Credits: 3

Offered: Offered on occasion.

EDU 200 - Statistics

Elements of probability theory; fundamental concepts and techniques of statistics with application. May not be repeated for credit. Note: Credit for at most one of the following courses may be applied towards a student's requirements for graduation: BUAD 200, ECON 200, EDU 200, POLI 200, SOC 200, and STAT 200.

Credits: 3

Offered: Offered on occasion.

EDU 214 - Introduction to Children's Literature

Designed to assist students in becoming widely acquainted with the great wealth of trade (library) books and media available for today's children, preschool through middle school. Course content includes all literary types.

Credits: 3

Offered: Offered on occasion.

EDU 215 - Education in American Society

Foundations course in the study of education. Introduction to social, historical, and philosophical foundations of education and the relationship between school and society.

Credits: 3

Offered: Offered on occasion.

EDU 218 - Children's Literature in Literacy Instruction

This course is an introduction to Children's Literature in Reading and includes a study of genre as well as discussion of literacy acquisition, reading instruction and use of children's literature for evaluation and remediation of reading difficulties.

Credits: 3

Offered: Offered on occasion.

EDU 220 - Child Development

Development of the child from beginning of life: prenatal development through age 12. Study of physical, cognitive, social, emotional, and moral development of the child. Credit will not be given for both EDU 220 and EDU 225.

Credits: 3

Offered: Offered on occasion.

EDU 221 - Introduction to Early Childhood Education

The course examines early childhood care and education with particular emphasis on center-based settings for children Birth-5 years. Topics include theories of child development that inform best practices, characteristics of quality care and education ("educare"), developmentally appropriate curriculum (with an emphasis on how children learn through play in well-prepared environments), appropriate assessment for young children (with an emphasis on observation), and strategies to build strong family partnerships.

Credits: 3

Prerequisite: (EDU 105 and EDU 106) and (EDU 220 or EDU 225). Offered: Every year.

EDU 224 - Adolescent Development

Physical, mental, and emotional influences on adolescent development in terms of habits, interests and social adjustment. Factors in home and school that influence adolescent behavior and personality, and procedures for evaluating relevant research.

Credits: 3

Offered: Every semester.

EDU 225 - Child Development

Orderly sequence of childhood growth and development. Principles of physical, intellectual and personality changes emphasized, along with procedures for evaluating relevant research.

Credits: 3

Offered: Every semester.

EDU 227 - The Electronic Classroom

An introduction to computer managed instruction, computer based instruction, and the design and use of multimedia resources in the classroom.

Credits: 3

Offered: Offered on occasion.

EDU 250 - Introduction to the Exceptional Learner

Introductory survey of nature, needs, and education of children who are exceptional because of intelligence, behavioral disorders, and/or physical development.

Credits: 3

Prerequisite: (EDU 105 and EDU 106) or (MAED 105 and MAED 106) or (SCED 105 and SCED 106) or ENED 101 or ENGL 101. Corequisite: EDU 251. Offered: Every semester.

EDU 251 - Practicum in Inclusive Education II

Candidates work directly with pupils with learning difficulties in area schools and agencies.

Credits: 0

Corequisite: EDU 250. Offered: Every semester.

EDU 275 - Introduction to the Teaching of Reading in the Elementary School

Introduction to techniques, activities, and materials employed in teaching elementary school candidates how to read. Focuses on traditional texts and reading materials, as well as hands-on experience in applying microcomputers in the teaching of reading. The use of writing as a technique in the teaching of reading will also be employed. Specifically designed to prepare students for participation in elementary school classrooms.

Credits: 3

Offered: Offered on occasion.

EDU 276 - Literacy and Technology in Inclusive Educational Settings

Overview of the processes involved in literacy acquisition and the instructional approaches that acknowledge current thinking. Relationship of reading and writing, and aspects of writing development and writing process appropriate to each stage of reading development. Topics: models of reading and writing conceptual and methodological issues related to instruction and acquisition of reading, the role and use of technology in literacy instruction, assessment of candidates' reading and writing, diversity in reading acquisition - the role of technology in facilitating reading and writing for diverse learners.

Credits: 3

Offered: Every semester.

EDU 295 - Introduction to Educational Assessment

This Assessment Course is intended to introduce teacher candidates to concepts and vocabulary of assessment, as well as the assessment process from choice of assessment through to interpreting and reporting of results. The course is part of the undergraduate education sequence. It should be taken early in the education program, preferably the first semester of the sophomore year either prior to or at same time as EDU 250 or EDU 221. Later courses in the sequence contain more discipline-specific components of assessment: EDU 355 examines assessment for inclusive education, EDU 405 and 406 for literacy, and EDU 221 for early childhood.

Credits: 3

Prerequisite: EDU 105 and EDU 106. Offered: Every semester.

EDU 300 - Safe Schools/Healthy Students

Identifying and reporting suspected child abuse and maltreatment; preventing child abduction; preventing alcohol, tobacco, and other drug abuse; providing safety education; providing instruction in fire and arson prevention; and preventing and intervening in school violence. The course meets the requirements for New York State certification based on the statutory requirements found in the Commissioner's Regulations subdivision 52.21.

Credits: 3

Offered: Every year.

EDU 301 - Safe Schools/Healthy Students: Child Abuse and Child Abduction

The course will present a general introduction to central themes in Child Abuse Detection and Reporting and Abduction Prevention at the local, state and federal levels of education and the law. Students will gain a working knowledge through case study analysis, assigned readings, related journals, situational analysis, group participation, reference review, video and lecture.

Credits: 1

Offered: Every year.

EDU 302 - Safe Schools/Healthy Students: Alcohol, Tobacco and Other Drug Abuse

The course will present a general introduction to central themes in the areas of alcohol, tobacco, and drug abuse prevention at the local, state, and federal levels, and to the role of the classroom teacher in prevention efforts. Students will develop their knowledge through discussion, situational analysis, assigned readings, Internet assignments, interviews, video and lecture.

Credits: 1

Offered: Every year.

EDU 303 - Safe Schools/Healthy Students-DASA: Safety Education/Fire and Arson/School Violence

The course is designed to provide pre-service teachers (B-12) with an introduction to essential concepts in fire safety, school violence prevention, and the social patterns of harassment, bullying and discrimination. Students will develop their knowledge through Internet assignments, assigned readings, situational analysis, group discussion, video and lecture.

Credits: 1

Offered: Every year.

EDU 305 - Cultural and Linguistic Diversity in the Classroom

An introduction to basic concepts, theories, and issues involving multicultural education, cultural diversity, and the educational system. Emphasis is on the development of a sound theoretical framework from which practical application to classroom situations will evolve. Candidates will teach, interact with, and/or observe children and youth from diverse cultural and linguistic backgrounds and employ a variety of teaching strategies.

Credits: 3

Prerequisite: EDU 250 and EDU 251. Corequisite: EDU 313. Offered: Every semester.

EDU 312 - Infant and Toddler Care and Education

The course examines learning environments for children ages Birth to 3 with particular emphasis on center based settings. Topics include a review of infant/toddler development, characteristics of quality education, developmentally appropriate curriculum in developmental areas, guidance based on observation and family dynamics and relations affecting infant development and growth, and parenting/teaching strategies.

Credits: 3

Prerequisite: EDU 105. Offered: Offered on occasion.

EDU 313 - Practicum in Inclusive Education III

Required for students enrolled in EDU 305 Cultural and Linguistic Diversity. Students spend seven to eight weeks in elementary and secondary classrooms, in traditional and/or non-traditional settings. Students will be paired to enable peer coaching and peer assisted learning to occur. Students will develop an instructional unit, and teach sample lessons; for small groups or entire classes, and incorporate multicultural concepts, including culture awareness; tolerance and acceptance; cooperative learning; multiple intelligence theory; and multicultural literature, among others.

Credits: 0

Corequisite: EDU 305. Offered: Offered on occasion.

EDU 314 - Developmental Learning

The course is designed to familiarize the beginning teacher with various developmental and learning theories, instructional implications relating to each theory, and classroom application of relevant principles.

Credits: 3

Offered: Offered on occasion.

EDU 315 - Early Childhood Curriculum Development

A methods class designed to help candidates further their knowledge and skills to plan and implement

developmentally appropriate learning activities for young children (birth - age 8). Emphasis on integrated curriculum planning to meet developmental needs of young learners.

Credits: 3

Prerequisite: EDU 221 or EDU 312. Offered: Every year.

EDU 321 - Teaching in the Middle School

Principles, materials, curriculum, and methods for teaching in the middle school. Required for certificate extension to middle school grades.

Credits: 3

Offered: Every year.

EDU 326 - Elements of Public School Law

Basic study of school law as applied to the organization of education from the federal and state perspective. Special attention is focused on the teacher and the law with respect to tort liability, due process, rights and responsibilities of teachers, students and parents. Impact of court decisions on the school.

Credits: 3

Offered: Offered on occasion.

EDU 349 - Educational Psychology

Areas of psychology utilized in the teaching and learning processes. Analyzing and interpreting scientific data related to individual differences, growth, learning, group processes, systematic assessment, measurement, and evaluation.

Credits: 3

Prerequisite: EDU 225 or EDU 224. Offered: Every semester.

EDU 351 - Classroom Management and Learning Principles

Examination of significant research in areas of human learning and motivation as they relate to effective instructional strategies. An investigation into how teachers can translate theories and research from such areas as achievement motivation, learner cognitive style, emotional climate of the classroom, concept learning, creativity, and problem-solving into constructive classroom action.

Credits: 3

Prerequisite: EDU 349. Offered: Offered on occasion.

EDU 355 - Assessment & Instruction of Students with Learning & Behavior Disorders in Inclusive Ed Settings

Critical examination of students with special needs in inclusive educational settings with an emphasis on the connections between core curriculum, ongoing assessment,

and varied instructional strategies. Principles, procedures, and the application of various assessment techniques will be discussed. Organization, development, implementation, modification, and evaluation of instruction across the curriculum will be presented.

Credits: 3

Prerequisite: EDU 250. Corequisite: EDU 356. Offered: Every semester.

EDU 356 - Practicum in Inclusive Education IV

This course is required for students enrolled in EDU 355 Assessment Instruction of Students with Learning Behavior Disorders in Inclusive Ed Settings. Students spend seven to eight weeks in a special education setting. Students will develop a Functional Behavioral Assessment (FBA), Behavior Intervention Plan (BIP) and Individual Education Plan (IEP) for a pupil.

Credits: 0

Prerequisite: EDU 250. Corequisite: EDU 355. Offered: Every semester.

EDU 360 - Developmental Disabilities

An examination of the etiology, characteristics, and psychological development associated with developmental disabilities. While focusing largely on mental retardation, the course is non-categorical in orientation. Particular attention is paid to techniques and strategies for integration of developmentally disabled children into the mainstream of education.

Credits: 3

Prerequisite: EDU 250. Offered: Offered on occasion.

EDU 380 - Working with Children Outside the Classroom

In this service learning course, college students will serve as mentors for K-5 pupils outside the classroom (12-15 hours). Critical issues regarding working with youth, particularly in urban schools, will be addressed and explored through professional development sessions (3-6 hours).

Credits: 1

Offered: Every semester.

EDU 390 - Special Topics in Education: Curriculum and Instruction

Study of special areas in education not covered by existing courses, with special emphasis on Curriculum and Instruction. Content varies from semester to semester. Students should consult the appropriate online Course Offerings and department notices.

Credits: 0-3

Offered: Offered on occasion.

EDU 391 - Special Topics in Education: Language, Learning, and Leadership

Study of special areas in education not covered by existing courses, with special emphasis on Language, Literacy, and Leadership. Content varies from semester to semester. Students should consult the appropriate online Course Offerings and department notices.

Credits: 3

Offered: Offered on occasion.

EDU 395 - Belize Project Orientation

This 2 credit course is a pre-requisite for the Belize Service Learning Project (INED 499). It provides an orientation to the elementary schools, students and teachers in Belize and to Belizean culture in general. It prepares participants to work with cooperating teachers in Belizean schools. Participants design instructional activities and create educational materials that will be donated to cooperating schools and the Belizean Scouts Organization after INED 499. Open to all students in Early Childhood, Childhood, and Childhood Inclusive Education, Adolescence Education, Social Work, Communication Disorders, Music Education, Music Therapy, graduate students in the COE, and other interested students. (Students may take EDU 395 for their own enrichment without participating in the January trip to Belize.)

Credits: 2

Offered: Every year.

EDU 402 - Teaching Mathematics in Inclusive Educational Settings

Content, curriculum, materials, and procedures in teaching mathematics in the elementary school based on the National Council of Teachers of Mathematics (NCTM) recommendations and standards.

Credits: 3

Prerequisite: MAED 302 and EDU 305 and EDU 313 and EDU 349. Offered: Every year.

EDU 403 - Teaching Science in Inclusive Educational Settings

Materials and procedures in a process-centered science curriculum. Investigation of new curricula illustrating guided discovery approach to teaching sciences.

Credits: 3

Prerequisite: EDU 305 and EDU 313 and EDU 349.

Offered: Every year.

EDU 404 - Teaching Social Studies in Inclusive Educational Settings

Curriculum, materials, and procedures in teaching social studies in the elementary school.

Credits: 3

Prerequisite: EDU 305 and EDU 313 and EDU 349.

Offered: Every year.

EDU 405 - Teaching Literacy in Inclusive Educational Settings

Candidates will explore and critique aspects of effective reading and writing programs for elementary and early childhood children who are in inclusive settings. Course content will enable candidates to review and select research-based materials, strategies, and assessments that promote learning to read and write and reading and writing to learn. Course connections to EDU 305 will enable candidates to reflect on and critique reading and writing curriculum practices that are culturally relevant and lead to successful literacy learning in balanced, comprehensive programs.

Credits: 3

Prerequisite: EDU 305* and (EDU 276 or SCED 276 or MAED 276). Cross-Listed as: * Indicates that the course can be taken in the same semester. Offered: Every year.

EDU 406 - Literacy and Assessment in Inclusive Educational Settings

Candidates will demonstrate their understanding of literacy assessment and instruction by critically exploring assessments, instructional practices, and programs for diverse learners and struggling readers and writers in elementary and early childhood inclusive settings. Using case study and assessment results, candidates will develop and recommend effective, balanced strategies and approaches to literacy instruction that are culturally responsive and meet the needs of all students.

Credits: 3

Prerequisite: (EDU 405*) and EDU 305* and EDU 313* and EDU 349 and (EDU 276 or MAED 276 or SED 276). Cross-Listed as: * Indicates that the course can be taken in the same semester. Offered: Every year.

EDU 412 - Integrated Methods for Early Childhood Education

Prepares students to teach in early childhood classrooms. Information on the national and state learning standards in science, social studies, and the creative arts. Topics include constructivist curriculum planning, preparing the teaching/learning environment, the anti-bias curriculum, project work, authentic assessment, and the role of play in the early childhood classroom.

Credits: 3

Prerequisite: EDU 315. Corequisite: EDU 432. Offered: Every year.

EDU 416 - Capstone Seminar - Advanced Study in Classroom Organization, Management, and Instruction

Focus on extending candidates' knowledge and skills in classroom management and organizational methods, as well as instructional strategies and content. The course also assists candidates in the successful completion of the applied teaching and learning project in their student teaching experiences.

Credits: 3

Offered: Every semester.

EDU 417 - Middle School (Grades 5-9) Methods in Mathematics

Principles, materials, and methods for teaching middle school (grades 5 to 9) mathematics. The course serves as the primary methods course for students pursuing initial certification in Middle Childhood Education - Mathematics Specialist.

Credits: 3

Offered: Every year.

EDU 419 - Secondary School (Adolescence) Methods

Principles, materials, and methods for teaching English, foreign languages, mathematics, science, or social studies in the secondary school. Assignment to sections according to subject matter. Note: must be taken before senior student teaching. Required for Adolescence Education.

Credits: 3

Offered: Every year.

EDU 420 - Student Teaching in the Elementary School - Primary

A field assignment to teach in Childhood Education. Assignments provided in grades 1 to 3; arrangements made by the Office of Field Experiences. Open only to candidates accepted in Childhood Education. Prerequisites: Enrollment and satisfactory progress in professional education courses; ongoing recommendation of the College of Education.

Credits: 6

Offered: Every semester.

EDU 421 - Student Teaching in Early Childhood Education - Pre-Kindergarten

A field assignment to teach in Early Childhood Education. Assignments in Pre-Kindergarten; arrangements made by the Office of Field Experiences. Open only to candidates accepted in Early Childhood Education. Prerequisites: Enrollment and satisfactory progress in professional

education courses; ongoing recommendation of the College of Education.

Credits: 6

Offered: Every semester.

EDU 422 - Student Teaching in the Elementary School - Intermediate

A field assignment to teach in Childhood Education. Assignments provided in grades 4 to 6; arrangements made by the Office of Field Experiences. Open only to candidates accepted in Childhood Education. Prerequisites: Enrollment and satisfactory progress in professional education courses; ongoing recommendation of the School of Education.

Credits: 6

Offered: Every semester.

EDU 423 - Student Teaching in Early Childhood Education - Kindergarten

A field assignment to teach in Early Childhood Education. Assignments in a kindergarten; arrangements made by the Office of Field Experiences. Open only to candidates accepted in Early Childhood Education. Prerequisites: Enrollment and satisfactory progress in professional education courses; ongoing recommendation of the College of Education.

Credits: 6

Offered: Every semester.

EDU 424 - Student Teaching in the Elementary School - Primary (Hamburg)

A field assignment to teach on the primary level in the elementary school. Open only to candidates accepted into the Fredonia-Hamburg Program. Prerequisites: Enrollment and satisfactory progress in professional education courses; ongoing recommendation of the College of Education.

Credits: 3

Offered: Offered on occasion.

EDU 425 - Student Teaching in Early Childhood Education - Grades 1 or 2

A field assignment to teach in Early Childhood Education. Assignments in a grade 1 or 2 classroom; arrangements made by the Office of Field Experiences. Open only to candidates accepted in Early Childhood Education. Prerequisites: Enrollment and satisfactory progress in professional education courses; ongoing recommendation of the College of Education.

Credits: 6

Offered: Every semester.

EDU 426 - Student Teaching in the Elementary School - Intermediate (Hamburg)

A field experience assignment to teach in the intermediate level in the elementary school. Open only to candidates accepted into the Fredonia-Hamburg Program.

Prerequisites: Enrollment and satisfactory progress in professional courses; ongoing recommendation of the College of Education.

Credits: 3

Offered: Offered on occasion.

EDU 429 - Student Teaching in Middle Childhood Education - Mathematics Specialist

A field assignment to teach middle school mathematics. Assignments provided in grades 5 through 9; arrangements made by the Office of Field Experiences. Open only to students accepted into SUNY Fredonia's Middle Childhood Education - Mathematics Specialist Program.

Credits: 15

Prerequisite: EDU 417 or MAED 417. Offered: Every year.

EDU 430 - Student Teaching in the Secondary School

A field assignment to teach in secondary education. Assignments provided by subject area in grades 7 through 12; arrangements made by Office of Field Experiences. Open only to students accepted in Adolescence Education Certification.

Credits: 15

Prerequisite: EDU 419 or MAED 419 or SCED 419 or SSED 419. Offered: Every year.

EDU 432 - Home/School Partnerships in a Diverse Society

Prepares the preservice teacher with strategies for facilitating family involvement in the education process. The course will place emphasis on the skills of communication (both personal and written). Topics covered include: parent conferences, volunteers in the classroom, barriers to parent involvement and one-way and two-way communication strategies.

Credits: 1.5-3

Corequisite: EDU 412. Offered: Every year.

EDU 435 - Student Teaching: Pre-K/Kindergarten

A field assignment to teach in Early Childhood Education. Assignments in Pre-Kindergarten or Kindergarten; arrangements made by the Office of Field Experiences. Open only to candidates majoring in Dual-Certification Early Childhood/Childhood Education who have been admitted to the professional sequence.

Credits: 3-6

Offered: Every semester.

EDU 436 - Student Teaching: Grades 1-3

A field assignment to teach in primary grades, 1-3. Assignments in grades 1, 2 or 3; arrangements made by the Office of Field Experiences. Open only to candidates majoring in Dual-Certification Early Childhood/Childhood Education who have been admitted to the professional sequence.

Credits: 3-6

Offered: Every semester.

EDU 437 - Student Teaching: Grades 4-6

A field assignment to teach in intermediate grades, 4-6. Assignments in grades 4, 5, or 6; arrangements made by the Office of Field Experiences. Open only to candidates majoring in Dual-Certification Early Childhood/Childhood Education who have been admitted to the professional sequence.

Credits: 3-6

Offered: Every semester.

EDU 440 - Student Teaching Inclusive Education - Primary

A field assignment to teach in Childhood Inclusive Education. Assignments provided in grades 1 - 3; arrangements made by the Office of Field Experiences. Open only to candidates accepted in Childhood Inclusive Education. Prerequisites: Enrollment and satisfactory progress in professional education courses; ongoing recommendation of the College of Education.

Credits: 6

Offered: Every semester.

EDU 441 - Student Teaching Inclusive Education - Intermediate

A field assignment to teach in Childhood Inclusive Education. Assignments provided in grades 4 - 6; arrangements made by the Office of Field Experiences. Open only to candidates accepted in Childhood Inclusive Education. Prerequisites: Enrollment and satisfactory progress in professional education courses; ongoing recommendation of the College of Education.

Credits: 6

Offered: Every semester.

EDU 480 - Internship - Curriculum and Instruction

Participation in a professional, subject related experience, with emphasis on Curriculum and Instruction. The student must submit a proposal stating what the experience is, how it relates to their course of study, and how it will be

monitored and evaluated. The instructor will be responsible for the supervision of the intern. The proposal must be approved one month in advance by the advisor, instructor, and chairperson prior to registration.

Credits: 1-15

Offered: Every semester.

EDU 481 - Internship: Language, Learning, and Leadership

Participation in a professional, subject related experience, with emphasis on Language, Learning, and Leadership. The student must submit a proposal stating what the experience is, how it relates to their course of study, and how it will be monitored and evaluated. The instructor will be responsible for the supervision of the intern. The proposal must be approved one month in advance by the advisor, instructor, and chairperson prior to registration.

Credits: 1-15

Offered: Every semester.

EDU 490 - Independent Study: Curriculum and Instruction

Study of a particular problem in education, with emphasis on Curriculum and Instruction. Periodic meetings with instructor and the writing of a substantial paper.

Credits: 1-4

Offered: Every semester.

EDU 491 - Independent Study: Language, Learning, and Leadership

Study of a particular problem in education, with emphasis on Language, Learning, and Leadership. Periodic meetings with instructor and the writing of a substantial paper.

Credits: 3-15

Offered: Every semester.

EDU 501 - Advanced Study: Child Psychology

Methods for observing and measuring child behavior. Principles of research in the study of children. Study of contemporary areas of concern in child development including psychological consequences of marital discord, day care, television, paternal behavior, and family size.

Credits: 3

Offered: Offered on occasion.

EDU 502 - Psychology of Adolescence

Influence of physical, sexual, and social factors upon total personality during adolescence. Relationship to formation of attitudes toward self and others. Social, emotional, intellectual, and vocational adjustment demanded of youth in contemporary life.

Credits: 3

Offered: Offered on occasion.

EDU 503 - Evaluation in the Schools

Practical applications of evaluation theory in the schools: preparation and use of teacher-made tests; selection, administration, and interpretation of standardized tests; the use of assessment data in school-related decision-making.

Credits: 3

Offered: Offered on occasion.

EDU 504 - The Exceptional Learner

Introduces teachers to instructional approaches for meeting the needs of exceptional learners. Addresses practical considerations regarding placement options, instructional adaptations, and effective use of support services.

Credits: 3

Offered: Offered on occasion.

EDU 505 - The Process of Writing: K-12

Examination of the writing process with emphasis on the theoretical and practical issues in the teaching of composition. Details the importance and role of audience, voice, focus, prewriting, conferencing, peer editing, assessment, purpose, and mechanics. Participants write in several modes as part of observation and study of their own composing strategies, including an investigation of the stage or step model of writing.

Credits: 3

Offered: Offered on occasion.

EDU 506 - Introduction to Literacy Instruction

The course is designed to provide an overview of literacy (reading, writing, viewing, speaking, listening, thinking) as a developmental process. It includes models of literacy that support learning and instruction, as well as addressing issues concerning emergent literacy, planning and evaluation, and programs funded at the state and federal levels.

Offered: Every year.

EDU 507 - Group Processes in Education

Implications of individual group relationships for teachers and administrators with respect to more effective teaching, higher student motivation, leadership identification and development, school climate and organizational development.

Credits: 3

Offered: Offered on occasion.

EDU 508 - Teaching Exceptional Learners in Inclusive Settings

Addresses evidence-based instructional approaches, curriculum adaptation, placement options, and effective use of support services for exceptional learners, with an emphasis on instructional approaches to support them in inclusive settings and in the general education curriculum.

Credits: 3

Offered: Offered on occasion.

EDU 509 - Teaching of Thinking

Study of an overall framework of teaching of and about thinking and teacher behaviors which create classroom conditions for thinking. Basic approaches to the teaching of thinking skills are explored through current programs, systems, and resources.

Credits: 3

Offered: Offered on occasion.

EDU 514 - Assessment and Instruction of Diverse Learners I

Addresses proven formal and informal approaches to be used by educators and related services professionals in identifying and teaching exceptional learners, with an emphasis on measurement strategies that inform their effective instruction.

Credits: 3

Prerequisite: EDU 508*. Cross-Listed as: * Indicates that the course can be taken in the same semester. Offered: Offered on occasion.

EDU 515 - Dramatic Experiences in Elementary School

The course will examine the history of dramatic experiences in the K-6 public school system, including oral and dramatic traditions in cultures around the world. Children's/adolescent literature titles will be the catalyst to develop projects that include storytelling and dramatic activities.

Credits: 3

Offered: Offered on occasion.

EDU 516 - Improving Educational Outcomes: Working with Children and Families from Poverty

This Linking Content to Pedagogy course provides an in-depth study of the culture of poverty (in contrast to middle class) using research-based frameworks. Candidates will explore characteristics of poverty and social class and relate these characteristics to academic readiness and success in order to develop classroom tools, interventions, and resources for use with P-12 children and their families.

Credits: 3

Offered: Offered on occasion.

EDU 517 - Types of English Language Learners

In this special topics course, participants will have the chance to learn about the various "types" of English language learners (ELLs). Often, people assume that ELLs are children who just need to learn the English language and are in K-12 school settings. While this definition can be true, it is limited in its scope for its lack of recognizing the various influences and contexts in which people are and can be classified as ELLs. Further, not all ELLs have had or are in K-12 settings. Therefore, this course is designed to introduce students to the various types of ELLs. This may include all or most of the following: (a) long-term ELLs; (b) (im)migrants; (c) adults; and (d) refugees, newcomers and students with interrupted formal education (SIFE). The goal of this course is to introduce anyone interested in learning about these various "types" of ELLs to the defining characteristics of each group, to rectify any myths and misunderstandings about who ELLs are while digging into the controversial group labeling that can exist, and to examine and discover pertinent influences which may impact language acquisition and ELLs' ability to be included as full members of society (whether in school or workplace environments).

Credits: 3

Offered: Every year.

EDU 518 - Second Language Acquisition and Development

Surveys and analyzes current models and theories of Second Language Acquisition (SLA) (e.g., cognitive/connectionist theory, interlanguage theory, acculturation/pidginization theory, linguistics universals, etc.) including theories from linguistics, psychology and education. Focuses on theories and applied perspectives of language instruction and learning emphasizing proficiency-orientated approaches, development of curricula and materials, and interconnections between language and culture. Participants explore grammatical, pragmatic, and sociolinguistic dimensions of language learning and development strategies that build on (meta)cognitive language development. Participants will also stress development of skills and accuracy and reflect the impact of current research in the field of SLA.

Credits: 3

Offered: Every year.

EDU 519 - Curriculum Theory for the Second Language Classroom - ESL I

Discusses basis curriculum theory, providing models of curriculum development and their application to Pre K-12 classrooms, with an emphasis on constructivist, student-centered theories. Emphasizes basic curriculum theory for the English as a Second Language (ESL) classroom,

providing an analysis of curriculum models for ESL and bilingual education. Basic methods of ESL are used, as students apply theory to classroom practice through research and projects. N.Y.S.E.D. Standards for ESL and the N.Y.S.E.D. ELA Standards applied to ELL students provide the basis for curriculum work. Infuses technology and Computer Assisted Language Learning (CALL) in methodology.

Credits: 3

Corequisite: EDU 521. Offered: Every other year.

EDU 520 - Curriculum Framework Theory/Development

Core graduate course for the Curriculum and Instruction master's degree specialization explores the people and changes impacting the history of curriculum in the U. S. Students will develop a usable curriculum/instructional framework following acceptable curriculum development practice.

Credits: 3

Offered: Every year.

EDU 521 - Practicum in TESOL, I

Required for students enrolled in EDU 519 Curriculum Theory for the Second Language Classroom-ESL 1. Students will complete 25 hours of clinical field experience in an elementary, secondary or adult classroom, in traditional and/or non-traditional settings, to work closely with English language learners in some capacity.

Credits: 0

Corequisite: EDU 519. Offered: Every Fall semester.

EDU 525 - Curriculum Framework Integration/Innovation

Builds on EDU 520. Curriculum issues and development course, students analyze current developments in the field of curriculum and instruction. Students develop an innovative curriculum framework integrating many content frameworks and innovative techniques.

Credits: 3

Offered: Every year.

EDU 526 - Middle School Curriculum

Study of the philosophy, organization, and curriculum of the middle school. Emphasis on the role of the teacher in the middle school. Research and experimental models are examined.

Credits: 3

Offered: Offered on occasion.

EDU 528 - Technology in the Schools

The course is designed to introduce education personnel to the techniques and equipment involved in the use and development of computer-assisted instruction (CAI). A preliminary introduction to the microcomputer will be a part of the course. The role of both CAI and computer-managed instruction will be explored, including the possibilities of record management, analysis of student performance, and the development of original CAI materials. Emphasis will be placed on the use of "high level, user- friendly" languages such as PILOT and LOGO.

Credits: 3

Offered: Offered on occasion.

EDU 529 - Proactive Approaches to Classroom Management in Inclusive Settings

Focus on research-based positive approaches to the prevention of and intervention on academic and social challenges of P-12 students with disabilities. Principles of classroom structure and organization, classroom management, positive proactive behavior management, and school-wide discipline plans are emphasized, with a basis in current research.

Offered: Offered on occasion.

EDU 530 - Assessment and Instruction of Diverse Learners II

Case study-based approach to issues of instructional planning, instructional delivery, analysis of student performance, and teacher reflection and response. Incorporates the "Planning, Instructing, Reflecting, Responding model" adopted by Fredonia's Professional Education Unit.

Credits: 3

Prerequisite: EDU 508 and EDU 514. Offered: Offered on occasion.

EDU 531 - Philosophy of Education

This course will provide candidates in a variety of content areas with the opportunity to explore the philosophical, historical, cultural and social foundations of educational thought relevant to their areas of pedagogical focus.

Credits: 3

Offered: Every other year.

EDU 535 - School and Society

Analysis of the school in relation to other socializing influences. Examines cultural change and its effect upon education; the school in relation to specific problems of changing American communities; and research on teaching as an occupation.

Credits: 3

Offered: Offered on occasion.

EDU 536 - Adolescent Literacies, Literature and Technology

The course provides an overview of multiple literacies associated with adolescents, including the theory and research base. It examines young adult literature from the perspectives of critical literacy and censorship, and it explores media literacy and technology, with a special emphasis on computers and writing. The course also develops means for assisting struggling adolescent readers, especially those from diverse cultural and linguistic backgrounds.

Credits: 3

Offered: Every year.

EDU 538 - Cultural Literature

The course takes a transcultural/global approach to the promotion of literacy. Focusing on juvenile and children's literature - as well as on literature applicable to adolescents - the course exposes course participants to world literature. Within an in-depth global exploration of culture and values, students will glean intercultural awareness, stretching literacy beyond U.S. national borders. Using sound instructional practice and theory, participants will read novels written by international child protagonists. Participants will generate annotated bibliographies that will enrich classroom libraries and promote literacy at the elementary, middle, and high school levels.

Offered: Offered on occasion.

EDU 539 - Current Issues and Problems in Education

Addresses identification, definition, and analysis of problems and issues facing education today; current criticisms of public schools; responsibilities of the schools; questions of curriculum development; and how well schools are teaching basic skills.

Offered: Offered on occasion.

EDU 540 - Content Area English as a Second Language

The course explores Sheltered/Scaffolded English as a Second Language Instruction. This translates as workplace know-how and student-learning that is clearly delivered. Students benefiting from this format will have content broken down into manageable learning units and instructors will learn how to communicate these more simply. Ultimately, both the instructor and the learner will communicate effectively and sustainable learning will ensue. Participants in the course will learn how to deliver instruction and how to create instructional materials using this model. The ultimate goal of the course is to explore the different content areas in both school and the workplace to be able to translate instruction into meaningful learning. Cognitive-Academic Language Learning Approaches (CALLA) and other content-area

Specially Designed Academic Instruction in English (SDAIE) lessons will be covered. The SIOP model will be emphasized. Assessment of learning in the second language content-area is presented.

Credits: 3

Prerequisite: EDU 519. Corequisite: EDU 541. Offered: Offered on occasion.

EDU 541 - Practicum in TESOL II

Required for students enrolled in EDU 540 Content Area English as a Second Language. Students will complete 25 hours of clinical field experience in an elementary, secondary or adult classroom, in traditional and/or non-traditional settings, to work closely with English language learners in some capacity.

Credits: 0

Corequisite: EDU 540. Offered: Every year.

EDU 542 - Evidence-Based Practices for Inclusive Settings

Evidence-Based Practices for Inclusive Settings meets new legislative and legal mandates for educators to provide their students with "scientifically-based" instructional practices for improving academic and behavioral performance. This course will help practitioners to link their respective academic "content" with "evidence-based" pedagogical practices.

Credits: 3

Offered: Every year.

EDU 543 - Education for Gifted and Talented Students

Focuses on development and implementation of educational programs for optimum growth of gifted/talented students, inclusive of curriculum content; organization of special schools and classes; teaching materials and methods; and the evaluation and administrative adjustments.

Credits: 3

Offered: Offered on occasion.

EDU 544 - Secondary School (Adolescence) Curriculum

Study of secondary curriculum, inclusive of new mandates; emerging practices; varied viewpoints; relevant research; programs; and the roles of classroom teacher and school administrator in curriculum development.

Credits: 3

Offered: Offered on occasion.

EDU 545 - History of American Education

Historical interpretation of American education. Characteristics of American colonial education and

significant developments in American elementary, secondary, and higher education during the 19th and 20th centuries.

Credits: 3

Offered: Offered on occasion.

EDU 546 - Models of Classroom Management

Designed to expand traditional understanding of classroom management that focuses on discipline and behavioral problems. The course follows a comprehensive classroom management approach, focusing on areas of knowledge and skills that teachers need in order to be effective classroom managers.

Offered: Offered on occasion.

EDU 548 - Practicum in International Teaching

The course provides an opportunity to expand and practice teaching skills in an international setting. Participants will gain information on an educational system different from their own, gain experiences with the traditions and cultural values of the host country, and participate in classrooms where they can observe, assist, and teach. On-site U.S. faculty will assign readings to complement the practical experiences and will lead discussion seminars on topics and themes associated with the international experience.

Credits: 3

Offered: Offered on occasion.

EDU 552 - Introduction to Literacy Assessment

The course investigates the nature and process of literacy assessment, with an eye to the diagnosis of literacy difficulties. The course requires Candidates to develop competence in using a wide variety of literacy assessments and analyzing data in order to identify reading and writing problems.

Credits: 3

Offered: Every year.

EDU 553 - Citizenship Education: Moral-Legal Education

Curriculum planning and revision, kindergarten through twelfth grade, as it relates to the moral-legal dilemmas facing teachers and students today. Elements include: (1) law-related education; (2) various theoretical positions regarding moral development; (3) moral dilemmas (case studies) drawn from schools; and (4) curricular implications and revisions needed.

Credits: 3

Offered: Offered on occasion.

EDU 554 - Advanced Literacy Assessment

The course is a continuation of EDU 552, the first assessment course. This course requires Candidates to develop competence in using and analyzing the results of more formalized and norm-referenced assessments such as the Peabody and Woodcock Johnson. The course also enables the Candidates to develop their literacy coaching skills as they assist teachers and others with data analysis and assessment issues.

Credits: 3

Prerequisite: EDU 506 and (EDU 552 or EDU 652).

Corequisite: EDU 583. Offered: Every year.

EDU 555 - Methods of Bilingual Education

Reviews, discusses, and analyzes teaching methods and techniques used in core subject areas (mathematics, science, and social studies) in bilingual education classrooms in the United States. Assessment strategies as integral parts of teaching methodology are discussed (e.g., portfolios will develop and teach reading and/or writing lessons using strategies, peer groups and self-assessments). Emphasis is on methods and techniques using the language in which the bilingual extension is sought. The course includes suggestions for coordination with ESL content area instruction. Students produce and carry out lessons in the various subject areas. Required course for candidates pursuing a New York State Bilingual Education Extension; recommended for teachers working with English Language Learners.

Credits: 3

Offered: Every other year.

EDU 556 - Teaching Language Arts in Spanish

Focuses on teaching approaches and methodology used in the development of literacy skills by Spanish speaking students in the U.S. Emphasizes the understanding of the active interaction of reading, writing, listening, and speaking in the process of acquiring and mastering communication skills. Reviews and analyzes current technology and curricular materials used to teach the language arts. Students will develop and teach reading and/or writing lessons using course materials. Required for teachers pursuing a New York State Bilingual Education extension.

Credits: 3

Offered: Every other year.

EDU 561 - Contemporary Issues in Parent/Teacher Relationships

Focuses on building successful partnerships with families with diverse structures. Identifies models of family involvement in schools; strategies for increasing family

involvement in classrooms; current educational mandates; implications for schools; and relevant research.

Credits: 3

Offered: Offered on occasion.

EDU 562 - Infant Development and Education

Focuses on nutritional and psychological influences on prenatal, infant, and toddler growth and development, inclusive of current research in infant development; childbirth; breastfeeding; infant simulation; intellectual development; attachment behavior; and infants in group care.

Credits: 3

Offered: Every other year.

EDU 563 - Cultural Perspectives

Explores cultural awareness and diversity-related issues both in classrooms and the workplace, with a social sciences approach. Uses ethnographic investigations, document-based analysis, and cultural instruments to explore the diverse reality of today's classrooms and schools. Explores constructivist, student-centered, and equitable learning formats.

Offered: Every other year.

EDU 564 - Linguistics for ESL Educators

Presents conceptual foundations and general principles of linguistics, examines the structural/functional properties of the human language, and discusses the rules and principles that govern the structural and interpretative parts of human natural language (i.e., morphology, phonetics, phonology, syntax, semantics, and pragmatics). Focuses on the nature of language and communication and the use of English in various linguistic and pragmatic contexts. The nature of grammar and approaches to the description of English grammar for the purpose of teaching forms and functions based on patterns of "authentic" language are emphasized. Participants carry out document-based, data-driven linguistic, lexical-semantic, and pragmatic analyses in relation to the acquisition of English as a second language and develop pedagogical grammars, dictionaries and literacy materials that enhance and strengthen the education for English language learners.

Credits: 3

Offered: Every year.

EDU 565 - Language and Learning: Psycho- and Sociolinguistic Considerations for Educators of ELL Students

Explores fundamental questions about the nature of language, memory, and cognition, approaches the evolving field of psycho- and sociolinguistics from a variety of perspectives, including different theoretical positions,

various research strategies, and classical versus more contemporary research, and discusses sociolinguistic phenomena such as code switching, dialects and idiolects, language transfer, loan words, and appropriate discourse, including common misconceptions regarding "Spanglish" and other linguistic phenomena associated with "languages in contact." Fundamental issues and principles of psycho- and sociolinguistics are presented in a balanced way that is accessible to all course participants. Participants share with other classmates everyday examples of "language use," apply theoretical models and crosslinguistic scientific findings relative to the cognition and socialization of language to classroom practice through research and projects, and compile a compendium of "best psycho- and sociolinguistic practices" to enable classroom teachers to stimulate active learning in first and second languages.

Credits: 3

Offered: Every other year.

EDU 567 - Practicum in TESOL, III

Required for students enrolled in EDU 569 Assessment and Evaluation of English Language Learners (ELLs). Students will complete 25 hours of clinical field experience in an elementary, secondary or adult classroom, in traditional and/or non-traditional settings, to work closely with English language learners in some capacity.

Credits: 0

Corequisite: EDU 569. Offered: Every Spring Semester.

EDU 568 - Foundations of Bilingual Education

The course provides the basic theories, issues, and concepts related to teaching bilingual students in P-12 classrooms. Program models will be presented that employ bilingual education and integrated ESL services as well as other models. Classroom strategies impacting student behavior and student learning are discussed. Current issues are discussed and provide students given opportunities to complete library research. The course will address U.S. bilingual education in terms of historical, theoretical, and practice/methods used in schools. Emphasis is on bilingual education from the 1960s to the present; Federal legislation (Title VII; Title III); the No Child Left Behind Act; Supreme and lower court decisions; state legislation; and other legal aspects.

Credits: 3

Offered: Every other year.

EDU 569 - Assessment and Evaluation of English Language Learners (ELLs)

Views current district assessments through psychometric and socio-cultural models of assessment focusing on how schools measure language and achievement for ELLs. Through a unified theory of construct validity, participants identify the purpose, instrument, method, and use of

assessments and evaluations most appropriate and valid for ELLs. The course explores relationships of assessment to instruction, consequences of assessments, test score interpretation, state and federal assessment policies, and those assessments unique for ELLs. Participants share with other classmates examples from the classroom of both formal and informal assessments of language and content for ELLs, and develop a conceptual understanding of basic psychometric concepts (grade level equivalent, percentile rank, cut-off scores, standard error of measurement) and how best to apply these concepts in schools with language minority students.

Credits: 3

Prerequisite: EDU 519. Corequisite: EDU 567. Offered: Every year.

EDU 570 - Using Educational Research to Improve Instruction

Assists educational practitioners to become knowledgeable consumers of research and evaluation reports by helping them critically analyze and evaluate research. It examines the nature of reasoning in educational research, the use of measurement procedures in quantifying traits, the role of design in testing hypotheses, the role of statistics in analyzing data, and the limitations inherent in generalizing the results of research studies. Should be taken in the first 9 hours of graduate study.

Offered: Every semester.

EDU 576 - Practicum in Literacy for All Students

The course is a field-based practicum taken at the same time as the Social Foundations of Literacy course. It provides Candidates with a minimum of 25 hours of practicum in intervention and coaching within formal educational settings wherein Candidates apply and practice what they learn in the co-requisite course about identifying and assisting all types of diverse students.

Credits: 0

Prerequisite: EDU 552. Corequisite: EDU 579. Offered: Every year.

EDU 579 - Social Foundations of Literacy

The course encourages and prepares literacy educators to be sensitive to cultural and social needs of their diverse pupil population by studying relevant literature and case studies. In the course, literacy educators investigate the language-specific issues of sociology that permeate all social interactions in school and school-related environments whether spoken, non-verbal, or written.

Credits: 3

Corequisite: EDU 576. Offered: Every year.

EDU 580 - Teaching Grades 7-12

Practical suggestions for teacher working in secondary school, with a focus on materials and teaching procedures for specific units of work such as: teaching as problem-solving, evaluation strategies, instructional techniques, and recent developments in educational thinking and practice that have affected the curriculum. Special attention to selected topics according to needs and interest of participants. Note: A selected area is to be designated: General, English, Mathematics, Foreign Languages, Science, or Social Studies.

Credits: 3

Offered: Offered on occasion.

EDU 581 - Japanese Culture and Education

Provides an overview of the Japanese educational system and Japanese educational psychology. Examines historical influences on Japanese educational values; and the nature of typical Japanese schools at all levels of compulsory education. Unique educational approaches, such as juku and kumon, are reviewed.

Credits: 3

Offered: Offered on occasion.

EDU 582 - Classroom Expectancy and Effects

Focuses on the impact of expectations on student teacher interactions. Participants will learn how their own behaviors may inadvertently create self-fulfilling prophecies, how student performance and relationships with students may be affected, and how reducing perceptual and behavioral biases can result in a better classroom environment. Note: Cross-listed as PSY 546.

Credits: 3

Offered: Offered on occasion.

EDU 583 - Literacy Interventionist Practicum I

The course is one of four practicum courses to train Candidates as reading specialists who provide reading intervention through individualized, assessment-based and learner-orientated instruction. Candidates learn to administer literacy assessments, track results, and use the data to develop interventions, write lesson plans, and work with struggling readers.

Credits: 3

Prerequisite: EDU 506 and EDU 552. Corequisite: EDU 554. Offered: Every year.

EDU 585 - Adolescent Literature

The course provides an overview of critical issues on various types of young adult literature, including forms of media that represent literature. Candidates will examine historical and contemporary literature, both fiction and

non-fiction. They will also identify and select appropriate reading materials, and teaching strategies to meet diverse needs of adolescent students, based on socio-cultural and academic backgrounds.

Credits: 1.5

Offered: Every year.

EDU 588 - Learning to Write: Pre K - Grade 6

Candidates engage interactively in various activities, discussions and readings about the development of writing skills and strategies in Pre K - 6. Current state standards, text types, appropriate teaching strategies for diverse learners, and assessment will be addressed.

Credits: 3

Offered: Offered on occasion.

EDU 589 - Writing in the Middle and Secondary Schools

Candidates engage interactively in various activities, discussions and readings about the development of writing skills and strategies in secondary schools. Current state standards, text types, appropriate teaching strategies for diverse learners, and assessment will be discussed.

Credits: 3

Offered: Offered on occasion.

EDU 591 - Special Topics: Curriculum and Instruction

In-depth exploration of selected topics in professional education, with emphasis on Curriculum and Instruction. Principal focus of the course varies.

Credits: 3

Offered: Every year.

EDU 592 - Special Topics: Language, Learning, and Leadership

In-depth exploration of selected topics in professional education, with emphasis on Language, Learning, and Leadership. Principal focus of the course varies.

Credits: 3

Offered: Every year.

EDU 598 - Special Education Considerations for Assessment of English Language Learners

This course presents current research in the identification of English Language Learners (ELLs) with special needs. The main focus of this course is the use of appropriate language development and disability. Participants will make appropriate intervention, referral, and placement decisions regarding ELLs. Participants will also be able to list key legal restraints on assessing ELLs for Special Education placements. A broad context of legal, historical,

sociopolitical and out of school factors (OSFs) affecting the schooling of culturally and linguistically diverse students will be explored. All participants will develop a portfolio of assessment methods for the use in describing student performance in both content areas and language development before diagnosis.

Credits: 3

Offered: Every year.

EDU 599 - edTPA Development and Support

This variable credit course is offered as a support course for post-baccalaureate applicants who need to complete all or part of the Education Teacher Performance Assessment (edTPA) for Initial Teacher Certification in New York State. Enrollees will be provided with supports sanctioned by the Stanford Center for Assessment, Learning, and Equity (SCALE) in completing edTPA and submitting to Pearson for evaluation. Enrollees planning to submit an entire edTPA will enroll for three credits, whereas those who enroll to resubmit a single task for edTPA will enroll for one credit.

Credits: 1-3

Offered: Every semester.

EDU 601 - Issues, Trends, and Research in Autism

This course provides an overview of the needs and education of children diagnosed with Autism Spectrum Disorder (ASD). Among the areas explored in this course are: a review of the historical background; causes and diagnosis; signs, symptoms, and characteristics; strategies in education, social interactions, and language development; education-related laws and rights; impact on family dynamics and parent support. In addition the course will include current trends pertaining to Autism Spectrum Disorder.

Credits: 3

Offered: Every year.

EDU 603 - Issues, Trends, and Research in Elementary (Childhood) Science

Focuses on issues, trends, and research in teaching science in the elementary school. Emphasis on individual readings and seminar discussions, using primary and secondary sources of research.

Offered: Every other year.

EDU 605 - Issues, Trends, and Research in Elementary (Childhood) Language

Focuses on the structure and organization of English language arts programs; examination of past and current research; and evaluation of current programs. Emphasis on individual readings and seminar discussions, using primary and secondary sources of research.

Credits: 3

Offered: Every year.

EDU 611 - Advanced Seminar in Elementary Education

Individual research on problems of special interest, under the guidance of one or more faculty members.

Credits: 3

Offered: Offered on occasion.

EDU 613 - Literacy Interventionist Practicum II

The course is the another of four practicum courses to train Candidates as reading specialists who provide reading intervention through individualized, assessment- based and learner-orientated instruction. Candidates move to mastery of interventionist skills as the course emphasizes impact on student learning. Candidates also practice their literacy coaching and leadership skills with classroom teachers and parents.

Credits: 3

Prerequisite: (EDU 552 or EDU 652) and (EDU 554 or EDU 653) and EDU 583. Offered: Every year.

EDU 614 - Principles of School Administration and Leadership

The first level administrative course is designed to provide students with an introduction to school leadership theory and practice and the structure of education at the local, state and national level. The role of the administrator as a service agent for instruction and his/her function as the coordinator of school programs will be emphasized. Students will construct their perception of the role of the principal with an emphasis on the diverse and sometimes conflicting responsibilities. The paradox of the principalship, the need to be both an effective leader and manager, will be emphasized.

Credits: 3

Offered: Every year.

EDU 615 - School Building Leader

The course explores the nature, responsibilities, and developing status of elementary and secondary principals and supervisors. The course is designed to provide an exploration of the issues of school culture, leadership, change theory, and data analysis as they relate to school leadership in P-12 education. Course content will focus on creating a culture of learning, investigating the elements of effective leadership, and planning for school improvement.

Credits: 3

Offered: Every year.

EDU 616 - Supervision I: Theory/Practice

The course is designed to provide an introduction to the theory and practice of supervision. Course content will focus on developing the skills an effective supervisor uses in recruiting, selecting, observing, evaluating, and conferencing with teachers in order to improve instruction. In addition, students will explore models of effective teaching and critically review laws, policies, and administrative regulations regarding teacher supervision and evaluation.

Credits: 3

Offered: Offered on occasion.

EDU 617 - Supervision II: Supervision to Improve Instruction

The course provides an overview of the theory and practice of supervising instructional programs with an emphasis on reviewing data and revising curriculum to improve student outcomes. Course content focuses on developing the skills an effective supervisor uses in organizing and working with groups to improve instruction. The role of the school leader in building learning communities that support instructional improvement will be emphasized. The course content and activities will focus on the curriculum revision process with an emphasis on the role of standards, best practice, professional development and assessment. Students will review the history of curriculum in the United States. In addition the need for curriculum to be responsive to the special needs presented by students' background will be investigated.

Offered: Every year.

EDU 618 - Internship I: Educational Leadership

The field experience provides the opportunity to directly participate in the activities related to the functions of a school administrator/supervisor/leader in a school district. Candidates attend seminars to discuss leadership issues and explore topics raised by their experiences in the field.

Credits: 3-6

Offered: Every semester.

EDU 619 - Internship II: Educational Leadership

The field experience provides the continuing opportunity to directly participate in the activities related to the functions of a school administrator/supervisor/leader with an emphasis on community, district policy, board of education, legislation, evaluation and communication. Candidates attend seminars to discuss leadership issues and explore topics raised by their experiences in the field.

Credits: 3

Offered: Every semester.

EDU 620 - Public School Finance

The course focuses on the factors associated with the financial support of public education at the local, state and national levels. The analysis and study of legislation, Commissioner's Decisions, Board of Cooperative Education (BOCES) and regulations as they pertain to the support of programs that lead to the development of local budgets as an educational objective of the school district, Board of Education and the community will be studied.

Offered: Every year.

EDU 624 - Contemporary Problems in School Leadership

The course is devoted to the intensive study of selected current or emerging problems in administration, supervision and leadership. The course will explore significant issues involving: the Politics of Education; studies in Administrative Leadership; School - Community Relations; Collective Negotiations; School Personnel; Curriculum, Instruction and Assessment.

Credits: 3

Offered: Offered on occasion.

EDU 625 - Early Childhood Curriculum

Focuses on educational experiences for children; parent involvement; health, psychological, and social services; planning and adaptation of facilities; utilization of materials and equipment; and development of internal program evaluation.

Credits: 3

Offered: Offered on occasion.

EDU 626 - Public School Law

The course is devoted to the study of law and the principles of law as they apply to organization and administration of education at the local, state and national levels. Special attention to the laws, rules, regulations and court decisions that influence district employees, policy, administrative operations and the community will be emphasized. The use of negotiation strategies to reach agreement will be studied.

Credits: 3

Offered: Offered on occasion.

EDU 627 - Multicultural Children's Literature and Technology

The course provides an overview of children's literature from the perspectives of genre, critical literacy, censorship, readability, instructional resource, and multiculturalism. The course also examines literature in non-print forms both for reading and as a product of student writing. The course emphasis is on using a variety of materials and

multicultural texts to assist student readers and writers from diverse cultural and linguistic backgrounds.

Credits: 3

Corequisite: EDU 628. Offered: Every year.

EDU 628 - Reading Specialist Practicum

The course is a field-based practicum taken at the same time as the Multicultural Children's Literature and Technology course. It provides Candidates with a minimum of 25 hours of practicum as reading specialist, literacy coach and program leader with classroom teachers and parents.

Credits: 0

Prerequisite: (EDU 552 or EDU 652) and (EDU 554 or EDU 653) and EDU 583 and EDU 613. Corequisite: EDU 627. Offered: Every year.

EDU 629 - Issues, Trends, and Research in Early Childhood Education

Explores basic issues in early childhood education, current trends, and past and current research.

Credits: 3

Offered: Offered on occasion.

EDU 630 - Educational Administration Special Topics

Advanced course devoted to the analysis of one topic, which may be selected from the following: Creating Safe and Productive Schools, The Politics of Education, Studies in Administrative Leadership, School-Community Relations, Collective Negotiations, School Personnel Administration, Administering Innovation Programs, or Management Objectives.

Credits: 3

Offered: Every year.

EDU 633 - Literacy in the Content Areas

The course explores reading and writing in discipline-specific areas including science, social studies, and mathematics. The course also places a strong emphasis on close reading of expository texts and analysis of test data as a tool for planning instruction.

Credits: 3

Offered: Every year.

EDU 635 - Curriculum Development in Social Studies Education

Investigates basic principles in curriculum development in elementary social studies. Examines current social studies curricula and materials. Students develop social studies curriculum projects of special interest.

Credits: 3

Offered: Offered on occasion.

EDU 636 - Issues, Trends, and Research in Elementary School Social Studies

Examines the structure and organization of social studies programs. Focuses on past and current issues, trends, and research in social studies education; and evaluation of current social studies programs.

Credits: 3

Offered: Every year.

EDU 637 - Psychological Foundations of Literacy

The course presents knowledge about basic psychological, cognitive foundations of reading, writing, spelling, and viewing. It addresses linguistic components that are essential for Candidates to know in order to provide literacy instruction and intervention to the increasingly diverse group of learners in today's classrooms. The course also prepares Candidates to take the New York State Content Specialty Test (CST) for Literacy.

Credits: 3

Offered: Every year.

EDU 640 - Issues, Trends, and Research in Elementary (Childhood) Mathematics

Examines issues and trends in elementary school mathematics programs. Reviews components of modern programs in elementary school mathematics, based on an examination of experimental programs, trends, and current materials. Focuses on content, instructional materials, procedures, and evaluation of current programs.

Offered: Offered on occasion.

EDU 642 - Activity-Oriented Elementary Mathematics

Prepares teachers to teach elementary mathematics through laboratory and learner-oriented activities. Class members prepare laboratory materials, kits, and activity-type lessons for their own classrooms.

Credits: 3

Offered: Offered on occasion.

EDU 643 - Math Assessment in Support of All Learners

Investigation and interpretation of assessment strategies and evaluation methods in mathematics education. Includes the study of current state assessments in mathematics as well as the design and use of criteria to evaluate performance in mathematics and their application to understanding and diagnosing learning difficulties in mathematics. Examines the role of assessment in making instructional decisions. Current research on mathematics assessment is also examined.

Credits: 3

Offered: Offered on occasion.

EDU 651 - Issues and Research in Literacy

The course provides Candidates with an opportunity to analyze issues in the field of literacy and the research connected to them. The course is also the pre-requisite to the Literacy Program capstone project course and requires Candidates to select their capstone topic and write a proposal for that project.

Credits: 3

Prerequisite: EDU 570 and EDU 583 and EDU 652.

Offered: Every year.

EDU 655 - Clinical Applications of Literacy Instruction

In the third clinical course, candidates apply multiple literacy and instructional techniques to enhance student's decoding, comprehension, and writing. The course addresses candidates in both elementary and secondary literacy programs.

Credits: 3

Prerequisite: EDU 583 and EDU 613. Offered: Offered on occasion.

EDU 659 - Master's Thesis/Project in Literacy

The course is the capstone for the graduate literacy program and is designed to help Candidates refine their skills in the analysis and evaluation of research and the process of conducting educational research. Candidates should have completed at least 27 credit hours of their program, including EDU 651 or EDU 660, before registering for the course.

Credits: 3

Prerequisite: EDU 570 or EDU 651 or EDU 660. Offered: Every semester.

EDU 660 - Conducting Educational Research

Focuses on the development of a research or curriculum project proposal. Eighteen (18) graduate credit hours must be completed.

Credits: 3

Prerequisite: EDU 570. Offered: Every semester.

EDU 662 - Policy Development, Politics and Ethical Practices

The course is specifically developed for candidates interested in the School District Leadership Certificate. Candidates must have completed all sections of the School Building Leadership requirements. Emphasis on school district policy development, its legal references, local, state, judicial and federal influences and regional implications on personnel, students and community and the board of education will be explored. Political entities that

influence administrative and board of education decisions will be explored. The ethical dilemmas between what is legal and what is ethical will be researched and rational positions developed.

Credits: 3

Offered: Every year.

EDU 664 - Governance, Media and Crisis Management

The course is specifically developed for candidates interested in the School District Leadership Certificate. Candidates must have completed all sections of the School Building Leadership requirements. Emphasis on central office administration, coordination of other municipal entities, local, state and federal regulatory agencies will be studied. Board of education/central administration coordination and communication, evaluation and planning will be studied with emphasis on positive district communication, coordination and public/taxpayer relations. The study of and the implementation of district crisis plans and adherence will also be studied.

Credits: 3

Offered: Every year.

EDU 670 - Independent Study: Curriculum and Instruction

Provides advanced graduate students the opportunity to work individually on problems of special concern not otherwise available through regular course offerings under the direction of a qualified faculty member. Emphasis on Curriculum and Instruction.

Credits: 1-12

Offered: Every semester.

EDU 671 - ESOL/BE Practicum & Supervision 20 Day

A field assignment to teach ESOL/BE (K-12): Candidates with current K-6 certificates are assigned to grades 7-12. Candidates with current 7-12 certificates are assigned to grades K-6. Candidates without current certification are assigned to both K-6 and 7-12 settings. Candidates with current certification complete a 20 day assignment. Supervision is provided on a one-to-one basis at the practicum site. Arrangements are made by the Office of Field Experiences. Open only to candidates in the TESOL MEd and TESOL BE CAS programs. Prerequisites: Satisfactory completion of EDU 518, 519, 540, 568, 569 ongoing recommendation of Department of Language, Learning Leadership.

Credits: 3

Prerequisite: EDU 518 and EDU 519 and EDU 540 and EDU 568 and EDU 569. Offered: Every semester.

EDU 672 - Independent Study: Language, Learning, and Leadership

Provides advanced graduate students the opportunity to work individually on problems of special concern not otherwise available through regular course offerings under the direction of a qualified faculty member. Emphasis on Language, Learning, and Leadership.

Credits: 1-12

Offered: Every semester.

EDU 673 - ESOL/BE Practicum & Supervision (40 day)

A field assignment to teach ESOL/BE (K-12): Candidates with current K-6 certificates are assigned to grades 7-12. Candidates with current 7-12 certificates are assigned to grades K-6. Candidates without current certification are assigned to both K-6 and 7-12 settings. Candidates without current certification complete two 20 day assignments. Supervision is provided on a one-to-one basis at the practicum site. Arrangements are made by the Office of Field Experiences. Open only to candidates in the TESOL MEd and TESOL BE CAS programs. Prerequisites: Satisfactory completion of EDU 518, 519, 540, 568, 569 ongoing recommendation of Department of Language, Learning Leadership.

Credits: 3

Prerequisite: EDU 518 and EDU 519 and EDU 540 and EDU 568 and EDU 569. Offered: Every semester.

EDU 674 - Bilingual Education (BE) Practicum & Supervision- 20 Day

This course provides classroom instruction and field experience for educators of English language learners. It provides a supervised student teaching experience for graduate students who are already certified in an approved area of education (20 day placement) and for those graduate students who are earning their initial certification in TESOL pre-K-12 (40 day placement). Students are placed in an approved ESL/BE classroom at a grade level appropriate to ensuring they have experience across the pre-K-12 levels. All effort will be made to place those students already holding an early childhood or childhood certificate in a middle school or secondary school (grades 5-12) and students already holding a middle school or adolescent certificate in an elementary school setting (grades K-6). The field placement shall be for five days per week until your placement requirements have been fulfilled. This means for those students with prior certification, a 20 day placement is required. For those with no prior teaching certification, a 40 day placement is required. Classroom theory is applied to field practice. Students will be observed by a field supervisor a minimum of two times for a 20 day placement and three times for a 40 day placement.

Credits: 3

Offered: Every semester.

EDU 680 - Master's Comprehensive Examination

The comprehensive examination is one of the capstone options for candidates in the Curriculum and Instruction, Literacy Education: Birth-Grade 6, and Literacy Education: Grades 5-12 programs. It is a three-part, intensive written examination in the areas of education research, foundational studies (psychology, sociology, exceptionality, and diversity), and content area pedagogy. Examinations are tentatively administered on the first Saturday of December, March, and August, but examination dates are subject to change. The course is graded S/U and may be repeated once if a grade of U is earned. Prerequisite: Enrollment in final semester of graduate study or approval of the Dean of the College of Education.

Credits: 0

Offered: Every semester.

EDU 690 - Master's Thesis/Project

Research including the preparation of a project, essay, or thesis.

Credits: 3-6

Prerequisite: EDU 660. Offered: Every semester.

EDU 691 - Master's Thesis/Project

Research involving the preparation of a project, essay, or thesis.

Credits: 3-6

Offered: Every semester.

ENED - English Education

ENED 101 - Introduction to English Adolescence Education

English Adolescence Education majors are introduced to teaching in the course which combines 25 hours of classroom observation with reading, writing, and discussion about the principles and practices of English Adolescence Education. Teaching strategies, learning styles, classroom management, socioeconomics, and the structure and history of language are among the topics considered.

Credits: 1.5

Offered: Every year.

ENED 103 - Readings and Observation in English Adolescence Education

Students participate in 25 hours of classroom observation in the secondary schools and then draw on the

observations, readings, and program course work in exploring advanced issues in pedagogy.

Credits: 1.5

Prerequisite: ENED 101 or ENGL 101. Offered: Every year.

ENED 250 - Literacy and Technology

Designed primarily for English Adolescence Education majors, this course explores the theoretical and practical implications of technology for the nature of literacy. The course presents approaches to helping secondary students improve their literacy through the use of technology.

Credits: 3

Offered: Every year.

ENED 352 - Teaching Writing in the Primary Grades

Examines the writing process as it applies to primary-grade students and offers developmentally-appropriate approaches for teaching drafting, revising, and editing.

Credits: 3

Offered: Every year.

ENED 353 - Reading and Writing Children's Literature

A study of children's picture storybooks and their use across the elementary school curriculum, combined with the craft of writing stories for children and the art of teaching story writing to them.

Credits: 3

Offered: Every other year.

ENED 354 - Literature for Intermediate Grades

The course presents a study of a range of texts written for, by and about children in the 8-12 year old range. Students will learn about the cognitive, social and psychological development typical of this time in children's lives and will consider these changes in relation to children's home, school and community experiences. Students will discuss and prepare to teach these texts in an inclusive manner to a wide range of students through the use of a number of "best practices" for literature instruction.

Credits: 3

Offered: Every year.

ENED 355 - Adolescent Literature

Study of and written responses to a broad variety of texts written for, by, and about adolescents. Examination of the adolescent experience as it is depicted in this literature, with an emphasis on multicultural education, cultural diversity, and the educational system. Students will discuss

and prepare to teach adolescent literature to children from diverse cultural and linguistic backgrounds.

Credits: 3

Offered: Every year.

ENED 356 - Teaching Writing in the Secondary School

Study of and practice in strategies for teaching the process of writing: pre-writing, drafting, revision, editing, and publication. Includes methods of assessing and writing.

Credits: 3

Offered: Every year.

ENED 357 - Literacy/Language/Learning Theory

Study of philosophical, sociological, and psychological theories of language, linguistics, and learning theory used to explore the nature of the reading process, how people learn to read, how people make meaning from print and other media, and how teachers might help students become more capable readers.

Credits: 3

Offered: Every year.

ENED 358 - Teaching Writing in the Intermediate Grades

Analysis of the writing process as it applies to elementary students. Approaches to teaching writing as a means of learning throughout the elementary-school curriculum.

Credits: 3

Offered: Every year.

ENED 359 - Teaching Poetry in Elementary and Middle School

Practical approaches for helping elementary and middle school students experience and enjoy many forms of poetry. Includes reading, writing and collecting poems.

Credits: 3

Offered: Offered on occasion.

ENED 360 - Multicultural English Education in Theory and Practice

This course will allow students to gain several constructive meanings of diversity issues that are associated with five major multicultural theories circulating mostly within the U.S. field of education. Additionally, through engaging in the processes of being analytical, critical, and self-reflexive, students will be challenged to grapple with the complexity and controversy of teaching diversity issues. Moreover, students will examine how gender, class, race, ethnicity and sexual orientation issues inform their instructional goals, curriculum planning/implementation,

and practices in the teaching of literature, language, and composition in K-12 English Language Arts classrooms.

Credits: 3

Offered: Every other year.

ENED 399 - Special Topics in English Education

Variable-content course; topic announced in the online Course Offerings each semester that the course is offered.

Credits: 1-3

Offered: Offered on occasion.

ENED 413 - Teaching Shakespeare

As preservice teachers, you know that when you have your own classrooms, you will probably be teaching at least one Shakespeare play as part of the curriculum. The following question then arises: "How do I get my students interested in Shakespeare?" This class will focus on Shakespeare plays commonly found in the high school curriculum. As we work closely with the texts, we will explore a range of pedagogical strategies for engaging students in the plays. Drama in the classroom is one effective approach, so we will be learning various strategies that get students up on their feet. Because of the pedagogical focus, we will be concentrating on a few plays and then working with them in depth.

Credits: 3

Offered: Every other year.

ENED 450 - Seminar for Teachers of English

Workshop designed to immerse students in the processes of preparing high-school students to read literature. Emphasis on pre-reading activities, construction of discussion questions and classroom activities, development of units for teaching literature, and participation in activities. Permission of instructor.

Credits: 3

Corequisite: ENED 451 or ENGL 401. Offered: Every year.

ENED 451 - Methods for English Education

Principles, materials and methods for teaching English. Note: Must be taken before student teaching.

Credits: 3

Corequisite: ENED 450 or ENGL 401. Offered: Every year.

ENED 452 - Inquiries in Student Teaching

The course serves as a complement to student teaching experiences in English Adolescence Education and examines professional issues that arise in classrooms with

emphasis on learner-initiated and shaped professional development.

Credits: 3

Corequisite: ENED 454 or ENED 455. Offered: Every year.

ENED 453 - Student Teaching in the Secondary School - English Grades 7-12

Student Teaching in the Secondary School - English Grades 7-12: A field assignment to teach in secondary education. Assignments provided by subject area in grades 7 through 12; arrangements made by Office of Field Experiences.

Credits: 12

Prerequisite: ENED 450 and ENED 451. Corequisite: ENED 452. Offered: Every year.

ENED 454 - Student Teaching in the Secondary School – English High School

Student Teaching in the Secondary School – English High School: A field assignment to teach in secondary education. Assignments provided by subject area in high school; arrangements made by Office of Field Experiences.

Credits: 6

Prerequisite: ENED 450 and ENED 451. Corequisite: ENED 452 or ENED 455. Offered: Every year.

ENED 455 - Student Teaching in the Secondary School – English Middle School

Student Teaching in the Secondary School - English Middle School: A field assignment to teach in secondary education. Assignments provided by subject area in middle school; arrangements made by Office of Field Experiences.

Credits: 6

Prerequisite: ENED 450 and ENED 451. Corequisite: ENED 452 or ENED 454. Offered: Every year.

ENED 502 - Directed Study

This is a 1.5 credit independent experience for the graduate students to work one-on-one with a faculty member on a topic related to the student's research focusing particularly on pedagogical issues. It is equivalent to the already existing ENGL 502, Directed Study, adding the option of the ENED prefix to indicate its pedagogical specificity, for students in the program leading to professional teaching certification.

Credits: 1.5

Prerequisite: ENGL 500. Offered: Every semester.

ENED 554 - Composition Theory and Practice

Study of and practice in approaches to teaching writing, with emphasis on whole language instruction. Survey of recent research in written composition and its applications in the secondary classroom.

Credits: 3

Offered: Every other year.

ENED 601 - Structured Field Experience Completion

Required for all MA+Certification. candidates. Gives recognition and validation for the thoughtful completion of all parts of the required Structured Field Experience

Credits: 0

Offered: Every semester.

ENED 665 - Studies in English Education

Study of components of English with emphasis chosen from linguistics, criticism, composition, media, and/or learning theories. Focus is on the implications for teaching English at the secondary level.

Credits: 3

Offered: Every other year.

ENED 690 - Degree Project Research

This required supervised research course for graduate students in English provides an opportunity for working one-on-one with a faculty mentor that will culminate in a final degree project subsequent to this class (thesis, action research thesis, professional development essay, comprehensive exam). Students will finish their project research, gain faculty feedback for proposals and drafts, finalize faculty committees and review professional opportunities in the field. Students conducting classroom research as part of their degree projects will also obtain necessary permissions from the Institutional Review Board and school authorities and carry out their research in preparation for writing their final reports. Students must have a minimum overall GPA of B in order to enroll in Degree Project Research. [NOTE: identical description for ENED 690, with prerequisites ENGL 500 and ENED 502]

Credits: 3

Prerequisite: ENGL 500 and ENGL 502. Offered: Every Fall semester.

ENED 696 - Degree Project Completion

The culminating project for all graduate students in English, taken together with the capstone course (ENGL 695), demonstrating successful completion of advanced research in the field of English studies. Students choose one of several different degree projects. A final grade in 696 of B or above indicates successful completion of the degree project, including all required written and oral

portions and, in the case of thesis/action research thesis, submission to the AP for Graduate Studies and to Reed Library for electronic archiving.

Credits: 3

Prerequisite: ENED 690 or ENGL 690. Offered: Every semester.

ENGL - English

ENGL 100 - English Composition

A writing-workshop course in which students understand and practice writing-process elements; compose essays using a variety of rhetorical strategies and research methods; and use critical reading, writing, and discussion as a means of situating themselves in a world of ideas

Credits: 3

Offered: Every semester.

ENGL 106 - Introduction to Literary Studies

ENGL 106 will provide students with a full semester overview of the major areas within and current approaches to literary studies. Students will gain insight into literary history, the process of and critical debates concerning canon formation, the fundamental skills and terms for effective analysis of poetry and prose, and the multiple functions and genres of literature and writing.

Credits: 3

Offered: Every semester.

ENGL 111 - Integrated Skills for Academic Purposes

ENGL 111 is a course for students who need to further develop their English language skills. This multi-skills course focuses on reading, writing, and communication needs essential in academic settings.

Credits: 3

Offered: Every year.

ENGL 114 - ESL:Spoken and Written Grammar in Context

ENGL 114 A review of English grammar through intensive written and oral practice to promote accurate and appropriate language use for students who have already studied grammar extensively and need to refine the ability to produce acceptable academic English.

Credits: 3

Offered: Every year.

ENGL 117 - ESL: Academic Reading and Writing

ENGL 117 will provide students the opportunity to further develop their academic reading and writing skills. It will focus on reading and writing strategies for academic work

that will enhance fluency and accuracy, vocabulary expansion and use, and developing metacognitive awareness of the text conventions of common academic genres. Students will improve their ability to understand and respond to texts.

Credits: 3

Offered: Every year.

ENGL 160 - Visiting Writers Program

The Visiting Writers Program is required for two semesters for all Writing minors in the creative writing track. Guest writers give readings and present lectures concerning the craft and process of writing, which students are required to attend. Each event offers opportunities for students to interact with the visiting writers and to discuss their craft and creative process. Writing minors are required to register for the course during the semesters when they are enrolled in their intermediate and advanced writing courses (ENGL 361, 362, 460, or 461).

Credits: .5

Offered: Every semester.

ENGL 200 - Introduction to American Studies

An introduction to the interdisciplinary study of American cultures, their historical development and contemporary status. Focusing on literary and cultural representations of specific aspects of the American experience, the course will examine the constructed nature of American self-perceptions and of U.S. history. The course contextualizes U.S. cultures within the Americas and the global arena. Particular course emphasis is selected by the instructor. Cross-listed as AMST 202.

Credits: 3

Offered: Every year.

ENGL 204 - Survey of English Literature

The study of major texts from origins to the present in British literature. Will include divergent approaches to texts, the historical development of the literatures, and the relationships between literature and other disciplines.

Credits: 3

Offered: Offered on occasion.

ENGL 205 - Epic and Romance

Readings in world literature from ancient to contemporary. Readings include epics from the oral and written traditions and romances from several traditions.

Credits: 3

Offered: Every semester.

ENGL 206 - Survey of American Literature

The study of major texts from origins to the present in American literature. Will include divergent approaches to texts, the historical development of the literatures, and the relationships between literature and other disciplines.

Credits: 3

Offered: Offered on occasion.

ENGL 207 - Drama and Film

Readings in world literature from ancient to contemporary. Analysis of drama and film as theatrical and cinematic works through various thematic and critical approaches. Includes screening of films.

Credits: 3

Offered: Every semester.

ENGL 208 - American Popular and Mass Cultures

An introduction to the methodologies of studying American cultures, with a special focus on popular and mass cultures. Particular course emphasis will be determined by the individual instructor, but topics will stress the multiplicity of American cultures. While literary works will make up the majority of the class texts, the course will utilize an interdisciplinary approach integrating materials from fields such as history, anthropology, women's studies, ethnic studies, geography, sociology, music, and art. Cross-listed as AMST 210.

Credits: 3

Offered: Every other year.

ENGL 209 - Novels and Tales

Readings in world literature from ancient to contemporary. The course teaches analysis of varying narrative styles and approaches and the relationship of narrative to culture.

Credits: 3

Offered: Every semester.

ENGL 211 - World Poetry

Readings in world literature from ancient to contemporary. Students will develop skills in reading poems both as literary works and as cultural artifacts.

Credits: 3

Offered: Every semester.

ENGL 213 - Texts and Contexts

Texts and Contexts is a writing-intensive course designed to introduce students to the process of research-based writing intended for a range of audiences and rhetorical situations. Students will undertake a series of writing projects that engage writing process elements, from completing pre-writing strategies; to locating, assessing,

integrating, and properly citing research sources; to drafting, revising, and proofreading final copy. Through reading like a writer, students will learn to evaluate and construct logical arguments and to explore questions related to the contexts of writing, such as audience, genre, and historical or political moment. The course will culminate in a significant research-based writing project

Credits: 3

Offered: Every semester.

ENGL 214 - American Fiction

Readings from among various fiction genres, intended to reflect the growth of and influences in American fiction from its beginnings to the present; specific focus is chosen by the instructor.

Credits: 3

Offered: Offered on occasion.

ENGL 215 - Detective Fiction

A survey of mystery writers from Edgar Allan Poe to P.D. James, exploring their techniques with the genre and the methods of their detectives.

Credits: 3

Offered: Offered on occasion.

ENGL 216 - Science Fiction

Historical and generic survey of science fiction through representative works and major authors; examination of its relationships with other types of literature.

Credits: 3

Offered: Offered on occasion.

ENGL 217 - Fantasy Fiction

Historical, comparative, and generic survey of fantasy fiction through representative works and major authors; examination of its relationships with other kinds of literature.

Credits: 3

Offered: Offered on occasion.

ENGL 240 - Introduction to African American Literature and Culture

An examination of major works by African American novelists, poets, dramatists, filmmakers, musicians, and essayists in terms of the intellectual and political concerns of their periods and locations. Cross-listed with ETHN 240.

Credits: 3

Offered: Every other year.

ENGL 241 - Introduction to Latino/a Literature

Study of works by and about Latinos, including poetry, novels, film, drama, music, and essays. Focus on culture of people of Hispanic descent living in the United States, including Chicanos, Puerto Ricans, Dominican Americans, and Cuban Americans, with some consideration of the ongoing relations between U.S. Latinos and Latin America. Cross-listed as ETHN 241.

Credits: 3

Offered: Offered on occasion.

ENGL 242 - American Indian Literature

Study of a variety of works, including traditional tales, novels, poems and memoirs, produced by American Indians from historical beginnings to the present. Cross-listed with ETHN 242.

Credits: 3

Offered: Offered on occasion.

ENGL 260 - Introduction to Creative Writing

First in the sequence of creative writing courses, the prerequisite for all higher level creative writing. Conducted in an informal workshop format, the course provides practical experience in the writing and evaluation of poetry and short fiction. Basic forms, prosodies, techniques, genres, and the problems they pose are considered through study of historical and contemporary examples, and through writing assignments.

Credits: 3

Offered: Every semester.

ENGL 261 - Literary Publishing

The course takes an in-depth look at magazine and fiction or poetry manuscript editing in preparation for publication. The course pays special attention to the selection of work, layout, and formation of the on-campus literary magazine *The Trident* as well as a chapbook manuscript from each student. Students will consider the elements of layout, arrangement, and editing for manuscript work and turn in two major projects over the semester.

Credits: 3

Prerequisite: ENGL 260. Offered: Every year.

ENGL 271 - Rhetoric for Writers

This course introduces students to the field of composition-rhetoric, its origins and present day applications. Students will investigate historical and contemporary definitions, theories of, and figures in composition-rhetoric as well as critically analyze and produce texts with a deep awareness of rhetorical strategies underlying them.

Credits: 3

Offered: Every other year.

ENGL 280 - Introduction to Film

Study of ways to approach and understand film as a medium of art and communication. Emphasis on building a working vocabulary of basic film terms through screening, discussion, and analysis of feature and shorter films.

Credits: 3

Offered: Every other year.

ENGL 291 - The Bible as Literature

Examination of sections of Old and New Testaments as works of literature, history and religious thought. Emphasis on major themes, motifs, and critical techniques.

Credits: 3

Offered: Offered on occasion.

ENGL 296 - American Identities

An exploration of the historical construction of American gender, ethnicity/race, and class; their present status; and their literary and cultural representations. Focusing on intersections between these categories of identity, the course will utilize an interdisciplinary approach, integrating materials from fields such as literary studies, history, women's studies, ethnic studies, geography, sociology, music, and art. Cross-listed as AMST 296.

Credits: 3

Offered: Every year.

ENGL 299 - Special Topics

Variable-content course; topic announced in the online Course Offerings each semester.

Credits: 1-4

Offered: Offered on occasion.

ENGL 300 - European Literary Landmarks

Offered on occasion. In-depth critical examination of selected "landmarks" from the literature of continental Europe. Focus on issues of interpretation, intertextuality, literary movements and periods, canon formation, and pedagogy.

Credits: 3

Offered: Offered on occasion.

ENGL 301 - American Literary Landmarks

In-depth critical examination of selected "landmarks" from the literary tradition of the United States. Focus on issues of interpretation, intertextuality, literary movements and periods, canon formation, and pedagogy.

Credits: 3

Offered: Every year.

ENGL 302 - British Literary Landmarks

In-depth critical examination of selected "landmarks" from British literary tradition. Focus on issues of interpretation, intertextuality, literary movements and periods, canon formation, and pedagogy.

Credits: 3

Offered: Every year.

ENGL 303 - Global Literary Landmarks

In-depth critical and comparative examination of selected "landmarks" from global literary traditions. Focus on issues of interpretation, intertextuality, literary movements and periods, canon formation, and pedagogy.

Credits: 3

Offered: Every other year.

ENGL 304 - Latina Literature and Cultural Studies

An examination of contemporary Latina literary productions in the context of representations of Latinas in mainstream U.S. society. The focus of the course is on women of Hispanic descent living and writing in the United States, including work by and about Chicanas, Puerto Ricans, Dominican Americans, and Cuban Americans. Previous course work in Latina/Latino literature not required, but some previous course work related to African American or other ethnic literature, women's literature/feminism, and/or film studies is strongly recommended. Cross-listed as WOST 304 and INDS 304.

Credits: 3

Offered: Offered on occasion.

ENGL 306 - Middle Eastern Literatures

This survey course will offer a study of Middle Eastern literatures from antiquity to the present. The central goal of the course is to introduce the students to the trends and genres in Middle Eastern literatures and to offer them an overview of the historical, literary, and cultural setting of some of the canonical literary texts. Particular emphasis will be given to a broad understanding of the interaction between religion, history, and literature in the Middle East. All readings will be in English translation.

Credits: 3

Offered: Offered on occasion.

ENGL 310 - Medieval Literature

Study of selected texts representative of the literature flourishing in Western Europe between 600 and 1500.

Credits: 3

Offered: Every other year.

ENGL 312 - Renaissance Literature

Study of Renaissance texts, with a focus on English Renaissance literature.

Credits: 3

Offered: Every other year.

ENGL 313 - Scribbling Women

This course includes coverage of a range of fiction, poetry, and non-fiction prose authored by 19th-century women writers, as well as the historical contexts within which those works were produced. In addition to the primary focus on reading and analyzing literature, the course will also expose students to histories and approaches of literary criticism and the methods of recovering and assessing neglected traditions and perspectives from literary history.

Credits: 3

Offered: Every other year.

ENGL 314 - Women Writers

An in-depth study of literature by women. The course explores questions regarding gender, language, perception, and experience through various genres. Cross-listed as WOST 314.

Credits: 3

Offered: Every other year.

ENGL 315 - The Gothic Novel

This course will explore the Gothic novel in its various geographic and temporal contexts, from classic texts to more non-traditional ones. Beginning with its eighteenth-century origins, we will examine the different changes that the genre has undergone and the different themes that the genre has addressed.

Offered: Every other year.

ENGL 316 - The Early 17th Century

Study of Jacobean drama, metaphysical and neo-classical poetry, and emerging prose styles.

Credits: 3

Offered: Every other year.

ENGL 318 - Studies in Poetry

Advanced-level course in analysis of poetry: introduction to various critical approaches; background study of poetic techniques; independent work on one poet.

Credits: 3

Offered: Every other year.

ENGL 319 - Modern Drama

A study of modern dramatic literature from the late 19th century through the first half of the 20th century. Particular attention will be paid to the influence of realism on modern drama. The course will explore meaning beyond the page by considering the textual ramifications of staging dramatic texts.

Credits: 3

Offered: Every other year.

ENGL 320 - The Restoration and 18th Century

Study of major literary forms with emphasis on Neoclassicism and emergent verse and prose styles; topics include significant social and political changes such as the expansion of empire and the growth of new readerships.

Credits: 3

Offered: Every other year.

ENGL 321 - Contemporary Drama

A study of contemporary dramatic literature from the mid-20th century to the present focusing on understanding the dramatic form and its relation to society. Critical analysis of plays includes historical and cultural contexts as well as theatrical implications of staging the text.

Credits: 3

Offered: Every other year.

ENGL 322 - The Romantic Age

Romantic movement in England, 1790 to 1835, as exemplified in writings of Blake, Wordsworth, Coleridge, Lamb, Byron, the Shelleys, Keats, Wollstonecraft, DeQuincey, Hazlitt, and others.

Credits: 3

Offered: Every other year.

ENGL 324 - Myth and Symbol in Literature

Study of myth theory, mythology, and literary symbolism in world literature.

Credits: 3

Offered: Offered on occasion.

ENGL 326 - Victorian Literature

Introduction to later 19th century English poetry and prose; emphasis on relationship between social-intellectual history and literature. Topics include problems of rapid industrialization, impact of science and technology, pressures for increased democratization, impact of laissez-faire capitalism, and relationship of the literature to 19th century music, painting, and architecture.

Credits: 3

Offered: Every other year.

ENGL 327 - Modern European Literature

Study of the literature of modernism in terms of influence, development, and its interaction with the other arts within the context of continental Europe. Might include figures such as Marcel Proust, Franz Kafka, Rainer Maria Rilke, and Thomas Mann; movements such as Surrealism and Expressionism; and specific historical-geographical contexts such as the Habsburg Empire and interbellum Paris.

Credits: 3

Offered: Offered on occasion.

ENGL 328 - Modern British Literature

Study of major British fiction, poetry, and drama, 1900 to the present. Topics include the Irish national movement, romantic/realistic attitudes toward war, the roots of modernism, the dissolution of Empire. Authors range from Yeats, Synge, Joyce, and Lawrence to Amis and Fowles. Approach is varied but tends to emphasize social-historical backgrounds.

Credits: 3

Offered: Every other year.

ENGL 329 - Graphic Literature

Exploration of the evolution, subject matters, forms, and conventions of graphic texts with emphasis on their literary form.

Credits: 3

Offered: Every other year.

ENGL 330 - The Contemporary Novel

Study of the novel in Britain and America, 1948 to the present. Emphasis on variety of forms, styles, and techniques in the genre and on contrasts between British and American novels of the period reflective of long-established, quite separate traditions.

Credits: 3

Offered: Every other year.

ENGL 331 - American Literary Roots

Study of American literary and cultural roots in the 17th and 18th centuries; special attention to the emergence of myths and realities concerning the American hero and the American dream, including specific issues such as the rise of slavery, the role of women, the treatment of the Indian, the power of the Puritans, and the rhetoric of the Revolution.

Credits: 3

Offered: Every other year.

ENGL 332 - American Romanticism in Literature

Study of Romanticism in terms of influence, development, and characteristics within the context of American culture, including textual examples ranging from indigenous native sources to those of Europe and the East.

Credits: 3

Offered: Every other year.

ENGL 333 - Environmental Literature

Survey of American nature writing, chiefly over the past half century. Focuses on the art of seeing natural places. Includes field trips, direct study of nature.

Credits: 3

Offered: Offered on occasion.

ENGL 334 - Realism/Naturalism in American Literature

Study of Realism and Naturalism in terms of influence, development, and characteristics within the context of American culture, including influences from Europe and from the emerging voices of American women and African American slaves.

Credits: 3

Offered: Every other year.

ENGL 335 - Modern American Poetry

Study of American poetry of the first half of the 20th century. Focuses on tradition and innovation, distinctive voices, the cultural and historical context.

Credits: 3

Offered: Every other year.

ENGL 336 - Modernism in American Literature

Study of modernism in terms of influence, development, and characteristics within the context of American culture; might include such figures as Faulkner and Hemingway, and such movements as the Harlem Renaissance.

Credits: 3

Offered: Every other year.

ENGL 338 - Contemporary American Literature

Study of contemporary works, genres and movements with attention to literary form, historical contexts and other interdisciplinary concerns.

Credits: 3

Offered: Every other year.

ENGL 339 - Contemporary American Poetry

Study of American poetry being written now and during the past 20 years in relationship to the American and lyric

traditions. Focuses on the place of poets in our society, the cultural and historical context of American poetics, and the development of a uniquely American voice in contemporary poetry.

Credits: 3

Offered: Every other year.

ENGL 340 - Black Women Writers

Study of the literature written by and often about black women, including poetry, short and long fictions, novels, drama, biography, and autobiography from the 18th century to the present.

Credits: 3

Offered: Every other year.

ENGL 341 - Harlem Renaissance

Study of the literature flourishing within the African American community between approximately 1919 and 1930. Focuses on the political, social, and literary activities of the era.

Credits: 3

Offered: Every other year.

ENGL 342 - African American Autobiography

Study of major texts that contribute to the field of African American autobiography. Focuses on the literary and cultural trends exhibited in these texts, as well as on the individual significance of each text.

Credits: 3

Offered: Every other year.

ENGL 343 - Queer Studies in Literature

This course offers students an introduction to literary and theoretical approaches to issues of sexuality and gender identity, as they pertain to gay, lesbian, bisexual, and transgender peoples. We investigate queerness both in terms of a range of identity issues, and as a set of approaches to reading texts. We will look at such representations through literature and film, from various historical, cultural and theoretical perspectives.

Credits: 3

Offered: Offered on occasion.

ENGL 344 - Contemporary Multiethnic American Literature

Study of a variety of genres of contemporary multiethnic American literature, featuring African American, Asian American, Latina/o, Native American and other ethnic American writers. The course explores whether and how these writers exhibit shared concerns; how racial and ethnic identities and differences are represented in their

work; and how race and ethnicity intersect with gender, class, sexuality, and nationality.

Credits: 3

Offered: Every other year.

ENGL 345 - Critical Reading

Focus on helping students develop an awareness of their own acts of interpretation in reading and an understanding of the strengths of different approaches to interpretation and criticism.

Credits: 3

Offered: Every semester.

ENGL 346 - History of Literary Criticism

Survey of representative texts in literary criticism from Plato to the mid-19th century.

Credits: 3

Offered: Offered on occasion.

ENGL 348 - Modern Literary Criticism

Study of major documents, theoretical concerns, and dominant trends in literary criticism from the mid-19th century to the present.

Credits: 3

Offered: Offered on occasion.

ENGL 349 - Theories of Gender

A multidisciplinary approach grounded in the humanities and arts will be employed to account for the social, economic, political, historical and cultural ways that gender is constructed and represented in contemporary societies.

Credits: 3

Prerequisite: ENGL 345 or WOST 201 or WGST 201.

Offered: Every year.

ENGL 351 - Language and Society

Overview of the ways language use both reflects and shapes social identities. Areas for consideration include gender, race, age, class, status, power, and nationality.

Credits: 3

Offered: Offered on occasion.

ENGL 352 - History of the English Language

Overview of the origins and changes of the English language, from Old English to present-day American English. Areas for consideration include the changing speech sounds, word and sentence structures of English; etymology and new word formation; and the

interrelationships between English and the political and social history of its speakers.

Credits: 3

Offered: Every other year.

ENGL 355 - Adolescent Literature

Study of and written responses to a broad variety of texts written for, by, and about adolescents. Examination of the adolescent experience as it is depicted in the literature, with an emphasis on multicultural education, cultural diversity, and the educational system. Students will discuss and prepare to teach adolescent literature to children from diverse cultural and linguistic backgrounds.

Credits: 3

Offered: Every year.

ENGL 361 - Intermediate Fiction Writing

Continued study of forms, techniques, genres, and theories of fiction writing. Emphasis on further development of students' skills in writing and self-criticism through intensive workshop experience. Readings in contemporary fiction. Permission of instructor. Writing minors must enroll in ENGL 160 concurrently with ENGL 362.

Credits: 3

Offered: Every year.

ENGL 362 - Intermediate Poetry Writing

Continued study of forms, techniques, genres, and theories of poetry. Emphasis on further development of students' skills in writing and self-criticism through intensive workshop experience. Readings in contemporary poetry. Permission of instructor. Writing minors must enroll in ENGL 160 concurrently with ENGL 362.

Credits: 3

Offered: Every year.

ENGL 363 - Intermediate Creative Nonfiction

Study of forms, techniques, genres, and theories of creative nonfiction writing and the differences with other rhetorical styles of nonfiction. Emphasis on further development of students' skills in writing and self-criticism through intensive workshop experience. Readings in contemporary creative nonfiction. Permission of instructor.

Credits: 3

Prerequisite: ENGL 260. Offered: Every other year.

ENGL 365 - Form and Theory of Writing

Students will be required to explore issues of form and theory relevant to both poetry and prose and to write in both genres. Sample topics for poetry might be the implicit politics involved in writing in form in the 21st century, the

complex issues surrounding the use of the lyric "I" in poetry, and the question of what different genres and modes of poetry can do (theorize, express, authenticate, narrate, etc.); sample topics for prose might include the distinctions that are made between genre and literary fiction, the question of what responsibilities, if any, a fiction writer has when he/she writes, and the sometimes complicated implications that point of view can have for narrative.

Credits: 3

Prerequisite: ENGL 260. Offered: Every other year.

ENGL 366 - Opinion in Journalism

The course focuses on the issues surrounding "fact" vs. "opinion" in journalism, including discussion of concepts such as objectivity, truth, and the importance of background, context and balance. Students will gain experience with techniques appropriate to presentation of opinion and critical commentary such as columns, editorials, cartoons and critical reviews of the arts as well as learning how to thoughtfully critique such work.

Credits: 3

Offered: Offered on occasion.

ENGL 369 - Argumentative Writing

In this course, we will isolate and study strategies for identifying issues, determining positions, assessing claims and reasons, locating and evaluating supporting evidence, and writing essays that represent clear and convincing arguments in themselves.

Credits: 3

Prerequisite: ENGL 100. Offered: Every year.

ENGL 372 - Grammar and Style for Writers

This course helps writers move beyond notions of "correctness" in matters of grammar and style to appreciate the nuances involved in crafting well-written persuasive prose for a variety of audiences, purposes, and contexts. It empowers students to approach grammar, syntax, and punctuation as rhetorical tools and to make thoughtful decisions among equally acceptable alternatives to suit the goals and needs of different audiences, assignments, and contexts. Because professional writers often work for an organization or institution, the course also introduces students to the notion of a style guide, preparing them to work with whatever house style is adopted by a specific profession or publication.

Credits: 3

Prerequisite: ENGL 100. Offered: Every other year.

ENGL 373 - English Grammar for Everyone

Overview of basic grammatical concepts and structures, including punctuation and basic usage. Students will learn

to recognize and correct grammatical errors in their writing and in everyday examples. They will also be able to explain why something is grammatically correct or incorrect, enabling them to impart their knowledge of grammar to others in their future professional workplace or classroom. While the course is designed with everyone in mind, the needs of future teachers are taken into special consideration. Additional topics will vary with instructor but might include differing approaches to grammar and style depending upon audience, purpose, and genre; the power of dynamics implicit in choosing one grammar over another; and the art of grammar - how writers use and abuse grammar artfully for expressive purposes.

Credits: 3

Offered: Every year.

ENGL 374 - Writing and Social Change

This writing-intensive course will use a variety of methods, materials, and rhetorical approaches to explore and respond to contemporary social change issues such as sustainability, democracy, social justice, and community engagement. In addition to literary works and nonfiction texts, students will analyze film, Internet, popular press and social media sources to evaluate the effectiveness of different writing/communication genres and to help them engage in several real world writing projects.

Credits: 3

Prerequisite: ENGL 100. Offered: Every other year.

ENGL 375 - Writing for the Professions

Focus on the development of students' ability to communicate in the business and professional world through the letter, memorandum, and in-house report. Emphasis on the importance of written communication as a tool for problem-solving in administrative and management settings.

Credits: 3

Offered: Offered on occasion.

ENGL 378 - Advanced Writing I: The Essay

Workshop-oriented course in which students write, examine, and discuss the essay as a distinct mode. Through the course, students can expect to extend the range of their writing, their understanding of rhetorical traditions, and their freedom and flexibility as writers of essays.

Credits: 3

Prerequisite: ENGL 100. Offered: Offered on occasion.

ENGL 379 - Writing in a Digital World

This course has two main goals, both of which will help prepare students to be informed and skilled citizens of an increasingly digital world. First, the course will prepare students to reflect on and think critically about the wide-

ranging effects of digital communication. Second, students will compose for digital spaces using a range of modes and media.

Credits: 3

Prerequisite: ENGL 100. Offered: Offered on occasion.

ENGL 380 - Film: Silence to Sound

An historical survey of feature narrative and dramatic films from the beginnings through the late 1930s, through screenings, lectures, discussions, and analysis of selected works. Filmmakers studied include Porter, Griffith, Von Stroheim, Eisenstein, Pudovkin, Lubitsch, Hitchcock, Lang, and Renoir.

Credits: 4

Offered: Offered on occasion.

ENGL 381 - Narrative Film After 1940

An historical survey of feature narrative and dramatic films from 1940 through the present, through screenings, lectures, discussions, and analysis of selected works. Filmmakers studied include Welles, Huston, Capra, Hitchcock, Kurosawa, Godard, Truffaut, Bunuel, Fellini, Antonioni, and Altman.

Credits: 4

Offered: Offered on occasion.

ENGL 386 - Women in Global Cinema

A study of films by and about women in global cinema. The course focuses on women filmmakers primarily, and their uses of documentary, experimental, and/or narrative forms.

Credits: 4

Offered: Offered on occasion.

ENGL 387 - American Film

A study of American history and culture through film. Course may be taught as a survey, or may focus on the work of a particular director, a specific time period, or a topic such as dramatic narrative, documentary, or genre type.

Credits: 4

Offered: Offered on occasion.

ENGL 389 - Greek and Roman Literature

Introduction to major literary genres of classical Greece and Rome; emphasis on characteristic forms and themes. Readings in Modern English translations.

Credits: 3

Offered: Offered on occasion.

ENGL 390 - Jewish Literature

A study of major Jewish writers from the Bible to the present. Emphasis will be on the literature and on the varieties of Jewish culture that it represents.

Credits: 3

Offered: Offered on occasion.

ENGL 391 - Romanticism in World Literature

An exploration of basic themes commonly associated with the concept of Romanticism as identified in literature from Eastern and Western cultures.

Credits: 3

Offered: Offered on occasion.

ENGL 392 - Asian Literature

A study of selected works from Chinese, Japanese, Indian, and Middle Eastern cultures, emphasizing those that make up their canon and which are recognized as having had a significant influence on Western culture.

Credits: 3

Offered: Offered on occasion.

ENGL 393 - Literatures of Colonization and Globalization

Study of texts from a variety of genres, time periods, and world cultures that explore the dynamics of colonization and globalization.

Credits: 3

Offered: Offered on occasion.

ENGL 394 - Japanese Literature

Study of selected works from Japanese culture, emphasizing those that make up their canon and which are recognized as having had a significant international influence, especially on the U.S.; the course also examines cultural assumptions in the works, and looks closely at the problem of language in translation and cultural contexts.

Credits: 3

Offered: Offered on occasion.

ENGL 395 - Non-Western Literature

Study of texts from a variety of world cultures that challenge, revise, or pose alternatives to traditional conceptions of the world literature canon and dominant modes of Western philosophy, history, literature, and art.

Credits: 3

Offered: Offered on occasion.

ENGL 396 - Russian Literature

Intensive reading of important works of Russian fiction to understand each writer's vision of the potentialities, complexities, and essential conditions of human nature, within the intellectual and cultural context perceived or created by the writer. Significant attention to political and cultural history of Russia.

Credits: 3

Offered: Offered on occasion.

ENGL 397 - Discourses of the Enlightenment

Study of the literary and philosophical transformations during the age of Enlightenment(s) (Aufklärung, Illuminismo, Lumières, etc.). Focuses on the genre of satire and concepts such as liberty, discovery, rationality, natural law, revolution, difference, belonging and the idea of Europe.

Credits: 3

Offered: Offered on occasion.

ENGL 399 - Special Topics

Variable-content course; topic announced in the online Course Offerings each semester that the course is offered.

Credits: 1-4

Offered: Offered on occasion.

ENGL 400 - Senior Seminar

In the capstone course, students will reflect back upon their English major, and will polish their skills in critical and close reading, research-based and other forms of writing, as well as oral explorations of literature.

Credits: 3

Prerequisite: ENGL 324 or ENGL 343 or ENGL 345 or ENGL 346 or ENGL 348 or ENGL 349 or ENGL 380 or ENGL 381 or ENGL 440 or ENGL 446. Corequisite: ENGL 401. Offered: Every semester.

ENGL 401 - Portfolio Completion

Required for all English and English Adolescence Education majors. Gives recognition for thoughtful completion of all elements of the reflective portfolio except the exit paper. Should be taken concurrently with either ENGL 400 or ENGL 450.

Credits: 0

Corequisite: ENGL 400. Offered: Every semester.

ENGL 404 - Literary London

Variable topics course. Taught in London as a study abroad experience, the course examines its content using interdisciplinary approaches rooted in the resources of the city of London.

Credits: 3

Offered: Every year.

ENGL 405 - Page and Stage

This course will study drama as it is meant to be explored--on the page and on the stage. We begin our analysis of the drama with discussion on campus and then travel to see productions of the plays. In our post-production discussions and writing, we will consider the choices made in production and the impact of that on our reading of the plays. A frequent destination for the course will be New York City, but we may also travel to Stratford, Ontario, or other sites, for productions as well.

Credits: 1.5-6

Offered: Every semester.

ENGL 407 - Tragedy

An examination of representative tragedies and selected theories of tragedy from ancient Greece through Renaissance England and Neo-Classical France to the modern era. Primary focus on the plays and fiction with attention to various conceptions of the tragic vision.

Credits: 3

Offered: Offered on occasion.

ENGL 408 - Arthurian Literature

Study of the many works about King Arthur and his knights of the Round Table, extending from the eighth century to the present.

Credits: 3

Offered: Every other year.

ENGL 410 - Chaucer

Study of The Canterbury Tales and Troilus and Criseyde. Introduction to Middle English language and period and to significant Chaucerian scholarship.

Credits: 3

Offered: Every other year.

ENGL 412 - Early Shakespeare

Study of Shakespeare's works to 1600; emphasis on his growth as a dramatist.

Credits: 3

Offered: Every year.

ENGL 414 - Later Shakespeare

Study of Shakespeare's works from 1600 to end of his career.

Credits: 3

Offered: Every year.

ENGL 416 - Elizabethan Drama

The development of the English drama in the late 16th and early 17th centuries. The growth of drama from the medieval mystery, miracle, and morality plays through the works of Shakespeare's contemporaries. The plays in their cultural, historical, and artistic climates.

Credits: 3

Offered: Offered on occasion.

ENGL 418 - Restoration/18th Century Drama

Study of the drama and theatre of the period, focusing on a variety of traditional and emergent genres such as comedy, tragedy, heroic drama, and pantomime.

Credits: 3

Offered: Offered on occasion.

ENGL 420 - Milton

Milton's thought and art as expressed in "Paradise Lost", "Paradise Regained", "Samson Agonistes", and selections from the minor poems and the prose.

Credits: 3

Offered: Offered on occasion.

ENGL 422 - English Novel I

Study of representative novels of the 18th and early 19th centuries with attention to the development of new readerships and the novel as a genre, emphasizing forms such as the gothic, the epistolary, and the didactic.

Credits: 3

Offered: Offered on occasion.

ENGL 424 - English Novel II

Study of such 19th and 20th century novelists as Dickens, Eliot, Hardy, Conrad, Lawrence, and Woolf. Special attention to form of the novel used to portray each writer's vision.

Credits: 3

Offered: Offered on occasion.

ENGL 425 - Yeats and Company

An intensive reading of certain major works of William Butler Yeats and of his contemporaries and successors. Considerable attention to the mythologies, history, and politics of Ireland.

Credits: 3

Offered: Every other year.

ENGL 427 - Major Writers

Study of the works of up to three major writers. A variable content course. May be taken more than once with departmental approval.

Credits: 3

Offered: Every year.

ENGL 430 - Bloomsbury Modernism

An in-depth exploration of the Bloomsbury Group, members of which individually and collectively were responsible for shifting attitudes about the nature and function of art, its relation to philosophy, science, economics, politics and culture in early twentieth-century England and beyond. The course seeks to expand students' understanding of the modernist period, Bloomsbury's place within it, and ongoing legacies for contemporary thinking.

Credits: 3

Offered: Offered on occasion.

ENGL 446 - Contemporary Literary Theory

A study of the most recent American and international literary critical thinking, emphasizing both theory and practice. Students are strongly encouraged to take ENGL 345 as a prerequisite.

Credits: 3

Offered: Offered on occasion.

ENGL 455 - Writing Tutors

An eight-week training program preparing students to tutor writing in the university Learning Center for a minimum of four hours per week. Permission of instructor required.

Credits: 3

Corequisite: ENGL 456. Offered: Every year.

ENGL 456 - ESL Tutoring

Focus on tutoring students whose first language is not English.

Credits: 1

Corequisite: ENGL 455. Offered: Every year.

ENGL 460 - Advanced Poetry Writing

Intensive critical discussion of student work. Readings in contemporary poetry. The orientation of the course is professional, and the students are expected to submit their work to periodicals for publication. Oral presentation of student work. Writing minors must enroll in ENGL 160 concurrently with ENGL 460.

Credits: 3

Prerequisite: ENGL 362. Offered: Every year.

ENGL 461 - Advanced Fiction Writing

Intensive critical discussion of student fiction. Readings in contemporary fiction. The orientation of the course is professional, and students are expected to submit their work to periodicals for publication. Writing minors must enroll in ENGL 160 concurrently with ENGL 461.

Credits: 3

Prerequisite: ENGL 360. Offered: Offered on occasion.

ENGL 465 - English Internships

English internships. Interns work 40 hours for 1 credit hour. Enrollment requires a completed Learning Contract and permission of the department.

Credits: 1-12

Offered: Every semester.

ENGL 490 - Independent Study

Study of a particular author, topic, or work. Periodic meetings with instructor and writing a substantial paper. Department approval.

Credits: 1-6

Offered: Every semester.

ENGL 499 - Special Topics

A variable-content course. Topics announced in online Course Offerings.

Credits: 3

Offered: Offered on occasion.

ENGL 500 - Introduction to Graduate Studies in English

ENGL 500 introduces new graduate students to contemporary issues, designs and methods in the field of English studies. Emphasis will be on scholarly methods and aims of research in literature, rhetoric, and pedagogy, showing points of intersection and connection across various aspects of the discipline. By the end of the course, students will develop tentative plans for pursuing their own research interests, providing them with a strong foundation for their individual program of advanced study.

Credits: 3

Offered: Every year.

ENGL 502 - Directed Study

Short-term independent study of particular texts, methodologies, pedagogies or theories, conducted by graduate students under the direction of a graduate faculty member in English. Students must take one directed study as part of their degree requirements; a second may be taken as part of elective credit, with a different faculty member.

Credits: 1.5

Prerequisite: ENGL 500. Offered: Every semester.

ENGL 510 - Major Writers

Study in-depth of one writer or up to three writers related on the basis of a unifying principle.

Credits: 3

Offered: Every year.

ENGL 512 - Historical Perspectives in Literature

Study of the development of important movements or concepts in literature.

Credits: 3

Offered: Every year.

ENGL 514 - Comparative Approaches to Literature

Study of literary works from different time periods, nations, or cultures.

Credits: 3

Offered: Every year.

ENGL 516 - Criticism and Theory I

Part one of the historical study of critical and theoretical approaches to literature and the teaching of literature, with concentration on authors pre 1900.

Credits: 3

Offered: Every other year.

ENGL 518 - Criticism and Theory II

Part two of the historical study of critical and theoretical approaches to literature and the teaching of literature, with concentration on authors post 1900.

Credits: 3

Offered: Every other year.

ENGL 520 - Graduate Seminar in Literature and Culture

A variable-content course, interdisciplinary in nature, featuring a contemporary topic central to the discipline.

Credits: 3

Offered: Every other year.

ENGL 521 - Ethics of Writing

This course will expose students to contemporary issues of ethics as they are encountered in the writing process. Such topics may include, but are not limited to, copyright and plagiarism issues; the question of how to write about others; maintaining integrity in marketing rhetoric; the

ethical implications of new media for writers; and the status of truth within contemporary creative non-fiction.

Credits: 3

Offered: Offered on occasion.

ENGL 522 - Writing for Digital Media

"Writing for Digital Media" will help prepare students to become informed and skilled citizens of an increasingly digital world. Students registered in this course will compose for digital spaces; relate these writing experiences to relevant theoretical frameworks; and reflect critically on the effects of digital communication.

Credits: 3

Offered: Offered on occasion.

ENGL 523 - Grant Writing

This course offers an overview of the grant writing process. In it, we will explore how to write a persuasive grant proposal and how to identify grant-making organizations best aligned with your project or need. We will also discuss the grant cycle so you can better appreciate not only how grants are reviewed, ranked, and awarded but also what is expected of you after a grant is secured.

Credits: 3

Offered: Offered on occasion.

ENGL 524 - Art of Grammar

Art of Grammar will help students learn the principles underlying internalized rules of English and the range of choices available to speakers and writers. The course will engage with debates around whether language is primarily cognitive or social in nature as well as language in use and on some fundamental principles of all languages--namely, variation and change.

Credits: 3

Offered: Offered on occasion.

ENGL 525 - Foundations of Editing

This skills-based course intended for multiple audiences provides a practical introduction to editorial practices. Students develop competence in basic procedures of copyediting; develop creativity through solving problems effectively; and come to expand their sense of the field of English and their possible roles within it.

Credits: 3

Offered: Every other year.

ENGL 580 - Studies in Literature

Study in literature or language in conjunction with a cross-listed undergraduate 400 level course. Graduate students

are required to do graduate-level work beyond the course requirements for undergraduate students.

Credits: 3

Offered: Every semester.

ENGL 590 - Special Topics

A variable-content course on topics announced in the online Course Offerings each semester.

Credits: 1-6

Offered: Offered on occasion.

ENGL 591 - E-portfolio

This is a portfolio completion credit for the Certificate of Advanced Study in Professional Writing.

Credits: 1

Offered: Every semester.

ENGL 605 - Independent Study

Independent study of a defined topic under the supervision of an instructor. No more than 6 credit hours of the course may be applied to degree requirements.

Credits: 1-4

Offered: Every semester.

ENGL 690 - Degree Project Research

This required supervised research course for graduate students in English provides an opportunity for working one-on-one with a faculty mentor that will culminate in a final degree project subsequent to this class (thesis, action research thesis, professional development essay, comprehensive exam). Students will finish their project research, gain faculty feedback for proposals and drafts, finalize faculty committees and review professional opportunities in the field. Students conducting classroom research as part of their degree projects will also obtain necessary permissions from the Institutional Review Board and school authorities and carry out their research in preparation for writing their final reports. Students must have a minimum overall GPA of B in order to enroll in Degree Project Research. [NOTE: identical description for ENED 690, with prerequisites ENGL 500 and ENED 502]

Credits: 3

Prerequisite: ENGL 500 and ENGL 502. Offered: Every Fall semester.

ENGL 694 - English Graduate Internship

English internships at the graduate level. Interns work 40 hours for 1 credit hour. Enrollment requires a completed Learning Contract and permission of the department.

Credits: 1-3

Offered: Every semester.

ENGL 695 - Capstone in English Studies

Capstone course for the graduate program focusing on the current state of English studies. The course facilitates the transition from graduate student to scholar-teacher and helps candidates prepare to take their place in the profession.

Credits: 3

Prerequisite: ENGL 500 and (ENGL 502 or ENED 502) and (ENGL 690 or ENED 690). Offered: Every Spring Semester.

ENGL 696 - Degree Project Completion

The culminating project for all graduate students in English, taken together with the capstone course (ENGL 695), demonstrating successful completion of advanced research in the field of English studies. Students choose one of several different degree projects. A final grade in 696 of B or above indicates successful completion of the degree project, including all required written and oral portions and, in the case of thesis/action research thesis, submission to the AP for Graduate Studies and to Reed Library for electronic archiving.

Credits: 3

Prerequisite: ENGL 690 or ENED 690. Offered: Every semester.

ESCI - Environmental Sciences

ESCI 100 - Environmental Sciences First-Year Seminar

The course is designed for Freshman Environmental Sciences majors to assist them in their transition into a college environment, to introduce them more specifically to the Environmental Sciences program, to help them acquire the skills necessary to be successful in a science major, and as a first introduction into some of the most pressing contemporary environmental issues. Students will be introduced to the Environmental Sciences faculty, as well as other Environmental Sciences majors, with discussions focused upon campus resources, study skills and current environmental issues.

Credits: 1

Offered: Every year.

ESCI 105 - Global Environmental Issues

The course's objective is to increase student awareness of the environmental issues that affect different parts of the world and the planet as a whole. The course will explore the historical roots of the problems and how different societies deal with environmental degradation. Topics will include overpopulation, food production, water scarcity, pollution and global climate change, among others. The

format of the course invites participation, discussion and critical thinking.

Credits: 3

Offered: Every year.

ESCI 290 -

Independent research, independent study, or internship under the direction of a participating faculty advisor.

Credits: 1-3

Offered: Offered on occasion.

ESCI 310 - Methods in Environmental Analysis

Methods common to environmental sciences emphasizing laboratory and field measurement techniques. In the laboratory, wet chemical and electrochemical techniques; methods of trace pollutant analysis; bioassays; BOD measurements, etc., will be studied. Field studies will include classical techniques such as dissolved oxygen and Secchi disk measurements, as well as more recent assessment methods such as terrain conductivity and macroinvertebrate studies. Combination lecture/laboratory.

Credits: 3

Prerequisite: GEO 165 and GEO 169 and BIOL 133 and BIOL 134 and STAT 250 and CHEM 225*. Corequisite: CHEM 215. Offered: Every year.

ESCI 410 - Environmental Assessment

Introduction to concepts involved in risk assessment and how they are applied to formulating a human or ecological risk assessment. Modern methods and models describing environmental risk assessment strategies will be emphasized. Topics will include fate and transport processes of pollutants in the environment, data evaluation, air and water quality, human health risk assessment, ecological risk assessment, and hazardous waste remediation. Case studies will be drawn from the contemporary literature and students will formulate a risk assessment as part of a team.

Credits: 3

Prerequisite: GEO 330 and GEO 243 and BIOL 244. Offered: Every year.

ESCI 440 - Environmental Sciences Seminar

This course is designed for senior-level Environmental Sciences majors. In this first semester seminar course every student will present several short seminars as preparation for a full-length seminar on a current topic of environmental sciences research to be given in the second semester senior seminar course. Emphasis is given on detailed knowledge of the subject matter, techniques for searching the professional literature, and procedures for the preparation and presentation of a professional presentation.

Credits: 1

Offered: Every year.

ESCI 441 - Environmental Sciences Senior Seminar

Each student will present a seminar on a current topic of environmental sciences research during the spring semester of their senior year. Emphasis on detailed knowledge of the subject matter, techniques for searching the professional literature, and procedures for the preparation and presentation of a professional seminar.

Credits: 1

Offered: Every year.

ESCI 490 - Environmental Sciences Practicum

Independent research, independent study, or internship under the direction of a participating faculty advisor.

Credits: 1-3

Offered: Every semester.

ETHN - Ethnic Studies

ETHN 101 - Colloquium

Explores the basic concepts and views of Ethnic Studies, introducing students to the concept of interdisciplinarity and some of the key issues addressed within each of the ETHN minors.

Credits: 1

Offered: Offered on occasion.

ETHN 200 - CMA Service Learning

This one-credit service learning course allows students who are on the executive board of one of the Center for Multicultural Affairs student groups to further their knowledge about the relationship between the student group and the academic pursuits of ETHN minors and WGST majors and minors.

Credits: 1

Offered: Every semester.

ETHN 205 - Introduction to American Indian Studies

Explains the origins and evolution of American Indian Studies as a program, placing it within the historical, political, social and cultural context in which it developed. Students will learn why a multi-disciplinary approach can be beneficial to the understanding of American Indian experiences in North America. This course explores the different sets of knowledge produced by and about American Indians and the complicated relationship between American Indians and the United States government. By interrogating representations of American Indian identity, this course will engage students in

discussions about the complexity of race, self-representation, and cultural politics

Credits: 3

Offered: Every other year.

ETHN 206 - Introduction to African American Studies

Study of the intellectual and social origins of the discipline known as African American Studies. Key concepts, themes, and theories of the discipline will be discussed in the class.

Credits: 3

Offered: Offered on occasion.

ETHN 225 - Introduction to Latino History and Culture

An interdisciplinary approach to historicizing the Latino experience in U.S. history. The course examines the political and cultural dynamics of Puerto Ricans, Mexicans, Cubans, and Dominicans within an historical context sensitive to changes and continuities in American history.

Credits: 3

Offered: Every year.

ETHN 240 - Introduction to African American Literature and Culture

An examination of major works by African American novelists, poets, dramatists, filmmakers, musicians, and essayists in terms of the intellectual and political concerns of their periods and locations. Cross-listed with ENGL 240.

Credits: 3

Offered: Every other year.

ETHN 241 - Introduction to Latino/a Literature

Study of works by and about Latinos, including poetry, novels, film, drama, music, and essays. Focus on culture of people of Hispanic descent living in the United States, including Chicanos, Puerto Ricans, Dominican Americans, and Cuban Americans, with some consideration of the ongoing relations between U.S. Latinos and Latin America. (Cross-listed as ENGL 241.)

Credits: 3

Offered: Offered on occasion.

ETHN 242 - American Indian Literature

Study of a variety of works, including traditional tales, novels, poems and memoirs, produced by American Indians from historical beginnings to the present. (Cross-listed with ENGL 242.)

Credits: 3

Offered: Offered on occasion.

ETHN 282 - Pre-Columbian and Colonial Latin America

An introductory survey of the history of early Latin America, from antiquity to the European conquest to the wars for independence in the early 19th century. Special attention is given to indigenous and African influences in the shaping of society and culture. (Cross-listed with HIST 282.)

Credits: 3

Offered: Every other year.

ETHN 283 - Latin America: Revolution & Reform

An introductory survey of the history of modern Latin America, from the wars for independence in the early 19th century to nation-state building, reform movements, violent revolutions, and democratization in the 20th century. Special attention is given to Native American influences in the shaping of modern society. The contested role of the United States in Latin American domestic policy also is considered. (Cross-listed with HIST 283.)

Credits: 3

Offered: Every other year.

ETHN 304 - Latina Literature and Cultural Studies

An examination of contemporary Latina literary productions in the context of representations of Latinas in mainstream U.S. society. The focus of the course is on women of Hispanic descent living and writing in the United States, including work by and about Chicanas, Puerto Ricans, Dominican Americans, and Cuban Americans. Previous course work in Latina/Latino literature not required, but some previous course work related to African American or other ethnic literature, women's literature/feminism, and/or film studies is strongly recommended.

Credits: 3

Offered: Every year.

ETHN 333 - African American History to 1877

Survey of the historical forces, within the African American community and elsewhere, which have shaped the African American experience. The course explores the cultural, social, and political development of African Americans from their African origins through Reconstruction.

Credits: 3

Prerequisite: HIST 105 or HIST 133. Offered: Every other year.

ETHN 334 - African American History since 1877

Survey of the historical forces, within the African American community and elsewhere, which have shaped the African American experience. The course explores the cultural, social, and political development of African Americans from Reconstruction to the present.

Credits: 3

Prerequisite: HIST 106 or HIST 133. Offered: Every other year.

ETHN 356 - American Indian History

A survey of the history of North America from the perspective of American Indians, covering topics from the period before contact through the present. Possible topics may include precontact history and societies, the challenges of contact and colonization, Indian Removal, and continuing questions of sovereignty and treaty rights.

Credits: 3

Prerequisite: HIST 105 or HIST 106 or HIST 133. Offered: Every other year.

ETHN 357 - Indians and Europeans in Early America

Introduces the major topics and themes in the ethnohistory of early America from the earliest contacts between Native Americans and Europeans to the early 18th century through a comparative study of British, French, and Spanish interactions with indigenous peoples.

Credits: 3

Prerequisite: HIST 102 or HIST 105 or HIST 115 or HIST 133. Offered: Every other year.

ETHN 358 - 20th Century American Indian Issues

American Indian peoples in the 20th century. Emphasis on federal policy development, the growth of political pan-Indian movements, the Indian image in popular culture, and current issues raised in the writings of contemporary authors representing a diversity of Indian nations.

Credits: 3

Prerequisite: HIST 106 or HIST 133. Offered: Every other year.

ETHN 359 - Ethnicity and Race

Interdisciplinary approach to race and ethnicity in the United States and other contemporary multiethnic/multiracial societies. Because these courses are equivalents, students who have earned credit for HIST/INDS/WOST 220 are not able to earn credit for this course.

Credits: 3

Offered: Every year.

ETHN 389 - Special Topics

Creating an ETHN specific course different from the INDS version.

Credits: 1-3

Offered: Every other year.

ETHN 400 - Independent Study

Intensive individual study of some aspect of multicultural studies involving a paper or project.

Credits: 1-3

Offered: Every other year.

ETHN 402 - Independent Study: African American Topics

Open only to African American Studies minors. Includes selected interdisciplinary reading, research, discussions and reports on current issues in African American Studies. Proposed independent study project must be described in the student's approved African American Studies proposal.

Credits: 3

Offered: Every year.

ETHN 403 - Contemporary Issues in Latino Studies

The capstone experience for the Latino Studies minor. Selected interdisciplinary reading, research, discussions, and reports on current issues in Latino Studies.

Credits: 3

Offered: Every year.

ETHN 404 - American Indian Capstone

The capstone experience for the American Indian Studies minor. Selected interdisciplinary reading, research, discussions, and reports on current issues in American Indian Studies.

Credits: 3

Offered: Every year.

ETHN 405 - Issues in Multi-Ethnic Studies

The capstone experience for the Multi-Ethnic Studies minor. Selected interdisciplinary reading, research, discussions, and reports on current issues related to Multi-Ethnic Studies.

Credits: 3

Offered: Offered on occasion.

ETHN 489 - Special Topics

Special Topics in Ethnic Studies that are not covered in other courses. Topics will vary by semester and instructor.

Credits: 3

Offered: Offered on occasion.

ETHN 490 - Ethnic Studies Internship

Open only to African American Studies, American Indian Studies, Latino Studies, or Multiethnic Studies minors. An internship can serve as the student's capstone experience. Students proposing internships must have an approved Interdisciplinary Studies proposal which includes the internship. Additionally, they must have completed the application required by the campus Office of Internships.

Credits: 1-6

Offered: Every other year.

EXSC - Exercise Science**EXSC 250 - Introduction to Applied Human Physiology**

This course examines significant and recent topics in exercise physiology, wellness, rehabilitation, biomechanics, motor learning, nutrition and health benefits associated with exercise. Emphasis will be placed on educational topics such as human physiology, medicine, rehabilitation, obesity, nutrition, advancements in cardiovascular health, hypokinetic diseases and fitness testing. Discussions and presentations will integrate topics from a variety of disciplines and their impact on the broad topic of applied human physiology. Required for Exercise Science majors.

Credits: 1

Offered: Every Fall semester.

EXSC 300 - Exercise Physiology

The purpose of this course is to examine human physiology and the responses that occur during both acute and chronic exercise. An understanding of how the body responds to this stress is an imperative for the athletic trainer, health professional (Occupational Therapy, Physical Therapy, Doctor of Chiropractic) or exercise physiologist. Additionally, the course will examine environmental factors, and the effects of gender and age on the adaptive response to exercise. Emphasis is placed on bioenergetics as well as cardiovascular and respiratory responses. Also discussed are the effects of ergogenic aids on human physiology performance. The objective of this course is for students to gain an understanding and working knowledge of how the body responds to exercise so that they may apply this knowledge to their chosen field. Additionally, students will be introduced to current research in the field of exercise physiology, applied physiology and experimental physiology. Laboratory activities will focus on measuring cardiorespiratory, metabolic (aerobic and anaerobic) and perceived exertion responses to sub-maximal and maximal exercise. Three hours of lecture and two hours of lab per week.

Credits: 4

Prerequisite: BIOL 245 and BIOL 246. Offered: Every semester.

EXSC 301 - Kinesiology

The purpose of the course is to acquaint the student with functional anatomy and the biomechanics of human movement and performance. The focus will be on the physiology of skeletal muscle, muscular arrangements around the major joints of the body, and the properties of muscular force production. There will also be an examination of the skeletal muscle adaptation to various forms of stimuli.

Credits: 3

Offered: Every year.

EXSC 302 - Exercise Prescription

The course is designed to introduce the student to theoretical and practical concepts of exercise assessment, exercise interpretation and exercise prescription. Course content includes the principles and practices of prescribing exercise to healthy individuals, and individuals with conditions such as cardiac disease, diabetes, physical disabilities and the aged.

Credits: 3

Offered: Every year.

EXSC 304 - Exercise Nutrition

Exercise nutrition integrates the sciences of nutrition, exercise physiology, and exercise metabolism. The first section of this course focuses on food and the macronutrients and micronutrients they provide, nutrient structure and characteristics, food digestion and nutrient absorption, and the conversion of food to energy. The second section of this course focuses on optimal nutrition for exercise, training, and health. The third and final section of the course provides information about the development and marketing of nutritional products and ergogenic (performance enhancing) aids.

Credits: 3

Prerequisite: PHED 200 and HLTH 303. Offered: Every year.

EXSC 305 - Economics of Sport

Course covers the principles of macro and micro economics related to the sport industry on a regional and national level, supply and demand, growth of the sport industry, venues and events, economic impact of facilities manufacture and television on intercollegiate and professional sport.

Credits: 3

Prerequisite: ECON 201 and ECON 202. Offered: Every year.

EXSC 306 - Biomechanics

The course stresses the quantitative nature of biomechanics that integrates anatomy, physics, mathematics, and physiology for the study of human movement. The course will cover the foundations of human movement, functional anatomy, and mechanical analysis of human motion.

Credits: 3

Prerequisite: STAT 200 or PSY 200 or ECON 200 or SOC 200 and PHED 301 or EXSC 301. Offered: Every year.

EXSC 315 - Prevention and Care of Athletic Injuries

Study of prevention and recognition of injuries commonly associated with athletic competition. Includes the study of anatomy and physiology involved in injuries. One of several courses designed to meet state mandate for interscholastic coaching.

Credits: 3

Prerequisite: HLTH 115 and BIOL 245. Offered: Every year.

EXSC 316 - Athletic Training Internship I

Develops the basic competencies of students interested in athletic training. Areas included in the internship will include preventive taping, injury prevention, the basics of rehabilitation, coverage of home events, and basic functioning of a training room. Athletic Trainer required.

Credits: 1-3

Offered: Every semester.

EXSC 317 - Athletic Training Internship II

The study of a particular topic related to physical education and recreation. Periodic meetings with an appropriate instructor will be scheduled. The topic may encompass individual research or a practical experience.

Credits: 1-4

Prerequisite: EXSC 316. Offered: Every semester.

EXSC 350 - Kinesiology

The purpose of the course is to acquaint the student with functional anatomy and the biomechanics of human movement and performance. The focus will be on the physiology of skeletal muscle, muscular arrangements around the major joints of the body, and the properties of muscular force production. There will also be an examination of the skeletal muscle adaptation to various forms of stimuli.

Credits: 3

Prerequisite: EXSC 300 or EXSC 410. Offered: Every semester.

EXSC 390 - Special Topics in Exercise Science

This special topics course emphasizes exercise science topics not covered in detail by regular courses and/or not offered on a regular basis. The course explores the field of exercise science and uses related literature to discuss current issues in exercise science. Students will pick topics, research them, critically analyze (interpret, explain) research related to a topic and present the research to the class. Guest lecturers will be used to present students with information on specialty areas in Exercise Science.

Credits: 1-4

Offered: Every year.

EXSC 401 - Senior Seminar in Exercise Science

This is the capstone course for exercise science and will bridge the gap between undergraduate and graduate Education and careers. Discussion items will provide a broad context for knowledge about the field of exercise science gained throughout the undergraduate years. Part of this process will involve exploring connections between both oneself and the educational/career opportunities the field of exercise science.

Credits: 3

Offered: Every year.

EXSC 410 - Advanced Exercise Physiology I

This course will expose students to advanced concepts in both applied and exercise physiology. The course will expose students to theoretical and clinical physiological research with regard to various forms of exercise

Credits: 4

Prerequisite: BIOL 245 and BIOL 246. Offered: Every year.

EXSC 420 - Advanced Exercise Physiology II

This course is designed to cover principles related to exercise circumstances which include analysis of the effect of exercise on human physiologic function. Special focus will be given to physiological responses of the nervous and endocrine systems to various forms of exercise.

Credits: 4

Prerequisite: EXSC 410. Offered: Every year.

EXSC 425 - Biomechanics

The course stresses the quantitative nature of biomechanics that integrates anatomy, physics, mathematics, and physiology for the study of human movement. The course will cover the foundations of human movement, functional anatomy, and mechanical analysis of human motion.

Credits: 3

Prerequisite: STAT 250 and EXSC 350. Offered: Every semester.

EXSC 450 - Advanced Exercise Physiology

The purpose of this course is to build and expand on the concepts covered in exercise physiology (EXSC 300). An emphasis will be placed physiological responses to environmental and terrestrial extremes (heat, cold, fluid restriction, altitude etc). Special topics will include the nature and origin of fatigue, dehydration, evolutionary explanations for physiological responses and an examination of the concept of exercise as medicine.

Credits: 3

Prerequisite: EXSC 300. Offered: Every Spring Semester.

EXSC 491 - Senior Capstone - Research

Exercise Science students will perform a capstone experience in their senior year. The experience can take the form of research, an internship or course, and will provide significant learning experiences in problem solving and written and oral communication. Capstone Research: The student will fulfill expectations for capstone research via two semesters of UGR (3 credits/semester) during the senior year, or a 10 week summer research position during the summer before the senior year. The faculty mentor will bear responsibility for the evaluation of the learning and inquiry experience. A formal paper will be expected. Oral presentation will occur during a capstone UGR/internship symposium.

Credits: 0-6

Offered: Every semester.

EXSC 492 - Senior Capstone - Internship

Exercise Science students will perform a capstone experience in their senior year. The experience can take the form of research, an internship or course, and will provide significant learning experiences in problem solving and written and oral communication. Capstone Internship: The student will fulfill expectations for capstone internship via a 3 credit internship experience (120 hours). Acceptable experiences include job apprenticeships (not unlike the clinical internships of MT students) involving very active learning. Research projects performed off-campus (not including REUs) are also acceptable as capstone internship experiences. A site supervisor will provide evaluations to the faculty mentor; the faculty mentor will bear responsibility for the final evaluation of the learning experience. A formal paper will be expected. Oral presentation will occur during a capstone UGR/internship symposia.

Credits: 0-6

Offered: Every semester.

EXSC 493 - Senior Capstone - Course

Exercise Science students will perform a capstone experience in their senior year. The experience can take the form of research, an internship or course, and will provide significant learning experiences in problem solving and written and oral communication. We will offer capstone 'sections' of UL courses on a rotating basis. Some of these courses will be modifications of currently existing courses; others may be new courses. Examples include Muscles and Movement and Advanced Exercise Physiology. Courses will be designed to include significant inquiry based learning, problem solving, and written and oral presentation' enrollment will be limited and carefully controlled. Students will write a formal paper and offer a formal presentation.

Credits: 0-6

Offered: Every semester.

FILM - Film Studies**FILM 220 - Film Form**

An introductory-level lecture course designed to introduce students to the formal issues involved in the production and perception of moving images. The course provides students with an understanding of aesthetic concepts that support the making of films, digital cinema, videos or video games. It reinforces the use of aesthetic vocabulary and demonstrates how audiences interact with, and are manipulated by, film language and syntax. Therefore, the course is useful for students who wish to enhance their skills in the making of films and videos as well as for students who wish to refine their ability to deconstruct motion pictures for critical and analytical purposes.

Credits: 3

Offered: Every year.

FILM 309 - Film Analysis

A study of contemporary filmmakers' work in feature length films. Particular focus on production elements that create aesthetic values and reflect our times and concerns.

Credits: 3

Prerequisite: COMM 155. Offered: Every year.

FILM 399 - Special Topics

A variable-content course. The topic will be announced in the online Course Offerings when the course is offered.

Credits: 1-4

Offered: Every other year.

FILM 401 - Independent Study

The course allows students to design and pursue independent, directed projects in film studies. As a rule,

these studies will examine in greater depth or breadth topics that are explored in current course offerings or are not available in current offerings. Permission of the coordinator of Film Studies required.

Credits: 1-4

Offered: Every other year.

FILM 470 - Senior Film Seminar

The capstone experience for the Film Studies Minor, involving advanced study, usually concerned with critical or historical issues in film. Content varies according to instructor and course title. Enrollment requires completion of 12 credits of film courses or permission of the instructor.

Credits: 3

Offered: Every year.

FREN - French**FREN 115 - Elementary French I**

Designed for students with no previous preparation. Study of fundamental speech patterns. Initial emphasis on developing listening comprehension, speaking skills, including pronunciation, with progressive emphasis on reading and writing skills. Discussion of selected cultural aspects.

Credits: 3

Offered: Every semester.

FREN 116 - Elementary French II

Designed for students with one semester of college level French or equivalent. Further practice in pronunciation and fundamental speech patterns. Continued development of listening, speaking, reading and writing skills for communicative proficiency. Discussion of selected cultural aspects.

Credits: 3

Prerequisite: FREN 115 or NY Regents French Exam Score of an 80 or better. Offered: Every semester.

FREN 215 - Intermediate French I

Continues the work required for increasing performance levels in the four skills of reading, writing, speaking, and understanding of the language. Regular language laboratory work for further reinforcement and drill.

Credits: 3

Prerequisite: FREN 116 or NY Regents French Exam Score of an 85 or better. Offered: Every year.

FREN 216 - Intermediate French II

Development of listening, speaking, reading and writing skills to attain proficiency required for upper level courses in French. Expansion of vocabulary and advanced grammar. Selected cultural and literary readings.

Credits: 3

Prerequisite: FREN 215. Offered: Every year.

FREN 308 - Advanced French Phonetics and Diction

Detailed study of rules of pronunciation and transcription into International Phonetic Alphabet (IPA). Pronunciation drills, exercises in sound discrimination and intonation.

Credits: 3

Prerequisite: FREN 215 or FREN 216. Offered: Every year.

FREN 310 - The Literature/Culture of Quebec

An exploration of Quebec's cultural uniqueness through the literature that has played a central role in defining it. The historical and political events that have influenced the development of Quebec literature and culture will also be examined. Review of separatist movement included.

Credits: 3

Prerequisite: FREN216. Offered: Offered on occasion.

FREN 315 - French Masterpieces

An introduction to the three literary genres: fiction, theatre, and poetry, with an emphasis on poetry and fiction. Selections are from a wide variety of authors and time periods, from the Renaissance to the 20th century. Primary focus is stylistic but considerable time will also be devoted to literary movements and to French history and culture. Different types of assessment will include oral presentations by the individual student and groups, papers, quizzes, discussions, and exams which will all be in French.

Credits: 3

Prerequisite: FREN 216. Offered: Every other year.

FREN 316 - French Plays and Prose

An introduction to the three literary genres: fiction, theatre, and poetry, with an emphasis on drama and fiction. Selections are from a wide variety of authors and time periods, from the Renaissance to the 20th century. Primary focus is stylistic but considerable time will also be devoted to literary movements and to French history and culture. Different types of assessment will include oral presentations by the individual student and groups, papers, quizzes, discussions, and exams which will all be in French.

Credits: 3

Prerequisite: FREN 216. Offered: Every other year.

FREN 317 - French Conversation

Exercises and activities designed to promote conversations about readings, films, and/or issues in France and the French-speaking world. Ample opportunities to practice understanding and speaking French in pair and small group settings.

Credits: 3

Prerequisite: FREN 216. Offered: Every year.

FREN 318 - French Composition

Syntactical patterns of French, vocabulary building, translation, and free composition. Useful techniques of composition, problems of translation and questions of style discussed.

Credits: 3

Prerequisite: FREN 216. Offered: Every year.

FREN 319 - Survey of French Literature I

History of principal movements and writers, from the beginning through the 17th century, studied in light of historical and social backgrounds. Discussion and lectures in French. Student reports.

Credits: 3

Prerequisite: FREN 315 or FREN 316. Offered: Every year.

FREN 320 - Survey of French Literature II

History of principal movements and writers, from the 17th century to the present, studied in light of historical and social backgrounds. Discussion and lectures in French. Student reports.

Credits: 3

Prerequisite: FREN 315 or FREN 316. Offered: Every year.

FREN 323 - France Today

France today is a country struggling with the tensions of social and economic modernization. The subject matter, therefore, will be actual and current in an effort to understand the broad sweep of social, economic, political, and cultural changes in post-war France.

Credits: 3

Prerequisite: FREN 315 or FREN 316. Offered: Offered on occasion.

FREN 341 - Le Grand Siecle

Detailed study of 17th century French classicism, its formation, flowering. Student reports, discussions.

Credits: 3

Prerequisite: FREN 315 or FREN 316. Offered: Offered on occasion.

FREN 351 - The Enlightenment

Major works of 18th century French literature; emphasis on Montesquieu, Voltaire, Diderot, Rousseau, Marivaux, and Beaumarchais. Class work in French.

Credits: 3

Prerequisite: FREN 315 or FREN 316. Offered: Offered on occasion.

FREN 361 - Contemporary French Literature

Novel and theater since Proust. Emphasis on post-1940 trends: existentialism, the New Novel and Theatre of the Absurd.

Credits: 3

Prerequisite: FREN 315 or FREN 316. Offered: Offered on occasion.

FREN 380 - French Drama in Practice

Seven-week course in which students will read, study, and stage an important dramatic work of French literature. The course will end with two public performances of the work(s) studied in class.

Credits: 3

Prerequisite: FREN 317 and (FREN 315 or FREN 316). Offered: Offered on occasion.

FREN 381 - Topics for French Conversation

Students engage in discussions and presentations on a variety of topics covering social, scientific, artistic, philosophical, psychological, religious, and political issues.

Credits: 2

Prerequisite: FREN 308 and FREN 317. Offered: Every other year.

FREN 400 - Special Topics in French

Special areas in French language, literature, or culture and civilization not covered by regular courses.

Credits: 1-3

Prerequisite: FREN 315 or FREN 316. Offered: Offered on occasion.

FREN 410 - Directed Study

Individual directed study of a particular area or topic in French language or literature. Periodic meetings with instructor, writing of a substantial paper.

Credits: 1-3

Offered: Offered on occasion.

FREN 415 - Individual Oral Proficiency Development In French

Student will develop a list of weekly activities, such as watching movies, listening to music, reading of articles and books, etc. that will further enhance the student's oral proficiency in French. Student will meet once a week with instructor to discuss the activities. The course will end with retaking of Oral Proficiency Interview (OPI) exam. Student is responsible for the cost of the exam.

Credits: 1

Offered: Every year.

FREN 417 - Romanticism and Realism

Detailed study of literary movements and major writers of 19th century.

Credits: 3

Prerequisite: FREN 315 or FREN 316. Offered: Offered on occasion.

FREN 419 - Studies in French Literature and Culture

Focus on a major theme, movement, author, or period in the literature and/or culture of France. The course can be repeated as its content changes.

Credits: 3

Prerequisite: FREN 318 and FREN 315 or FREN 316. Offered: Offered on occasion.

FREN 420 - Studies in Francophone Literature and Culture

Focus on a major theme, movement, author or period of one or more French-speaking regions around the world. The course can be repeated as its content changes.

Credits: 3

Prerequisite: FREN 318 and FREN 315 or FREN 316. Offered: Offered on occasion.

FREN 422 - Advanced French Conversation

Intensive practice in spoken French and listening comprehension at an advanced level.

Credits: 3

Prerequisite: FREN 317 and FREN 308. Offered: Offered on occasion.

FREN 423 - Senior Seminar

In-depth study of a literary or cultural topic selected by the instructor. Major written paper and oral presentation required. All work to be done in French.

Credits: 3

Prerequisite: (FREN 318 and FREN 319) or FREN 320. Offered: Every year.

FREN 424 - Stylistics

To give feeling for French style, shades of meaning, and mastery of stylistic difficulties not taken up in more elementary courses. Study of classic French prose; translations and free composition.

Credits: 3

Prerequisite: FREN 318. Offered: Every year.

FREN 485 - Undergraduate Learning Assistantship for French

Students serve as undergraduate learning assistants to any of the intermediate and phonetic courses in French, to be decided in consultation with the instructor. Assistants help the instructor both in the classroom as well as outside the classroom monitoring class activities online and offering tutoring. Assistants are also responsible for developing and teaching lesson(s) on grammar and/or cultural topics as agreed upon with the instructor. Assistants learn and develop best practices in language teaching. Students in education certification programs preferred.

Credits: 3

Prerequisite: FREN 315 or FREN 316 and FREN 317 and FREN 318. Offered: Every semester.

FREN 500 - Special Topics in French

Special areas in French not covered by regular courses. Permission of department.

Credits: 1-3

Offered: Offered on occasion.

FREN 510 - Directed Study in French

Individual supervised study of particular area or topic in any of the department's French language or literature offerings. Periodic meetings with instructor and writing of a substantial paper. Permission of department.

Credits: 1-3

Offered: Offered on occasion.

GEO - Geosciences**GEO 101 - Geology of National Parks**

The geology of many of America's most visited parks, including the geologic features, the processes which formed them, the chronology of events that led to the rocks, structures, and landscapes of the natural treasures, and the environmental problems that now threaten the parks. Lectures, videos, small-group discussions, use of the Internet, in-class quizzes and exams. Small-group preparation and presentation on a geologically significant national monument or park. Not open to students who have passed GEO 165 Geology I. Students may take GEO 169 General Geology Lab as a co-requisite to expand their

knowledge of minerals, rocks, fossils, and topographic and geologic map reading and interpretation.

Credits: 3

Offered: Every semester.

GEO 102 - Freshman Seminar

This course will introduce students to the Geosciences program at SUNY Fredonia. Throughout the semester, students will meet other Geosciences majors and the department faculty, including an introduction to faculty areas of specialization and research. Students will learn about local geology through lecture and field trips, as well as what they will be exposed to over the next four years with regard to coursework, research possibilities, job prospects, and graduate school. The seminar will provide students with networking opportunities as they make their way through demanding program requirements.

Credits: 1

Offered: Every Fall semester.

GEO 121 - Landform Geography

An introduction to the field of geography, with particular emphasis on the driving physical forces and processes that shape the earth's surface. The impact on human activities and patterns will be examined. A spatial approach will be used to study the nature and character of physical space including measurements, relations, locations, and the distribution of phenomena. The course will meet twice a week in a traditional classroom setting and once a week in a laboratory setting, which will include occasional field trips to explore the local area in an effort to observe how landforms, vegetation and microclimate vary over short distances.

Credits: 3

Offered: Every year.

GEO 139 - Mass Extinctions

The course provides an introduction to the history of life on Earth with emphasis on the five mass extinctions throughout geologic times and the sixth mass extinction occurring today.

Credits: 1

Offered: Offered on occasion.

GEO 140 - Catastrophic Weather

Examines the development of severe and unusual weather phenomena including floods, tornadoes, thunderstorms, hurricanes and other tropical storms, blizzards, and electrical storms. The frequency and geographic occurrence of these events is considered in terms of current climatic models.

Credits: 1

Offered: Every semester.

GEO 141 - Age of Dinosaurs

The course centers on life in the Mesozoic era of geological time, when dinosaurs rule the earth. In addition to discussing the different types of dinosaurs and their ecological roles, the role of climatic and catastrophic extinction in shaping this unique time in geologic history is explored. Topics also include the evolution of dinosaurs and their relationship to modern birds, the controversy over "warm-blooded" versus "cold-blooded" metabolism, and the ultimate extinction of the dinosaurs leading to the age of mammals.

Credits: 1

Offered: Every semester.

GEO 142 - Drifting Continents

A review of modern ideas of crustal movement, the origin of volcanoes and earthquakes, the continents and their history of breakup, drifting and collisions to create mountain belts, and the ocean basins and their formation by seafloor spreading. The course covers the evolution in thought of the theories of continental drift and plate tectonics.

Credits: 1

Offered: Every semester.

GEO 143 - Evolution of Life

The course is an introduction to basic principles relating to present understanding of biological evolution. Evolution is a major scientific paradigm that underlies both theoretical and practical research in the life sciences, and it has strong interdisciplinary support from biology and other branches of science. The course explores the development of evolutionary ideas from early concepts up to the modern synthesis. Topics include: origin of life, geologic record and geologic time, inheritance and Darwinian selection, patterns of evolution, macroevolution, and modern opposition to evolutionary science. Lecture format.

Credits: 1

Offered: Every semester.

GEO 145 - Geology of New York State

Much of earth history can be explored by the study of New York State geology. The course explores - among other things - the evolution of life in vast marine basins, the uplift of lofty mountains during the Appalachian Orogeny, followed by the more recent advance of Pleistocene ice sheets that covered the state until about 10,000 years ago. Students should come away with a better understanding and appreciation for the rich geological history of their home state.

Credits: 1

Offered: Every semester.

GEO 146 - Great Ice Age

One of the series of five-week introductory courses exploring topics in the geological sciences. The Great Ice Age topic explores the interesting history and effects of glacial periods on Earth, with parallels to current interest in, and observations on, global climate change. This course provides one credit in the category of CCC Natural Sciences.

Credits: 1

Offered: Every semester.

GEO 148 - Trembling Earth

A mini-course that examines earthquakes as an example of natural hazards. Topics include history of earthquake science, quake causes, prediction, risk assessment, engineering response, and response of culture such as artistic renderings of quakes.

Credits: 1

Offered: Every year.

GEO 149 - Volcanoes

The course deals with the science of volcanology. Topics include the types of magmas (molten rock) and rocks that produce the different kinds of volcanoes, physical and chemical controls on eruptions, and hazards and benefits of volcanoes. Scientific study and the effect of volcanism on human beings are discussed in the context of major historical eruptions.

Credits: 1

Offered: Every semester.

GEO 150 - Moons and Planets

Historical and scientific treatment of the solar system. Emphasis on the development of astronomical thought from ancient times to the flowering of modern concepts of planetary origins and evolution. Problem sets deal with analysis of classical and modern concepts, including mathematical solutions. High school math through Math III suggested, but not required.

Credits: 3

Offered: Every year.

GEO 152 - Evolution of Western Science

Examines the progression of scientific thought in the Western world from Paleolithic cultures, through Mesopotamia, Greek, and European civilizations. Emphasis on classic works of philosophers, mystics, and scientists and their contribution toward molding the nature and practice of modern-day science. Lecture format with formal group discussions, videos, and periodic question sets. One major research paper required.

Credits: 3

Offered: Every other year.

GEO 160 - Oceanography

Origin of the oceans, chemical and physical properties of sea water, circulation of the oceans, waves, tides, shoreline processes, marine biology, and the productivity of the ocean.

Credits: 3

Offered: Every year.

GEO 165 - Geology I

Introduction to earth materials (minerals, rocks, soils); Earth's interior structure; geological processes in operation on and beneath the surface of the earth and their effects (weathering, erosion, deformation and geologic structures, earthquakes, plate tectonics, ocean basins, running water, ground water, glaciers, winds and deserts, coasts and shorelines); techniques of dating geological events. Lectures, group discussion. High school background in earth sciences not required. Geosciences majors and minors, including Childhood Education Science/Geoscience Concentration majors, should take GEO 169 General Geology Lab as a corequisite.

Credits: 3

Offered: Every semester.

GEO 169 - General Geology Lab

Laboratory introduction to topographic and geologic maps, and earth materials (minerals, rocks and fossils). Exercises include use of these tools to recognize and interpret geological processes, history and structure.

Credits: 1

Prerequisite: GEO 165*. Cross-Listed as: * Indicates that the course can be taken in the same semester. Offered: Every semester.

GEO 175 - Thirsty Planet

The course investigates ancient and modern water supplies, studies surface and underground watersheds, evaluates risks to water quantity, quality and distribution systems, reviews water law and regulation, and reflects on the role of water resources in war and terror, food and transport, scenery and beauty.

Credits: 3

Offered: Every year.

GEO 180 - Weather and Climate

Introduction to the transitory and long-term physical, chemical, and dynamic states of the atmosphere, measurement of weather factors, weather forecasting, regional climates, climatic change, weather and climate

modification, and practical aspects and applications of weather and climate.

Credits: 3

Offered: Every year.

GEO 210 - Geology II

Physical history of the earth in relationship to orderly development of life throughout geological time. Lecture format.

Credits: 3

Prerequisite: GEO 165. Offered: Every year.

GEO 215 - Minerals and Rocks

Theory, geological occurrence, and identification of the common minerals and rocks. A well-written report, critiqued and returned for revision, is required. Laboratory work includes a brief introduction to the petrographic microscope, but mostly emphasizes hand specimen identification. Two-day field trip to the Thousand Islands/Laurentian lowlands of New York State, or to Bancroft, Ontario mineral localities.

Credits: 4

Prerequisite: GEO 165*. Cross-Listed as: * Indicates that the course can be taken in the same semester. Offered: Every other year.

GEO 301 - Cartography

Comprehensive treatment of maps and map making. Includes the history of maps and their construction from ancient times to present, including affect on history and politics. Also entails essential elements of maps, their construction by manual and computer means, and how they are used to express information. Lecture and lab. Can be taken as Geographic Information Systems (GIS) elective.

Credits: 4

Offered: Every year.

GEO 311 - Global Climate

Introduction to short and long term physical, chemical and dynamic states of the atmosphere, measurement of meteorological parameters, weather systems and forecasting. Special emphasis is placed on regional climates, climatic change and potential societal economic effects of climatic change.

Credits: 3

Offered: Every year.

GEO 329 - Regional Field Geology

Participants are exposed to issues of regional Historical Geology during a seven-day field trip (Summer Session I). Students observe the record of multiple mountain-building

episodes and basin evolution through a series of roadcut, stream, and quarry exposures. Aspects of the geologic record including cross-cutting relationships, biostratigraphy and paleoenvironmental inference are used at stops to reconstruct the regional geology puzzle. Knowledge of structural geology is recommended but is not essential. The course applies principles learned in GEO 210, but it also supplements information in GEO 345, GEO 370, and GEO 400. Students attend several orientation classes during the spring semester in preparation for the field course. During the course, students keep notes and prepare a field diary containing information from field stops. The course grade is based on the notebook turned in upon completion of the course. Offered in years when GEO 461 is not offered.

Credits: 2

Prerequisite: GEO 210. Offered: Every other year.

GEO 330 - Geomorphology

Study of geomorphic processes, relating topographic features to underlying rocks and structures and to processes of erosion, deposition, and earth movements. Lectures and laboratory supplemented by field work. Library research leads to a written term paper.

Credits: 4

Prerequisite: GEO 165 and GEO 169. Offered: Every year.

GEO 331 - Restless Earth

The course links the many time frames and events of geodynamics ranging from continental drift to earthquake hazards. The subject is presented from several viewpoints, including the history of science, spatial and temporal distribution of hazards and resources, and impacts on culture. Learning activities include small group discussions, computer manipulation of spatial data, reading from historical writings of scholars such as Lyell and Darwin, and review of cultural impacts through paintings and films. Prerequisite: Any introductory science course.

Credits: 3

Prerequisite: GEO 165. Offered: Offered on occasion.

GEO 335 - Geophysics

Emphasis on how problems dealing with the shape, mass, structure, composition, and tectonic history of the Earth can be resolved using such methods of geophysics as gravity, magnetics, and seismology. Lectures, laboratory, and field work lead to several written papers.

Credits: 4

Prerequisite: GEO 165 and GEO 169. Offered: Every other year.

GEO 341 - Stars and Galaxies

An introduction to stellar astronomy with emphasis on what is currently known about the life history of stars, the structure of galaxies - with emphasis on our own Milky Way Galaxy - and nebulae, and black holes and quasars, and dark matter. Includes a historical overview of the study of stellar astronomy as well as considerations of the origin and ultimate fate of the universe, and the origin of life in the universe. Must have completed the Natural Sciences category of the College Core Curriculum.

Credits: 3

Offered: Offered on occasion.

GEO 345 - Paleontology

Principles of paleontology; biologic relationships of fossil organisms, particularly ancient invertebrates. Emphasizes evolutionary principles and trends. Field work supplements lecture and laboratory.

Credits: 4

Prerequisite: GEO 210. Offered: Every other year.

GEO 359 - Vanishing Earth Resources

An interdisciplinary synthesis of perspectives on the Earth's resources. A broad range of resources will be discussed in the context of population growth, the global commons, resource management, sustainable development, and environmental policy. The course will focus on the measurement, analysis, and evaluation of resources such as minerals, vegetation, animals, soils and landforms, atmosphere and climate, and water.

Credits: 3

Prerequisite: GEO 121 or GEO 165. Offered: Every other year.

GEO 370 - Structural Geology

Theoretical aspects of stress and strain as applied to natural rock systems; description and origin of rock structures in Earth's crust. Laboratory work stresses structural interpretation of geologic maps. Field work supplements lectures and laboratory. Students are required to complete a paper on some aspect of structural geology; part of the revision processes will include peer review.

Credits: 4

Prerequisite: GEO 165 and GEO 169. Offered: Every year.

GEO 400 - Stratigraphy

Principles of stratigraphy with examples of stratigraphic successions from various sedimentary basins around the world. Course emphasizes techniques of basin analysis and mechanisms of basin formation. The writing and peer review of abstracts are stressed in the course. In addition, students are required to submit a written report describing

their results of a field stratigraphic study of the Devonian section of western New York.

Credits: 4

Prerequisite: GEO 165 and GEO 169 and GEO 210.

Offered: Every year.

GEO 410 - Directed Study

Independent study and research in areas beyond formal courses. Permission of department.

Credits: 1-4

Offered: Every semester.

GEO 411 - Mineralogy

An introduction to descriptive crystallography and to chemical, physical, determinative and descriptive mineralogy. Areas covered include: crystal symmetry, classification, morphology, crystal chemistry, physical properties, geologic occurrence, significance, and characteristic properties of minerals. Lectures and laboratory supplemented with one field trip.

Credits: 4

Prerequisite: CHEM 115* and GEO 165*. Cross-Listed as:

* Indicates that the course can be taken in the same semester. Offered: Every other year.

GEO 421 - Petrology

Lecture emphasis on problems and hypotheses involved with the origin of rocks. Laboratory stresses use of the petrographic microscope for identification, description, and analysis of rock materials. A well-written research paper, which may include computer, lab, and library research, is required. Course includes a weekend trip to study classic rock terrains in the Adirondack Mountains.

Credits: 4

Prerequisite: GEO 411. Offered: Every other year.

GEO 431 - Geochemistry

Scope, literature, and history of geochemistry. Principles and applications of geochemistry, including the elements; isotope geology; thermodynamics; water chemistry; crystal chemistry; organic geochemistry; geochemistry of sedimentary, igneous and metamorphic rocks. Lab work emphasizes instrumental methods of analysis.

Credits: 4

Prerequisite: GEO 411. Offered: Every other year.

GEO 445 - Geosciences Internship

Approved work-training experience with state or federal agency, museum, or industrial firm. Permission of department.

Credits: 1-15

Offered: Every semester.

GEO 450 - Hydrogeology

Hydrologic problems are analyzed by organizing information into a water budget and then quantifying the variables in the water budget equation. Common hydrologic variables include precipitation, evaporation, transpiration, stream flow, infiltration and groundwater. Groundwater is emphasized. Lectures supplemented by field work, lab measurements, and computer modeling.

Credits: 4

Prerequisite: GEO 165 and GEO 330 and GEO 169.

Offered: Every year.

GEO 455 - Laboratory Supervision in Geosciences

Students serve as laboratory assistants under supervision of faculty member. Four hours of work per week expected for each hour of credit elected; may be taken more than once. Does not count toward major requirements. Permission of the chairperson.

Credits: 1

Offered: Every semester.

GEO 459 - Seminar in Geosciences

Individual student presentation of two 20-minute seminars pertaining to the geology and geologic evolution of different provinces of the North American continent. Students are required to prepare an abstract and bibliography of their presentations. Permission of department.

Credits: 1

Offered: Every semester.

GEO 461 - Field Geology

Two-week geologic mapping course immediately following end of spring semester (Summer Session I). Held at Catskill, N.Y.

Credits: 3

Prerequisite: GEO 370. Offered: Every other year.

GEO 471 - Senior Thesis

Research leading to a comprehensive report reviewed and evaluated by faculty. Open to B.S. Geology majors in Honors Track only. Permission of department/enrollment in B.S. Geology Honors track.

Credits: 3

Offered: Every semester.

GEO 480 - Special Topics in Geosciences

Special area of geosciences not covered by regular courses.

Credits: 1-4

Offered: Every semester.

GEO 481 - Special Topics in Geosciences

Special area of geosciences not covered by regular courses.

Credits: 1-4

Offered: Every semester.

GEO 482 - Special Topics in Geosciences

Special area of geosciences not covered by regular courses.

Credits: 1-4

Offered: Every semester.

GEO 483 - Special Topics in Geosciences

Special area of geosciences not covered by regular courses.

Credits: 1-4

Offered: Every semester.

GEO 484 - Special Topics in Geosciences

Special area of geosciences not covered by regular courses.

Credits: 1-4

Offered: Every semester.

GEO 485 - Special Topics in Geosciences

Special area of geosciences not covered by regular courses.

Credits: 1-4

Offered: Every semester.

GEO 486 - Special Topics in Geosciences

Special area of geosciences not covered by regular courses.

Credits: 1-4

Offered: Every semester.

GEO 487 - Special Topics in Geosciences

Special area of geosciences not covered by regular courses.

Credits: 1-4

Offered: Every semester.

GEO 488 - Special Topics in Geosciences

Special area of geosciences not covered by regular courses.

Credits: 1-4

Offered: Every semester.

GEO 489 - Special Topics in Geosciences

Special area of geosciences not covered by regular courses.
Permission of the department.

Credits: 1-4

Offered: Every semester.

GEO 505 - Earth Science of Chautauqua County

This is a field based course. While it includes some classroom training as topics are introduced, the majority of instruction will occur at various sites across Chautauqua County. General areas of instruction will include geologic stratigraphy, rocks and minerals, water processes (fluvial and lacustrine), soils and groundwater, glacial geology, meteorology, and astronomy.

Credits: 3

Offered: Offered on occasion.

GEO 580 - Special Topics in Advanced Geosciences

Special areas of problems in advanced geosciences not covered by regular graduate courses.

Credits: 1-4

Offered: Offered on occasion.

GEO 581 - Special Topics in Advanced Geosciences

Special areas of problems in advanced geosciences not covered by regular graduate courses.

Credits: 3

Offered: Offered on occasion.

GEO 582 - Special Topics in Advanced Geosciences

Special areas of problems in advanced geosciences not covered by regular graduate courses.

Credits: 3

Offered: Offered on occasion.

GEO 583 - Special Topics in Advanced Geosciences

Special areas of problems in advanced geosciences not covered by regular graduate courses.

Credits: 3

Offered: Offered on occasion.

GEO 584 - Special Topics in Advanced Geosciences

Special areas of problems in advanced geosciences not covered by regular graduate courses.

Credits: 3

Offered: Offered on occasion.

GEO 585 - Special Topics in Advanced Geosciences

Special areas of problems in advanced geosciences not covered by regular graduate courses.

Credits: 3

Offered: Offered on occasion.

GEO 586 - Special Topics in Advanced Geosciences

Special areas of problems in advanced geosciences not covered by regular graduate courses.

Credits: 3

Offered: Offered on occasion.

GEO 587 - Special Topics in Advanced Geosciences

Special areas of problems in advanced geosciences not covered by regular graduate courses.

Credits: 3

Offered: Offered on occasion.

GEO 588 - Special Topics in Advanced Geosciences

Special areas of problems in advanced geosciences not covered by regular graduate courses.

Credits: 3

Offered: Offered on occasion.

GEO 589 - Special Topics in Advanced Geosciences

Special areas of problems in advanced geosciences not covered by regular graduate courses.

Credits: 3

Offered: Offered on occasion.

GEO 590 - Independent Study

Independent study of topics not covered in regular graduate course offerings and pertinent to student's program of study or future career.

Credits: 3

Offered: Offered on occasion.

GEO 610 - Independent Research

Independent research and study in current geoscientific problems based on laboratory and field research or current literature.

Credits: 3

Offered: Offered on occasion.

GEO 615 - Independent Research

Independent research and study in current geoscientific problems based on laboratory and field research or current literature.

Credits: 3

Offered: Offered on occasion.

GEO 690 - Thesis Research

Thesis research projects in an area of the geosciences.

Credits: 1-3

Offered: Offered on occasion.

GERM - German**GERM 115 - Elementary German I**

Designed for students with no previous preparation. Study of fundamental speech patterns. Initial emphasis on developing listening comprehension, speaking skills, including pronunciation, with progressive emphasis on reading and writing skills. Discussion of selected cultural aspects.

Credits: 3

Offered: Every semester.

GERM 116 - Elementary German II

Designed for students with one semester of college level German or equivalent. Further practice in pronunciation and fundamental speech patterns. Continued development of listening, speaking, reading and writing skills for communicative proficiency. Discussion of selected cultural aspects.

Credits: 3

Prerequisite: GERM 115 or NY Regents German Exam Score of an 80 or better. Offered: Every semester.

GERM 215 - Intermediate German I

Increases proficiency in listening, speaking, reading and writing skills in German. Further development of vocabulary and grammar. Selected cultural and literary readings.

Credits: 3

Prerequisite: GERM 116 or NY Regents German Exam Score of an 85 or better. Offered: Offered on occasion.

GERM 216 - Intermediate German II

Development of listening, speaking, reading and writing skills to attain proficiency required for upper level courses in German. Expansion of vocabulary and advanced grammar. Selected cultural and literary readings.

Credits: 3

Prerequisite: GERM 215. Offered: Offered on occasion.

GERM 317 - German Conversation

Conversational exercises: reports, discussions. Readings from newspapers and cultural texts stressing contemporary colloquial German. Emphasis on idioms.

Credits: 3

Prerequisite: GERM 215. Offered: Offered on occasion.

GERM 318 - German Composition

Practice in writing colloquial and formal German. Emphasis on idioms; style and structure in dialogue, descriptive and critical writing.

Credits: 3

Prerequisite: GERM 215. Offered: Offered on occasion.

GERM 323 - Germany Since 1918

Cultural aspects of the Weimar Republic, the Third Reich, and contemporary Germany. Guest lecturers, readings, and films. in English.

Credits: 3

Prerequisite: GERM 215. Offered: Offered on occasion.

GERM 400 - Special Topics in German

Special areas in German language, literature, or culture and civilization not covered by regular courses.

Credits: 1-3

Offered: Offered on occasion.

GERM 410 - Directed Study

Individual directed study of a particular area or topic in German language or literature. Periodic meetings with instructor, writing of a substantial paper.

Credits: 1-3

Offered: Offered on occasion.

GERM 413 - German Song Literature

A study of selected German vocal literature in its literary and musical context to acquaint singers and pianists with authors and their background from the viewpoint of intellectual history and literary movements.

Credits: 3

Prerequisite: MUS 137 and MUS 138 and MUS 139 and MUS 264. Offered: Every other year.

GIS - Geographic Info Systems**GIS 201 - Geographic Information Systems I**

The essential theory, components, and applications of Geographic Information Systems, including data structures, database management, spatial analysis, and automated mapping technology. The lab work will introduce students to commercially available Geographic Information Systems software.

Credits: 3

Offered: Every year.

GIS 301 - Geographic Information Systems II

The expanded theory, components and applications of Geographic Information Systems. The course builds on topics presented in GIS 201 Geographic Information Systems I, and introduces students to additional commercially available Geographic Information Systems software.

Credits: 3

Prerequisite: GIS 201. Offered: Every year.

GIS 350 - Remote Sensing/Image Processing

Study of the conditions and/or state of remotely sensed objects and scenes. Application to many real world problems including harvest prediction, containment migration, forest mapping, resource delivery, and extraterrestrial exploration. Image processing, pattern recognition, and Geographic Information Systems (GIS).

Credits: 3

Prerequisite: GIS 201. Offered: Every other year.

GIS 360 - Mapping the Social World

Representation and analysis of the spatial structure of the social world using Geographic Information Systems (GIS). Exploration of how such technology is used to exploit and commercialize the social world in ways that serve the interests of those who control the technology and how it could provide opportunities to redraw boundaries and identify new social spaces.

Credits: 3

Offered: Every other year.

GIS 401 - Special Topics in Geographic Information Systems

In-depth examination of GIS topics introduced in GIS 201 or GIS 301. May be taken more than once as topics vary.

Credits: 3

Prerequisite: GIS 301. Offered: Offered on occasion.

GIS 450 - Directed Study

Participation in GIS-related faculty research.

Credits: 3

Prerequisite: GIS 201. Offered: Every semester.

GIS 460 - Teaching Assistant

Students have the opportunity to assist the instructor in the laboratory components of GIS 201 and GIS 301.

Credits: 1-3

Prerequisite: GIS 201. Offered: Every semester.

GIS 480 - Independent Study

Individualized study under the close supervision of a faculty member. Students should have specific topics or projects in mind before approaching an instructor.

Credits: 3

Prerequisite: GIS 201. Offered: Every semester.

GIS 490 - Internship

Provides opportunities for testing concepts and applications presented in the classroom. Interns have found opportunities in both the public and private sector.

Credits: 1-6

Prerequisite: GIS 201. Offered: Every semester.

GRAD - Graduate Studies

GRAD 695 - Thesis/Capstone Research Continuation

Graduate students are required to remain continuously enrolled until completion of thesis/capstone work in order to allow continuing usage of university resources and to accurately account for faculty involvement.

Credits: 1

Offered: Offered on occasion.

HIST - History

HIST 100 - History Introductory Seminar

A one-credit course designed to help History and Social Studies majors to succeed at SUNY Fredonia. The course will introduce students to the academic, social, and citizenship aspects of the History and Social Studies programs. Further, it will introduce majors to departmental personnel, expectations, and career opportunities in history and associated disciplines. The course will also introduce students to the skills and techniques appropriate to the successful study of history. Finally, the seminar will introduce students to university resources, functions, and extra-curricular opportunities.

Credits: 1

Offered: Every year.

HIST 101 - World History I

Survey of the human experience from the Neolithic Revolution to the linking of the world (3500 B.C.E. - 1500 C.E.).

Credits: 3

Offered: Every semester.

HIST 102 - World History II

Survey of the human experience from the linking of the world to the present (1500 C.E. - 2000 C.E.).

Credits: 3

Offered: Every semester.

HIST 105 - United States History I

Survey from colonial times to 1877 of political, economic, social, and cultural development of America, including examples from New York State.

Credits: 3

Offered: Every semester.

HIST 106 - United States History II

Survey from 1877 of political, economic, social, and cultural development of America, including examples from New York State.

Credits: 3

Offered: Every semester.

HIST 107 - Themes from American History

Exploration in-depth of single themes from the history of America. Specific themes vary from semester to semester.

Credits: 1-3

Offered: Offered on occasion.

HIST 115 - Western Civilization I

A survey of the major ideas, events, cultural trends, experiences, traditions and achievements of the West. The class will follow the ebb and flow of progress and failures that have framed the Western World from the birth of civilization to the Age of Exploration.

Credits: 3

Offered: Every semester.

HIST 116 - Western Civilization II

A survey of the major ideas, events, cultural trends, experiences, traditions and achievements of the West. The class will follow the ebb and flow of progress and failures that have framed the Western World from the rise of the nation state to the present day.

Credits: 3

Offered: Every semester.

HIST 118 - Themes from Western Civilization

Exploration in depth of single themes from history of the Western world and its antecedent civilizations. Specific themes, which vary from semester to semester.

Credits: 1-3

Offered: Offered on occasion.

HIST 133 - American Cultures

An overview of American history and culture from the colonial era to the present. Not open to students majoring in History, Social Studies, or Childhood Education with Social Studies concentration. Students who have taken or transferred HIST 105 or HIST 106 should NOT take this course.

Credits: 3

Offered: Every semester.

HIST 134 - Western Cultures

A topical and/or thematic examination of selected major ideas, events, cultural trends, experiences, traditions, and achievements of the West. The class will examine key elements of the Western World ranging from the birth of Western Civilization to the rise of the nation state and on to the present day. Not open to students majoring in History, Social Studies, or Childhood Education with Social Studies concentration. Students who have successfully completed or transferred HIST 115 or HIST 116 should NOT take this course.

Credits: 3

Offered: Every semester.

HIST 135 - World Cultures

An overview of world cultures with topics ranging from the origin of humanity to the present. Not open to students majoring in History, Social Studies, or Childhood Education with Social Studies concentration. Students who have taken or transferred HIST 101 or HIST 102 should NOT take this course.

Credits: 3

Offered: Every semester.

HIST 201 - Doing History

Format varies depending on instructor, but all sections include intensive instruction in methods of historical reading, research, analysis, and writing. About 20 to 30 pages of required written work each semester. History and Social Studies majors should take the course in the sophomore year. Sophomore standing required.

Credits: 3

Offered: Every semester.

HIST 202 - Applied History

Introduces students to applied historical research. Focus varies with semesters, e.g., creation of historical documentaries; local history archives and research.

Credits: 3

Offered: Offered on occasion.

HIST 203 - History Through Films

Examination of life, values, and beliefs of various cultures, countries, and epochs as exhibited in films. Film images compared with historical writing.

Credits: 1-3

Offered: Offered on occasion.

HIST 206 - Introduction to African American Studies

Study of the intellectual and social origins of the discipline known as African American Studies. Key concepts, themes, and theories of the discipline will be discussed in the class.

Credits: 3

Offered: Offered on occasion.

HIST 212 - History of the Holocaust

The Nazi murder of six million Jews and perhaps 10 million other people during World War II, for the sole purpose of eliminating undesirable people, may be the seminal event of the 20th century. The introductory, multimedia course surveys the Nazi programs of mass murder, explores their historical roots, and examines their consequences for our world today.

Credits: 3

Offered: Every year.

HIST 215 - Holidays and American Culture

The course will examine the invention, celebration, and meanings of American holidays from the colonial era to the present. Issues to be considered include the ways in which holidays have shaped cultural values and American identity and vice versa; the ways in which holidays have both reflected and shaped views of gender, race, class, and ethnicity; and the relationships between holidays and religious belief, nationalism, consumer culture and political ideology. The course will take a multicultural and interdisciplinary approach.

Credits: 3

Offered: Offered on occasion.

HIST 225 - Introduction to Latino History and Culture

An interdisciplinary approach to historicizing the Latino experience in U.S. history. The course examines the political and cultural dynamics of Puerto Ricans, Mexicans, Cubans, and Dominicans within a historical context sensitive to changes and continuities in American history.

Credits: 3

Offered: Every other year.

HIST 250 - Introduction to Russia, Eastern Europe & Eurasia, 1789-Present

Following the collapse of the Soviet Union the world looked forward expectantly to a new age of European and world integration; but while some countries from within the former Soviet sphere of influence have prospered and moved toward greater integration, others have slipped into poverty, isolation and authoritarianism. Russia hangs dangerously between authoritarian and democratic tendencies. HIST 250/INDS 250 explores the history of this complex region, and identifies the traditions and influences that its constituent countries and ethnic groups hold in common and those that divide them.

Credits: 3

Offered: Every year.

HIST 261 - Islamic Civilization

The political, religious and social development of the Islamic Empire from pre-Islamic to Napoleonic era.

Credits: 3

Offered: Every other year.

HIST 264 - East Asian Civilizations

Introduction to the history and cultures of East Asia from the Neolithic Revolution to the 19th century. The course focuses primarily on the domestic economic and political developments of China and Japan, but, where appropriate, it also includes aspects of the history of Central Asia, Korea and Southeast Asia. Similarity and diversity of these civilizations, cultural interrelation and regional interaction, and contact with the West, are among the topics to be covered.

Credits: 3

Offered: Every year.

HIST 265 - Pre-modern East Asia

The development of East Asian civilization from the Neolithic Revolution to the end of the 16th century, with emphasis on the classical philosophers, the growth of states and national economies, cultural exchange, and scientific and technological achievements.

Credits: 3

Offered: Offered on occasion.

HIST 266 - Modern East Asia

The history of East Asia from 1700 to the present. Covers domestic economic and political developments, interaction between the cultures and nations of the region, interaction with the West, and the revolutions of the 19th and 20th centuries.

Credits: 3

Offered: Offered on occasion.

HIST 268 - History of South Asia

Survey of the subcontinent from the Indus civilization to the present (3000 R.C.E. - 2000 C.E.).

Credits: 3

Offered: Offered on occasion.

HIST 272 - Africa to 1800

The course provides students with a survey examination of African history from ancient Egypt to the abolition of the Atlantic slave trade. Students will be introduced to the diversity of the African experience, undermining popular notions of Africa as a "country" or homogeneous region. Themes explored include the effect of the environment on African societies; the establishment of long distance trade networks which linked Africa to global trade; the spread of world religions such as Christianity and Islam; the rise and fall of African empires and states; the impact of the Transatlantic slave trade; and cooperation and conflict with early European settlers, missionaries and explorers.

Credits: 3

Offered: Every year.

HIST 282 - Pre-Columbian and Colonial Latin America

An introductory survey of the history of early Latin America, from antiquity to the European conquest to the wars for independence in the early 19th century. Special attention is given to indigenous and African influences in the shaping of society and culture.

Credits: 3

Offered: Every other year.

HIST 283 - Latin America: Revolution and Reform

An introductory survey of the history of modern Latin America, from the wars for independence in the early 19th century to nation-state building, reform movements, violent revolutions, and democratization in the 20th century. Special attention is given to Native American influences in the shaping of modern society. The contested role of the United States in Latin American domestic policy also is considered.

Credits: 3

Offered: Every other year.

HIST 288 - The Atlantic World, 1500-1820

Introduces the concept of the Atlantic World as a focus for study. Integrating and comparing the histories of Europe, the Americas, and Africa, the course will consider key interpretive themes, including European exploration and expansion; imperialism and colonialism; the emergence of an Atlantic economy; intercultural interaction and

exchange; and the establishment of the African slave trade and the plantation economy.

Credits: 3

Offered: Every other year.

HIST 289 - Comparative North America

A survey of North American history that employs the methodology of comparative history to interpret the histories of the United States, Canada, and Mexico within a conceptual framework sensitive to continental similarities and differences. The course takes a thematic approach, and special attention is given to the political institutions and economic structures that have fostered transnational cooperation and continental integration. The social and cultural dimensions of discord and conflict also are examined.

Credits: 3

Offered: Every other year.

HIST 299 - Experimental Course in History

Varies in content from semester to semester. Student should consult the online Course Offerings and department notices for specific subject covered each semester.

Credits: 1-3

Offered: Offered on occasion.

HIST 301 - The Greek World

The evolution of Greek society from the Minoan and Mycenaean cultures through the empire of Alexander the Great and his successors. Includes the world of Homer, Dark Ages, the Archaic Period, the age of Pericles, the rise of Macedonia, and the Hellenistic age.

Credits: 3

Prerequisite: HIST 101 or HIST 115 or HIST 134. Offered: Offered on occasion.

HIST 302 - Republican/Imperial Rome

Traces the development of Rome from a city-state through the Roman Empire and its fourth-century transformation. Includes the Primordia, the formation of the early republic and the Confederation of Italy, the Punic Wars and the conquest of the Mediterranean world, the conflicts of the late republic, Augustus and the empire, the origins of Christianity, the Third Century Crisis, and the Late Antique transformation.

Credits: 3

Prerequisite: HIST 101 or HIST 115 or HIST 134. Offered: Offered on occasion.

HIST 303 - Medieval History I

Treats the transformation of the Roman world from the Late Antique Empire through the formation of the monotheistic theocracies of the Carolingian Empire, the Byzantine Empire, and the Islamic Caliphate. Includes Late Antiquity, the Germanic invasions and kingdoms, the Byzantine Empire, the emergence of Islam and the Caliphate, Charlemagne, and the Viking Era.

Credits: 3

Prerequisite: HIST 101 or HIST 115 or HIST 134. Offered: Offered on occasion.

HIST 304 - Medieval History II

History from 900-1300. Includes lordship, monastic reform movements, great disputes on religion and society, the Crusades, the European kingdoms, political and cultural innovations, and the Medieval legacy.

Credits: 3

Prerequisite: HIST 101 or HIST 115 or HIST 134. Offered: Offered on occasion.

HIST 305 - Europe in the Era of the Renaissance

General study of European development from 1300-1600. Emphasizes the Renaissance of the 14th century within a Late Medieval context. Topics include the Italian commune, social and cultural development within the Italian city-states, printing and print culture, the Republican tradition, the Northern Renaissance, and German federalism.

Credits: 3

Prerequisite: HIST 101 or HIST 115 or HIST 134. Offered: Offered on occasion.

HIST 306 - The Age of Reformation

Origins of Protestant and Catholic reformations will contribute to an understanding of the persistence of conflict. Intellectual issues of the age presented in light of social, cultural, economic and political conditions.

Credits: 3

Prerequisite: HIST 101 or HIST 115 or HIST 134. Offered: Offered on occasion.

HIST 309 - The Modernization of Europe

The major social, political, economic and cultural trends that have laid the foundations for the contemporary world: nationalism; scientific, technological and industrial revolutions; modern ideologies, especially Marxism; modern militarism; imperialism; revolutions of 1789, 1830, 1848, 1905; modernization of society, life styles and values.

Credits: 3

Prerequisite: HIST 102 or HIST 116 or HIST 134. Offered: Every other year.

HIST 310 - World Environmental History

An introduction to the relationship between the natural environment and human development in the 20th century. Much of the history of humanity's interaction with the environment is one of catastrophes, but the course also investigates important and instructive examples of reform, reconstruction, and co-existence.

Credits: 3

Prerequisite: HIST 102 or HIST 116 or HIST 135. Offered: Every year.

HIST 311 - Europe in the Modern World

The major transition of European society from World War I, when Europe ruled the world, to its present status, newly liberated from the super powers of the Cold War, perhaps to be united as a new super power. Special attention to international tensions, fascism, and the Nazi and Soviet experiences.

Credits: 3

Prerequisite: HIST 102 or HIST 116 or HIST 134. Offered: Every other year.

HIST 312 - Modern Germany

Germany from its modern unification in 1870 to its recent reunification. Emphasis will vary: nationalism and the impact of industrialization, imperialism; World War I and the revolution; problems of Weimar Republic; the Nazi experience, World War II, Holocaust; Cold War divisions, role in European unification and end of Cold War.

Credits: 3

Prerequisite: HIST 102 or HIST 116 or HIST 134. Offered: Every other year.

HIST 313 - Medieval Russia, 860-1700

An investigation of the Russian people, state and culture, with emphasis on the major social, institutional and ideological changes from the inception of the first Russian state - Kiev Russia - in the ninth century C.E., through the rise of Moscow, to the founding of the Russian Empire in the 18th century.

Credits: 3

Prerequisite: HIST 101 or HIST 115 or HIST 134. Offered: Every other year.

HIST 314 - Imperial Russia

The rise of Russia from Kievan times through the growth of autocracy and territorial expansion under Ivan the Terrible and Peter the Great, "Westernization," and the development of radicalism, populism and Marxism from

Catherine the Great through the Russian Revolution of 1917.

Credits: 3

Prerequisite: HIST 102 or HIST 116 or HIST 134. Offered: Every other year.

HIST 315 - The Formation of France

The social, political, economic and cultural history of France from 1200 to 1789. Emphasis on the rise of the monarchy, religious dissension, popular culture, the age of Louis XIV, the growth of Enlightenment thought and the origins of the French Revolution.

Credits: 3

Prerequisite: HIST 115 or HIST 134. Offered: Offered on occasion.

HIST 316 - 20th Century Russia

A political, intellectual and social examination of Russia in the 20th century. Topics include the causes of the decline of the Czarist regime, World Wars I and II, the Stalin dictatorship, and the rise and fall of the Soviet Union as a military superpower.

Credits: 3

Prerequisite: HIST 102 or HIST 116 or HIST 134. Offered: Every other year.

HIST 317 - Modern France

The leading social, economic and political events since the revolution of 1789. The major theme is the transformation of a rural and agrarian society in conflict with an urban nucleus of heavy industry into a modern technological community in which the schisms of 1789 are no longer relevant.

Credits: 3

Prerequisite: HIST 116 or HIST 134. Offered: Offered on occasion.

HIST 321 - The Dutch Republic, 1500-1800

Survey of the history of the Dutch Republic from the Burgundian and Habsburg periods to the Napoleonic Era, 1500-1800.

Credits: 3

Prerequisite: HIST 102 or HIST 115 or HIST 116 or HIST 134. Offered: Offered on occasion.

HIST 322 - French Revolution and Napoleon

A major turning point in the ideological, social, and constitutional evolution of the modern West. Far-reaching change during a decade of revolutionary turmoil, followed by the dazzling career of Napoleon, who introduced the

ideas and institutions of the Revolution to Europe and at the same time provided the substance of modern tyranny.

Credits: 3

Prerequisite: HIST 116 or HIST 134. Offered: Offered on occasion.

HIST 323 - Victorian Britain

The transformation of Great Britain from an agrarian country governed by landed patricians to a nation directed by a commercial middle-class. The rise of democracy, an industrial economy, an urban society, public opinion, and a populist monarchy.

Credits: 3

Prerequisite: HIST 102 or HIST 116 or HIST 134. Offered: Every other year.

HIST 324 - History of the Ukraine

History of Ukrainian society, culture, politics and economics from Kiev Rus (ca. 870) to the Orange Revolution (2004). Emphasis on the rise of modern nationalism since the mid-19th century.

Credits: 3

Prerequisite: HIST 102 or HIST 116. Offered: Every other year.

HIST 325 - Colonial America

North American history from European settlement through the mid-18th century. Topics will include exploration and early contact; settlement; and social, political, economic, and cultural development. Focus will be on the lives and perceptions of ordinary men and women.

Credits: 3

Prerequisite: HIST 105 or HIST 133. Offered: Every other year.

HIST 326 - 20th Century Britain

The course is intended to explore the history of Britain during the 20th century. A range of political, social and economic developments will be examined, e.g. emergence of the welfare state, movements for political reform, imperial changes and the impact of two world wars.

Credits: 3

Prerequisite: HIST 102 or HIST 116 or HIST 134. Offered: Every other year.

HIST 327 - Antebellum United States, 1820-1861

Territorial expansion and resistance, the rise of the factory system and labor unions, political and cultural democratization, social reform, immigration and nativism, religious revivalism, slavery, and the causes of the Civil War.

Credits: 3

Prerequisite: HIST 105 or HIST 133. Offered: Every other year.

HIST 328 - Civil War Era

The roots of the Civil War in antebellum northern and southern societies, war-time military, political, and social developments in the North and South, the Reconstruction experiment, the retreat from Reconstruction and the legacy of the war in the immediate post-war era and today.

Credits: 3

Prerequisite: HIST 105 or HIST 133. Offered: Every other year.

HIST 330 - Industrial America, 1890-1920

The transformation of the U.S. from a rural/agrarian to an urban/industrial society. Topics include the process of industrialization and social upheavals that resulted; the development of the New South and New West; the emergence of the U.S. as a world power; the challenge of ethnic/cultural diversification; and the social and political reform movements of the era.

Credits: 3

Prerequisite: HIST 106 or HIST 133. Offered: Every other year.

HIST 331 - The Inter-War Years, 1919-1945

The domestic scene in America from end of World War I to end of World War II, including discussion of business dominated 1920s, economic crisis and the New Deal of the 1930s, second World War, and other major trends, events, and figures.

Credits: 3

Prerequisite: HIST 106 or HIST 133. Offered: Offered on occasion.

HIST 332 - United States History: 1945-Present

The major cultural, economic, and political developments since World War II, including the Cold War, 1960s counterculture, Civil Rights movement, the Reagan era.

Credits: 3

Prerequisite: HIST 106 or HIST 133. Offered: Every year.

HIST 333 - African American History to 1877

Survey of the historical forces, within the African American community and elsewhere, which have shaped the African American experience. The course explores the cultural, social, and political development of African Americans from their African origins through Reconstruction.

Credits: 3

Prerequisite: HIST 105 or HIST 133. Offered: Every other year.

HIST 334 - African American History Since 1877

Survey of the historical forces, within the African American community and elsewhere, which have shaped the African American experience. The course explores the cultural, social, and political development of African Americans from Reconstruction to the present.

Credits: 3

Prerequisite: HIST 106 or HIST 133. Offered: Every other year.

HIST 335 - American Women

A survey of women's history from colonial times to present with emphasis on the changing status and definition of women's roles, race and ethnicity, and women's writings.

Credits: 3

Prerequisite: HIST 106 or HIST 133. Offered: Every other year.

HIST 336 - African American Black Women's History

Explores the history of women of African descent in the Americas, with a particular focus on the United States. Covers black women's experiences from their African origins, through the Middle Passage, in enslavement, and in freedom. Issues addressed include labor, the black family, cultural expression, and racial identity (in comparative perspective).

Credits: 3

Prerequisite: HIST 333 or HIST 334 or ENGL 240 or ENGL 340. Offered: Offered on occasion.

HIST 337 - History of New York

The course examines the history of New York through a chronological survey of key events and issues that defined the city, state and nation. Beginning with the Dutch settlement in Manhattan, this course investigates significant social, economic, cultural, religious or political changes that shaped the history of the "Empire State." Particular emphasis will be made on New York's connection with the nation and the world.

Credits: 3

Prerequisite: HIST 105 or HIST 106 or HIST 133. Offered: Every other year.

HIST 338 - 19th Century American Culture

Examines how social, political, and economic changes have affected American culture and Americans' lives. Topics include consumption patterns; recreational activities; architectural styles; high and popular culture; family life; and social and cultural rituals.

Credits: 3

Prerequisite: HIST 105 or HIST 133 or AMST 202 or AMST 210. Offered: Every other year.

HIST 339 - 20th Century American Culture

Examines how social, political, and economic changes have affected American culture and Americans' lives. Topics include consumption patterns; recreational activities; architectural styles; high and popular culture; family life; and social and cultural rituals.

Credits: 3

Prerequisite: HIST 106 or HIST 133 or AMST 202 or AMST 210. Offered: Every other year.

HIST 340 - The Westward Movement

The importance of the frontier and the expanding West to the development of the U.S., its history, institutions, beliefs, values, and national character. The West as myth and reality, from colonial times to issues confronting the 20th century trans-Mississippi West.

Credits: 3

Prerequisite: HIST 105 or HIST 106 or HIST 133. Offered: Offered on occasion.

HIST 341 - American Revolution and Republic

The roots of the American Revolution, the political military, economic and social developments associated with the War for Independence and the first decade of the Early Republic, and the legacy of the American Revolution.

Credits: 3

Prerequisite: HIST 105 or HIST 133. Offered: Every other year.

HIST 342 - The American Century

The major issues in American foreign policy in the 20th century. The focus is on America's economic ascendancy and the effect of this prominence on 20th century world order.

Credits: 3

Prerequisite: HIST 106 or HIST 133. Offered: Every other year.

HIST 343 - Civil Rights Movement

Seeks to expose the romanticized myths currently accepted as history among the general populace and to replace those myths with a better understanding of the goals, participants, issues and divisions that were a part of the African American struggle for freedom in the United States.

Credits: 3

Prerequisite: HIST 105 or HIST 106 or INDS 106.
Offered: Every other year.

HIST 344 - African American Social Thought

Critical reading of primary texts authored by African American social thinkers beginning in the 19th century up to the present day. Special emphasis on placing these writings within the scholarly debates about the paradigmatic theories of race relations- integrationism, accommodationism, and separatism/nationalism.

Credits: 3

Prerequisite: HIST 333 or HIST 334. Offered: Every other year.

HIST 345 - Asian American History

The course explores the experiences of Asian Americans from the mid-19th century to the present. Topics will include Asian diasporas in the United States; immigration and settlement issues; work and labor systems; racial ideologies and anti-Asian movements; gender, family and community formation; Asian Americans in American popular culture; Asian American cultural expressions and social organization; and American nationalism and debates over American citizenship.

Credits: 3

Prerequisite: HIST 106 or HIST 133. Offered: Every other year.

HIST 346 - History of American Cities

The course examines the history of American cities since the colonial period to the present day. It will investigate the history of U.S. cities from multiple perspectives, including industrialization, migration, globalization, suburbanization, race, gender, class, and the environment.

Credits: 3

Prerequisite: HIST 106 or HIST 106 or HIST 133. Offered: Every other year.

HIST 347 - U.S. Immigration

Immigration to the U.S., with an emphasis on comparing the experiences of European, African, Latin American, and Asian immigrants. Topics will include immigrants' lives, work, and communities; assimilation and cultural persistence; and the development of U.S. immigration policy.

Credits: 3

Prerequisite: HIST 105 or HIST 106 or HIST 133. Offered: Every other year.

HIST 348 - The American Metropolis Since World War II

The course examines the relationship between cities and suburbs. It analyzes metropolitan areas across regions and time, challenging traditional notions of postwar America. Utilizing historical monographs, novels, films, and more, topics range from Levittown to Columbine, beat culture to hip hop, development to redevelopment.

Credits: 3

Prerequisite: HIST 106 or HIST 133. Offered: Every other year.

HIST 349 - U.S. Military History

The development of American military strategy and tactics. Focus on Civil War, World War I, and World War II.

Credits: 3

Offered: Offered on occasion.

HIST 350 - The Vietnam War: An International Conflict

The international context of the Vietnam War is examined in terms of American politics, international strategy and global economics.

Credits: 3

Prerequisite: HIST 106 or HIST 133. Offered: Every other year.

HIST 351 - Defining America

Examines how private citizens, writers, politicians, business, the media and popular culture have defined America since 1776, how the definitions have changed over time, and the impact of race, ethnicity, gender, and class on the definitions.

Credits: 3

Prerequisite: HIST 106 or HIST 133. Offered: Offered on occasion.

HIST 352 - Environmental History of North America

The course explores the interrelationship and interdependencies of human development and the environment. Topics include Native American and colonial land use practices, capitalism and nature, industrialization, urban environments, ethics, nature as leisure, and environmental politics.

Credits: 3

Prerequisite: HIST 105 or HIST 106 or HIST 133. Offered: Every other year.

HIST 353 - U.S. Consumer Culture

Examines the historical development of a consumer culture and its effects. Topics include the roots of consumer

culture; the role of the industrial revolution; the development of marketing; and how consumption altered American life and culture in the 20th century.

Credits: 3

Prerequisite: HIST 106 or HIST 133. Offered: Every other year.

HIST 354 - History of Globalization in Mexico

Examines the complexities and nuances of modern Mexican society within a historical context sensitive to structural changes in both the global economy and Mexico's political culture. The course historicizes contemporary political, social, and economic phenomena by evaluating changes and continuities in the Mexican experience since the late 19th century

Credits: 3

Offered: Offered on occasion.

HIST 355 - American Religious History

American religion from the Puritans to the present as set in the larger social, economic and cultural context.

Credits: 3

Prerequisite: HIST 105 or HIST 106 or HIST 133. Offered: Offered on occasion.

HIST 356 - American Indian History

A survey of the history of North America from the perspective of American Indians, covering topics from the period before contact through the present. Possible topics may include precontact history and societies, the challenges of contact and colonization, Indian Removal, and continuing questions of sovereignty and treaty rights.

Credits: 3

Prerequisite: HIST 105 or HIST 106 or HIST 133. Offered: Every other year.

HIST 357 - Indians and Europeans in Early America

Introduces the major topics and themes in the ethnohistory of early America from the earliest contacts between Native Americans and Europeans to the early 18th century through a comparative study of British, French, and Spanish interactions with indigenous peoples.

Credits: 3

Prerequisite: HIST 102 or HIST 105 or HIST 115 or HIST 133. Offered: Offered on occasion.

HIST 358 - 20th Century American Indian Issues

American Indian peoples in the 20th century. Emphasis on federal policy development, the growth of political pan-Indian movements, the Indian image in popular culture,

and current issues raised in the writings of contemporary authors representing a diversity of Indian nations.

Credits: 3

Prerequisite: HIST 106 or HIST 133. Offered: Offered on occasion.

HIST 359 - Ethnicity and Race

Interdisciplinary approach to race and ethnicity in the United States and other contemporary multiethnic/multiracial societies. Because these courses are equivalents, students who have earned credit for HIST/INDS/WOST 220 are not able to earn credit for this course.

Credits: 3

Offered: Every year.

HIST 361 - Modern Middle East

History of the Modern Middle East (18th-20th century) with emphasis on the social, political and economic repercussions of the Western presence in the region.

Credits: 3

Prerequisite: HIST 261 or HIST 102. Offered: Every other year.

HIST 362 - History of American Education

The course examines the history of American schools since the colonial period to the present day. It will examine the history of American education from multiple perspectives, including how education has been conceived, what it was designed for, and how people experienced American schools.

Credits: 3

Prerequisite: HIST 105 or HIST 106 or HIST 133. Offered: Every other year.

HIST 363 - Chinese Culture Through Films

Examines Chinese culture using a selection of literary texts and films. Thematic concerns include: aesthetic form and socio-political contents, gender relations, re-writing and re-presenting history, national and transnational identity through words and images. Ten or 11 screenings each semester.

Credits: 4

Prerequisite: HIST 102 or HIST 264 or HIST 265. Offered: Offered on occasion.

HIST 364 - Historical Landscape and National Identity in Modern East Asia

The course attempts to ground the history of modern East Asia in physical space and to invest the places we see with historical meaning. To this end, the course will be set in

the historical sites in China, Japan, and South Korea. Through exploring the ritual, political, and historical significance of these sites, the course will investigate the forces that have transformed physical spaces into symbols of national/local identity. This course is also suitable for the Museum Studies minor.

Credits: 3

Prerequisite: HIST 102 or HIST 264 or HIST 265. Offered: Every other year.

HIST 366 - Late Imperial China

From the late Ming dynasty to the fall of the Manchu Qing dynasty in 1912. Covers the rise of the Manchus, political and cultural developments in the Qing empire, and the Western impact in the 19th century.

Credits: 3

Prerequisite: HIST 264 or HIST 102. Offered: Every other year.

HIST 367 - 20th Century China

From the fall of the Manchus (1912) to the present. Covers political and cultural developments, including nationalist and Communist revolutions, the Anti-Japanese War, and the People's Republic through the post-Mao reforms.

Credits: 3

Prerequisite: HIST 264 or HIST 102. Offered: Every other year.

HIST 368 - Modern Japan

Japanese history from the founding of the Tokugawa shogunate to the present. Covers political and cultural developments during the shogunate, the Meiji Restoration, domestic political and cultural developments, and Japan's interactions with the West and other East Asian nations in the 19th and 20th centuries.

Credits: 3

Prerequisite: HIST 264 or HIST 102. Offered: Offered on occasion.

HIST 370 - History of South Africa

This course provides a critical, objective, and balanced examination of South African history from the seventeenth century to the present, based upon a combination of lectures, seminar readings, and discussions, and drawing upon primary documents, literary works, and films about South Africa. South Africa's complex history of social competition, conflict and cooperation provides students the opportunity to explore in greater depth the history of one of the world's most notorious states. Themes and topics studied include: white settlement and race relations, the impact of industrialization, apartheid, and South Africa from a global perspective.

Credits: 3

Prerequisite: HIST 102 or HIST 116. Offered: Every other year.

HIST 371 - Russia After Stalin

A thematic approach to recent Russian history. The course identifies Russia's most critical immediate problems and places them in their historical context. Major themes include: political structures and practices; the economy; the military; domestic security; international relations; minorities; culture and society.

Credits: 3

Prerequisite: HIST 102 or HIST 116 or HIST 134. Offered: Every other year.

HIST 372 - Africa in the 19th Century

The course deals with five case studies of political and economic transformation in the 19th century. The case studies are drawn from three different parts of sub-Saharan Africa: Sokoto (Nigeria) and Ashanti (Ghana) in the West; the Zulu (Republic of South Africa) and Sotho (Lesotho) in the South; and Buganda (Uganda) in the East.

Credits: 3

Prerequisite: HIST 102 or HIST 272. Offered: Every other year.

HIST 373 - African Urban History

This course aims to provide students with a comprehensive approach to urban African history. To avoid fashioning an understanding of this history that often equates urbanization with westernization, this course begins with an examination of the multiple precolonial urban centers which existed in Africa prior to the arrival of the Europeans. It continues with the onset of colonialism and industrialisation which affected both the pace and nature of urbanisation in Africa. Migrations to the cities transformed the lives of millions of Africans. This course will focus on the lives of these urban dwellers: their relations to the spaces in which they live and the influence of those spaces on them; the development of urban cultures; the gendered character of urbanization; the creation of new social, political, economic and criminal networks; conflict and cooperation amongst urbanites; and the nature of colonial and post colonial oppression and control in the cities.

Credits: 3

Prerequisite: HIST 101 or HIST 102 or HIST 115 or HIST 116. Offered: Every other year.

HIST 375 - History of Authority

Interdisciplinary analysis of the methods of domination and control employed in major Western cultures since the 17th century. Focus on 19th and 20th century United

States. Prison, schooling, the market system, hegemony, the welfare state, narrative and the media.

Credits: 3

Offered: Offered on occasion.

HIST 376 - Film and American Culture

Examines the links between film and American culture and society from the silent era to the present, with some emphasis on the Great Depression, the post-World War II years, and the 1980s. Thematic concerns include race and ethnicity, sexuality and gender, class, identity, postmodernism, voyeurism, and the new age. Ten or 11 screenings each semester.

Credits: 3

Prerequisite: HIST 106 or HIST 133. Offered: Offered on occasion.

HIST 378 - Canada and the Canadians

Contemporary Canada: history, geography, population, parliamentary government, economic structure, free trade, Quebec nationalism and the British legacy.

Credits: 3

Offered: Every other year.

HIST 380 - Pre-Columbian/Colonial Mexico

Comprehensive examination of the early history of Mexico, including the political, economic, social, and cultural complexities of antiquity, the violence of the Conquest, and the structural transformations that took place in Indian Mexico after the arrival of the Spanish. Special attention is given to the cultural and political legacies of the Spanish influence in Mexico, with an eye toward assessing the domestic and global trajectories that pushed the colony to declare its independence from Spain in 1810.

Credits: 3

Offered: Every other year.

HIST 381 - Mexico in the Modern World

Comprehensive examination of the political, economic, and cultural history of Modern Mexico from the end of the colonial period through the 19th and 20th centuries, a time-line marked by foreign invasions, dictatorships, modernization, social revolution and democratization. The course also evaluates the historical processes that have transformed Mexico into a strategic ally of the United States, as well as the tensions and discord that have often characterized the political and social relationship between the two countries.

Credits: 3

Offered: Every other year.

HIST 385 - International Communication

An examination of the media in a global context. Attention is focused on public and private management, regulatory mandates, and programming and publishing philosophy in the global village. Topics include cultural exchange and interaction between the media and consumers.

Credits: 3

Offered: Offered on occasion.

HIST 386 - Global Studies

Study of cross-cultural encounters based on case studies from Africa, Asia, and the Americas (e.g. Spanish and Aztecs in Mexico; Dutch and Mughals in India; British and Zulus in South Africa).

Credits: 3

Prerequisite: HIST 101 or HIST 102. Offered: Every other year.

HIST 387 - Comparative Slave Societies

The development, effects, and elimination of slavery in different societies and in various eras. Includes historians' debates on slavery and its impact.

Credits: 3

Offered: Offered on occasion.

HIST 389 - Religion in the Western Tradition

Historical development of three great monotheistic faiths: Judaism, Christianity, Islam. Comparison of these creeds with earlier religions. The development of monotheistic faiths and their divergent branches and heresies into modern times. Changing religious ideals, values and practices over time.

Credits: 3

Prerequisite: HIST 101 or HIST 102 or HIST 115 or HIST 116 or HIST 134. Offered: Every other year.

HIST 390 - Interpreting the Global Past

Introduction to recent world history scholarship, exploring interpretations and understandings of certain topics and time periods from the age of transregional nomadic empires to the present (e.g. dependency and world systems analysis, the "rise of the West" and the "decline of the East," "New or High" Imperialism).

Credits: 3

Prerequisite: HIST 102 or HIST 116. Offered: Offered on occasion.

HIST 391 - History of Christianity I

History of Christianity I introduces the student to the broad narrative of the religion's development within a historical context. The course explores the formation of Christian

doctrines, faith practices, and institutions until 1517 within broader cultural, social, and economic parameters, while addressing the impact of specific events and personalities on the formation of Christian spiritualities and identities. The course aims at a balance between the study of doctrine and practice. Of particular importance is an exploration of the impact of non-Christian religious and philosophical traditions on the formation of Christian doctrines and practices. Students will also gain an understanding of the academic study of religion as a field of inquiry in its own right, with reference to theories of religion and terminology from the field of religious studies.

Credits: 3

Prerequisite: HIST 101 or HIST 115 or HIST 134 or HIST 303 or HIST 304 or HIST 305 or INDS 120. Offered: Every other year.

HIST 394 - Globalization

Analysis of 20th Century and recent history of globalization and its effects in Africa, Asia and Latin America. The course will focus on the history of cultural and economic globalization, and its effects on society. In particular, the course will examine changes in the status, condition or rights of women, human rights, the role of international organizations and non-governmental organizations, and the relationship between the World Bank and International Monetary Fund (IMF) and economic development in non-Western regions. The course will also examine the recent rise of China as an economic, political and cultural force in the world.

Credits: 3

Prerequisite: HIST 101 or HIST 102 or HIST 135. Offered: Every other year.

HIST 396 - Themes in American History

The study of a person, event, cultural issue, or other theme during a specific period in American History. Students will delve in depth into the historical context of the topic, gaining a greater understanding of the way that people, ideas, and events can change history or reflect and respond to changes that have already occurred. Through primary and secondary sources, students will consider the issue from different perspectives, developing a greater understanding for the role of the historian as interpreter.

Credits: 3

Prerequisite: HIST 105 or HIST 106 or HIST 133. Offered: Every year.

HIST 397 - Themes in European History

The study of a person, event, cultural issue, or other theme during a specific period in European History. Students will delve in depth into the historical context of the topic, gaining a greater understanding of the way that people, ideas, and events can change history or reflect and respond

to changes that have already occurred. Through primary and secondary sources, students will consider the issue from different perspectives, developing a greater understanding for the role of the historian as interpreter.

Credits: 3

Prerequisite: HIST 115 or HIST 116 or HIST 134. Offered: Every year.

HIST 398 - Themes in World History

The study of a group, event, cultural issue, or other theme during a specific period in world history. Students will delve in depth into the historical context of the topic, gaining a greater understanding of the way that people, ideas, and events can change history or reflect and respond to changes that have already occurred. Through primary and secondary sources, students will consider the issue from different perspectives, developing a greater understanding for the role of the historian as interpreter.

Credits: 3

Prerequisite: HIST 101 or HIST 102 or HIST 135. Offered: Every year.

HIST 399 - Experimental Course in History

Varies in content from semester to semester. Students should consult college the online Course Offerings and department notices for specific subject covered each semester.

Credits: 1-3

Offered: Offered on occasion.

HIST 400 - Directed Study

In-depth exploration of an historical topic under the direction of a department member. Student must have instructor's approval before registering for course. Students should have specific topics in mind before approaching an instructor.

Credits: 1-3

Offered: Every semester.

HIST 409 - Topics in Modern/Contemporary Europe

Subject matter and credit hours will vary by semester and by instructor.

Credits: 1-3

Offered: Offered on occasion.

HIST 432 - Topics in 20th Century U.S. History

Subject matter and credit hours will vary by semester and by instructor.

Credits: 1-3

Prerequisite: HIST 106. Offered: Offered on occasion.

HIST 490 - Public History Internship

Students interested in a career in public history may receive credit for an internship with an historical society, museum, archive, or other public history venue.

Enrollment is to be arranged with an appropriate faculty sponsor.

Credits: 1-6

Offered: Every semester.

HIST 495 - Capstone Seminar

The capstone course focuses on the in-depth study of an historical topic. Emphasis is on historiography, analysis of secondary literature and primary sources, and research methodology. Course is writing and speaking intensive. Format and topic varies depending on instructor.

Credits: 3

Prerequisite: HIST 201. Offered: Every semester.

HIST 499 - Honors Research Seminar

Focus is on historiography and research methodology through preparation of a research paper based on primary sources. By invitation only.

Credits: 3

Prerequisite: HIST 201. Offered: Every year.

HIST 500 - Special Topics

Directed Study of a defined topic, to be arranged with and supervised by the instructor.

Credits: 0-3

Offered: Offered on occasion.

HIST 623 - Readings in World History

Themes and issues in recent scholarship on world history. Content varies from semester to semester according to instructor.

Credits: 3

Offered: Offered on occasion.

HIST 633 - Graduate Research Seminar: World History

Research topics and methodologies in world history. Content varies from semester to semester according to instructor.

Credits: 3

Offered: Offered on occasion.

HIST 643 - Readings in American History

A graduate-level introduction to the historical literature for a particular chronological period or subject. Content varies from semester to semester, according to instructor, yet all

offerings have a pedagogical component. Possible topics include the colonial era; the family; the Civil War and Reconstruction; the African American experience.

Credits: 3

Offered: Offered on occasion.

HIST 653 - Research Seminar in American History

A graduate-level research seminar in American history. Content varies according to instructor. Students will become familiar with the basic literature in the area of study and will conduct original research in that area.

Credits: 3

Offered: Offered on occasion.

HIST 670 - Curriculum Development Project Research

Design and development of a curriculum unit relating to a particular topic in world history or American history. Project must be approved by the department graduate committee; work is done in consultation with a faculty advisor.

Credits: 2-3

Offered: Offered on occasion.

HIST 671 - Curriculum Development Project Completion

Completion of curriculum project, including final production, editing, and formatting of project to departmental and Graduate Studies guidelines. Final project must be approved by department graduate committee; work is done in consultation with faculty advisor. The final work must be defended before a faculty committee.

Credits: 1

Prerequisite: HIST 670. Offered: Offered on occasion.

HLTH - Health Education**HLTH 115 - First Aid Skills and Knowledge**

Prepares student, through knowledge and skills, to meet the needs of most emergency situations when first aid care is required and medical attention is not readily available. Personal safety and accident-prevention information incorporated to acquaint individuals with causes of many accidents, so that action may be taken to eliminate or minimize such causes. The course meets the coaching first aid requirements of the New York State Coaching Mandate.

Credits: 3

Offered: Every semester.

HLTH 215 - Personal and Community Health

To develop positive attitudes toward health and optimum living and to influence formation of good habits affecting one's physical, mental, and social well being. Emphasis will be on proper health behavior as it relates to the disease process. Brief consideration is given to the role of health agencies in assessing community health needs and coordinating activities to meet these needs.

Credits: 3

Offered: Every year.

HLTH 217 - Fitness & Wellness for Life: A Multidisciplinary Perspective

This course examines the multiple dimensions of fitness, health, and wellness as they relate to individuals and society. Students will develop an understanding of current trends and practices as they relate to topics such as stress management, cardiovascular fitness, nutrition, and disease prevention. Emphasis will be given to four components of wellness: physical, emotional, social, and psychological. Students will apply this knowledge to become educated health care consumers, advocates, and responsible decision makers. Students will develop personal and community action plans for enhancing health and well-being.

Credits: 3

Offered: Every semester.

HLTH 300 - Education in Drugs/Alcohol/Tobacco

Knowledge and methods to deal with the problems of use of drugs, alcohol, and tobacco in elementary and secondary schools. Meets requirement for Education Law, Section 804, 804a, and 805. Limited to Education majors only.

Credits: 1

Offered: Every semester.

HLTH 302 - Stress Management

Identifies the mechanisms that generate the human stress response and their physical and psychological effects on the body and mind. The course also introduces the student to developing personal strategies for effective stress management.

Credits: 1

Offered: Every semester.

HLTH 303 - Fitness and Wellness

This course will explore the development of knowledge and skills necessary to become personally responsible for fitness and wellness. Investigations will include fitness assessment, exercise prescription, preventative health care, eating disorders, weight management, nutrition, smoking cessation and stress management.

Credits: 3

Prerequisite: HLTH 115. Offered: Every semester.

HLTH 343 - Drugs and Behavior

The course provides students with a basic understanding of the effects of legal and illegal drugs on physiological and psychological functioning, and how drugs influence personal and social behavior.

Credits: 3

Offered: Every year.

HLTH 386 - Wellness and Health Promotion

The course emphasizes wellness as a positive approach to health promotion. The course explores ways of establishing effective health strategies that affect the physical, emotional and social self, use the mind constructively, channel stress energies positively, express emotions effectively, and enable the individual to interact with others.

Credits: 3

Offered: Every semester.

HLTH 400 - Internship

Work under supervision in a community setting. Students are expected to complete 67 clock hours of direct service to individuals, groups, or organizations for each credit hour awarded. The internship will emphasize theory, knowledge and skills needed when working with and within groups and organizations. A Learning Contract encompassing job requirements, learning objectives and methods will be utilized to evaluate the intern.

Credits: 1-6

Offered: Every semester.

HLTH 499 - Independent Study

The study of a particular topic related to health and wellness. Periodic meetings with an appropriate instructor will be scheduled. The topic may encompass individual research or a practical experience.

Credits: 1-3

Offered: Every semester.

HLTH 500 - Wellness and Health Promotion for the Elderly

The course explores wellness and health promotion the human lifespan. Emphasis will be placed on prevention, behavior modification and services available to the individual as they age.

Credits: 3

Offered: Offered on occasion.

HLTH 502 - Stress Management

The course deals with the physiological, psychological aspects of stress as it affects individual performance and people within the workplace and educational environments. Stress causes, effects, and management strategies will be introduced in this course.

Credits: 3

Offered: Every year.

HONR - Honors**HONR 201 - Honors Seminar College Core Curriculum: World History**

Honors Program course that will fulfill the College Core Curriculum part identified in the title. Content will vary from year to year depending on the instructor.

Credits: 3

Offered: Every semester.

HONR 203 - Honors Seminar IIB

Variable-content course that will fulfill Part IIB of the General College Program. Content will vary from year to year depending on the instructor.

Credits: 3

Offered: Every semester.

HONR 204 - Honors Seminar IIB

Variable-content course that will fulfill Part IIB of the General College Program. Content will vary from year to year depending on the instructor.

Credits: 3

Offered: Every semester.

HONR 205 - Honors Seminar IIC

Variable-content course that will fulfill Part IIC of the General College Program. Content will vary from year to year depending on the instructor.

Credits: 3

Offered: Every semester.

HONR 206 - Honors Seminar IIC

Variable-content course that will fulfill Part IIC of the General College Program. Content will vary from year to year depending on the instructor.

Credits: 3

Offered: Every semester.

HONR 207 - Honors Seminar IB

Variable-content course that will fulfill Part IB of the General College Program. Content will vary from year to year depending on the instructor.

Credits: 3

Offered: Every semester.

HONR 208 - Honors Seminar IIIA

Variable-content course that will fulfill Part IIIA of the General College Program. Content will vary from year to year depending on the instructor.

Credits: 3

Offered: Every semester.

HONR 209 - Honors Seminar IIIB

A variable content course for Honors students.

Credits: 3

Offered: Offered on occasion.

HONR 222 - Honors Seminar: CCC Math

Topics vary from semester to semester. Each course fulfills the requirements for the appropriate section of the College Core Curriculum.

Credits: 3

Offered: Offered on occasion.

HONR 224 - Honors Seminar CCC: The Arts

Topics vary from semester to semester. Each course fulfills the requirements for the appropriate section of the College Core Curriculum.

Credits: 3

Offered: Every semester.

HONR 225 - Honors Sem CCC: Humanities

Honors program course that will fulfill the College Core Curriculum area identified in the title. Content will vary from year to year depending on the instructor.

Credits: 3

Offered: Every year.

HONR 226 - Honors Sem CCC: Social Sciences

Honors program course that will fulfill the College Core Curriculum area identified in the title. Content will vary from year to year depending on the instructor.

Credits: 3

Offered: Every year.

HONR 227 - Honors Sem CCC: Natural Science

Topics vary from semester to semester.

Credits: 3

Offered: Every year.

HONR 228 - Honors Sem CCC: American Hist

Topics vary from semester to semester.

Credits: 3

Offered: Every year.

HONR 229 - Honors Sem CCC: Western Civ

Topics vary from semester to semester.

Credits: 3

Offered: Every year.

HONR 230 - Honors Sem CCC: World History

Topics vary from semester to semester.

Credits: 3

Offered: Every year.

HONR 300 - Honors Colloquium

A discussion course for students in the Honors Program. Subjects of discussion range from current events to campus activities to metaphysical speculations.

Credits: 1

Offered: Every semester.

HONR 400 - Honors Thesis

Directed research leading to the preparation of a thesis.

Credits: 3

Offered: Offered on occasion.

HONR 401 - Honors Thesis

Directed research leading to the preparation of a thesis.

Credits: 3

Offered: Offered on occasion.

INDS - Interdisciplinary Studies**INDS 100 - International Student Seminar**

A seminar for international students that provides speaking and writing opportunities building on previous English language training. Enrollment requires permission of instructor and/or the International Education Office.

Credits: 1

Offered: Every semester.

INDS 101 - Colloquium

Explores the basic concepts and views of International Studies as well as offering an introduction to each area of specialization.

Credits: 1

Offered: Offered on occasion.

INDS 105 - Introduction to American Indian Studies

Introduces students to the multi-disciplinary nature of American Indian Studies. The course is divided into three parts with each part emphasizing a different set of knowledges and approaches to the study of American Indians. The first part of the course will examine the historical relationships between American Indians and the U.S. government. Emphasis will be placed on changes in federal policies, and the importance of law in shaping American Indian geographies. Part two of the course examines the politics of "Indian Country," the environment, changing Indian demographics and economic development. Part three will focus upon cultural politics and will examine American Indian ethnic identity, representations of Indians in movies and literature, and Indian self-expression through literature and other expressive forms.

Credits: 3

Offered: Offered on occasion.

INDS 110 - SUNYMEU: Freshman

The course meets weekly for 50 minutes, culminating in participation in a four-day intercollegiate, international simulation of the European Union. The simulation takes place at a university campus in New York State in odd years (spring semester) and at a European university in even years (winter break/January). Students are assigned alter egos (roles) and work on country teams.

Credits: 2

Offered: Every year.

INDS 111 - Religion and Culture in the Time of the Crusades

The course focuses specifically on interactions between Christianity and Islam during the time of the Crusades. From four disciplinary perspectives, the class examines both the interdependence and the roots of conflict between the two cultures, the nature of fanaticism, and the development of Church and State as related institutions, as they all originate from the medieval quest for true knowledge of God.

Credits: 3

Offered: Offered on occasion.

INDS 120 - World Religions

An introduction to the beliefs, history, scriptures, practices, experiences, institutions, and values of five prominent world religions: Hinduism, Buddhism, Judaism, Christianity, and Islam. Also introduces the methods and classic theories of the discipline of Religious Studies.

Credits: 3

Offered: Every year.

INDS 199 - Service Learning

Students will work on public service projects that are coordinated through the instructor. Successful completion of an approved service-learning contract will be expected for students enrolled in this course. A maximum of 4 credit hours of service learning may be applied to the 120 credit hour requirement for Bachelor's Degree.

Credits: 1

Offered: Every semester.

INDS 202 - Introduction to Museum Studies

The course will provide a broad introduction to the field of museum work. Topics may include the history, philosophy, and ethics of museums; the different types of museums; social, economic, and political trends influencing museums; introduction to museum software such as Past Perfect; museum administration; collections management and conservation; and the various aspects of museum work - collecting, registration and record keeping, curatorial, object conservation, exhibition, interpretation, education, research, and public relations.

Credits: 3

Offered: Every year.

INDS 210 - SUNYMEU: Sophomore

The course meets weekly for 50 minutes, culminating in participation in a four-day intercollegiate, international simulation of the European Union. The simulation takes place at a university campus in New York State in odd years (spring semester) and at a European university in even years (winter break/January). Students are assigned alter egos (roles) and work on country teams.

Credits: 2

Offered: Every year.

INDS 240 - African American Literature and Culture

An examination of major works by African American novelists, poets, dramatists, filmmakers, musicians, and essayists in terms of the intellectual and political concerns of their periods and locations. Cross-listed with ENGL 240

Credits: 3

Offered: Every year.

INDS 241 - Introduction to Latino Literature and Culture

Examines literature by Latinos in the U.S. including poems, short stories, novels, plays, and essays, but will also consider music, mass media representations, performance art, film and at least one documentary in order to give students a better picture of the cultures of U.S. Latinos (Chicanos, Puerto Ricans, Cuban Americans, Dominican Americans, etc). Designed for students with no previous knowledge of U.S. Latino cultures or Spanish. Not a complete historical survey, but will introduce students to key issues for understanding U.S. Latino literature with texts from conquest to contemporary.

Credits: 3

Offered: Every year.

INDS 250 - Introduction to Russia, Eastern Europe & Eurasia, 1789-Present

Following the collapse of the Soviet Union the world looked forward expectantly to a new age of European and world integration; but while some countries from within the former Soviet sphere of influence have prospered and moved toward greater integration, others have slipped into poverty, isolation and authoritarianism. Russia hangs dangerously between authoritarian and democratic tendencies. HIST 250/INDS 250 explores the history of this complex region, and identifies the traditions and influences that its constituent countries and ethnic groups hold in common and those that divide them.

Credits: 3

Offered: Every year.

INDS 285 - Mock Trial I

Preparation of case materials for participation in the trial competition sponsored by the American Mock Trial Association. Competition includes both civil and criminal litigation.

Credits: 0

Offered: Every year.

INDS 287 - Mock Trial II

Preparation of case materials for participation in the trial competition sponsored by the American Mock Trial Association. Competition includes both civil and criminal litigation.

Credits: 3

Prerequisite: INDS 285 or POLI 285. Offered: Every year.

INDS 299 - Service Learning

Students will work on public service projects that are coordinated through the instructor. Successful completion of an approved service-learning contract will be expected

for students enrolled in this course. A maximum of 4 credit hours of service learning may be applied to the 120 credit hour requirement for Bachelor's Degree.

Credits: 1

Offered: Every semester.

INDS 302 - Special Topics: Museum Studies

The course will examine a specialized area of museum studies, such as public history, museum education, the art museum, historical sites administration, or the anthropological museum. Format and topic will vary, depending on instructor. May be taken more than once for credit.

Credits: 3

Prerequisite: INDS 202. Offered: Every year.

INDS 310 - SUNYMEU: Junior

The course meets weekly for 50 minutes, culminating in participation in a four-day intercollegiate, international simulation of the European Union. The simulation takes place at a university campus in New York State in odd years (spring semester) and at a European university in even years (winter break/January). Students are assigned alter egos (roles) and work on country teams.

Credits: 2

Offered: Every year.

INDS 315 - Italian American Experience

This course examines the experience of Italians in the United States from an interdisciplinary perspective. It explores the push and pull factors during the peak years of Italian emigration, the culture, society, economy, and government they left behind, and the new world they entered.

Credits: 3

Offered: Offered on occasion.

INDS 389 - Special Topics

Topics of special or current interest offered periodically and taught from an interdisciplinary perspective.

Credits: 1-3

Offered: Offered on occasion.

INDS 399 - Service Learning

Students will work on public service projects that are coordinated through the instructor. Successful completion of an approved service-learning contract will be expected for students enrolled in this course. A maximum of 4 credit hours of service learning may be applied to the 120 credit hour requirement for Bachelor's Degree.

Credits: 1

Offered: Every semester.

INDS 400 - Independent Study

Intensive individual study of some aspect of multicultural studies involving a paper or project.

Credits: .5-8

Offered: Offered on occasion.

INDS 410 - SUNYEMU: Senior

The course meets weekly for 50 minutes, culminating in participation in a four-day intercollegiate, international simulation of the European Union. The simulation takes place at a university campus in New York State in odd years (spring semester) and at a European university in even years (winter break/January). Students are assigned alter egos (roles) and work on country teams.

Credits: 2

Offered: Every year.

INDS 480 - Independent Study

Open only to Interdisciplinary Studies majors. Proposed independent studies must be described in the student's approved Interdisciplinary Studies proposal.

Credits: 1-6

Offered: Every semester.

INDS 489 - Special Topics

Topics of special or current interest offered periodically and taught from an interdisciplinary perspective.

Credits: 0-3

Offered: Every year.

INDS 490 - Internship

Open only to Interdisciplinary Studies majors. Students proposing internships must have an approved Interdisciplinary Studies proposal which includes the internship. Additionally, they must have a faculty sponsor and a detailed plan for the internship describing; (1) the duties approved by the interning agency; (2) the student's method of reporting or reflecting on the internship experience; (3) the method of internship evaluation; and (4) the amount of credit to be earned.

Credits: 1-15

Offered: Every semester.

INDS 491 - African American Studies Internship

Open only to African American Studies minors. Students proposing internships must have an approved Interdisciplinary Studies proposal which includes the internship. Additionally, they must have completed the application required by the campus Office of Internships.

Credits: 0-6

Offered: Offered on occasion.

INDS 492 - American Indian Studies Internship

Open only to American Indian Studies minors. Students proposing internships must have an approved Interdisciplinary Studies proposal which includes the internship. Additionally, they must have completed the application required by the campus Office of Internships.

Credits: 0-6

Offered: Offered on occasion.

INDS 493 - Latino Studies Internship

Open only to Latino Studies minors. Students proposing internships must have an approved Interdisciplinary Studies proposal which includes the internship. Additionally, they must have completed the application required by the campus Office of Internships.

Credits: 0-6

Offered: Offered on occasion.

INDS 494 - Museum Studies Capstone

Internship with a museum (history, art, anthropological, natural history/science), archive, historical site, etc. Enrollment is to be arranged with an appropriate supervisor and faculty sponsor, by permission only. Internship should include the opportunity to create a small exhibit or work on another special project, determined in consultation with the site supervisor and faculty sponsor. Student should also enroll in INDS 495.

Credits: 3

Prerequisite: INDS 302. Corequisite: INDS 495. Offered: Every semester.

INDS 495 - Museum Studies Portfolio Completion

Students will work with the coordinator to complete and turn in all elements of the Museum Studies portfolio required for the minor. Should be taken concurrently with INDS 494.

Credits: 0

Prerequisite: INDS 302. Corequisite: INDS 494. Offered: Every semester.

INDS 499 - Service Learning

Students will work on public service projects that are coordinated through the instructor. Successful completion of an approved service-learning contract will be expected for students enrolled in this course. A maximum of 4 credit hours of service learning may be applied to the 120 credit hour requirement for Bachelor's Degree.

Credits: 1

Offered: Every semester.

INDS 555 - Introduction of Databases for Data Science

This course is designed to introduce graduate students to the foundations of database systems, focusing on relational algebra and data model, query optimization and query processing. Students would also be introduced to practical database design and implementation including SQL and NoSQL programming. Other topics to be covered include Data and Database Security, Object-Relational Databases, Database Tuning, Transaction processing, Concurrency control, Database recovery techniques, Electronic commerce, Distributed Databases.

Credits: 3

Offered: Offered on occasion.

INDS 573 - Big Data and Distributed Database Systems Management

This course is designed to introduce graduate students to the large data warehousing, "Cloud" computing, Hadoop and similar distributed/parallel systems. Students would also be introduced to the current data mining tools. The students will learn about the general architecture of data mining systems, techniques and algorithms of practical utility, types of patterns that can be found in practically important systems. Data mining primitives and query languages, an integration of a data mining system with databases and data warehouses will be investigated; essential insights in data mining systems of the future will be given. Students are also expected to be able to clearly communicate the data mining results.

Credits: 3

Offered: Offered on occasion.

INDS 589 - Special Topics

Topics of special or current interest offered periodically and taught from an interdisciplinary perspective.

Credits: 1-4

Offered: Every year.

INDS 590 - Independent Study

Independent study of interdisciplinary topics not covered in regular graduate course offerings and pertinent to the student's program of study.

Credits: 1-3

Offered: Every semester.

INDS 662 - Data Visualization and Presentation Techniques

The course introduces the students to the field of data visualization. Students will study basic visualization design and evaluation principles, and learn how to acquire, parse,

and analyze large datasets. They will also learn techniques for visualizing multivariate, temporal, text-based, geospatial, hierarchical, and network/graph-based data in 2-, 3-, or more dimensions. In addition, they will utilize various software tools to implement these techniques.

Credits: 3

Offered: Offered on occasion.

INDS 690 - Research

Capstone research experience required for the Interdisciplinary Studies degree. Research leading to, and preparation of, a final project explored in depth or a traditional master's thesis that integrates interdisciplinary course work with professional and personal goals. All work guided by a faculty mentor and coordinated by the Dean of Graduate Studies or the student's advisor. Copies of completed project/thesis must be submitted to the Graduate Office.

Credits: 1-5

Offered: Every semester.

INDS 691 - Research

Continued attention to research project or thesis for INDS 690, as needed. Requires written justification approved by the faculty mentor and submitted for the review of the Dean of Graduate Studies prior to registration.

Credits: 1-3

Offered: Offered on occasion.

INDS 695 - Thesis/Capstone Research Continuation

Graduate students are required to remain continuously enrolled until completion of thesis/capstone work in order to allow continuing usage of university resources and to accurately account for faculty involvement.

Credits: 1

Offered: Every semester.

INED - International Education

INED 299 - International - Special Topics

A variable content faculty-led international course. Subject is based on student and faculty interest and is arranged through the Office of International Education.

Credits: 0-15

Offered: Offered on occasion.

INED 399 - International - Special Topics

A variable content faculty-led international course. Subject is based on student and faculty interest and is arranged through the Office of International Education.

Credits: .5-15

Offered: Offered on occasion.

INED 400 - Study Abroad

Opportunities for study abroad as arranged through the Office of International Education.

Credits: 1-23

Offered: Every semester.

INED 401 - Study Abroad - Aichi University of Education, Japan

Conveniently located along the Tokyo-Osaka corridor, Aichi University is close to Kyoto and Nara, two of Japan's most popular tourist and resort areas. The summer language and culture program is for students interested in learning Japanese and offers a unique opportunity for intensive daily language instruction and cultural excursions to places such as the Toyota Motor Co., Nagoya City and Nagoya Castle. Students live in residence halls with other international students. Meals are self catered.

Credits: 1-21

Offered: Every year.

INED 402 - Study Abroad - American University in Bulgaria

The American University in Bulgaria (AUBG) is a highly selective private university that attracts students and faculty from all around the world. Located in the city of Blagoevgrad, AUBG is one hour from the capital of Sofia. AUBG offers an American style liberal arts education taught in English. Students interested in American Studies, Business Administration, History, International Studies, Journalism and Political Science will find the curriculum stimulating. Fredonia students share double rooms with Bulgarians.

Credits: 1-21

Offered: Every semester.

INED 403 - Study Abroad - IAU in Aix en Provence, France

Founded in 1957, the Institute for American Universities (IAU) is one of the oldest and largest education abroad programs in Europe. IAU's program offers a cross cultural environment that stimulates intellectual vigor, reflection and personal growth. Students take courses in European studies, all levels of French, and literature courses conducted in French and humanities and social science courses conducted in English. Housing is with host families.

Credits: 1-21

Offered: Every semester.

INED 404 - Study Abroad - Northumbria University, England

Newcastle Upon Tyne, a city known for its vibrant cultural life, is home to Northumbria University and nearly 30,000 students studying in 500 undergraduate and graduate programs. The very modern campus has wireless Internet throughout, single residence halls, and athletic facilities. Instruction is delivered via lectures, workshops, and tutorials. The British Colloquium course, a requirement for full time visiting students, covers the history and culture of Britain and includes regular cultural excursions.

Credits: 1-21

Offered: Every semester.

INED 405 - Study Abroad - University Autonoma Benito Juarez, Mexico

Founded in 1974 as the Language Center of the Benito Juarez University of Oaxaca, it serves over 1,500 students and offers courses in Spanish, French, Italian, Portuguese and Zapotec. The language courses are offered at six levels, from beginning to advanced, in small group settings. It has been designed to develop basic language skills and to help use language in real-life scenarios with a Mexican context. Housing is with host families to further immersion in the life and culture of Oaxaca.

Credits: 1-21

Offered: Every semester.

INED 408 - Study Abroad - Music Conservatory of Seville, Spain

The Conservatorio Superior de Musica Manuel Castillo de Sevilla, a conservatory of international stature, prepares students for the music profession. There are five distinct specialties: instrumental instruction, composition, musicology, choir conducting, and pedagogy. Although some instruction is offered in English, students will need to understand Spanish at an intermediate level to fully participate. Intensive language instruction is available at the University of Seville prior to classes beginning in the fall. Housing is with host families.

Credits: 3-21

Offered: Every semester.

INED 409 - Study Abroad - Izmir University of Economics

Founded in 2001, Izmir University of Economics offers courses in business, computer science, art and design, economics, international relations, psychology, journalism and many others that can be taken to fulfill SUNY Fredonia degree requirements. Courses are taught in English. IUE is located in the coastal city of Izmir, 200 miles from Istanbul.

Credits: 1-21

Offered: Every semester.

INED 415 - Study Abroad: University of Puerto Rico, Puerto Rico

The University of Puerto Rico, also referred to as UPR-RP, is a public research university in San Juan, Puerto Rico. UPR-RP serves more than 18,000 students, 20% graduate, and grants an average of over 3,000 degrees a year. It is recognized by the Carnegie Foundation for the Advancement of Teaching as an Intensive Doctoral/Research University. Its academic offerings range from the baccalaureate to the doctoral degree, through 70 undergraduate programs and 19 graduate degrees with 71 specializations in the basic disciplines and professional fields. UPR-RP is the largest campus in terms of student population of the University of Puerto Rico System, and is the first public university in the history of Puerto Rico.

Credits: 1-21

Offered: Every semester.

INED 416 - Study Abroad: Earth Education International

Earth Education International (EEI) in Costa Rica provides interdisciplinary courses and programs related to sustainability, environmental studies and social responsibility. EEI's offerings emphasize applied learning, substantial field study experiences and in-class lectures, discussions, workshops, debates, and student presentations. Time spent outside the classroom may include field trips, educational exercises, field research, and/or other appropriate assignments. The sites serve as case studies that taken together provide a real-world context for understanding the complex regional, national and global issues associated with working toward a sustainable future.

Credits: 1-21

Offered: Every semester.

INED 437 - Study Abroad - University of the Sunshine Coast Australia

Founded in 1998, The University of the Sunshine Coast offers courses in the arts, education, humanities, business and sciences that can be taken to fulfill SUNY Fredonia degree requirements. It is located one hour north of Brisbane on the Mooloolaba coast.

Credits: 1-21

Offered: Every semester.

INED 438 - Study Abroad - UPAEP Mexico

Founded in 1973, the Universidad Popular Autonoma del Estado de Puebla offers courses in arts, business, education, humanities, language and sciences that can be taken to fulfill SUNY Fredonia degree requirements. While most courses are taught in Spanish, UPAEP also

offers a selection of courses in English. UPAEP is located in the city of Puebla.

Credits: 1-21

Offered: Every semester.

INED 439 - Study Abroad - St. Petersburg University Russia

Founded in 1755, St. Petersburg University offers courses in the arts, education, humanities, business and sciences that can be taken to fulfill SUNY Fredonia degree requirements. Courses are offered in English and Russian. The University is located in the city of St. Petersburg, about 450 miles from Moscow.

Credits: 1-21

Offered: Every semester.

INED 440 - Study Abroad: Southwestern Univ. of Finance and Economics

SWUFE, founded in 1952, is listed as one of China's key universities for international student exchange. It features strong scholarly excellence and course work in economics, finance, accounting, management and mathematics. While all courses are taught in English, students who want to learn to speak Chinese will receive free lessons taught by the College of International Education. SWUFE is located in the Chengdu, the capital of the Sichuan Province.

Credits: 1-21

Offered: Every semester.

INED 441 - Study Abroad: University of Plymouth, England

Plymouth is a university built on a rich heritage dating back to 1862 and while it has grown in terms of size, reputation and impact, it remains true to its values of social inclusion with a strong sense of place and civic responsibility. In 2008 Plymouth was named as a top 50 research university. Courses are offered in all major areas of studies and specialized courses in areas such as marine sciences and entrepreneurial studies.

Credits: 1-21

Offered: Every semester.

INED 442 - Study Abroad: Weimar Conservatory, Germany

At the LISZT SCHOOL of Music- Weimar Conservatory students can study all orchestral instruments, piano, guitar, accordion, voice, theatre, organ, early music, composition, conducting, school music and music pedagogy. In addition, jazz and music theory, musicology and arts management are offered. The most important goal of The LISZT SCHOOL is to prepare its students for their future careers as comprehensively as possible. This means that the

classical orchestral instrumentalists are not only offered private lessons and a committed orchestral school but also gain an insight into special branches such as

Credits: 1-21

Offered: Every semester.

INED 443 - Study Abroad: FLAME, India

The Foundation for Liberal and Management Education (FLAME) is located in the city of Pune, about 1 hour from Mumbai. FLAME focuses on broadening students' perspectives by offering students courses in a range of disciplines - from pure sciences to humanities and social sciences to performance studies. Students are free to choose between courses offered by all four FLAME schools (FSB, FSC, FSLE and FSPA). This freedom results in intellectual interactions between our PG and UG students. A post-graduate student of business, an undergraduate student of physics, a post graduate student of journalism, and an GI

Credits: 1-21

Offered: Every semester.

INED 444 - Study Abroad: Umbra Institute, Italy

The Umbra Institute, founded in 1999 in Perugia, Italy, is the only year-round independent American program based in Perugia, offering semester, year-long and summer programs with a variety of academic programs and special courses. The faculty and staff strive to incorporate a genuine Italian experience into all elements of both the academic curriculum and student life. Whether they choose to pursue a curriculum taught by Umbra faculty or Direct Enrollment at one of the local Italian universities, Umbra students have Italian classmates and engage in the Perugia community on a daily basis for cultural and linguistic discovery.

Credits: 1-21

Offered: Every semester.

INED 445 - Study Abroad: Hankuk University of Foreign Studies, Korea

Since its founding in 1954, Hankuk University of Foreign Studies (HUFS) has played a significant role in reconstructing Korea after the Korean War by producing numerous CEOs and outstanding diplomats, who are competitive enough to strive forward in the global stage. HUFS teaches courses in 45 foreign languages, humanities, law, social sciences, business, and computer science, helping students to grow as global leaders, equipped with both professional knowledge and language proficiency. HUFS is located in the capital city of Seoul.

Credits: 1-21

Offered: Every semester.

INED 446 - Study Abroad: Aichi Prefectural University, Japan

Aichi Prefectural University was founded in 1947 at the end of the Second World War, when the residents of Aichi Prefecture wanted to recover from a period of confusion. In 1998, the campus was relocated from Nagoya city, where the School of Information Science and Technology, the School of Literature, and the School of Foreign Studies, were founded. APU's educational philosophy aims to advance globalization, social welfare, and a society of lifelong learning.

Credits: 1-21

Offered: Every semester.

INED 447 - Study Abroad: Yamasa Institute, Japan

The Yamasa Institute, noted for its excellence in Japanese language instruction and cultural immersion programs is the place where students from around the world begin to encounter the "real Japan." Living with, studying with, and communicating with Japanese people is the key to understanding Japan and its people. The Yamasa Institute has been working since 1919 to improve the quality of education and real understanding across cultures.

Credits: 1-21

Offered: Every semester.

INED 448 - Study Abroad: Shih Hsin University: Taiwan

Upper level coursework in the humanities, communications, business. Introductory Chinese language.

Credits: 1-23

Offered: Every semester.

INED 450 - International Internship

Opportunities for international internships as arranged through the Office of International Education.

Credits: 1-15

Offered: Every semester.

INED 451 - Study Abroad - Washington, D.C.

Prior selection required.

Credits: 1-15

Offered: Every semester.

INED 499 - International - Special Topics

This is a variable content faculty-led international course. Subject is based on student and faculty interest and is arranged through the Office of International Education.

Credits: .5-15

Offered: Offered on occasion.

INED 599 - Study Abroad Special Topics

Study abroad experience with emphasis that changes according to content and experiences.

Credits: 1-15

Offered: Offered on occasion.

INTL - International Studies**INTL 101 - Introduction to International Studies**

Required for all International Studies majors and minors. An introduction to the interdisciplinary study of the global society, its historical development and contemporary status. The course is based on a selection of readings that explore the world's evolution from the perspective of politics, history, economics, sociology, anthropology and the arts.

Credits: 1

Offered: Offered on occasion.

INTL 302 - Russia after Stalin

A thematic approach to recent Russian history. The course identifies Russia's most critical immediate problems and places them in their historical context. Major themes include: political structures and practices; the economy; the military; domestic security; international relations; minorities; culture and society.

Credits: 3

Prerequisite: HIST 102 and HIST 116. Offered: Every other year.

INTL 303 - Globalization in Latin America

Examines the complexities and nuances of modern Latin American societies having as a background the dynamics of the global economy. The course analyzes politics, culture, and socioeconomic conditions in Latin America, both from a contemporary policy perspective and with an examination of the region's insertion into the international political economy in the 19th century.

Credits: 3

Offered: Offered on occasion.

INTL 305 - Transitions in Central Europe

Examines the history, geography, culture, and politics of countries in Central Europe, more specifically, Bulgaria, Hungary, Poland, Romania, Ukraine, Czech Republic, and Slovakia. Particular emphasis is placed on contemporary political and economic developments evolving from the transition from communism to democracy and capitalism. It is designed for students with no knowledge of Slavic languages.

Credits: 3

Offered: Offered on occasion.

INTL 400 - Special Topics

Course content varies based on student and faculty interest.

Credits: 1-15

Offered: Offered on occasion.

INTL 401 - Intl Studies Senior Project

Required for all International Studies majors. A scholarly project utilizing methods and concepts drawn from the Social Sciences and the Humanities and applied to current issues in International Studies. Upon registration, student must submit a project proposal to the Coordinator of International Studies. Working under supervision, student will complete and submit a comprehensive study of the selected topic. International Studies majors only.

Credits: 1

Offered: Every year.

INTL 500 - Overseas Graduate Study - Special Topics

The course provides students with an international experience studying the culture, language, history and politics of foreign countries. Course subject varies based on student and faculty interest. Students are expected to conduct an in-depth exploration of selected topics.

Credits: 3-6

Offered: Offered on occasion.

ITAL - Italian

ITAL 115 - Elementary Italian I

Designed for students with no previous preparation. Study of fundamental speech patterns. Initial emphasis on developing listening comprehension, speaking skills, including pronunciation, with progressive emphasis on reading and writing skills. Discussion of selected cultural aspects.

Credits: 3

Offered: Every semester.

ITAL 116 - Elementary Italian II

Designed for students with one semester of college level Italian or equivalent. Further practice in pronunciation and fundamental speech patterns. Continued development of listening, speaking, reading and writing skills for communicative proficiency. Discussion of selected cultural aspects.

Credits: 3

Prerequisite: ITAL 115. Offered: Every semester.

ITAL 210 - Italian Through Literature and Popular Culture

Students will strengthen their language skills and develop an understanding of Italian culture. Emphasis will be on communication in Italian.

Credits: 3

Prerequisite: ITAL 116. Offered: Every year.

LANG - Foreign Languages

LANG 100 - Special Topics on Lang & Lit

Special topics in Modern Languages and Literature not covered in detail by regular courses.

Credits: 1-6

Offered: Offered on occasion.

LANG 200 - Special Topics on Lang & Lit

Special topics in Modern Languages and Literature not covered in detail by regular courses.

Credits: 1-6

Offered: Offered on occasion.

LANG 300 - Special Topics on Lang & Lit

Special topics in Modern Languages and Literature not covered in detail by regular courses.

Credits: 1-6

Offered: Offered on occasion.

LANG 315 - Transitions in Bulgaria

The goal of the course is to learn about Bulgarian history, culture, politics, economics, geography, and language with an emphasis on contemporary Bulgaria and the transition from Communism to democracy and capitalism. It is designed for students with no knowledge of Slavic languages. Comparison and contrasts with other Eastern/Central European countries will be made.

Credits: 3

Offered: Offered on occasion.

LANG 322 - French Civilization/Culture

Introduction to the political development of France and issues of community, family, gender and class in determining French national identity. Topics include Gothic cathedrals, Joan of Arc, the chateaux of the Loire, the Sun King and Versailles, Le Louvre, the age of reason, Napoleon and the establishment of the Republic.

Credits: 3

Offered: Every year.

LANG 323 - Germany Since 1918

Cultural aspects of the Weimar Republic, the Third Reich, and contemporary Germany. Guest lecturers, readings, and films in English.

Credits: 3

Offered: Offered on occasion.

LANG 327 - Magic Realism in Latin American Literature

A study of conflicting definitions by scholars of what is and is not Magic Realism. Readings will include works by authors considered by many critics (rejected by others) to be practitioners of Magic Realism. The opinions of these writers will also be incorporated into the study, through recorded and published interviews

Credits: 3

Offered: Offered on occasion.

LANG 340 - Introduction to Liberal Arts in Puerto Rico

This course will provide introduction to the study of what it means to be Puerto Rican and to the understanding of Puerto Rican society. This Fall one-credit course will prepare students for their study abroad interdisciplinary experience in Puerto Rico during J-Term.

Credits: 1

Offered: Every Fall semester.

LANG 342 - Liberal Arts in Puerto Rico Meets OSCAR

This course is the culmination of the interdisciplinary cultural immersion in Puerto Rico, where student will produce a research paper and poster presentation at OSCAR, putting together what they learned from the lectures, related field trips, living experiences, research, and discussions.

Credits: 1

Prerequisite: LANG 340. Offered: Every Spring Semester.

LANG 371 - Canadian Writers

An introduction to some of Canada's most significant writers, both anglophone and francophone. Although this is primarily a literature course, considerable attention will be devoted to Canadian history and politics, and to the notion of the Canadian identity.

Credits: 3

Offered: Offered on occasion.

LANG 378 - Canada Today

A look at the history, politics, culture, and geography of Canada and an analysis of contemporary issues affecting Canada and its neighbors.

Credits: 3

Offered: Every year.

LANG 380 - World in Cinema: Special Topics

The course will introduce students to the films of a specific country and/or culture. The films will serve as a text through which students will learn about the country's history, culture, and the socio-political issues affecting that society and how they are depicted through film. Films will be seen in the original with subtitles in order to expose students to the language in which they were filmed. The course can be repeated as its content changes.

Credits: 3

Offered: Every year.

LANG 385 - German Film

The course will address contemporary civilization in Germany in that it will examine its artistic expression in drama and film. The works of major directors such as Fritz Lang, Leni Riefenstahl, Werner Herzog, and Wim Wenders will be examined. Short examples of Fassbinder, Schlöndorff and von Trotta will be shown to contrast their work and style.

Credits: 3

Offered: Offered on occasion.

LANG 388 - Spanish Civilization/Culture

A comprehensive introduction to aspects of Spanish civilization and culture: geography, history, social customs, political movements, literature and art. In English.

Credits: 3

Offered: Offered on occasion.

LANG 400 - Special Topics in Languages and Literatures

Special topics in Modern Languages and Literature not covered in detail by regular courses.

Credits: .5-3

Offered: Offered on occasion.

LANG 405 - French Women Writers

An evaluation of the contributions of French women writers to the social, economic and political institutions which form the basis of Western philosophic tradition.

Credits: 3

Offered: Every year.

LANG 410 - Directed Study

Individual supervised study of a particular area or topic in any of the department's language or literature offerings.

Periodic meetings with instructor; writing of a substantial paper.

Credits: 1-3

Offered: Offered on occasion.

LANG 415 - Bulgaria Study Tour

A two-three week study/travel tour of Bulgaria. First week in Sofia includes lectures and visits to various government business and social organizations. Following would be travel to key cities and historical sites around Bulgaria. Possible side trip to Istanbul.

Credits: 3

Prerequisite: LANG 315 or INTL 305. Offered: Offered on occasion.

LANG 419 - France and the French

Develops students' understanding of France and the French. Students explore an important theme, movement, author, or period in the literature and/or culture of France. The course can be repeated as its content changes. Course taught in English.

Credits: 3

Offered: Offered on occasion.

LANG 420 - The French-speaking World

Introduces students to the Francophone world. Students explore an important theme, movement, author, or period in the literature and/or culture of one or more Francophone regions such as French Caribbean, West and North Africa, Canada, etc. The course can be repeated as its content changes. The course is taught in English.

Credits: 3

Offered: Offered on occasion.

LANG 500 - Special Topics in Foreign Language

Special topics in Modern Languages and Literature not covered in detail by regular courses.

Credits: 1-3

Offered: Offered on occasion.

LANG 510 - Directed Study

Individual supervised study of a particular area or topic in any of the department's language or literature offerings. Periodic meetings with instructor; writing of a substantial paper.

Credits: 1-3

Offered: Offered on occasion.

LART - Liberal Arts

LART 150 - Liberal Arts Freshman Seminar

As part of The Liberal Arts Freshman Year Experience, entering freshmen who are still exploring for a major are required to choose from an interesting variety of topical, 1 credit seminars. Taught by faculty and professional staff members, each seminar enrolls no more than 20 students and is graded on a Satisfactory/Unsatisfactory basis. In addition to the seminar, all Liberal Arts freshmen must attend one group meeting as part of the course requirement.

Credits: 1

Offered: Every year.

LART 151 - Liberal Arts Freshmen Explore for Major

Second-semester Liberal Arts freshmen who have not yet chosen a major are required to attend 15 of 17 class meetings offered during the first-half of the spring semester. This part of The Liberal Arts Freshman Year Experience provides students with a survey of the variety of major offerings. Presentations are made by faculty, chairpersons, students and deans from departments and divisions across campus. In addition to answering any questions students may have, the discussions explain the requirements for each discipline as well as the career paths students have taken with these majors, whether or not graduate school is indicated, what remuneration can be expected and more. Grading is done on a Satisfactory/Unsatisfactory basis determined by attendance.

Credits: 1

Offered: Every year.

LEAD - Leadership Studies

LEAD 101 - Intro to Leadership Seminar

An introductory course in the study of leadership that will introduce the student to the tasks, strategies and skills of effective leadership. This course covers introductory theories of leadership, personal assessment, and offers opportunities to develop individual self-discovery and group leadership experience through experiential education. (Note: Students must be nominated by a SUNY Fredonia faculty or staff member, apply and be accepted prior to registration)

Credits: 1

Offered: Every Spring Semester.

LEAD 201 - Advanced Leadership Development

A course in the study of leadership that introduces the student to tasks, strategies, and skills of effective leadership. Course activities will move the student from theory to the practical processes of leadership through the

use of experiential learning, oral expression, and effective teamwork on several projects.

Credits: 3

Offered: Every semester.

LEAD 302 - Exploring Leadership and Ethics

Through this course students will gain a broad understanding of historical and current theories of leadership and management and the shift from the dominant paradigm to the emergent paradigm. Students will also explore how normative ethics affects their leadership philosophy and decision making. As a way to recognize their leadership strengths, students will participate in several instruments that will assist them in defining their leadership strength and style.

Credits: 3

Offered: Every Fall semester.

LEAD 490 - Internship in Leadership

Open only to Leadership Studies minors. Students proposing internships must have an approved Leadership Studies proposal which includes the internship. Additionally, they must have a faculty sponsor and a detailed plan for the internship describing; (1) the duties approved by the interning agency; (2) the student's method of reporting or reflecting on the internship experience; (3) the method of internship evaluation; and (4) the amount of credit earned.

Credits: 1-6

Prerequisite: LEAD 201 or SPST 201. Offered: Every semester.

MAED - Mathematics Education

MAED 105 - Introduction to Contemporary Mathematics Education

Introduction to middle and secondary mathematics education, its principles and practices. Organization of schools, planning, teaching styles, classroom management, and instructional materials in mathematics education are among the topics considered. Direct experiences with middle and secondary school students are an integral part of the course.

Credits: 3

Corequisite: MAED 106. Offered: Every semester.

MAED 106 - Contemporary Mathematics Education - Field Experience

Provides participants an opportunity to observe classroom operations, observe and describe the role of the teacher, conduct focused observations and interviews, work with

individual and small groups of candidates on a teaching project.

Credits: 0

Corequisite: MAED 105. Offered: Every semester.

MAED 207 - Mathematics Tutoring in the Community

The course is designed for students working as Math and Science Partnership mathematics tutors in the local community. Students eligible for the work-study program or working as volunteers, tutor in area schools or after-school programs. The course examines issues such as getting children interested in mathematics, how to explain various topics, working with groups vs. individuals, and cultural differences. Problems encountered in the tutoring experience will be discussed. Students must apply through the Mathematical Sciences department.

Credits: 1

Offered: Every semester.

MAED 208 - Special Topics

Selected readings, discussions, and problem solutions on a topic in mathematics education at an introductory level. Permission of department required.

Credits: 1-3

Offered: Offered on occasion.

MAED 240 - Statistics for School Teachers

This course will include data collection, random sampling, numerical and graphical summaries, statistical variability, the logic behind tests of significance and confidence intervals, simulation, regression and chance. Activities for learning statistics and resources available for teaching and learning statistics at a middle school level will be used.

Credits: 3

Offered: Every semester.

MAED 276 - Literacy and Technology for Science and Mathematics

The course provides an overview of the processes involved in literacy acquisition and instructional technologies available to enhance teaching in science and mathematics. The relationship of reading and writing, and aspects of writing development and writing process appropriate to each stage of reading development will be presented. Topics: conceptual and methodological issues related to instruction and acquisition of reading, the role and use of technology in literacy instruction, assessment of candidate's reading and writing, diversity in reading acquisition, use of computers, graphing calculators and other multimedia applications.

Credits: 3

Offered: Every Spring Semester.

MAED 301 - Mathematics for School Teachers I

Meaning, development, and communication of number ideas and logical structure of base 10 number systems (as well as other bases); the concepts and procedures related to the basic algorithms of arithmetic; problem solving and mathematical modeling within the whole number system and positive rational number system. Course open only to students seeking certification to teach at the early childhood, childhood, or middle childhood level. Sophomore standing required.

Credits: 3

Offered: Every semester.

MAED 302 - Mathematics for School Teachers II

Meaning, development and communication in the real number system; problem solving and mathematical modeling within this system; including proportional reasoning; algebra, statistics, probability, properties of geometric shapes and measurement in 2 and 3-dimensions. Course open only to students who are seeking certification to teach at the early childhood, childhood or middle childhood level.

Credits: 3

Prerequisite: MAED 301. Offered: Every semester.

MAED 303 - Mathematics for School Teachers III

Further development of geometry concepts; including triangle congruence and similarity; coordinate geometry and transformations; advanced problem solving using algebraic models, geometric models and other modeling techniques; emphasis on the framework provided by the National Council of Teachers of Mathematics for elementary/middle school mathematics; investigation of concepts teachers must know in order to build and refine mathematical ideas and connections in K-8.

Credits: 3

Prerequisite: MAED 302. Offered: Every semester.

MAED 305 - Diversity in the Teaching of Science and Mathematics

The course provides a theoretical framework for exploring and developing a culturally responsive approach to the teaching of mathematics and science. In exploring different instructional formats, the course allows candidates to develop approaches that prepare them for an ever-increasing population of students that reflect diverse backgrounds and abilities. The field experience is a co-requisite that allows the candidates the opportunity to apply their knowledge of the issues presented in the course work to a diverse population.

Credits: 3

Corequisite: MAED 313. Offered: Every Fall semester.

MAED 310 - Reading and Writing Mathematics

The course will use the vehicle of problem solving to help students develop their abilities in reading and writing mathematics. It will also focus on how reading and writing exercises can be used to enhance the teaching and learning of mathematics, and how reading and writing mathematics can be used to enhance the teaching of literacy. The course will include discussions of reading mathematics, writing mathematics, oral presentation of mathematics, and problem solving techniques. "Communication" is one of the standards from Principles and Standards for School Mathematics of the National Council of Teachers of Mathematics. Students will read and discuss material from the NCTM and other sources related to the standard.

Credits: 3

Prerequisite: MATH 210. Offered: Every semester.

MAED 313 - Diversity in the Teaching of Science and Mathematics Field Experience

The course is the field component to MAED 305. Candidates will use different instructional formats to develop effective approaches for teaching mathematics and science to students with different backgrounds and abilities in diverse educational learning environments.

Credits: 0

Corequisite: MAED 305. Offered: Every Fall semester.

MAED 325 - Technology Integration in Mathematics Education

Introduction to software packages appropriate for use by mathematics educators. Topics selected from, but not limited to: applets, geometry software, calculators, web page design, programming, scientific word processors, spreadsheet applications, computer algebra systems, electronic whiteboards and other specialized software.

Credits: 3

Prerequisite: MAED 302. Offered: Every year.

MAED 400 - Independent Study

Independent study of a selected list of readings approved by a faculty advisor. Permission of department required.

Credits: 1-3

Offered: Offered on occasion.

MAED 410 - Seminar: Mathematics for High School Teachers

The course is intended for future teachers of high school mathematics to help them develop a deeper knowledge of some key topics in the high school curriculum. Topics will be chosen from the following: Complex numbers, functions including logarithmic, exponential and trigonometric functions, curve-fitting, transformations,

equations, inequalities and algebraic expressions. Students must have senior standing in the Mathematics Adolescence Education major.

Credits: 3

Offered: Every year.

MAED 416 - Math Student Teaching Seminar

The course complements the student teaching practicum in either Adolescence Mathematics Education or Middle Childhood Mathematics Education. Candidates receive detailed instruction in the completion of the applied teaching and learning projects associated with their student teaching placements.

Credits: 3

Prerequisite: MAED 417 or MAED 419. Offered: Every semester.

MAED 417 - Middle School (Grades 5-9) Methods in Mathematics

Principles, materials, and methods for teaching middle school (grades 5-9) mathematics. The course serves as the primary methods course for students pursuing initial certification in Middle Childhood Education - Mathematics Specialist. Departmental approval required.

Credits: 3

Offered: Every year.

MAED 419 - Secondary School (Grades 7-12) Methods in Mathematics

Principles, materials, and methods for teaching secondary school (grades 7-12) mathematics. The course serves as the primary methods course for students pursuing initial certification in Adolescence Education - Mathematics. Note: must be successfully completed before student teaching. Departmental approval required.

Credits: 3

Offered: Every year.

MAED 428 - Student Teaching for Mathematics/Middle Childhood Education: Grades 5-6 Placement

A field assignment to teach middle school mathematics. Assignments provided in grades 5 through 6 during this placement. Arrangements made by the Office of Field Experiences.

Credits: 6

Prerequisite: MAED 417. Corequisite: MAED 416 or MAED 429. Offered: Every semester.

MAED 429 - Student Teaching for Mathematics/Middle Childhood Education: Grades 7-9 Placement

A field assignment to teach middle school mathematics. Assignments provided in grades 7 through 9 during this placement. Arrangements made by the Office of Field Experiences.

Credits: 6

Prerequisite: MAED 417. Corequisite: MAED 416 or MAED 428. Offered: Every semester.

MAED 430 - Student Teaching for Mathematics/Adolescence Education: Grades 7-9 Placement

A field assignment to teach mathematics at the adolescence level. Assignments provided in grades 7 through 9 during this placement. Arrangements made by the Office of Field Experiences.

Credits: 6

Prerequisite: MAED 419. Corequisite: MAED 416 or MAED 431. Offered: Every semester.

MAED 431 - Student Teaching for Mathematics/Adolescence Education: Grades 10-12 Placement

A field assignment to teach mathematics at the secondary level. Assignments provided in grades 10 through 12 during this placement. Arrangements made by the Office of Field Experiences.

Credits: 6

Prerequisite: MAED 419. Corequisite: MAED 416 or MAED 430. Offered: Every semester.

MAED 500 - Independent Study

Independent study of a set of related topics agreed to by the student and the instructor.

Credits: 1-6

Offered: Offered on occasion.

MAED 509 - Technology in Mathematics Education

A survey of software or technology used in teaching mathematics and of current issues in the use of technology in the teaching and learning of mathematics.

Credits: 3

Offered: Offered on occasion.

MAED 512 - Design and Evaluation of Mathematics Curricula

Study of the design and evaluation of various models of mathematics curricula including the latest National Council Teachers of Mathematics (NCTM) materials.

Credits: 3

Offered: Offered on occasion.

MAED 514 - Instructional Methods in Mathematics

A critical study of the literature on current methods of teaching mathematics.

Credits: 3

Offered: Offered on occasion.

MAED 518 - History of Mathematics Education

Overview of the development of mathematics education as a discipline, the major influence from other fields and society, trends in recent decades, and the impact on school mathematics.

Credits: 3

Offered: Offered on occasion.

MAED 522 - Differential Equations

Introductory course with emphasis on applications of calculus. Topics include: first order equations, higher order linear equations, undetermined coefficients, variation of parameters, linear systems, bifurcation analysis, series solutions, Laplace transforms, numeric and qualitative techniques, mathematical modeling and applications, and computational technology. Additional topics selected from linear and nonlinear systems as time permits. Prerequisites: MATH 122, 123, 223, 231 or permission from the instructor.

Credits: 3

Offered: Offered on occasion.

MAED 523 - Real Analysis

Topology of the real line, measure and integration on the real line, function spaces and their topologies.

Credits: 3

Offered: Offered on occasion.

MAED 524 - Complex Analysis

Geometric interpretation of the complex plane, analytic functions and power series representations, introduction to Riemann Surfaces, the Cauchy Integral Theorem and Integral Formula, calculation of integrals by residues, application to potential theory.

Credits: 3

Offered: Offered on occasion.

MAED 531 - Rings and Fields

An introduction to rings and fields: rings; integral domains; fields; characteristics of a ring; subrings; ideals; factor rings; ring homomorphisms; polynomial rings; introduction to Galois theory as time permits.

Credits: 3

Offered: Offered on occasion.

MAED 532 - Abstract Algebra with Applications

Study of selected applications of abstract algebra. Topics selected from: identification numbers, symmetry, applications to combinatorics, coding theory, cryptography.

Credits: 3

Offered: Offered on occasion.

MAED 533 - Theory of Equations

This course focuses on a problem with a rich mathematical history, that of solving polynomial equations. Topics selected from: review of rings and fields; construction of the real numbers from the rationals; algebraic and complex numbers; fundamental theorem of algebra; finite fields and integral domains; polynomial rings, including the division algorithm and Euclidean algorithm for polynomials; counting and locating real roots; cubic and quartic equations; introduction to Galois theory.

Credits: 3

Offered: Offered on occasion.

MAED 535 - Number Theory

Topics selected from: congruence relations; arithmetic functions; primitive roots; quadratic reciprocity; sums of squares; continued fractions; Farey sequences; factoring and primality testing; analytic and additive number theory. The course relates directly to the following N.Y.S. Learning Standards for Mathematics, Science, and Technology: mathematical reasoning, numbers and numeration, and patterns/functions.

Credits: 3

Offered: Offered on occasion.

MAED 537 - Combinatorics

The addition, multiplication and pigeonhole principles. Permutations and combinations, partitions and distributions; the binomial and multinomial theorems. Generating functions; recurrence relations; principle of inclusion-exclusion; combinatorial algorithms or designs as time permits. The course relates directly to the following N.Y.S. Learning Standards for Mathematics, Science, and Technology: mathematical reasoning, modeling/multiple representation, and pattern/functions.

Credits: 3

Offered: Offered on occasion.

MAED 540 - Graph Theory

Graph models; graph structure and representation; trees; connectivity; graph traversals; graph colorings; other

topics as time permits. The course relates directly to the N.Y.S. Learning Standards for Mathematics, Science, and Technology: mathematical reasoning, modeling/multiple representation, and pattern/functions.

Credits: 3

Offered: Offered on occasion.

MAED 541 - Euclidean Geometry

Neutral geometry; Euclidean geometry; comparison of various models of Euclidean geometry, such as that of Hilbert and the SMSG; comparison of Euclidean geometry to various finite geometries and non-Euclidean geometries; geometry of circles and triangles; other topics such as analytic and transformational geometry as time permits.

Credits: 3

Offered: Offered on occasion.

MAED 542 - Non-Euclidean Geometry

Neutral geometry; hyperbolic geometry; elliptic geometry; various models of hyperbolic and elliptic geometry; comparison of results to those of Euclidean geometry.

Credits: 3

Prerequisite: MATH 341. Offered: Offered on occasion.

MAED 543 - Algebraic Geometry

A study of varieties and morphisms between them; foundational material from commutative ring theory; the Zariski topology; dimension and degree of varieties; select problems in enumerative geometry.

Credits: 3

Prerequisite: MATH 331. Offered: Offered on occasion.

MAED 545 - Geometric Topology

Detailed study of topological spaces and their invariants. The emphasis will be on the geometric aspects of topology. Topics may include Sperner's lemma and Brouwer Fixed Point Theorem, classification of compact surfaces, application to systems of differential equations.

Credits: 3

Offered: Offered on occasion.

MAED 550 - Statistics for Mathematics Educators

Given the emphasis on statistics in the mathematics 5 - 12 grades curriculum, and the increased need for teachers competent to teach AP Statistics, mathematics educators need to understand statistical concepts and methods to a greater depth than what is acquired in an undergraduate level statistics course or sequence. In this course, students will learn to understand and explain why certain statistical techniques are used in certain situations and why they

work, why certain methods don't work well sometimes, and also common conceptual errors that users and consumers of statistics often make. Students in the course will investigate some current resources that exist to help their students understand statistics, as well as teaching methods and activities that increase student understanding. Prerequisite: a university-level statistics course.

Credits: 3

Offered: Offered on occasion.

MAED 551 - Statistics

Regression, hypothesis testing and confidence intervals in regression, nonparametric statistics, chi-square tests, sampling, use of activities in probability and statistics.

Credits: 3

Offered: Offered on occasion.

MAED 560 - Conics

This course concerns the conic sections: the parabola, ellipse, and hyperbola. It covers their basic definitions and equations, from both a synthetic and analytic perspective, including their equations in polar coordinates. It then moves on to consider the conic sections in light of Bezout's theorem, which concerns the number of points of intersection of two algebraic curves.

Credits: 3

Offered: Offered on occasion.

MAED 575 - Linear Optimization

Formulation and solution of linear programming problems using graphical and algebraic methods and computer software, sensitivity analysis, and the dual problem; additional topics chosen from network analysis, game theory, and integer programming.

Credits: 3

Prerequisite: MATH 231. Offered: Offered on occasion.

MAED 581 - History of Mathematics

A study of selected topics in the history of mathematics and their applications to teaching. Permission of instructor required.

Credits: 3

Offered: Offered on occasion.

MAED 591 - Math Academy: K-12 Materials

The week-long academy is dedicated to the development of instructional and curricular materials in K-12 mathematics. Special topics include proof and communication, the use of current technology and manipulatives, and preparation strategies for N.Y.S. Math Assessments.

Credits: 3

Offered: Every year.

MAED 599 - Special Topics

Selected readings, discussions, reports and problem solutions on a topic of interest in mathematics, mathematics education or statistics.

Credits: 1-3

Offered: Offered on occasion.

MAED 602 - Mathematics Education Seminar

Selected reading, discussions, and reports on current issues in mathematics education.

Credits: 3

Offered: Every year.

MAED 690 - Graduate Project

Students will be required to research a topic pertaining to mathematics education and apply it to their own classroom experiences if possible. The project will require a written proposal, a final report and an oral defense.

Credits: 3

Prerequisite: MAED 602. Offered: Every year.

MATH - Mathematics

MATH 100 - Mathematics First-Year Seminar

The course seeks to help students utilize campus resources effectively, learn useful academic skills, especially those relevant to mathematics, develop a support network, become more self-aware, promote personal health and wellness, and better connect with the campus. The course will introduce students to the culture of the Mathematical Sciences department and the mathematics community in general. Students in the course should be concurrently enrolled in a precalculus or calculus course.

Credits: 1

Offered: Every year.

MATH 105 - Precalculus

The course is designed to prepare students to take Survey of Calculus I (MATH 120) or University Calculus I (MATH 122). It emphasizes multi-step problem solving. Topics include algebraic, exponential, logarithmic, and trigonometric functions and their graphs, transformations and combinations of functions, a review of algebra, geometry, and trigonometry, solving inequalities and systems of equations, and computational technology. (The course is not open to students who have completed MATH 106 with a grade of C- or better, or those who have completed a calculus course.) Background assumed: N.Y.S. Integrated Algebra and Trigonometry, or equivalent.

Credits: 4

Offered: Every year.

MATH 106 - University Precalculus

The course is designed to prepare students to take University Calculus (MATH 122) and emphasizes multi-step problem solving. Topics include a review of algebra, solving inequalities, algebraic and transcendental functions, trigonometry, analytic geometry, applications and computational technology. (Not open to students who have completed a calculus course with a grade of C- or better.) Background assumed: N.Y.S. Algebra II and Trigonometry (or Math B), or equivalent.

Credits: 3

Offered: Every semester.

MATH 108 - Prize-Winning Mathematics

The course surveys some mathematical tools that have proved useful to the social sciences, especially in business, economics, and political science. Work on one topic in particular, game theory, has led to several Nobel prizes, and may have helped the New England Patriots win three Super Bowls. Other topics will be selected from linear models, matrices, linear programming, and nonlinear and probabilistic models. Background assumed: N.Y.S. Algebra II and Trigonometry (or Math B), or equivalent.

Credits: 3

Offered: Every year.

MATH 110 - Mathematics in Action

Emphasizes the real-world significance of mathematics and the applications of several areas of mathematics. Some topics: design of street networks, planning and scheduling, weighted voting systems, fair division and apportionment, measuring populations and the universe, and statistics. Background assumed: N.Y.S. Algebra II and Trigonometry (or Math B), or equivalent.

Credits: 3

Offered: Every semester.

MATH 112 - Preparation for Calculus

Designed for students who plan to take first-semester calculus in the following semester, and want to hone their precalculus skills. The course utilizes an online system called ALEKS (Assessment and LEarning in Knowledge Spaces), an artificially-intelligent assessment and learning system. ALEKS uses adaptive questioning to determine exactly what each student knows, and then tailors a study plan to each individual student. Students work at their own pace to attain mastery of the prerequisite knowledge necessary for success in calculus. Not open to students with credit for calculus.

Credits: 1

Offered: Summer, JTerm.

MATH 117 - Why Mathematics?

Introduces the liberal arts student to the nature of mathematics and what mathematicians do. An emphasis on presenting ideas and mathematical concepts rather than on attaining computational skills. Ideas from algebra, geometry, number theory, set theory and topology are presented with emphasis on their history and relevance to other disciplines. Background assumed: N.Y.S. Algebra II and Trigonometry (or Math B), or equivalent.

Credits: 3

Offered: Offered on occasion.

MATH 120 - Survey of Calculus I

An introduction to differential and integral calculus for functions of a single variable with applications to the management, social, and life sciences. Not open to students majoring in mathematics, physics, or chemistry. Background assumed: Preparation equivalent to MATH 105 or MATH 106. Credit may not be earned for both MATH 120 and MATH 122.

Credits: 3

Offered: Every semester.

MATH 121 - Survey of Calculus II

A continuation of MATH 120. Additional techniques of differentiation and integration with further applications to the management, social, and life sciences. Introduction to the calculus of functions of several variables. Not open to students majoring in mathematics, physics, or chemistry. Credit may not be earned for both MATH 121 and MATH 123.

Credits: 3

Prerequisite: MATH 120. Offered: Every semester.

MATH 122 - University Calculus I

Functions, inverse functions, limits, continuity, derivatives, indeterminate forms, antiderivatives; applications to rectilinear motion, graphing, maxima-minima, related rates; computational technology. Background assumed: Preparation equivalent to MATH 105 or MATH 106. Credit will not be given for both MATH 120 and MATH 122.

Credits: 4

Offered: Every semester.

MATH 123 - University Calculus II

Definite integrals, the fundamental theorem of calculus, techniques of integration, applications of the definite integral in the physical sciences and geometry, improper integrals, differential equations, sequences and series.

Credit will not be given for both MATH 121 and MATH 123.

Credits: 4

Prerequisite: MATH 122. Offered: Every semester.

MATH 125 - Software for Mathematics

Introduction to software packages used by mathematicians. Topics selected from: computer algebra systems, spreadsheet software, and software for publishing mathematics (both in print and on the Web). Some attention is given to writing programs and macros within these systems.

Credits: 3

Prerequisite: MATH 122. Offered: Every year.

MATH 190 - Honors Problem Solving

Designed to engage promising mathematics students in solving problems related to calculus and its applications. Students are partitioned into small groups and given interesting and nontrivial problems to work on together. Students present solutions in class and are required to record their work in notebooks.

Credits: 2

Corequisite: MATH 123. Offered: Every year.

MATH 210 - Mathematical Structures and Proof

Careful study of the concepts and techniques often used in mathematics courses at the advanced undergraduate level. Topics include logic, set theory, proof techniques, elementary number theory, mathematical induction, functions, and relations. Additional topics from abstract algebra, combinatorics, or countable vs. uncountable sets as time permits.

Credits: 4

Prerequisite: MATH 121 or MATH 123. Offered: Every semester.

MATH 223 - University Calculus III

Parametric equations, polar, cylindrical, and spherical coordinates, algebra of vectors, equations of lines, planes, quadratic surfaces, vector functions and space curves, calculus of functions of several variables including multiple integration; applications to the physical sciences and geometry; computational technology.

Credits: 4

Prerequisite: MATH 123. Offered: Every semester.

MATH 224 - Differential Equations

Introductory course with emphasis on methods of solution of differential equations and applications. Topics include: first order differential equations, higher order linear

differential equations, method of undetermined coefficients, method of variation of parameters, systems of first order linear differential equations, qualitative and numerical analyses of solutions, and power series solutions and Laplace transforms as time permits.

Credits: 3

Prerequisite: MATH 123. Offered: Every year.

MATH 231 - Linear Algebra

Careful study of matrices, systems of linear equations, determinants, linear transformations, with emphasis on similarities and isometries of the plane, vector spaces, eigenvalues and eigenvectors; other topics as time permits. Completion of, or concurrent enrollment in MATH 210 is recommended.

Credits: 4

Prerequisite: MATH 121 or MATH 123. Offered: Every semester.

MATH 290 - Sophomore Honors Mathematics

Mathematics majors who excel in calculus and/or discrete mathematics may be invited to join the Honors Program in Mathematics. MATH 290 is the first course in the Honors Program. It looks at advanced topics from calculus, discrete mathematics, and linear algebra, with emphasis on reading and writing mathematical proofs.

Credits: 2

Prerequisite: MATH 210. Corequisite: MATH 231. Offered: Every year.

MATH 307 - Math and Music

Explores how mathematical ideas have been used to understand and create music, and how musical ideas have influenced math and science. Topics selected from the history of tuning and alternative tuning, the Music of the Spheres doctrine, historical theories of consonance, contributions to music theory by mathematicians, mathematical analysis of sound, philosophical and cognitive connections between math and music, and math in music composition and instrument design. An ability to read music is recommended. This course is not intended for Mathematics majors.

Credits: 3

Offered: Offered on occasion.

MATH 309 - Mathematical Sciences Internship

Participation in an approved professional experience applying mathematics or statistics in a real world setting. Students must submit a Learning Contract describing the work experience, its relationship to the mathematical sciences, and how it will be monitored and evaluated. Permission of the department required.

Credits: 1-6

Offered: Offered on occasion.

MATH 315 - Theory of Equations

Study of the theory of polynomial equations. Rational, real and complex roots of algebraic equations, the Remainder and Factor theorems, Fundamental Theorem of Algebra, solutions of cubic and bi-quadratic equations and approximation of roots.

Credits: 3

Prerequisite: MATH 210. Offered: Offered on occasion.

MATH 322 - Partial Differential Equations

Introductory course in partial differential equations with emphasis on boundary value problems encountered in mathematical physics. Fourier series; separation of variables; D'Alembert's solution; the heat, wave and potential equations. Additional topics such as Sturm-Liouville problems or Laplace transforms as time permits.

Credits: 3

Prerequisite: MATH 224. Offered: Offered on occasion.

MATH 323 - Introductory Real Analysis

Careful presentation of the ideas of calculus that are developed intuitively in the usual freshman-sophomore calculus courses. Techniques of proof in analysis; countable sets and cardinality; the real line as a complete ordered field; some topology of the real line; sequences and their limits; continuous functions and their properties; other topics as time permits.

Credits: 3

Prerequisite: MATH 123 and MATH 210. Offered: Every Fall semester.

MATH 325 - Numerical Analysis

Introductory course in numerical methods for digital computers. Floating point arithmetic, errors, error analysis. Roots of equations, systems of equations. Numerical differentiation and integration. Interpolation and least squares approximations.

Credits: 3

Prerequisite: MATH 123. Offered: Offered on occasion.

MATH 329 - Mathematical Modeling

An introduction to the development of mathematical models to solve various applied and industrial problems. Topics will include optimization, Lagrange multipliers, sensitivity analysis in optimization models, analysis and simulation of discrete and continuous dynamic models.

Credits: 3

Prerequisite: MATH 223 and MATH 231. Offered: Every year.

MATH 331 - Abstract Algebra I

Study of algebraic structures, such as groups and rings. The fundamental theorem of finite abelian groups, basic homomorphism theorems for groups, permutation groups and polynomial rings are presented.

Credits: 3

Prerequisite: MATH 210 and MATH 231. Offered: Every year.

MATH 332 - Abstract Algebra II

Continuation of the study of algebraic structures such as groups, rings, integral domains and fields, with applications such as: geometric symmetry and crystallography, switching networks, and error-correcting codes.

Credits: 3

Prerequisite: MATH 331. Offered: Every other year.

MATH 335 - Number Theory

Study of integers and their properties; divisibility; primes; congruencies; multiplicative functions; quadratic residues; quadratic reciprocity; Diophantine equations.

Credits: 3

Prerequisite: MATH 210. Offered: Every other year.

MATH 337 - Combinatorics

The addition, multiplication and pigeon-hole principles. Permutations and combinations, partitions and distributions; the binomial and multinomial theorems. Generating functions; recurrence relations; principle of inclusion-exclusion; combinatorial algorithms or designs as time permits.

Credits: 3

Prerequisite: MATH 210 and MATH 231. Offered: Every other year.

MATH 341 - Geometry

Study of absolute, Euclidean, and hyperbolic geometry from synthetic and analytic viewpoints. Topics include axioms for geometries, transformations, triangles and other basic shapes, and constructions. Some consideration given to finite, spherical, and spatial geometry. Use of geometry software.

Credits: 3

Prerequisite: MATH 210. Offered: Every year.

MATH 359 - Probability Models in Operations Research

Topics chosen from stochastic processes; birth-death processes; queuing theory; inventory theory; reliability; decision analysis; simulation.

Credits: 3

Prerequisite: STAT 350 and MATH 231. Offered: Every other year.

MATH 365 - Financial Mathematics

Study of basic financial mathematical concepts used in modeling and hedging. Topics include: financial derivatives, call and put options, futures, binomial trees, replicating portfolios and arbitrage, stocks and options pricing, Black-Scholes model, hedging. Additional topics such as swaps, currency markets, and international political risk analysis as time permits.

Credits: 3

Prerequisite: MATH 231 and STAT 350. Offered: Every other year.

MATH 369 - Interest Theory

A rigorous treatment of the mathematical theory associated with financial transactions, including simple and compound interest, annuities, bonds, yield rates, amortization schedules, and sinking funds. Additional topics such as capital asset pricing models and portfolio risk analysis as time permits.

Credits: 3

Prerequisite: MATH 123. Offered: Every Spring Semester.

MATH 375 - Deterministic Models in Operations Research

Topics chosen from linear programming and applications; network analysis; game theory; dynamic, integer and nonlinear programming.

Credits: 3

Prerequisite: MATH 231. Offered: Offered on occasion.

MATH 381 - History of Mathematics

Chronological study of the development of mathematics. Emphasis on the solution of selected mathematical problems associated with historical periods.

Credits: 3

Prerequisite: MATH 210. Offered: Every year.

MATH 390 - Honors Special Topics

The course, the second in the Honors Program in Mathematics, will focus on a topic reflecting the interest of the instructor. Examples include combinatorial topology, nonlinear dynamic systems, graph theory, complex

analysis, and the theory of partitions. This course is by invitation only.

Credits: 2

Prerequisite: MATH 290. Offered: Every year.

MATH 400 - Independent Study

Independent study of a selected list of readings approved by a faculty advisor. Permission of department required.

Credits: 1-3

Offered: Every semester.

MATH 405 - Senior Seminar

Studies from selected areas of mathematics. Written reports and formal presentations will be required. Senior standing or permission of instructor required.

Credits: 1

Offered: Every semester.

MATH 408 - Special Topics Seminar

Selected readings, discussions, and reports on topics in mathematics. Permission of department required.

Credits: 1-3

Offered: Offered on occasion.

MATH 420 - Advanced Calculus

Vector calculus; Jacobian matrices and their determinants; differentiation and integration of differential forms and applications to physics; generalizations of the fundamental theorem of calculus, including Green's theorem, the divergence theorem, Gauss's theorem, and Stokes' theorem; potential theory.

Credits: 3

Prerequisite: MATH 231 and MATH 223. Offered: Every year.

MATH 423 - Topics in Analysis

Topics vary, depending on the instructor, but may include measure and integration, basic functional analysis, complex analysis, residue theory, and special functions.

Credits: 3

Prerequisite: MATH 323. Offered: Offered on occasion.

MATH 440 - Graph Theory

Introduction to graph theory. Topics chosen from: connectivity, trees, eulerian and hamiltonian graphs, matchings, factorizations, and colorings. Applications chosen from: the shortest path problem, communication networks, the traveling salesman problem, the optimal assignment problem, and scheduling algorithms.

Credits: 3

Prerequisite: MATH 210 and MATH 231. Offered: Offered on occasion.

MATH 490 - Honors Thesis

The capstone course in the Honors Program in Mathematics. Each student will conduct research under the mentorship of a faculty member, culminating in a written thesis and an oral presentation. This course is by invitation only.

Credits: 3

Prerequisite: MATH 390. Offered: Every year.

MEDT - Medical Technology

MEDT 490 - Clinical Internship

A full-year program of study conducted at an National Accrediting Agency for Clinical Laboratory Sciences (NAACLS)-approved hospital medical technology program, typically one of the three programs with which SUNY Fredonia is affiliated. Students attend lectures and perform lab tests under the instruction and supervision of certified lab scientists and physicians. Upon successful completion of the internship, students receive certification as a medical technologist, and are eligible to take the board exam offered by the American Society of Clinical Pathologists. Passing the exam extends Board certification and N.Y.S. licensure, enabling the graduates to work as medical technologists in a variety of laboratory settings. Permission of Department is required.

Credits: 15

Offered: Every semester.

MEDT 491 - Clinical Internship

A full-year program of study conducted at an NAACLS-approved hospital medical technology program, typically one of the three programs with which SUNY Fredonia is affiliated. Students attend lectures and perform lab tests under the instruction and supervision of certified lab scientists and physicians. Upon successful completion of the internship, students receive certification as a medical technologist, are eligible to take the board exam offered by the American Society of Clinical Pathologists. Passing the exam extends Board certification and N.Y.S. licensure, enabling the graduates to work as medical technologists in a variety of laboratory settings. Permission of department is required.

Credits: 15

Offered: Every semester.

MUED - Music Education

MUED 128 - Instruments for Vocal/General Concentration

Group applied instruction on brass, woodwind, string, and percussion instruments to develop a playing competence sufficient to teach beginning students through NYSSMA Level II on at least one instrument in each area. The. Candidates who already possess playing competence may test out of the requirement.

Credits: 1

Offered: Every semester.

MUED 150 - Introduction to Public School Music

The preliminary course for the Foundations of Music Education sequence combines an introduction to and exploration of the purposes and premises of music education. Class sessions seek to broaden students' perspectives of the profession and of the potential for a rewarding career in music education.

Credits: 0

Offered: Every year.

MUED 161 - Beginning Trumpet

Group applied instruction on the trumpet designed to develop a playing competence sufficient to teach beginning students through NYSSMA Level II. Required course for Music Education majors with an instrumental concentration. Students who already possess playing competence may examine out of the requirement and substitute another brass or woodwind instrument in its place.

Credits: 1

Offered: Every semester.

MUED 162 - Beginning Trombone

Group applied instruction on the trombone designed to develop a playing competence sufficient to teach beginning students through NYSSMA Level II. Required course for Music Education majors with an instrumental concentration. Students who already possess playing competence may examine out of the requirement and substitute another brass or woodwind instrument in its place.

Credits: 1

Offered: Every semester.

MUED 163 - Beginning French Horn

Group applied instruction on the French horn designed to develop a playing competence sufficient to teach beginning students through NYSSMA Level II. Required course for Music Education majors with an instrumental

concentration. Students who already possess playing competence may examine out of the requirement and substitute another brass or woodwind instrument in its place.

Credits: 1

Offered: Every semester.

MUED 164 - Beginning Tuba/Euphonium

Group applied instruction on the tuba/euphonium designed to develop a playing competence sufficient to teach beginning students through NYSSMA Level II. Required course for Music Education majors with an instrumental concentration. Students who already possess playing competence may examine out of the requirement and substitute another brass or woodwind instrument in its place.

Credits: 1

Offered: Every semester.

MUED 171 - Beginning Clarinet

Group applied instruction on the clarinet designed to develop a playing competence sufficient to teach beginning students through NYSSMA Level II. Required course for Music Education majors with an instrumental concentration. Students who already possess playing competence may examine out of the requirement and substitute another brass or woodwind instrument in its place.

Credits: 1

Offered: Every semester.

MUED 172 - Beginning Flute

Group applied instruction on the flute designed to develop a playing competence sufficient to teach beginning students through NYSSMA Level II. Required course for Music Education majors with an instrumental concentration. Students who already possess playing competence may examine out of the requirement and substitute another brass or woodwind instrument in its place.

Credits: 1

Offered: Every semester.

MUED 173 - Beginning Oboe

Group applied instruction on the oboe designed to develop a playing competence sufficient to teach beginning students through NYSSMA Level II. Required course for Music Education majors with an instrumental playing competence may examine out of the requirement and substitute another brass or woodwind instrument in its place.

Credits: 1

Offered: Every semester.

MUED 174 - Beginning Bassoon

Group applied instruction on the bassoon designed to develop a playing competence sufficient to teach beginning students through NYSSMA Level II. Required course for Music Education majors with an instrumental concentration. Students who already possess playing competence may examine out of the requirement and substitute another brass or woodwind instrument in its place.

Credits: 1

Offered: Every semester.

MUED 175 - Beginning Saxophone

Group applied instruction on the saxophone designed to develop a playing competence sufficient to teach beginning students through NYSSMA Level II. Required course for Music Education majors with an instrumental concentration. Students who already possess playing competence may examine out of the requirement and substitute another brass or woodwind instrument in its place.

Credits: 1

Offered: Every semester.

MUED 185 - Beginning Violin/Viola

Group applied instruction on the violin/viola designed to develop a playing competence sufficient to teach beginning students through NYSSMA Level II. Required course for Music Education majors with an instrumental concentration. Students who already possess playing competence may examine out of the requirement and substitute another string instrument in its place.

Credits: 1

Offered: Every semester.

MUED 186 - Beginning Cello

Group applied cello designed to develop a playing competence sufficient to teach beginning students through NYSSMA Level II. Required course for Music Education majors with an instrumental concentration. Students who already possess playing competence may examine out of the requirement and substitute another string instrument in its place.

Credits: 1

Offered: Every semester.

MUED 187 - Beginning String Bass

Group applied string bass designed to develop a playing competence sufficient to teach beginning students through

NYSSMA Level II. Required course for Music Education majors with an instrumental concentration. Students who already possess playing competence may examine out of the requirement and substitute another string instrument in its place.

Credits: 1

Offered: Every semester.

MUED 203 - Intermediate Voice Class

Applied group instruction in voice for non-voice general choral Music Education majors. Further development of student's performing ability, repertoire, and principle and technique behind healthy singing. Emphasis on an introduction to vocal anatomy and physiology, application of vocal technique to choral warm-ups and instruction.

Credits: 1.5

Prerequisite: MUS 113. Offered: Every year.

MUED 204 - Advanced Voice Class

Applied group instruction in voice for non-voice general choral Music Education majors. Emphasis on methods of developing and building singing voices. Student further develops performing ability and enlarges his/her repertoire. Introduction to International Phonetic Alphabet and its application to correct diction.

Credits: 1.5

Prerequisite: MUED 203. Offered: Every year.

MUED 210 - Guitar Class

Designed to enable students to accompany themselves and to lead others in the singing of simple folk and popular songs. Includes use of I, IV, V7 chords in the keys of G, C, D, E; simple strumming and finger picking; and single line melodies.

Credits: 1

Offered: Every semester.

MUED 211 - Guitar Class

Continuation of MUED 210. Includes I, IV, V7 chords in the keys of A, F, B; secondary dominants; more advanced accompaniment patterns.

Credits: 1

Prerequisite: MUED 210. Offered: Every semester.

MUED 221 - Percussion Class

Group applied instruction and pedagogical approaches on percussion designed to develop a playing competence sufficient to teach beginning students through NYSSMA Level II. Required course for Music Education majors with an instrumental concentration. Students who already possess playing and teaching competence may examine out

of the requirement and substitute another percussion course in its place.

Credits: 2

Offered: Every semester.

MUED 222 - Advanced Percussion

Group applied instruction on cymbals, drum set, and field drums and accessories. Designed to develop a playing competence sufficient to teach advanced percussion to public school students.

Credits: 1

Prerequisite: MUED 221. Offered: Every semester.

MUED 250 - Foundations of Music Education I

Study human and musical developmental processes and variations, including: the impact of culture, heritage, socioeconomic level, personal health and safety, nutrition, past or present abusive or dangerous environment, and factors in the home, school, and community on students' readiness to learn. Study and implement effective practices for planning and designing co-teaching and collaboration with peers. Includes language acquisition development and literacy development by native English speakers and students who are English language learners. Introduction to instructional planning and multiple research-validated instructional strategies for teaching students within the full range of abilities in music.

Credits: 2

Corequisite: MUED 252 or MUED 255. Offered: Every semester.

MUED 251 - Foundations of Music Education II

Study basic principles of educational psychology and sociology, including learning processes, motivation, communication, and classroom management. Study the special education process and state and federal special education laws and regulations. Introduction to research-validated instructional strategies for teaching students within the full range of abilities in music. Study of the rights and responsibilities of teachers, staff, students, parents, community members, school administrators, and others with regard to education, and the importance of productive relationships and interactions among the school, home, and community for enhancing student learning.

Credits: 2

Corequisite: MUED 253 or MUED 256. Offered: Every semester.

MUED 252 - Child Abuse/Neglect Reporting

The course covers the basics of identifying and reporting suspected child abuse and maltreatment, at the local, state, and federal levels.

Credits: 0

Corequisite: MUED 250. Offered: Every semester.

MUED 253 - Alcohol, Tobacco, and Drug Abuse Identification

The course covers the basics of identifying and dealing with students who have problems with alcohol, tobacco, and other drug abuse problems, with an emphasis on knowledge and prevention at the local, state, and federal levels, and skill in applying that understanding to create a safe and nurturing learning environment that is free of alcohol, tobacco, and other drugs and that fosters the health and learning of all students, and the development of a sense of community and respect for one another.

Credits: 0

Corequisite: MUED 251 and MUED 256. Offered: Every semester.

MUED 255 - Foundations I Practicum - Elementary

Students act as music teachers or teacher aides for approximately 40 contact hours. The requirement may be completed during the January recess, in May/June or by several other alternatives approved by the chair for Music Education/Music Therapy.

Credits: 0

Offered: Every semester.

MUED 256 - Foundations II Practicum - Middle School

Students act as music teachers or teacher aides in middle school level settings for approximately 40 contact hours. This requirement may be completed during the January recess, in May/June or by several other alternatives approved by the area chair for Music Education/Music Therapy.

Credits: 0

Offered: Every semester.

MUED 260 - Brass Pedagogy

Covers instructional materials and pedagogical methods common to beginning instruction in public schools on brass instruments. Student must be enrolled simultaneously in one or more brass instrument playing classes, or should already have completed the competency requirements for trumpet and trombone.

Credits: 1

Offered: Every semester.

MUED 261 - Advanced Trumpet

Group applied instruction and pedagogical approaches on the trumpet designed to develop a playing competence sufficient to teach beginning students through NYSSMA Level IV. Required course for Music Education majors

with an instrumental concentration. Students who already possess playing competence may examine out of the requirement and substitute another brass instrument in its place. Prerequisite: Demonstrated playing proficiency on a contrasting brass instrument through NYSSMA Level II.

Credits: 1

Offered: Every year.

MUED 262 - Advanced Trombone

Group applied instruction and pedagogical approaches on the trombone designed to develop a playing competence sufficient to teach beginning students through NYSSMA Level IV. Required course for Music Education majors with an instrumental concentration. Students who already possess playing competence may examine out of the requirement and substitute another brass instrument in its place. Prerequisite: Demonstrated playing proficiency on a contrasting brass instrument through NYSSMA Level II.

Credits: 1

Offered: Every year.

MUED 263 - Advanced French Horn

Group applied instruction and pedagogical approaches on the French horn designed to develop a playing competence sufficient to teach beginning students through NYSSMA Level IV. Required course for Music Education majors with an instrumental concentration. Students who already possess playing competence may examine out of the requirement and substitute another brass instrument in its place. Prerequisite: Demonstrated playing proficiency on a contrasting brass instrument through NYSSMA Level II.

Credits: 1

Offered: Every year.

MUED 264 - Advanced Tuba/Euphonium

Group applied instruction and pedagogical approaches on the tuba/euphonium designed to develop a playing competence sufficient to teach beginning students through NYSSMA Level IV. Required course for Music Education majors with an instrumental concentration. Students who already possess playing competence may examine out of the requirement and substitute another brass instrument in its place. Prerequisite: Demonstrated playing proficiency on a contrasting brass instrument through NYSSMA Level II.

Credits: 1

Offered: Every year.

MUED 271 - Advanced Clarinet

Group applied instruction and pedagogical approaches on the clarinet designed to develop a playing competence sufficient to teach beginning students through NYSSMA Level IV. Required course for Music Education majors

with an instrumental concentration. Students who already possess playing competence may examine out of the requirement and substitute another woodwind instrument in its place. Prerequisite: Demonstrated playing proficiency on a contrasting woodwind instrument through NYSSMA Level II.

Credits: 2

Offered: Every year.

MUED 272 - Advanced Flute

Group applied instrument and pedagogical approaches on the flute designed to develop a playing competence sufficient to teach beginning students through NYSSMA Level IV. Required course for Music Education majors with an instrumental concentration. Students who already possess playing competence may examine out of the requirement and substitute another woodwind instrument in its place. Prerequisite: Demonstrated playing proficiency on a contrasting woodwind instrument through NYSSMA Level II.

Credits: 2

Offered: Every year.

MUED 273 - Advanced Oboe

Group applied instruction and pedagogical approaches on the oboe designed to develop a playing competence sufficient to teach beginning students through NYSSMA Level IV. Required course for Music Education majors with an instrumental concentration. Students who already possess playing competence may examine out of the requirement and substitute another woodwind instrument in its place. Prerequisite: Demonstrated playing proficiency on a contrasting woodwind instrument through NYSSMA Level II.

Credits: 2

Offered: Every year.

MUED 274 - Advanced Bassoon

Group applied instruction and pedagogical approaches on the bassoon designed to develop a playing competence sufficient to teach beginning students through NYSSMA Level IV. Required course for Music Education majors with an instrumental concentration. Students who already possess playing competence may examine out of the requirement and substitute another woodwind instrument in its place. Pre-requisite: Demonstrated playing proficient on a contrasting woodwind instrument through NYSSMA Level II.

Credits: 2

Offered: Every year.

MUED 275 - Advanced Saxophone

Group applied instruction and pedagogical approaches on the saxophone designed to develop a playing competence sufficient to teach beginning students through NYSSMA Level IV. Required course for Music Education majors with an instrumental concentration. Students who already possess playing competence may examine out of the requirement and substitute another woodwind instrument in its place. Prerequisite: Demonstrated playing proficiency on a contrasting woodwind instrument through NYSSMA Level II.

Credits: 2

Offered: Every year.

MUED 285 - Advanced Violin/Viola

Group applied instruction and pedagogical approaches on the violin or viola designed to develop a playing competence sufficient to teach beginning students through NYSSMA Level IV. Required course for Music Education majors with an instrumental concentration. Students who already possess playing competence may examine out of the requirement and substitute another advanced string instrument in its place. Prerequisite: Demonstrated playing proficiency on cello/string bass through NYSSMA Level II.

Credits: 2

Offered: Every year.

MUED 286 - Advanced Cello/String Bass

Group applied instruction and pedagogical approaches on the cello or string bass designed to develop a playing competence sufficient to teach beginning students through NYSSMA Level IV. Required course for Music Education majors with an instrumental concentration. Students who already possess playing competence may examine out of the requirement and substitute another advanced string instrument in its place. Prerequisite: Demonstrated playing proficiency on violin/viola through NYSSMA Level II.

Credits: 2

Offered: Every year.

MUED 291 - Technology in Music I

An overview of technology in one's musical life. Basic technological concepts are explored with the goal of developing self sufficiency, and the means to update knowledge and skills in music, with a focus towards utilization of technology in future teaching and study.

Credits: 2

Offered: Every semester.

MUED 292 - Technology in Music II

Overview of technology and its application to music composition, instruction, notation, performance, theory, and music education. Fundamentals of electronic music, MIDI, and computer usage.

Credits: 2

Prerequisite: MUS 124 and MUED 291. Offered: Every year.

MUED 300 - Foundations in Music Education III

Study history, philosophy, and role of education, including philosophy of music, education, and music education. This course also will examine philosophies of assessment, using formal and informal methods of assessing student learning, and help students develop skill in using information gathered through assessment and analysis to plan or modify instruction. Develop skills to provide instruction that will promote the participation and progress of students with disabilities. Study and practice skills for developing the listening, speaking, reading, and writing skills of all students. Investigate means to update knowledge and skills in music and in pedagogy. Professional Standing required.

Credits: 3

Corequisite: MUED 303 or MUED 355. Offered: Every semester.

MUED 301 - General Music in Elementary School

Study curriculum development, instructional planning, and research-validated instructional strategies for teaching general music in grades K through 6. Design and practice offering differentiated instruction that enhances the music learning of all students. Initiate and practice applying knowledge of human and musical developmental processes and variations to create a safe and nurturing learning environment that fosters the health and learning of all students, and the development of a sense of community and respect for one another. Practice applying knowledge of learning processes, motivation, communication, and classroom management to stimulate and sustain student interest, cooperation, and achievement to each student's highest level of learning in preparation for productive work, citizenship in a democracy, and continuing growth. Develop skills to provide instruction that will promote the participation and progress of students with disabilities. Study and implement effective practices for planning and designing co-teaching and collaboration with peers; Increase skill assessing student learning, analyzing one's own teaching practice, using information gathered through assessment and analysis to plan or modify instruction, and using various resources to enhance teaching. Investigate means to update knowledge and skills in music and in pedagogy. Intern teaching with students in elementary school classrooms. Professional Standing required.

Credits: 2

Corequisite: MUED 356. Offered: Every semester.

MUED 302 - General Music in Secondary School

Study curriculum development, instructional planning, and research-validated instructional strategies for teaching students in general music activities and programs in middle school through high school. Design and practice offering differentiated instruction that enhances the music learning of all students. Initiate and practice applying knowledge of human and musical developmental processes and variations to create a safe and nurturing learning environment that fosters the health and learning of all students, and the development of a sense of community and respect for one another. Practice applying knowledge of learning processes, motivation, communication, and classroom management to stimulate and sustain student interest, cooperation, and achievement to each student's highest level of learning in preparation for productive work, citizenship in a democracy, and continuing growth. Develop skills to provide instruction that will promote the participation and progress of students with disabilities. Develop skill in using technology and teaching students to use technology to acquire information, communicate, and enhance learning. Increase skill assessing student learning, analyzing one's own teaching practice, using information gathered through assessment and analysis to plan or modify instruction, and using various resources to enhance teaching. Investigate means to update knowledge and skills in music and in pedagogy. Intern teaching with students in middle school or high school. Professional Standing required.

Credits: 2

Corequisite: MUED 356. Offered: Every semester.

MUED 303 - Literacy Instruction Workshop

The course provides an overview of the processes involved in literacy acquisition and the instructional approaches that acknowledge current thinking. Consideration is given to the relationship between English and music literacy.

Credits: 0

Corequisite: MUED 300. Offered: Every semester.

MUED 304 - Instrumental Music in Elementary School

Study curriculum development, instructional planning, and research-validated instructional strategies for teaching instrumental music in elementary school. Design and practice offering differentiated instruction that enhances the music learning of all students. Practice applying knowledge of human and musical developmental processes and variations to create a safe and nurturing learning environment that fosters the health and learning of all students, and the development of a sense of community and respect for one another. Develop skills to provide instruction that will promote the participation and progress of students with disabilities. Study and apply effective

practices for applying positive behavioral supports and interventions to address student and classroom management needs. Study and implement effective practices for planning and designing co-teaching and collaboration with peers. Study and practice skills for developing the listening, speaking, reading, and writing skills of all students. Increase skill assessing student learning, analyzing one's own teaching practice, using information gathered through assessment and analysis to plan or modify instruction, and using various resources to enhance teaching. Investigate means to update knowledge and skills in music and in pedagogy. Intern teaching with students in elementary and middle school classrooms. Professional Standing required.

Credits: 2

Corequisite: MUED 393. Offered: Every semester.

MUED 305 - Instrumental Music in Secondary School

Study curriculum development, instructional planning, and research-validated instructional strategies for teaching instrumental music in secondary school. Design and practice offering differentiated instruction that enhances the music learning of all students. Practice applying knowledge of learning processes, motivation, communication, and classroom management to stimulate and sustain student interest, cooperation, and achievement to each student's highest level of learning in preparation for productive work, citizenship in a democracy, and continuing growth. Develop skills to provide instruction that will promote the participation and progress of students with disabilities. Study and apply effective practices for applying positive behavioral supports and interventions to address student and classroom management needs. Study and practice skills for developing the listening, speaking, reading, and writing skills of all students. Increase skill assessing student learning, analyzing one's own teaching practice, using information gathered through assessment and analysis to plan or modify instruction, and using various resources to enhance teaching. Develop and practice skill in fostering effective relationships and interactions to support student growth and learning, including skill in resolving conflicts. Investigate means to update knowledge and skills in music and in pedagogy. Intern teaching with high school students. Professional standing required.

Credits: 2

Corequisite: MUED 394. Offered: Every semester.

MUED 310 - Guitar Class

Designed to enable students to accompany themselves and to lead others in the singing of simple folk and popular songs. Includes use of transposition and capo, more advanced melodic patterns, and melody and accompaniment combinations.

Credits: 1

Prerequisite: MUED 211. Offered: Every semester.

MUED 311 - Guitar Class

Continuation of MUED 310; includes pedagogy of guitar for individuals in public schools, music therapy, and private instruction.

Credits: 1

Prerequisite: MUED 310. Offered: Every semester.

MUED 315 - Music, Play, and Self

A course primarily for students with little or no previous musical knowledge or skill. Examines the relationships among music, play and self, especially with regard to children. Emphasizes activity, creativity and personal expression.

Credits: 3

Offered: Every semester.

MUED 331 - Marching Band Techniques

Technical and organizational considerations for the public school marching band program. Topics include parade, field and show marching, rehearsal techniques, drill and show design, festivals and competitions, auxiliary and support units. Individual and class projects include field-based instruction.

Credits: 2

Offered: Offered on occasion.

MUED 355 - Foundations III Practicum - Secondary

Students act as music teachers or teacher aides in secondary school music settings for approximately 40 contact hours. The requirement may be completed during the January recess, in May/June or by several other alternatives approved by the chair for Music Education/Music Therapy.

Credits: 0

Prerequisite: MUED 256. Corequisite: MUED 300 or MUED 303. Offered: Every semester.

MUED 356 - Methods Practicum

Students act as music teachers or teacher aides in music learning settings for approximately 40 contact hours. The requirement may be completed during the January recess, in May/June or by several other alternatives approved by the chair for Music Education/Music Therapy.

Credits: 0

Offered: Every semester.

MUED 391 - Elementary School Choral Rehearsal Techniques

Study curriculum development, instructional planning, and research-validated instructional strategies for teaching choral music in elementary school. Design and practice offering differentiated instruction that enhances the music learning of all students. Practice applying knowledge of human and musical developmental processes and variations to create a safe and nurturing learning environment that fosters the health and learning of all students, and the development of a sense of community and respect for one another. Practice applying knowledge of learning processes, motivation, communication, and classroom management to stimulate and sustain student interest, cooperation, and achievement to each student's highest level of learning in preparation for productive work, citizenship in a democracy, and continuing growth. Develop skills to provide instruction that will promote the participation and progress of students with disabilities. Study and apply effective practices for planning and designing co-teaching and collaboration with peers; individualizing instruction; and applying positive behavioral supports and interventions to address student and classroom management needs. Study and practice skills for developing the listening, speaking, reading, and writing skills of all students. Increase skill in using technology and teaching students to use technology to acquire information, communicate, and enhance learning. Increase skill assessing student learning, analyzing one's own teaching practice, using information gathered through assessment and analysis to plan or modify instruction, and using various resources to enhance teaching. Investigate means to update knowledge and skills in music and in pedagogy. Intern teaching occurs in an elementary school choral classroom. Professional Standing required.

Credits: 3

Prerequisite: MUS 232 and MUS 317. Offered: Every year.

MUED 392 - Secondary School Choral Rehearsal Techniques

Study curriculum development, instructional planning, and research-validated instructional strategies for teaching choral music in secondary school. Design and practice offering differentiated instruction that enhances the music learning of all students. Initiate and practice applying knowledge of human and musical developmental processes and variations to create a safe and nurturing learning environment that fosters the health and learning of all students, and the development of a sense of community and respect for one another. Practice applying knowledge of learning processes, motivation, communication, and classroom management to stimulate and sustain student interest, cooperation, and achievement to each student's highest level of learning in preparation for productive work, citizenship in a democracy, and continuing growth.

Develop skills to provide instruction that will promote the participation and progress of students with disabilities. Increase skill assessing student learning, analyzing one's own teaching practice, using information gathered through assessment and analysis to plan or modify instruction, and using various resources to enhance teaching. Study and practice skills for developing the listening, speaking, reading, and writing skills of all students. Develop and practice skill in fostering effective relationships and interactions to support student growth and learning, including skill in resolving conflicts. Investigate means to update knowledge and skills in music and in pedagogy. Intern teaching occurs in a middle school or high school choral classroom. Professional Standing required.

Credits: 3

Prerequisite: MUS 232 and MUS 317. Offered: Every year.

MUED 393 - Elementary School Instrumental Rehearsal Techniques

Design and practice offering differentiated instruction that enhances the music learning of all students in elementary and middle school instrumental music rehearsals. Initiate and practice applying knowledge of human and musical developmental processes and variations to create a safe and nurturing learning environment that fosters the health and learning of all students, and the development of a sense of community and respect for one another. Practice applying knowledge of learning processes, motivation, communication, and classroom management to stimulate and sustain student interest, cooperation, and achievement to each student's highest level of learning in preparation for productive work, citizenship in a democracy, and continuing growth. Increase skill assessing student learning, analyzing one's own teaching practice, using information gathered through assessment and analysis to plan or modify instruction, and using various resources to enhance teaching. Develop and practice skill in fostering effective relationships and interactions to support student growth and learning, including skill in resolving conflicts. Investigate means to update knowledge and skills in music and in pedagogy. Professional Standing required.

Credits: 2

Corequisite: MUED 304. Offered: Every semester.

MUED 394 - Secondary School Instrumental Rehearsal Techniques

Design and practice offering differentiated instruction that enhances the music learning of all students in secondary instrumental music rehearsals. Practice applying knowledge of learning processes, motivation, communication, and classroom management to stimulate and sustain student interest, cooperation, and achievement to each student's highest level of learning in preparation for productive work, citizenship in a democracy, and

continuing growth. Develop skills to provide instruction that will promote the participation and progress of students with disabilities. Increase skill assessing student learning, analyzing one's own teaching practice, using information gathered through assessment and analysis to plan or modify instruction, and using various resources to enhance teaching. Develop and practice skill in fostering effective relationships and interactions to support student growth and learning, including skill in resolving conflicts. Investigate means to update knowledge and skills in music and in pedagogy. Professional Standing required.

Credits: 2

Corequisite: MUED 305. Offered: Every semester.

MUED 400 - Professional Semester

Student teaching in selected public schools in western New York State under the supervision of university music education faculty and cooperating teachers. With music education faculty advisement, students typically seek placements that provide experience and credentials in the musical specialties, and at the public school levels, in which they expect to seek professional positions. The combination of field experiences and student teaching shall include both settings, pre-kindergarten through grade 6 and grades 7 through 12.

Credits: 12

Prerequisite: EDU 303 or SAVE Workshop of an 1 or better. Offered: Every semester.

MUED 450 - Directed Study in Music Education

Projects related to music education but not otherwise a part of regular course offerings. Requires a formal Learning Contract approved by a faculty sponsor and the chair for Music Education/Music Therapy.

Credits: 1-3

Offered: Every semester.

MUED 451 - Directed Study in Music Education

Projects related to music education but not otherwise a part of regular course offerings. Requires a formal Learning Contract approved by a faculty sponsor and the chair for Music Education/Music Therapy.

Credits: 1-3

Offered: Every semester.

MUED 470 - Special Topics in Music Education

Studies of area supplementing, not replacing, regular course offerings.

Credits: 1-3

Offered: Offered on occasion.

MUED 471 - Special Topics in Music Education

Studies of areas supplementing, not replacing, regular course offerings.

Credits: 1-3

Offered: Offered on occasion.

MUED 472 - Special Topics in Music Education

Studies of areas supplementing, not replacing, regular course offerings.

Credits: 1-3

Offered: Offered on occasion.

MUED 473 - Special Topics in Music Education

Studies of areas supplementing, not replacing, regular course offerings.

Credits: 1-3

Offered: Offered on occasion.

MUED 474 - Special Topics in Music Education

Studies of areas supplementing, not replacing, regular course offerings.

Credits: 1-3

Offered: Offered on occasion.

MUED 475 - Special Topics in Music Education

Studies of areas supplementing, not replacing, regular course offerings.

Credits: 1-3

Offered: Offered on occasion.

MUED 476 - Special Topics in Music Education

Studies of areas supplementing, not replacing, regular course offerings.

Credits: 1-3

Offered: Offered on occasion.

MUED 477 - Special Topics in Music Education

Studies of areas supplementing, not replacing, regular course offerings.

Credits: 1-3

Offered: Offered on occasion.

MUED 478 - Special Topics in Music Education

Studies of areas supplementing, not replacing, regular course offerings.

Credits: 1-3

Offered: Offered on occasion.

MUED 479 - Special Topics in Music Education

Studies of area supplementing, not replacing, regular course offerings.

Credits: 1-3

Offered: Offered on occasion.

MUED 485 - Advanced Instrument Pedagogy

For instrument majors to learn advanced techniques for teaching their instrument. Course involves teaching beginning instrument classes with guidance and instruction from faculty.

Credits: 2

Prerequisite: MUS 325 and MUED 304 and MUED 393.

Offered: Every semester.

MUED 510 - Principles of Music Education with Media

Study in principles and use of media in instructional situations in music education. Theoretical framework for use of media developed. Student responsible for series of media productions appropriate to music education. Emphasis not on operation of audio-visual equipment, but on effectiveness and efficiency of media-based instruction, thus suitable for non-music majors with some familiarity with music in school situations, but whose interest in media may be more far-reaching.

Credits: 3

Offered: Offered on occasion.

MUED 513 - Systematic Design of Curricula for Music Education

Systematic design of curricula for all areas of music education. Each participant develops actual curriculum, plans for using and evaluating it, and means for evaluating and reporting students' progress.

Credits: 3

Offered: Offered on occasion.

MUED 514 - Psychology of Music

Study of empirical aesthetics. Explores characteristics of aesthetic response, structural characteristics of music as they relate to aesthetic responses, and theories that describe how this response is achieved and developed. Empirical research studies examined within theoretical contexts.

Credits: 3

Offered: Every year.

MUED 522 - Psychological Research in Music

Resources, techniques, applications, and processes in research in music education and therapy. Special emphasis will be on psychological and experimental research.

Credits: 3

Offered: Every year.

MUED 555 - Special Topics Workshop

Usually summer or other short-term workshops dealing with specific music literature, techniques, problems, or teaching methodologies. Maximum of 6 credit hours in increments of no more than 3 credit hours may apply, with permission, to requirements in the Elective Course Work by Advisement category.

Credits: 1-3

Offered: Every year.

MUED 560 - Teaching Hand Drumming in Schools

African and Caribbean drumming in the middle school. Special emphasis on World Music Drumming Curriculum and the National and State Standards in Music.

Credits: 1

Offered: Every year.

MUED 565 - Special Topics Seminar

Presentation and investigation of a specific but not regularly scheduled topic of current need or interest. Course may be repeated to a maximum of 6 credit hours (in different topics) and may apply with permission to requirements in the categories of Music Education and related Course Work or Elective Course Work by Advisement.

Credits: 1-3

Offered: Every year.

MUED 590 - Special Studies

Studies not otherwise available as regular course offerings relevant to students' programs or career plans, pursued in independent, directed, tutorial manner. Student must submit proposal for ap- proval, available in School of Music Office. Student must also secure agreement of faculty member to sponsor the study. Maximum of 6 hours of any combination of MUS and MUED may be earned this way in increments of no more than 3 credit hours.

Credits: 1-3

Offered: Every semester.

MUED 591 - Special Studies

Studies not otherwise available as regular course offerings relevant to students' programs or career plans, pursued in independent, directed, tutorial manner. Student must submit proposal for ap- proval, available in School of Music Office. Student must also secure agreement of faculty member to sponsor the study. Maximum of 6 credit hours of any combination of MUS and MUED may

be earned this way in increments of no more than 3 credit hours.

Credits: 1-6

Offered: Every semester.

MUED 609 - Administration and Supervision of School Music

Study of current practices. Topics include supervision, in-service education, curricular and instructional developments, public relations, finance, facilities, and resources. Individual projects connected to teaching situations.

Credits: 3

Offered: Offered on occasion.

MUED 610 - Music Assessment

Presents and examines the functions of assessment in the music classroom; how to create, administer, and interpret the results of teacher-developed assessments; and how to interpret the results of externally developed, published music measures.

Credits: 3

Offered: Offered on occasion.

MUED 618 - Seminar in Music Education

Presentation and examination of current topics of relevance to music educators. Outside faculty, students, and others in music and related fields called upon as needed. Individual projects.

Credits: 3

Offered: Every year.

MUED 619 - Foundations of Music Education I

Study of philosophical and historical foundations of music education, emphasizing current issues and developments. Particular application to curriculum and instruction in school music.

Credits: 3

Offered: Every year.

MUED 620 - Foundations of Music Education II

Study of psychological and sociological foundations of music education, emphasizing current issues and developments. Particular application to curriculum and instruction in school music.

Credits: 3

Offered: Every year.

MUED 621 - Music Education Foundation III

Study of curriculum and assessment in music education, emphasizing a synthesis of previous course work. Written project required. Should be the final Music Education course after all requirements are met in the Music Education category, all but 3 credit hours completed in the Musicianship category, and all but 3 credit hours completed in the elective category.

Credits: 3

Prerequisite: MUED 619 and MUED 620. Offered: Every year.

MUED 651 - Philosophical Perspectives of Music Education

Examination of important philosophies, relevance to music education and educator; aesthetics; contemporary educational philosophies including Existentialism, Reconstructionism, Experimentalism, Realism, Idealism, and philosophies of mind as they relate to the artistic experience and arts education. Emphasis on developing, articulating, and defending a philosophical point of view.

Credits: 3

Offered: Offered on occasion.

MUED 652 - Psychological Perspectives for Music Education

Examination of important psychological developments and theories and their importance for music education and the music educator: psychology of aesthetics, humanistic psychology, current learning theory, and child and adolescent development as related to problems of instruction in music. Emphasis on articulating and defending methods of instruction and choice of musical content in terms of psychological principles.

Credits: 3

Offered: Offered on occasion.

MUED 695 - Thesis/Final Project

Study/research culminating in a Thesis, a Composition/Arrangement, or a Performance Recital as required in the Final Project Program. Candidate must register for the course in each semester or term during which the services of the Project Leader are actively engaged toward the completion of the Final Project. Maximum of 3 credit hours.

Credits: 1-3

Offered: Offered on occasion.

MUSB - Music Industry**MUSB 101 - Music Industry Career Foundations**

A survey of the various opportunities in the Music Industry, including venue operation, artist management, performing, recording, publishing, broadcast media, journalism, film etc., paired with the development of writing skills. Students will gather information and evaluate the interrelationships between multiple potential career paths while developing skills in written and oral communications including preparation of letters of inquiry, press releases, press kits and presentation materials.

Credits: 3

Offered: Every semester.

MUSB 201 - The Business of Music

A comprehensive exploration of the various facets of the music business including careers in music, music publishing (copyrights, licensing, music books, exploitation of catalogue), the record business (recording, artist management, licensing, record distribution), tour management, self-employment business basics and ethics in the music business.

Credits: 3

Offered: Every semester.

MUSB 230 - History of the Music Industry

The American music industry has generated hits and new style combinations throughout every decade. The course will survey this evolution from roots through modern times.

Credits: 3

Prerequisite: MUSB 101. Offered: Every other year.

MUSB 301 - Music Copyrights

An exploration of copyright purpose, history, use and challenges. Students will learn about copyright ownership and registration, and how copyright is used to manage royalties, publication, project development, and dissemination of the intellectual property through the various media, including the Internet.

Credits: 3

Prerequisite: MUS 380 or MUSB 201. Offered: Every year.

MUSB 304 - Business of the Beatles

An in-depth look at the business of The Beatles. The course will examine recording contracts, publishing, touring and biographies of those most closely associated with the band.

Credits: 3

Prerequisite: MUSB 101. Offered: Every other year.

MUSB 320 - Music Contracts

The music business engages musicians with detailed contracts that establish terms of management, marketing, producing, licensing, recording, distribution, and the like. The student will learn about standard language and the principles of contract negotiations.

Credits: 3

Prerequisite: MUS 285 or MUSB 301. Offered: Every year.

MUSB 350 - Special Topics in Music Business

Special topics in Music Business not covered in detail by regular courses and not offered on a regular basis.

Credits: 1-3

Offered: Offered on occasion.

MUSB 420 - Student Record Label

Examines the inner workings of a record label. The primary functions of all department of a record label will be discussed, including artist repertoire, marketing, business and legal affairs, public relations, promotion, sales and distribution, merchandising, and artist relations. Students will gain hands-on experience operating an independent record label and facilitating the creation of a music product.

Credits: 3

Prerequisite: (MUSB 201 and MUSB 320) or (MUS 380 and MUS 385). Offered: Every year.

MUSB 425 - Music Marketing and Promotion

Effective marketing is a necessary component of any successful release of recorded music. This course explores the various elements of a marketing plan, how it is researched, prepared, and implemented. The use and effectiveness of marketing via radio, print, the Internet, and touring will be examined. An inquiry into the changing music industry will focus on the emergence of developing markets and the future of music.

Credits: 3

Prerequisite: (MUSB 201 and MUSB 320) or (MUS 380 and MUS 385). Offered: Every year.

MUSB 430 - Independent Study

This is a course for highly motivated students to undertake special studies in music business under faculty guidance.

Credits: 1-3

Offered: Offered on occasion.

MUSB 435 - Contemporary Issues in Music and the Marketplace

Contemporary consumer behavior and the changing marketplace as well as traditional marketing methods and the legal issues that apply must be understood for a successful career in the music industry. Students will examine the current market in the context of emerging legal issues and marketplace ethics.

Credits: 3

Prerequisite: MUSB 201. Offered: Every year.

MUSB 465 - Music Industry Internship

The course provides credit for professional experiences in the music business for music business majors. Enrollment is to be arranged with an appropriate instructor.

Credits: 1-15

Offered: Every year.

MUSB 470 - Concert Touring and Sound

This course will teach the essential elements of assembling a tour team, understanding live sound and acoustics and tips on recording.

Credits: 3

Prerequisite: MUSB 101. Offered: Every other year.

MUSB 480 - Independent Study

This is a course for highly motivated students to undertake special studies in music business under faculty guidance.

Credits: 1-7

Offered: Every semester.

MUS - Music

MUS 018 - Clarinet Ensemble

The study and performance of ensemble repertoire for the clarinet family.

Credits: 0.5

Offered: Every semester.

MUS 022 - College Choir

All music students participate in the university music ensembles, the required number of participations varying among the several music curricula. Participation in any ensemble is open to students in other departments of the university by audition and consent of the conductor and/or Director of the School of Music.

Credits: 1

Offered: Every semester.

MUS 021 - University Chorus

All music students participate in the university music ensembles, the required number of participations varying among the several music curricula. Participation in any ensemble is open to students in other departments of the university by audition and consent of the conductor and/or Director of the School of Music.

Credits: 1

Offered: Every semester.

MUS 023 - Chamber Choir

All music students participate in the university music ensembles, the required number of participations varying among the several music curricula. Participation in any ensemble is open to students in other departments of the university by audition and consent of the conductor and/or Director of the School of Music.

Credits: 1

Offered: Every semester.

MUS 024 - Women's Chorus

All music students participate in the university music ensembles, the required number of participations varying among the several music curricula. Participation in any ensemble is open to students in other departments of the university by audition and consent of the conductor and/or Director of the School of Music.

Credits: 1

Offered: Every semester.

MUS 025 - All-College Band

All music students participate in the university music ensembles, the required number of participations varying among the several music curricula. Participation in any ensemble is open to students in other departments of the university by audition and consent of the conductor and/or Director of the School of Music.

Credits: 1

Offered: Every semester.

MUS 026 - Concert Band

All music students participate in the university music ensembles, the required number of participations varying among the several music curricula. Participation in any ensemble is open to students in other departments of the university by audition and consent of the conductor and/or Director of the School of Music.

Credits: 1

Offered: Every semester.

MUS 027 - Wind Symphony

All music students participate in the university music ensembles, the required number of participations varying among the several music curricula. Participation in any ensemble is open to students in other departments of the university by audition and consent of the conductor and/or Director of the School of Music.

Credits: 1

Offered: Every semester.

MUS 028 - Wind Ensemble

All music students participate in the university music ensembles, the required number of participations varying among the several music curricula. Participation in any ensemble is open to students in other departments of the university by audition and consent of the conductor and/or Director of the School of Music.

Credits: 1

Offered: Every semester.

MUS 029 - Symphony Orchestra

All music students participate in the university music ensembles, the required number of participations varying among the several music curricula. Participation in any ensemble is open to students in other departments of the university by audition and consent of the conductor and/or Director of the School of Music.

Credits: 1

Offered: Every semester.

MUS 030 - Chamber Orchestra

All music students participate in the university music ensembles, the required number of participations varying among the several music curricula. Participation in any ensemble is open to students in other departments of the university by audition and consent of the conductor and/or Director of the School of Music.

Credits: 1

Offered: Every semester.

MUS 031 - String Chamber Ensemble

All music students participate in the university music ensembles, the required number of participations varying among the several music curricula. Participation in any ensemble is open to students in other departments of the university by audition and consent of the conductor and/or Director of the School of Music.

Credits: 0.5

Offered: Every semester.

MUS 032 - Music Theatre Ensemble

All music students participate in the university music ensembles, the required number of participations varying among the several music curricula. Participation in any ensemble is open to students in other departments of the university by audition and consent of the conductor and/or Director of the School of Music.

Credits: 0.5

Offered: Every semester.

MUS 033 - Opera Prod Practicum

All music students participate in the university music ensembles, the required number of participations varying among the several music curricula. Participation in any ensemble is open to students in other departments of the university by audition and consent of the conductor and/or Director of the School of Music.

Credits: 0.5

Offered: Every semester.

MUS 034 - Opera Workshop

All music students participate in the university music ensembles, the required number of participations varying among the several music curricula. Participation in any ensemble is open to students in other departments of the university by audition and consent of the conductor and/or Director of the School of Music.

Credits: 0.5

Offered: Every semester.

MUS 035 - Piano Ensemble

All music students participate in the university music ensembles, the required number of participations varying among the several music curricula. Participation in any ensemble is open to students in other departments of the university by audition and consent of the conductor and/or Director of the School of Music.

Credits: 1

Offered: Every semester.

MUS 036 - Woodwind Chamber Ensemble

All music students participate in the university music ensembles, the required number of participations varying among the several music curricula. Participation in any ensemble is open to students in other departments of the university by audition and consent of the conductor and/or Director of the School of Music.

Credits: 0.5

Offered: Every semester.

MUS 037 - Brass Chamber Ensemble

All music students participate in the university music ensembles, the required number of participations varying among the several music curricula. Participation in any ensemble is open to students in other departments of the university by audition and consent of the conductor and/or Director of the School of Music.

Credits: 0.5

Offered: Every semester.

MUS 038 - Saxophone Ensemble

All music students participate in the university music ensembles, the required number of participations varying among the several music curricula. Participation in any ensemble is open to students in other departments of the university by audition and consent of the conductor and/or Director of the School of Music.

Credits: 0.5

Offered: Every semester.

MUS 039 - Flute Ensemble

All music students participate in the university music ensembles, the required number of participations varying among the several music curricula. Participation in any ensemble is open to students in other departments of the university by audition and consent of the conductor and/or Director of the School of Music.

Credits: 0.5

Offered: Every semester.

MUS 040 - Brass Choir

All music students participate in the university music ensembles, the required number of participations varying among the several music curricula. Participation in any ensemble is open to students in other departments of the university by audition and consent of the conductor and/or Director of the School of Music.

Credits: 0.5

Offered: Every semester.

MUS 041 - Percussion Ensemble

All music students participate in the university music ensembles, the required number of participations varying among the several music curricula. Participation in any ensemble is open to students in other departments of the university by audition and consent of the conductor and/or Director of the School of Music.

Credits: 0.5

Offered: Every semester.

MUS 042 - African Drumming Ensemble

All music students participate in the university music ensembles, the required number of participations varying among the several music curricula. Participation in any ensemble is open to students in other departments of the university by audition and consent of the conductor and/or Director of the School of Music.

Credits: 0.5

Offered: Every semester.

MUS 043 - Guitar Chamber Ensemble

All music students participate in the university music ensembles, the required number of participations varying among the several music curricula. Participation in any ensemble is open to students in other departments of the university by audition and consent of the conductor and/or Director of the School of Music.

Credits: 0.5

Offered: Every semester.

MUS 044 - Guitar Quartet

All music students participate in the university music ensembles, the required number of participations varying among the several music curricula. Participation in any ensemble is open to students in other departments of the university by audition and consent of the conductor and/or Director of the School of Music.

Credits: 1

Offered: Every semester.

MUS 045 - Guitar Ensemble

All music students participate in the university music ensembles, the required number of participations varying among the several music curricula. Participation in any ensemble is open to students in other departments of the university by audition and consent of the conductor and/or Director of the School of Music.

Credits: 1

Offered: Every semester.

MUS 046 - Special Ensemble

All music students participate in the university music ensembles, the required number of participations varying among the several music curricula. Participation in any ensemble is open to students in other departments of the university by audition and consent of the conductor and/or Director of the School of Music.

Credits: 0.5

Offered: Every semester.

MUS 047 - Special Ensemble

All music students participate in the university music ensembles, the required number of participations varying among the several music curricula. Participation in any ensemble is open to students in other departments of the university by audition and consent of the conductor and/or Director of the School of Music.

Credits: 0.5

Offered: Every semester.

MUS 048 - Special Ensemble

All music students participate in the university music ensembles, the required number of participations varying among the several music curricula. Participation in any ensemble is open to students in other departments of the university by audition and consent of the conductor and/or Director of the School of Music.

Credits: 0.5

Offered: Every semester.

MUS 100 - Recital-Seminar

Required of all freshman music majors enrolled in private applied music instruction or composition. Students perform or critique performance or composition of colleagues during one recital-seminar each week. Recital schedule rotated: one week, studio; next week, area; following, school recitals.

Credits: 0

Offered: Every semester.

MUS 101 - Beginning Music Theory I

For students with little or no background in music. Course deals with beginning and rudimentary aspects of music including clefs, scales, chords, key signatures, melody, harmony, ear training, and aural perception.

Credits: 3

Offered: Every year.

MUS 102 - Beginning Music Theory II

For students with little or no background in music. Course deals with beginning and rudimentary aspects of music including clefs, scales, chords, key signatures, melody, harmony, ear training, and aural perception.

Credits: 3

Offered: Every year.

MUS 103 - Beginning Piano Class for Non-Majors

A one semester beginning piano class for non-majors.

Credits: 1

Offered: Offered on occasion.

MUS 104 - Applied Music Class for Non-Music Majors

Group instruction in voice, keyboard, and orchestral instruments for students not majoring in music. Previous experience in performance medium required. Enables student to enhance performance ability in performance area. May involve rental of instrument. Course may be repeated for credit.

Credits: 1

Offered: Offered on occasion.

MUS 105 - Applied Music Major

Weekly half-hour private applied instruction for music majors in Bachelor of Arts and Bachelor of Science degree programs. Students should see MUS 125-126 for further information about the requirements of specific studios.

Credits: 2

Offered: Every semester.

MUS 106 - Applied Music Major

Weekly half-hour private applied instruction for music majors in Bachelor of Arts and Bachelor of Science degree programs. Students should see MUS 125-126 for further information about the requirements of specific studios.

Credits: 2

Offered: Every semester.

MUS 107 - Double Reed Class I

(Required for all freshman oboe and bassoon majors.) The beginning fundamentals of reed making are covered including formation of blank and rudimentary scraping skills.

Credits: .5

Offered: Every year.

MUS 108 - Double Reed Class II

(Required for all freshman oboe and bassoon majors.) A continuation of Class I. The course covers shaping, gouging and refinement of scraping skills.

Credits: .5

Prerequisite: MUS 107. Offered: Every year.

MUS 109 - Harp Class, Elementary

Introductory course for beginners on the harp. Hand position, finger exercises, and tone production.

Credits: 1

Offered: Every semester.

MUS 110 - Harp Class, Intermediate

Continuing development of tone and technique: elementary harp repertoire.

Credits: 1

Prerequisite: MUS 109. Offered: Every year.

MUS 111 - The Rudiments of Music

A course for students who do not successfully complete the rudiments proficiency exam required for entrance into MUS 123. Covers the fundamentals of scales, key signatures, intervals, triads, and rhythm.

Credits: 1

Prerequisite: Mus Theory Rudiments Exam of an 85 or better. Offered: Every semester.

MUS 113 - Voice Class

One-semester course in basic vocal skills. Primary objective is to develop vocal technique for demonstration as instrumental or vocal conductor, and for choral participation.

Credits: 1

Offered: Every semester.

MUS 115 - Music Appreciation

Introduction to music in Western civilization: materials of music (melody, harmony, rhythm, tempo, dynamics, musical structure and design, and musical style); various performance media. Major composers of each musical epoch discussed, musical examples listened to in class. Covers 19th century Romanticism; 18th century classicism; medieval, renaissance, and baroque music; the 20th century, and the American scene.

Credits: 3

Offered: Every semester.

MUS 117 - Piano Class, Elementary

For students with little or no piano background. Development of beginning technique through major and minor scales and arpeggios, chord study, harmonization, transposition, sight reading, pedal usage, and improvisation.

Credits: 1

Prerequisite: MUS 101 or MUS123. Offered: Every semester.

MUS 118 - Piano Class, Elementary

For students with previous piano background or MUS 117. Development of technique through major and minor scales and arpeggios, chord study, harmonization, transposition, sight reading, pedal usage, improvisation, and repertoire. Barrier exam at end of course.

Credits: 2

Prerequisite: MUS 117. Offered: Every semester.

MUS 119 - Free Improvisation

The course is an exploration of the art of music improvisation for self-expression. It is taught in a supportive, safe environment of non-judgment, in order to give students the freedom needed to create music spontaneously. The voice is considered the primary instrument. Drums, and other World Music instruments will be provided. Other instruments primary, secondary, or otherwise, may be used in the class.

Credits: 1

Offered: Every semester.

MUS 120 - Concert Attendance

Attendance at a minimum of eight approved concerts (including faculty solo and ensemble recitals, Western New York Chamber Orchestra, visiting artists, and major student ensembles) each semester.

Credits: 0

Offered: Every semester.

MUS 121 - Aural Skills I

Course deals with various aspects of ear training including melodic, harmonic, and formal perception as well as sight-singing skills.

Credits: 2

Offered: Every semester.

MUS 122 - Aural Skills II

A continuation of MUS 121 dealing with various aspects of ear training including melodic, harmonic, and formal perceptions as well as sight-singing skills.

Credits: 2

Prerequisite: MUS 121. Offered: Every semester.

MUS 123 - Music Theory I

Course deals with elements of counterpoint, harmony, rhythm, and phrase analysis. Prerequisite: Satisfactory completion of Rudiments Exam.

Credits: 3

Prerequisite: Mus Theory Rudiments Exam of an 85 or better. Offered: Every semester.

MUS 124 - Music Theory II

A continuation of MUS 122 dealing with more advanced aspects of harmony, melody, form, and style analysis.

Credits: 3

Prerequisite: MUS 123. Offered: Every semester.

MUS 125 - Applied Music Major

Weekly hour private applied instruction for music majors in Bachelor of Music in Performance and Bachelor of Music in Music Education degree programs.

Credits: 2

Offered: Every semester.

MUS 126 - Applied Music Major

Weekly hour private applied instruction for music majors in Bachelor of Music in Performance and Bachelor of Music in Music Education degree programs.

Credits: 2

Offered: Every semester.

MUS 127 - Applied Lessons (Composition)

Weekly hour private applied instruction for music majors in the Bachelor of Music Composition program.

Credits: 2

Offered: Every semester.

MUS 128 - Applied Lessons (Composition)

Weekly hour private applied instruction for music majors in the Bachelor of Music Composition program.

Credits: 2

Prerequisite: MUS 127. Offered: Every semester.

MUS 129 - Beginning Composition

Introduction to composition, covering the various concepts inherent in composition, with an emphasis on creativity and performance. Students will be expected to begin to understand their own creative process and demonstrate their knowledge through composition projects.

Credits: 2

Prerequisite: MUS 121* or MUS 123*. Cross-Listed as: * Indicates that the course can be taken in the same semester. Offered: Every semester.

MUS 130 - Beginning Composition

Introduction to composition, covering the various concepts inherent in composition, with an emphasis on creativity and performance. Students will be expected to begin to understand their own creative process and demonstrate their knowledge through composition projects.

Credits: 2

Prerequisite: MUS 129 and MUS 121* and MUS 123*. Cross-Listed as: * Indicates that the course can be taken in the same semester. Offered: Every semester.

MUS 131 - Applied Musicianship I

Study of solfege and conducting as basic tools of musicianship.

Credits: 1

Offered: Every semester.

MUS 132 - Applied Musicianship II

Study of solfege and conducting as basic tools of musicianship.

Credits: 1

Offered: Every semester.

MUS 137 - Diction for Singers

A two-semester sequence intended to give singers an understanding of the International Phonetic Alphabet (IPA) and a thorough application of IPA symbols to the sounds of Italian, German, French, Latin and English dictions. The course is designed for voice students in all music curricula, and may be taken by students from other majors as well.

Credits: .5

Offered: Every year.

MUS 138 - Diction for Singers

A two-semester sequence intended to give singers an understanding of the International Phonetic Alphabet (IPA) and a thorough application of IPA symbols to the sounds of Italian, German, French, Latin and English dictions. The course is designed for voice students in all music curricula, and may be taken by students from other majors as well.

Credits: .5

Offered: Every year.

MUS 139 - Diction for Singers

A two-semester sequence intended to give singers an understanding of the International Phonetic Alphabet (IPA) and a thorough application of IPA symbols to the sounds of Italian, German, French, Latin and English dictions. The course is designed for voice students in all music curricula, and may be taken by students from other majors as well.

Credits: .5

Offered: Every year.

MUS 140 - Diction for Singers

A two-semester sequence intended to give singers an understanding of the International Phonetic Alphabet (IPA) and a thorough application of IPA symbols to the sounds of Italian, German, French, Latin and English dictions. The course is designed for voice students in all music

curricula, and may be taken by students from other majors as well.

Credits: .5

Offered: Every year.

MUS 163 - Our World of Music

An introduction to the study of music at the university level, to careers in music and to music in general. Much of the course involves a theoretical and musicological survey of musical style in cultures throughout the world, creating a foundation for musical understanding in later academic studies.

Credits: 1

Offered: Every year.

MUS 164 - Our World of Music

An introduction to the study of music at the university level, to careers in music and to music in general. Much of the course involves a theoretical and musicological survey of musical style in cultures throughout the world, creating a foundation for musical understanding in later academic studies.

Credits: 1

Offered: Every year.

MUS 198 - Composition Forum

Required of all first-year music majors enrolled in MUS 127-128. One recital/seminar per week, in which students perform and/or critique performances and compositions of colleagues. Recital schedule rotates from studio, to area, to school. Regular faculty and guest presentations and master classes are included.

Credits: 0

Corequisite: MUS 129. Offered: Every semester.

MUS 199 - Composition Forum

Required of all first-year music majors enrolled in MUS 127-128. One recital/seminar per week, in which students perform and/or critique performances and compositions of colleagues. Recital schedule rotates from studio, to area, to school. Regular faculty and guest presentations and master classes are included.

Credits: 0

Prerequisite: MUS 198. Offered: Every semester.

MUS 200 - Recital Seminar

Required of all sophomore music majors enrolled in private applied music instruction or composition. Students perform or critique the performance or composition of colleagues during one recital-seminar each week. Recital

schedule rotated: one week, studio; the next week, area; and the following week, school recitals.

Credits: 0

Offered: Every semester.

MUS 205 - Applied Music Major

Weekly half-hour private applied instruction for music majors in Bachelor of Arts, Bachelor of Science and Bachelor of Music in Music Composition degree programs. Students should see MUS 225-226 for further information about the requirements of specific studios.

Credits: 2

Prerequisite: MUS 106. Offered: Every semester.

MUS 206 - Applied Music Major

Weekly half-hour private applied instruction for music majors in Bachelor of Arts, Bachelor of Science and Bachelor of Music in Music Composition degree programs. Students should see MUS 225-226 for further information about the requirements of specific studios.

Credits: 2

Prerequisite: MUS 205. Offered: Every semester.

MUS 209 - Harp Class, Advanced

Advanced training in technique: scales, arpeggios, harmonies, pedal studies, chords, octaves, glissandi, and finger exercises in velocity.

Credits: 1

Prerequisite: MUS 110. Offered: Offered on occasion.

MUS 213 - Opera Seminar I

The study of stage movement and acting as it relates to opera performance. Projects will include study and performance of monologues, arias, and ensembles.

Credits: 1

Offered: Every semester.

MUS 217 - Piano Class, Intermediate

Intermediate course in functional piano playing of major, minor, modal scales, arpeggios, harmonization using primary and secondary chords, seventh chords, and secondary dominants; transposition, improvisation, sight reading, and repertoire.

Credits: 1

Prerequisite: MUS 118. Offered: Every semester.

MUS 218 - Piano Class, Intermediate

Continuation of development of functional piano skills through technique studies, harmonization, part-reading,

transposition, improvisation and accompanying. Piano Standards barrier exam at end of course.

Credits: 1

Prerequisite: MUS 217. Offered: Every semester.

MUS 221 - Aural Skills III

A continuation of MUS 123 dealing with more advanced aspects of ear training including melodic, harmonic, and formal perception as well as sightsinging skills.

Credits: 2

Prerequisite: MUS 122. Offered: Every semester.

MUS 222 - Aural Skills IV

A continuation of MUS 221 dealing with the more advanced aspects of ear training including melodic, harmonic, and formal perception as well as sightsinging skills.

Credits: 2

Prerequisite: MUS 221. Offered: Every semester.

MUS 223 - Music Theory III

A continuation of MUS 124 dealing with more advanced aspects of harmony, form, and style analysis.

Credits: 3

Prerequisite: MUS 124. Offered: Every semester.

MUS 224 - Music Theory IV

A continuation of MUS 223 dealing with advanced harmony, form, and style analysis.

Credits: 3

Prerequisite: MUS 223. Offered: Every semester.

MUS 225 - Applied Music Major

Bassoon, Cello, Clarinet, Classical Guitar, Double Bass, Euphonium, Flute, French Horn, Harp, Oboe, Percussion, Piano, Saxophone, Trombone, Trumpet, Tuba, Viola, Violin, Voice.

Credits: 2

Prerequisite: MUS 126. Offered: Every semester.

MUS 226 - Applied Music Major

Bassoon, Cello, Clarinet, Classical Guitar, Double Bass, Euphonium, Flute, French Horn, Harp, Oboe, Percussion, Piano, Saxophone, Trombone, Trumpet, Tuba, Viola, Violin, Voice.

Credits: 2

Prerequisite: MUS 225. Offered: Every semester.

MUS 227 - Applied Music (Composition)

Weekly hour private applied instruction for music majors in the Bachelor of Music in Music Composition program.

Credits: 2

Prerequisite: MUS 130. Corequisite: MUS 298. Offered: Every semester.

MUS 228 - Applied Music (Composition)

Weekly hour private applied instruction for music majors in the Bachelor of Music in Music Composition program.

Credits: 2

Prerequisite: MUS 227. Corequisite: MUS 299. Offered: Every semester.

MUS 231 - Conducting I

Basic conducting technique with special emphasis on score reading and improved aural skills, rehearsal planning and efficient use of time, conducting leadership style, and ability to communicate effectively with an ensemble.

Credits: 2

Prerequisite: MUS 124. Offered: Every year.

MUS 232 - Conducting II

Continuation of skills developed in MUS 231. Special emphasis on interpretation within defensible parameters, aural refinements in overcoming difficulties, diction (chorus)/articulation (instrumental), balance, and blend.

Credits: 2

Prerequisite: MUS 231. Offered: Every year.

MUS 235 - Musical Theatre Voice

Continuation of fundamentals of vocal technique. Emphasis upon German literature and literature from the Broadway stage. Continued study of contemporary vocal literature as well as introduction to operatic and oratorio repertoire.

Credits: 3

Prerequisite: MUS 126. Offered: Every semester.

MUS 236 - Musical Theatre Voice

Continuation of fundamentals of vocal technique. Emphasis upon German literature and literature from the Broadway stage. Continued study of contemporary vocal literature as well as introduction to operatic and oratorio repertoire.

Credits: 3

Prerequisite: MUS 235. Offered: Every semester.

MUS 245 - Performance Major

Bassoon, Cello, Clarinet, Classical Guitar, Double Bass, Euphonium, Flute, French Horn, Harp, Oboe, Percussion, Piano, Saxophone, Trombone, Trumpet, Tuba, Viola, Violin, Voice.

Credits: 3

Prerequisite: MUS 126. Offered: Every semester.

MUS 246 - Performance Major

Bassoon, Cello, Clarinet, Classical Guitar, Double Bass, Euphonium, Flute, French Horn, Harp, Oboe, Percussion, Piano, Saxophone, Trombone, Trumpet, Tuba, Viola, Violin, Voice.

Credits: 3

Prerequisite: MUS 245. Offered: Every semester.

MUS 262 - American Music

Survey of U.S. music, colonial times to present. Such American developments studied as music of first New England School, vernacular and black music of 19th century, jazz, and mixed media music of 20th century. American music which parallels and absorbs European developments and distinctly American contributions to Western music, such as music of Ives, Gershwin, and Copland included.

Credits: 3

Offered: Every other year.

MUS 263 - Music History in Western Civilization I

Survey of Western art music from the medieval era to the classical period, focusing on primary composers and their works, and major style periods. Through readings and listening assignments the course will construct a basic historical narrative of music as an evolving art form and as an integral part of society.

Credits: 3

Offered: Every year.

MUS 264 - Music History in Western Civilization II

Survey of Western art music from the classical period to today, focusing on primary composers and their works, and major style periods. Through readings and listening assignments the course will construct a basic historical narrative of music as an evolving art form and as an integral part of society.

Credits: 3

Offered: Every semester.

MUS 265 - History of Jazz

For majors and non-majors. History of jazz, early African American origins through 1970s. Survey of principal

movements and personalities in jazz and sociological and cultural influences on these movements.

Credits: 3

Offered: Every year.

MUS 267 - African American Music

A chronological history of African American music from its African roots through American forms of work songs, cries, hollers, spirituals, blues, ragtime, jazz, rhythm and blues, rock and roll, soul, gospel, rap, and music written by 20th century Black composers.

Credits: 3

Offered: Every year.

MUS 269 - Music Criticism

Development of method and vocabulary for critiquing musical works and performances. Extensive in-class listening and discussion. Reading assignments survey the history of music criticism and compare reviews of various musical genres and the other arts. Writing assignments include reviews of concerts and recordings. Non-music majors should have taken a college-level music course or have significant experience in music activities.

Credits: 3

Prerequisite: ENGL 100. Offered: Every year.

MUS 270 - The History of American Popular Music, 1900-1963

A non-technical survey of the 20th century American popular music genres, beginning with ragtime and ending at the time of the emergence of the new British rock. Among the subjects covered will be vaudeville, blues, country music, the Big Band era, Broadway and Hollywood, pop vocalists, rhythm and blues, early rock 'n' roll, and ethnic and regional popular music. Classes will consist of listening and discussion. Written assignments will be based on required and supplemental listening and recommended readings.

Credits: 3

Prerequisite: ENGL 100. Offered: Offered on occasion.

MUS 272 - Arts Advocacy and Leadership

This course is an overview of the issues in the arts, especially as perceived and confronted by the artist, artist manager and educator. The course will explore the relationship between artist and various constituencies that have the potential of form audiences, supporters, advocates and communities. Students will learn about the not-for-profit model, and how to engage business, government, and other sectors as partners. The class is a mixture of lecture, seminar, workshop and guest lectures.

Credits: 3

Offered: Every year.

MUS 285 - Music Copyright

An exploration of copyright purpose, history, use and challenges. Students will learn about copyright ownership and registration, and how copyright is used to manage royalties, publication, project development, and dissemination of the intellectual property through the various media, including the Internet.

Credits: 3

Prerequisite: MUS 380. Offered: Every other year.

MUS 298 - Composition Forum

Required of all sophomore-level music majors enrolled in MUS 227-228. One recital/seminar per week, in which students perform and/or critique performances and compositions of colleagues. Recital schedule rotates from studio, to area, to school. Regular faculty and guest presentations and master classes are included.

Credits: 0

Corequisite: MUS 227. Offered: Every semester.

MUS 299 - Composition Forum

Required of all sophomore-level Music majors enrolled in MUS 227-228. One recital/seminar per week, in which students perform and/or critique performances and compositions of colleagues. Recital schedule rotates from studio, to area, to school. Regular faculty and guest presentations and master classes are included.

Credits: 0

Corequisite: MUS 228. Offered: Every semester.

MUS 300 - Recital Seminar

Required of all junior-level music majors enrolled in private applied music instruction or composition. Students perform or critique performance or composition of colleagues during one recital-seminar each week. Recital schedule rotated: one-week studio, the next week area, and following week school recitals.

Credits: 0

Offered: Every semester.

MUS 301 - Composition Lab: Instrumentation

Fundamentals of instrumentation, covering the various timbral and technical characteristics of the instruments within the string, woodwind, brass, and percussion families. Students will be expected to understand how each instrument works and demonstrate their knowledge through transcription projects.

Credits: 2

Prerequisite: MUS 121 and MUS 123. Offered: Offered on occasion.

MUS 302 - Composition Lab: Orchestration

Fundamentals of orchestration, covering the techniques of combining instrumental colors in small and large ensembles. Additional instruments that were not covered in MUS 301 will be studied, as well. Students will be expected to understand the combinative concepts and demonstrate their knowledge through transcription projects.

Credits: 2

Prerequisite: MUS 301. Offered: Offered on occasion.

MUS 305 - Applied Music Major

Weekly half-hour private applied instruction for music majors in Bachelor of Arts and Bachelor of Music in MusicComposition degree programs. Students should see MUS 325-326 for further information about the requirements of specific studios.

Credits: 2

Prerequisite: MUS 206. Offered: Every semester.

MUS 306 - Applied Music Major

Weekly half-hour private applied instruction for music majors in Bachelor of Arts and Bachelor of Music in MusicComposition degree programs. Students should see MUS 325-326 for further information about the requirements of specific studios.

Credits: 2

Prerequisite: MUS 305. Offered: Every semester.

MUS 311 - Composition Lab: Music Notation

The course will entail study of western musical notation rules and traditions, engraving techniques, and digital note setting using digital notation software. The course will emphasize a practical approach to both the final product and to the process.

Credits: 2

Prerequisite: MUS 121 and MUS 123. Offered: Offered on occasion.

MUS 312 - Composition Lab: Music Arranging

Workshop-style course exploring the techniques of music arranging within classical, jazz, and popular musical styles. Several short projects will be assigned throughout the semester.

Credits: 2

Prerequisite: MUS 121 and MUS 123. Offered: Offered on occasion.

MUS 313 - Opera Seminar II

The study of stage movement and acting as it relates to opera performance. Projects will include study and performance of monologues, arias, and ensembles. This course will build on the skills learned in Opera Seminar I.

Credits: 1

Prerequisite: MUS 213. Offered: Every semester.

MUS 315 - Secondary Applied Study

Weekly one-half hour private instruction on an instrument other than a student's principal applied instrument, and for which the student has already had the appropriate secondary applied group instruction in a playing class.

Credits: 1

Offered: Every semester.

MUS 316 - Secondary Applied Study

Weekly one-half hour private instruction on an instrument other than a student's principal applied instrument, and for which the student has already had the appropriate secondary applied group instruction in a playing class.

Credits: 1

Offered: Every semester.

MUS 317 - Piano Class

More advanced class for non-keyboard major with emphasis on technique development, sight reading, ensemble playing and repertoire such as Bach, Two-Part Invention; Chopin, Prelude in B minor, and Sonatinas by Clementi, Kuhlau.

Credits: 1

Prerequisite: MUS 218. Offered: Every semester.

MUS 318 - Piano Class

More advanced class with emphasis on performance of solo piano literature, accompaniment of vocal and instrumental solos and choral accompaniments.

Credits: 1

Prerequisite: MUS 317. Offered: Every semester.

MUS 321 - Composition Lab: Collaborative Composition

Workshop-style course exploring the techniques of music composition within a collaborative environment. Several short scoring projects will be assigned across the genres of film, theatre, and dance.

Credits: 2

Prerequisite: MUS 121 and MUS 123. Offered: Offered on occasion.

MUS 322 - Composition Lab: Music of the 21st Century

Seminar/discussion course exploring various works, composers, styles, techniques, and issues that have emerged in the last 10 to 15 years. Extensive listening, analysis, and discussion with individual projects and presentations.

Credits: 2

Prerequisite: MUS 121 and MUS 123. Offered: Offered on occasion.

MUS 325 - Applied Music Major

Bassoon, Cello, Clarinet, Classical Guitar, Double Bass, Euphonium, Flute, French Horn, Harp, Oboe, Percussion, Piano, Saxophone, Trombone, Trumpet, Tuba, Viola, Violin, Voice.

Credits: 2

Prerequisite: MUS 226. Offered: Every semester.

MUS 326 - Applied Music Major

Bassoon, Cello, Clarinet, Classical Guitar, Double Bass, Euphonium, Flute, French Horn, Harp, Oboe, Percussion, Piano, Saxophone, Trombone, Trumpet, Tuba, Viola, Violin, Voice.

Credits: 2

Prerequisite: MUS 226. Offered: Every semester.

MUS 327 - Applied Music (Composition)

Weekly hour private applied instruction for music majors in the Bachelor of Music in Music Composition program.

Credits: 2

Prerequisite: MUS 228. Corequisite: MUS 398. Offered: Every semester.

MUS 328 - Applied Music (Composition)

Weekly hour private applied instruction for music majors in the Bachelor of Music in MusicComposition program.

Credits: 2

Prerequisite: MUS 327. Corequisite: MUS 399. Offered: Every semester.

MUS 330 - Advanced Instrumental Conducting

Develop proficiency in manual and aural skills with special emphasis on rehearsal techniques. Studies and practices aimed toward improved clarity and musicality of basic conducting technique. Practical exploration of rehearsal techniques with an emphasis on efficiency of solving problems of balance, ensemble, intonation and phrasing.

Credits: 2

Prerequisite: MUS 231 and MUS 232 and MUS 222 and MUS 224. Offered: Every semester.

MUS 333 - Musics of the World

Non-technical introduction to ethnomusicology. Survey of musical styles from around the world emphasizing how music reflects and influences society.

Credits: 3

Offered: Every year.

MUS 334 - Music of Latin America

Survey of the Concert Music of Latin America from colonial times to the present. Special emphasis will be placed on the unique culture of this region and its relationship to the compositional characteristics of its music. Students will become familiar with the geography, history, and distinctive elements which make up the major regions (Rio de la Plata, Caribbean, Andean, etc.). Although there are no prerequisites, a reading knowledge of Spanish would be desirable.

Credits: 3

Offered: Offered on occasion.

MUS 335 - Musical Theatre Voice

Continuation of the study of vocal techniques. Possible inclusion of the French repertoire. Continuation of the study of literature of the Broadway stage, opera and oratorio.

Credits: 3

Prerequisite: MUS 236. Offered: Every semester.

MUS 336 - Musical Theatre Voice

Continuation of the study of vocal techniques. Possible inclusion of the French repertoire. Continuation of the study of literature of the Broadway stage, opera and oratorio.

Credits: 3

Prerequisite: MUS 236. Offered: Every semester.

MUS 340 - Piano Pedagogy I

Introduction to piano pedagogy. Survey of learning theories and varied approaches to teaching the beginning piano student, evaluation of beginning piano methods, use of technology in the studio, improvisation, technical development in the beginner, and the business of teaching. Practice teaching and observations.

Credits: 3

Prerequisite: MUS 226. Offered: Every other year.

MUS 341 - Piano Pedagogy II

Introduction to the intermediate repertoire available to the piano student, with specific study of assigned literature; pedagogical approaches to adult students and group piano study; teaching piano technique and musicianship to the intermediate to advanced piano student. Practice teaching and observations.

Credits: 3

Offered: Offered on occasion.

MUS 344 - Vocal Pedagogy

Introduction to the objective study of the art of singing. Students will develop a working knowledge of the anatomy and physiology of the vocal mechanism as it relates to posture, respiration, phonation, resonance and articulation in singing. Findings from other sciences are applied to problems of vocal development, voice disorders and vocal hygiene. Students are expected to develop a knowledge base in these areas sufficient to demonstrate competence in working with voices of all ages in a voice studio setting.

Credits: 3

Offered: Every year.

MUS 345 - Performance Major

Bassoon, Cello, Clarinet, Classical Guitar, Double Bass, Euphonium, Flute, French Horn, Harp, Oboe, Percussion, Piano, Saxophone, Trombone, Trumpet, Tuba, Viola, Violin, Voice.

Credits: 3

Prerequisite: MUS 246. Offered: Every semester.

MUS 346 - Performance Major

Bassoon, Cello, Clarinet, Classical Guitar, Double Bass, Euphonium, Flute, French Horn, Harp, Oboe, Percussion, Piano, Saxophone, Trombone, Trumpet, Tuba, Viola, Violin, Voice.

Credits: 3

Prerequisite: MUS 246. Offered: Every semester.

MUS 347 - Junior Recital

Student performs Junior Performance Recital while enrolled. Enrollment is concurrent with Performance Major lessons, either MUS 345 or MUS 346.

Credits: 1

Offered: Every semester.

MUS 349 - Vocal Pedagogy Practicum

Students act as voice instructors for approximately 15 contact hours per semester teaching studio voice lessons. One two-hour weekly seminar concentrates on methods of

building voices, assessing and assigning vocal literature, building recital programs, choice and use of exercises and vocalizes.

Credits: 1

Prerequisite: MUS 344. Offered: Every semester.

MUS 350 - Special Topics in Music History

A course to permit music history instructors to initiate special studies in specialized subjects.

Credits: 3

Offered: Offered on occasion.

MUS 351 - Independent Study Music History

An opportunity for a student to pursue a limited study under supervision. The study will usually result in a research-based term paper.

Credits: 1

Offered: Offered on occasion.

MUS 354 - Topics in Musical Analysis

A analytical study of musical styles, periods, genera, and forms, with rotating focuses, including: sonata forms; the symphony; music since 1945; Impressionism; the Second Viennese School; late Romanticism; and the analysis of song

Credits: 3

Prerequisite: MUS 222 and MUS 224. Offered: Every semester.

MUS 355 - Pedagogy Practicum

Music Performance majors in orchestral instruments tutoring secondary or non-major applied music classes under supervision of applied studio faculty.

Credits: 0

Offered: Every semester.

MUS 356 - Pedagogy Practicum

Music Performance majors in orchestral instruments tutoring secondary or non-major applied music classes under supervision of applied studio faculty.

Credits: 0

Offered: Every semester.

MUS 358 - Governments and the Avant Garde

Interdisciplinary course begins with a section on arts and governments of former times, and in socialist countries, to provide an historical context for systems current in the U.S. and Canada. Then the arts-funding institutions of the U.S. and Canada will be studied. The actual interactions of

U.S. and Canadian governments and artists will be compared.

Credits: 3

Offered: Offered on occasion.

MUS 361 - Jazz Improvisation

A performance lab and study of various theoretical foundations of improvised jazz. Mainstream style is emphasized.

Credits: 2

Prerequisite: MUS 122 and MUS 124. Offered: Every year.

MUS 362 - Jazz Theory

A study of jazz harmony: chord symbols, melody, harmonization, chord extensions and substitutions in various jazz styles. Ear training in jazz style will also be included.

Credits: 3

Offered: Every year.

MUS 363 - Music Entrepreneurship I

This course will build upon the concepts and skills from Arts Leadership and help the student explore the entrepreneurial career options in an ever-changing landscape in the arts. The class will be comprised of lectures, discussion, guests, readings, written projects and group projects. Emphasis will be on considering current, successful models as the students imagine what might be appropriate to their own skills and interests.

Credits: 3

Prerequisite: MUS 272. Offered: Every year.

MUS 364 - Music Entrepreneurship II

This course will build upon the concepts and skills from Arts Leadership and Entrepreneurship I. From brainstorming and identification of a niche, to planning, grant-writing, and networking students will develop a set of skills leading up to the creation of an arts venture plan. The class will be comprised of lectures, discussion, guests, readings, written projects and group projects. Students will develop their knowledge and skills, culminating in the creation of a complete arts venture plan, to be carried out during the capstone course.

Credits: 3

Prerequisite: MUS 272 and MUS 363. Offered: Every year.

MUS 370 - Rhythm, Pitch, and Gesture

A course designed for music majors, dance majors, and musical theatre majors that emphasizes experiential

learning or rhythmic and pitch phenomena through full-body movement, improvisation, and musical visualization (making music "visual" through three-dimensional movement.) Sophomore standing required.

Credits: 3

Prerequisite: MUS 101 or MUS 122. Offered: Every year.

MUS 371 - Woodwind Repair

Introduction to common repair problems, preventative maintenance, adjustments necessary to maintain good playing condition, and emergency repairs on the woodwind instruments. Replacement of pads, springs, corks and felts.

Credits: 2

Offered: Every other year.

MUS 372 - Special Topics in Music

Study of music areas supplementing but not replacing regular courses. Topics, credit hours, and instructor determined by school.

Credits: 1-3

Offered: Offered on occasion.

MUS 373 - Special Topics in Music

Study of music areas supplementing but not replacing regular courses. Topics, credit hours, and instructor determined by school.

Credits: 1-3

Offered: Offered on occasion.

MUS 374 - Special Topics in Music

Study of music areas supplementing but not replacing regular courses. Topics, credit hours, and instructor determined by school.

Credits: 1-3

Offered: Offered on occasion.

MUS 375 - Special Topics in Music

Study of music areas supplementing but not replacing regular courses. Topics, credit hours, and instructor determined by school.

Credits: 1-3

Offered: Offered on occasion.

MUS 376 - Special Topics in Music

Study of music areas supplementing but not replacing regular courses. Topics, credit hours, and instructor determined by school.

Credits: 1-3

Offered: Offered on occasion.

MUS 377 - Special Topics in Music

Study of music areas supplementing but not replacing regular courses. Topics, credit hours, and instructor determined by school.

Credits: 1-3

Offered: Offered on occasion.

MUS 378 - Special Topics in Music

Study of music areas supplementing but not replacing regular courses. Topics, credit hours, and instructor determined by school.

Credits: 1-3

Offered: Offered on occasion.

MUS 379 - Special Topics in Music

Study of music areas supplementing but not replacing regular courses. Topics, credit hours, and instructor determined by school.

Credits: 1-3

Offered: Offered on occasion.

MUS 380 - The Business of Music

A comprehensive exploration of the various facets of the music business including careers in music, music publishing (copyrights, licensing, music books, exploitation of catalogue), the record business (recording, artist management, licensing, record distribution), tour management, self-employment business basics and ethics in the music business.

Credits: 3

Offered: Every other year.

MUS 385 - Music Contracts

The music business engages musicians with detailed contracts that establish terms of management, marketing, producing, licensing, recording, distribution, and the like. The student will learn about standard language and the principles of contract negotiations.

Credits: 3

Prerequisite: MUS 285. Offered: Every other year.

MUS 395 - Career/Business Management for Musicians

Business and marketing skills for the professional performing musician and private studio teacher. Career and financial planning, accounting and record-keeping, taxes and insurance, contracts and booking, promotion and marketing, etc. Junior standing in Music or permission of instructor required.

Credits: 3

Offered: Every other year.

MUS 396 - Guitar Pedagogy

The course is designed to help students develop the skills necessary to be successful guitar teachers. The focus will be on classical guitar methods and literature. Topics include early childhood education, guitar in the classroom, and running a private music studio, technical development, and etudes.

Credits: 3

Offered: Every other year.

MUS 398 - Composition Forum

Required of all junior-level Music majors enrolled in MUS 327-328. One recital/seminar per week, in which students perform and/or critique performances and compositions of colleagues. Recital schedule rotates from studio, to area, to school. Regular faculty and guest presentations and master classes are included.

Credits: 0

Corequisite: MUS 327. Offered: Every semester.

MUS 399 - Composition Forum

Required of all junior-level Music majors enrolled in MUS 327-328. One recital/seminar per week, in which students perform and/or critique performances and compositions of colleagues. Recital schedule rotates from studio, to area, to school. Regular faculty and guest presentations and master classes are included.

Credits: 0

Corequisite: MUS 328. Offered: Every semester.

MUS 400 - Recital Seminar

Required of all senior-level Music majors enrolled in private applied music instruction or composition. Students perform or critique performance or composition of colleagues during one recital-seminar each week. Recital schedule rotated: one week studio, the next week area, and following week, school recitals.

Credits: 0

Offered: Every semester.

MUS 403 - Counterpoint

A study of the art of counterpoint as practiced from its beginning in western musical history to the present, concentrating on analysis of important examples and some compositional exercises based thereon.

Credits: 3

Prerequisite: MUS 222 and MUS 224. Offered: Every other year.

MUS 404 - Choral Arranging

Fundamental techniques of arranging for a cappella and accompanied choral groups. Deals primarily with problems of public school-aged choral ensembles, their specific characteristics and limitations, including ranges, voice combinations, and suitable material. Includes consideration of use of special choral devices and treatments.

Credits: 2

Prerequisite: MUS 222 and MUS 223 and MUS 224 or MUS 354. Offered: Every year.

MUS 405 - Applied Music Major

Weekly half-hour private applied instruction for Music majors in Bachelor of Arts in Applied Music degree program. See MUS 425-426 for further information about the requirements of specific studios.

Credits: 2

Prerequisite: MUS 306. Offered: Every semester.

MUS 406 - Applied Music Major

Weekly half-hour private applied instruction for Music majors in Bachelor of Arts in Applied Music degree program. See MUS 425-426 for further information about the requirements of specific studios.

Credits: 2

Prerequisite: MUS 306. Offered: Every semester.

MUS 408 - History and Literature of the Wind Band

Survey of various influences (political, social, musical, etc.) upon the development of the Wind Band and its repertoire. Extensive listening, analysis and discussion with individual projects including bibliography and discography development.

Credits: 3

Offered: Offered on occasion.

MUS 409 - History and Literature of the Guitar

For majors and non-majors. A survey of guitar history from the years 1487 to the present. Primary attention will be devoted to guitar composers/performers and their musical works examined in historical, aesthetic and social contexts. These include: musical form and genre; compositional practices and procedures; aspects of the composer's biography and/or historical events that shaped his or her attitudes; general intellectual trends that helped to shape musical practices; and the original venues and circumstances in which the musical works were created and heard.

Credits: 3

Offered: Offered on occasion.

MUS 410 - Survey of Song Literature

A survey of representative composers and associated poets from their origins to the present in the English, French, and German language art song traditions. Discussions will include divergent approaches to style and text setting, historical development of the genre and associated musical characteristics. Music studied through scores, recordings and student performances.

Credits: 3

Prerequisite: MUS 137 and MUS 138 and MUS 139 and MUS 140 and MUS 264. Offered: Every year.

MUS 411 - American Song Literature

A study of selected American vocal literature in its literary and musical context to acquaint singers and pianists with authors and their background from the viewpoint of intellectual history and literary movements.

Credits: 3

Prerequisite: MUS 137 and MUS 138 and MUS 139 and MUS 140 and MUS 264. Offered: Every other year.

MUS 412 - French Song Literature

A study of selected 19th and 20th century French vocal literature in its literary and musical context, to acquaint singers and pianists with composers and poets from the viewpoint of intellectual history and literary movements.

Credits: 3

Prerequisite: MUS 137 and MUS 138 and MUS 139 and MUS 140 and MUS 264. Offered: Every other year.

MUS 413 - German Song Literature

A study of selected German vocal literature in its literary and musical context to acquaint singers and pianists with authors and their background from the viewpoint of intellectual history and literary movements.

Credits: 3

Offered: Every other year.

MUS 415 - Piano Class for Keyboard Majors

Introductory course in functional piano for keyboard majors. Technical study of modal scales, harmonization using primary and secondary chords, secondary dominant chords, and seventh chords in folk, pop and beginning jazz style, transposition, part-reading, ensemble playing, playing by ear, sight reading, improvisation, transposing instrument parts and reading clefs.

Credits: 1

Prerequisite: MUS 317 and MUS 318. Offered: Every year.

MUS 416 - Piano Class for Keyboard Majors

Continuation of development of functional piano skills of harmonization, part-reading, transposition, sight reading, and improvisation; playing and improvising rags, and writing or arranging a piano duet. Piano standards barrier exam at end of course.

Credits: 1

Prerequisite: MUS 415. Offered: Every year.

MUS 417 - Piano Class for Non-Keyboard Majors

More advanced course in functional piano with emphasis on harmonization in pop and jazz style. Continued work on transposition, sight reading, playing by ear and part-reading. Music Education majors take the piano proficiency barrier at conclusion of course.

Credits: 1

Prerequisite: MUS 317 and MUS 318. Offered: Every semester.

MUS 418 - Piano Improvisation for Non-Keyboard Majors

Emphasis on harmonization of lead sheets with jazz voicings, chord substitution, creative harmonization, tritone substitution; improvisation of 12 bar blues and boogie.

Credits: 1

Prerequisite: MUS 317 and MUS 318. Offered: Every semester.

MUS 420 - Piano Literature I

Survey of representative piano literature for performance and teaching. Analysis of principal works of Bach, Haydn, Mozart, Beethoven, Chopin, Brahms, Schumann, Liszt, and the impressionistic and modern composers. Emphasis on structural and stylistic considerations.

Credits: 3

Prerequisite: MUS 221 and MUS 222 and MUS 223. Offered: Every other year.

MUS 421 - Piano Literature II

Continuation of the survey of representative piano literature begun in Piano Literature I, with analysis of the works of principal composers from the romantic through Modern periods. Emphasis on structural and stylistic considerations.

Credits: 3

Prerequisite: MUS 420. Offered: Every other year.

MUS 424 - The History of Opera

Technical study of opera emphasizing its musical and dramatic development, relating it to social, cultural, and intellectual forces influencing it.

Credits: 3

Prerequisite: MUS 122 and MUS 123 and MUS 124. Offered: Offered on occasion.

MUS 425 - Applied Music Major

Preparation for senior recital. Bassoon, Cello, Clarinet, Classical Guitar, Double Bass, Euphonium, Flute, French Horn, Harp, Oboe, Percussion, Piano, Saxophone, Trombone, Trumpet, Tuba, Viola, Violin, Voice.

Credits: 2

Prerequisite: MUS 326. Offered: Every semester.

MUS 426 - Applied Music Major

Preparation for senior recital. Bassoon, Cello, Clarinet, Classical Guitar, Double Bass, Euphonium, Flute, French Horn, Harp, Oboe, Percussion, Piano, Saxophone, Trombone, Trumpet, Tuba, Viola, Violin, Voice.

Credits: 2

Prerequisite: MUS 326. Offered: Every semester.

MUS 427 - Applied Music (Composition)

Weekly hour private applied instruction for music majors in the Bachelor of Music in Music Composition program.

Credits: 2

Prerequisite: MUS 328. Corequisite: MUS 498. Offered: Every semester.

MUS 428 - Applied Music (Composition)

Weekly hour private applied instruction for music majors in the Bachelor of Music in Music Composition program.

Credits: 2

Prerequisite: MUS 427. Corequisite: MUS 499. Offered: Every semester.

MUS 432 - VoceVISTA: Science of the Professional Voice

This course involves an in-depth study of vocal tract acoustics (acoustic phonetics) and resonance strategies utilized by singers trained in the western classical tradition as well as non-classical (i.e. Broadway, or CCM - Contemporary Commercial Music).

Credits: 3

Offered: Every other year.

MUS 433 - Romanticism and Music

Investigation of aesthetic and philosophical concepts of Romanticism in art, literature, and philosophy; search for those conceptual characteristics in history of musical style.

Credits: 3

Offered: Offered on occasion.

MUS 435 - Musical Theatre Voice

Preparation of the B.F.A. in Musical Theatre recital which includes dance technique, acting technique and the culmination of the three previous years of vocal study.

Credits: 3

Prerequisite: MUS 336. Offered: Every semester.

MUS 436 - Musical Theatre Voice

Preparation of the B.F.A. in Musical Theatre recital which includes dance technique, acting technique and the culmination of the three previous years of vocal study.

Credits: 3

Prerequisite: MUS 336. Offered: Every semester.

MUS 439 - Composition Seminar

Continuation of free composition with detailed study of 20th century compositional techniques.

Credits: 3

Offered: Every semester.

MUS 440 - Composition for Electronic Media I

Basic compositional and technical skills necessary for realization of electronic music. Emphasis on proper recording, editing, mixing, and synthesis techniques as they relate to the composer. Analog synthesis is stressed. An introduction to digital synthesis (MIDI, FM, computer-assisted composition) also included. Brief historical survey of medium presented.

Credits: 3

Prerequisite: MUS 122 and MUS 123 and MUS 124.

Offered: Every year.

MUS 441 - Composition for Electronic Media II

Electronic music composed and realized using a variety of computer-related techniques. Covers digital recording and synthesis using MIDI and other digital audio hardware/software. Emphasis on MIDI and audio sequencing. Related topics include electronic orchestration, computer assisted software and algorithms, and literature.

Credits: 3

Prerequisite: MUS 122 and MUS 123 and MUS 124 and MUS 440. Offered: Every year.

MUS 442 - Seminar in Computer Music

A seminar focused on the development and practice of composing music using algorithms, represented by tools such as Max/MSP, CSound, SuperCollider, Symbolic Composer, and Jitter. These applications are comparatively lower-level softwares that require the writing of algorithms that control data (creation and flow) and digital signal processing in order to create musical structures. It is not a course dealing with commercial software such as sequencers, samplers, or editors.

Credits: 3

Prerequisite: MUS 440 or MUS 441. Offered: Every year.

MUS 443 - Seminar in New Music Software

A seminar focusing on the latest developments in compositional and performance software tools. Applications considered could include (but not limited to): Reason, Metasynth, Artmatic, Arkaos Visualizer, Re Cycle, Garageband, Reaktor, and Kontakt. Emphasis will be placed on the musical uses and metaphors for each tool and will be demonstrated through research, presentations and creative projects.

Credits: 3

Prerequisite: MUS 440 or MUS 441. Offered: Every year.

MUS 445 - Performance Major

Preparation for senior recital. Bassoon, Cello, Clarinet, Classical Guitar, Double Bass, Euphonium, Flute, French Horn, Harp, Oboe, Percussion, Piano, Saxophone, Trombone, Trumpet, Tuba, Viola, Violin, Voice.

Credits: 3

Prerequisite: MUS 346. Offered: Every semester.

MUS 446 - Performance Major

Preparation for senior recital. Bassoon, Cello, Clarinet, Classical Guitar, Double Bass, Euphonium, Flute, French Horn, Harp, Oboe, Percussion, Piano, Saxophone, Trombone, Trumpet, Tuba, Viola, Violin, Voice.

Credits: 3

Prerequisite: MUS 346. Offered: Every semester.

MUS 447 - Senior Recital

Student performs Senior Performance Recital while enrolled. Enrollment is concurrent with Performance Major lessons, either MUS 445 or MUS 446.

Credits: 1

Offered: Every semester.

MUS 450 - Directed Studies

Directed Studies in music. Designed exclusively for Childhood Education majors with a concentration in

music. Includes voice proficiency, vocal instruction, observation of elementary music classrooms, and conducting.

Credits: 2

Offered: Every semester.

MUS 451 - Directed Studies

Directed Studies in music. Designed exclusively for Childhood Education majors with a concentration in music. Includes voice proficiency, vocal instruction, observation of elementary music classrooms, and conducting.

Credits: 2

Offered: Every semester.

MUS 453 - The Baroque Period in Music

Detailed study of styles, trends, and developments in music, 17th and 18th centuries through preclassic era. Music studied through scores, recordings, and performance. Review of important historical and theoretical developments.

Credits: 3

Offered: Offered on occasion.

MUS 454 - The Classical Period in Music

Study of styles, trends, and developments in music in Classical period (ca. 1740-1820). Study of music of Haydn, Mozart, and other composers included. Music studied through scores, recordings, and performance. Historical and theoretical developments.

Credits: 3

Offered: Offered on occasion.

MUS 455 - The Romantic Period in Music

Music composers, and theorists of 19th and 20th centuries, from after Beethoven through impressionists. Emphasis on developments in the music through study of scores and performance. Parallels between musical romanticism and romanticism in other arts.

Credits: 3

Offered: Offered on occasion.

MUS 456 - The Modern Period in Music

Detailed historical study of 20th century composers, musical trends, and developments. Variety of contemporary styles, experimentation, and performance practice in recent music emphasized. Recorded examples.

Credits: 3

Offered: Offered on occasion.

MUS 457 - Seminar in Popular Music

The seminar examines the ways in which contemporary popular music both reflects and influences contemporary society. A brief history of American popular music and its styles will be followed by discussions based on topics such as cover tunes, music videos, cross-over artists, and the music business. Junior standing required.

Credits: 3

Offered: Offered on occasion.

MUS 458 - Cult of Elizabeth/Patronage in Arts

For upper-level non-music majors. Course deals with understanding of the purposes of the Cult of Elizabeth in Renaissance England and to assess its effect on music and other arts of the age. With the Elizabethan patronage model as a foundation for understanding the relationships between governments and the arts, the present system of support for the arts will be assessed, debated and critiqued.

Credits: 3

Offered: Offered on occasion.

MUS 460 - Independent Study

Maximum of 6 credit hours of independent study in music or music education exclusive of applied music. Projects selected from subject areas not available in regularly scheduled course offerings. Well in advance of registration for either regular or summer session, student must complete independent study request form (in triplicate) available in the School of Music office.

Credits: 1-3

Offered: Every semester.

MUS 461 - Independent Study

Maximum of 6 credit hours of independent study in music or music education exclusive of applied music. Projects selected from subject areas not available in regularly scheduled course offerings. Well in advance of registration for either regular or summer session, student must complete independent study request form (in triplicate) available in School of Music office.

Credits: 1-3

Offered: Every semester.

MUS 465 - Music Business Internship

The course provides credit for professional experiences in the music business for music business majors. Enrollment is to be arranged with an appropriate instructor.

Credits: 1-15

Offered: Every semester.

MUS 470 - Special Topics Workshop

Usually summer or other short-term workshops/institutes dealing with specific music literature, topics, problems, or teaching approaches and techniques.

Credits: 1-6

Offered: Offered on occasion.

MUS 471 - Special Topics Workshop

Usually summer or other short-term workshops/institutes dealing with specific music literature, topics, problems, or teaching approaches and techniques.

Credits: 1-6

Offered: Offered on occasion.

MUS 476 - Audio and Desktop Multimedia

Course designed for students with a strong interest and background in composition, multimedia, audio and MIDI. A project-oriented course which focuses on audio design, analysis, and integration as it applies to multimedia authoring, motion video, and web content creation.

Credits: 3

Prerequisite: MUED 291. Offered: Every year.

MUS 477 - History of Performance and the Analysis of Interpretation

Explores the changing historical views of the process of musical interpretation in performance and develops a useful language to discuss the interpretive choices made by performers. We will discuss the aesthetic issues surrounding the notions of "the work" and "the interpretation" while comparing recorded performances from across the 20th century. Guest lecturers from among our studio faculty and ensemble directors will discuss their own specialty from the perspective of interpretation.

Credits: 3

Offered: Every other year.

MUS 485 - Multimedia for Musicians

A course designed for musicians and music educators focusing on the preparation and integration of various elements (text, graphics, video, music) with the goal of producing interactive or self-running computer-based presentations. Related topics include; design and content issues, music and authoring software, media preparation and creation, and final delivery.

Credits: 3

Prerequisite: MUED 291. Offered: Every year.

MUS 491 - Senior Project in Composition

An original composition representing the most mature work of the apprentice composer. Students will also

supply a complete written analysis of the final composition. The scope and content of all final projects are subject to the approval of the area head.

Credits: 2

Offered: Every semester.

MUS 492 - Music Capstone Project

Building upon the skills and ideas developed through a non-performance track of the Bachelor of Arts in Music, students will implement an arts venture and/or research project as approved and guided by faculty. The project will be linked to the professional goals of the curriculum and the career interests of the student.

Credits: 3

Offered: Every year.

MUS 498 - Composition Forum

Required of all senior-level music majors enrolled in MUS 427-428. One recital/seminar per week, in which students perform and/or critique performances and compositions of colleagues. Recital schedule rotates from studio, to area, to school. Regular faculty and guest presentations and master classes are included.

Credits: 0

Corequisite: MUS 427. Offered: Every semester.

MUS 499 - Composition Forum

Required of all senior-level music majors enrolled in MUS 427-428. One recital/seminar per week, in which students perform and/or critique performances and compositions of colleagues. Recital schedule rotates from studio, to area, to school. Regular faculty and guest presentations and master classes are included.

Credits: 0

Corequisite: MUS 428. Offered: Every semester.

MUS 500 - Graduate Music Ensemble

Instrumental or vocal performance group for graduate students. All music students participate in the university music ensembles, the required number of participations varying among the several music curricula. Participation in any ensemble is open to students in other departments of the university by audition and consent of the conductor and/or Director of the School of Music.

Credits: .5

Offered: Every semester.

MUS 501 - Graduate Music Ensemble

Instrumental or vocal performance group for graduate students. All music students participate in the university music ensembles, the required number of participations

varying among the several music curricula. Participation in any ensemble is open to students in other departments of the university by audition and consent of the conductor and/or Director of the School of Music

Credits: 1

Offered: Every semester.

MUS 502 - Harmonic Styles Since 1850

Analytical and compositional study of stylistic developments since 1850 which extend, expand, depart from or negate "common-practice" harmony and tonality. Major composers studied. Emphasis on gaining understanding of their harmonic styles via analysis and compositional imitation by student. Individual projects required.

Credits: 3

Prerequisite: MUS 221. Offered: Offered on occasion.

MUS 503 - 20th Century Counterpoint

Study of linear aspects of music via combining melodies into various textures. Special emphasis on revival of contrapuntal techniques in 20th century by such composers as Busoni, Hindemith, Bartok, Schoenberg, Webern, and their successors; these techniques and styles used in direct composition.

Credits: 3

Offered: Offered on occasion.

MUS 506 - Basic Studies Seminar: Theory

A review of the principles and practices of music theory/composition, centering on the "common practice" period but not confined to it, and geared to the individual needs of participating students, whose prior involvement with theory may not be recent or extensive. Syllabi for particular areas of study, relevant texts, scores and recordings in library, assignments leading to final paper.

Credits: 3

Offered: Every other year.

MUS 507 - Basic Studies Seminar: History

A review of the basic framework of Western musical history, centered on a core repertory but not restricted by it, with class listening and discussion; individual projects required of students, utilizing standard research procedures and reference materials, including scores and recordings; optionally also class lecture and/or performance by students.

Credits: 3

Offered: Every other year.

MUS 508 - History and Literature of the Wind Band

Survey of various influences (political, social, musical, etc.) upon the development of the Wind Band and its repertoire. Extensive listening, analysis and discussion with individual projects including bibliography and discography development.

Credits: 3

Offered: Every other year.

MUS 520 - Piano Literature

Survey of representative piano literature for performance and teaching. Analysis of principal works of Bach, Haydn, Mozart, Beethoven, Chopin, Brahms, Schumann, Liszt, and the impressionistic and modern composers. Emphasis on structural and stylistic considerations.

Credits: 3

Offered: Every other year.

MUS 521 - Music Bibliography

An exploration of the resources and techniques needed for graduate studies in all areas of music. Students will learn to examine and critically evaluate music resources in both traditional and electronic forms, and will develop research strategies that can be adapted to many different areas of study. Through a variety of projects and in-class presentations, students will become better equipped to undertake graduate level music research, and to ultimately present that research with proper bibliographic style according to established scholarly conventions.

Credits: 3

Offered: Offered on occasion.

MUS 522 - Style and Techniques of Song Literature

Students will study a survey of representative songs from their origins to the present in the Italian, French, German, British, and American art song traditions. Discussions will include divergent approaches to style and text settings, historical development of the genre, poetry, and associated musical characteristics. Music is studied through scores, recordings and performances. Students will be coached in the performance practice of the literature.

Credits: 3

Offered: Offered on occasion.

MUS 523 - Sonata Duo and Chamber Ensemble Seminar

Collaborative Pianists will study representative chamber instrumental literature from the Baroque, Classical, Romantic, Impressionistic, and 20th century periods. An overview of standard literature for duos with all instruments, piano, trios, and larger ensembles (quartets, quintets, and sextets) will be presented. Collaborative

Pianists will also play in chamber ensembles and perform duos in class.

Credits: 3

Offered: Every year.

MUS 524 - Techniques of Opera Coaching

Collaborative pianists will learn basic skills for working as a rehearsal pianist with a conductor and stage director, how to prepare an orchestral reduction of an opera score, and how to assist singers in the preparation of operatic roles. Collaborative pianists will prepare arias, recitatives, and ensemble pieces, and will be expected to sing vocal lines while playing the orchestral accompaniment as well as accompany guest singers in the class. Topics discussed will include elements of style, traditions of vocal ornamentation, and lyric diction.

Credits: 3

Prerequisite: MUS 615. Offered: Offered on occasion.

MUS 542 - Renaissance Period in Music

Detailed study of styles, trends, and developments in music in 15th and 16th centuries. Survey of 14th century, Ars Nova period also included. Philosophical and theoretical ideas of period studied as well as the actual music. Performance of Renaissance music stressed.

Credits: 3

Offered: Offered on occasion.

MUS 544 - Classical Period in Music

Study of styles, trends, and developments in music in classical period (ca. 1740-1820). Study of music of Haydn, Mozart, and other composers included. Music studied through scores, recordings, and performance. Historical and theoretical developments.

Credits: 3

Offered: Offered on occasion.

MUS 545 - Romantic Period in Music

Music, composers, and theorists of 19th and 20th centuries, from after Beethoven through impressionists. Emphasis on developments in the music through study of scores and performance. Parallels between musical romanticism and romanticism in other arts.

Credits: 3

Offered: Offered on occasion.

MUS 550 - Compositional Technology Since 1950

Survey of music since 1950. Emphasis upon main stylistic trends, avant-garde music, electronic music, multi-media, and new younger composers. Musical analysis and composition required of students.

Credits: 3

Offered: Offered on occasion.

MUS 555 - Special Topics Workshop

Usually summer or other short-term workshops dealing with specific topics, techniques or problems in music theory, analysis, history or literature. Maximum of 6 credit hours in increments of no more than 3 credit hours may apply with permission to requirements in categories of theory, history and literature, or electives.

Credits: 1-3

Offered: Offered on occasion.

MUS 565 - Special Topics Seminar

Presentation and investigation of a specific but not regularly scheduled topic of current need or interest, including choral conducting and analysis of choral scores. Course may be repeated to a maximum of 6 credit hours (in different topics) and may apply with permission to requirements in categories of theory, history and literature, or electives.

Credits: 1-3

Offered: Offered on occasion.

MUS 566 - Advanced Choral Conducting/Analysis of History Styles

Advanced choral conducting techniques and analysis of choral scores. Students will conduct in class from choral repertoire that will be chosen from representative works of the important style periods in music history, including Gregorian Chant, the Middle Ages, Renaissance, Baroque, Classical, Romantic, and a variety of 20th century styles. Some class time will also be devoted to presentation and discussion of appropriate choral literature of high quality in the school curriculum.

Credits: 3

Prerequisite: MUS 222 and MUS 224 and MUS 232.

Offered: Offered on occasion.

MUS 575 - Music and Computer Multimedia

A course focusing on the integration of music (digital audio and MIDI) into a variety of computer-based multimedia environments including Hypercard, Director, Adobe Premiere, and others. Music development tools will include many recent production and editing applications including: Digital Performer, Deck, Alchemy, and Sound Designer.

Credits: 3

Offered: Every semester.

MUS 576 - Audio and Desktop Multimedia

Course designed for students with a strong interest and background in composition, multimedia, audio and MIDI. A project-oriented course which focuses on audio design, analysis, and integration as it applies to multimedia authoring, motion video, and web content creation.

Credits: 3

Prerequisite: MUS 291. Offered: Every year.

MUS 580 - The Art of Improvisation

The course, which will explore the world of free improvisation, will enhance the expressive skills of performers, educators, and music therapists.

Credits: 1-3

Offered: Every year.

MUS 590 - Special Studies

Studies not otherwise available as regular course offerings and relevant to student's program or career plans, pursued in independent, directed, or tutorial manner. Student must submit proposal for approval, format available in the School of Music office. Student must also secure agreement of faculty member to sponsor study. Maximum of 6 credit hours of any combination of MUS and MUED may be earned this way in increments of no more than 3 credit hours.

Credits: 1-3

Offered: Offered on occasion.

MUS 591 - Special Studies

Studies not otherwise available as regular course offerings and relevant to student's program or career plans, pursued in independent, directed, or tutorial manner. Student must submit proposal for approval, format available in the School of Music office. Student must also secure agreement of faculty member to sponsor study. Maximum of 6 credit hours of any combination of MUS and MUED may be earned this way in increments of no more than 3 credit hours.

Credits: 1-3

Offered: Offered on occasion.

MUS 592 - Graduate Performance Major

Two semesters of advanced applied instruction for candidates for Master of Music in Performance degree culminating in a public performance.

Credits: 3

Offered: Every semester.

MUS 593 - Graduate Performance Major

Two semesters of advanced applied instruction for candidates for Master of Music in Performance degree culminating in a public performance.

Credits: 3

Offered: Every semester.

MUS 601 - Applied Music Minor I

Half-hour lessons in secondary applied instruments. Permission of School of Music.

Credits: 1

Offered: Every semester.

MUS 602 - Applied Music Minor II

Half-hour lessons in secondary applied instruments. Permission of School of Music.

Credits: 1

Offered: Every semester.

MUS 603 - Applied Music Minor III

Half-hour lessons in secondary applied instruments. Permission of School of Music.

Credits: 1

Offered: Every semester.

MUS 604 - Applied Music Minor IV

Half-hour lessons in secondary applied instruments. Permission of School of Music.

Credits: 1

Offered: Every semester.

MUS 605 - Applied Music Major I

Hour lessons in major applied instruments. Permission of School of Music.

Credits: 2

Offered: Every semester.

MUS 606 - Applied Music Major II

Hour lessons in major applied instruments. Permission of School of Music.

Credits: 2

Offered: Every semester.

MUS 607 - Applied Music Major III

Hour lessons in major applied instruments. Permission of School of Music.

Credits: 2

Offered: Every semester.

MUS 608 - Applied Music Major IV

Hour lessons in major applied instruments. Permission of School of Music.

Credits: 2

Offered: Every semester.

MUS 609 - Composition

Advanced free composition for graduate study, concentrating on individual creative musical inclinations of each student. Seminar and private study of 20th century creative concepts.

Credits: 3

Prerequisite: MUS 438 or MUS 439. Offered: Every semester.

MUS 610 - Composition

Advanced free composition for graduate study, concentrating on individual creative musical inclinations of each student. Seminar and private study of twentieth century creative concepts.

Credits: 3

Prerequisite: (MUS 438 or MUS 439) and MUS 609. Offered: Every semester.

MUS 611 - Composition

Continuation of advanced composition pursuing mature, professional creative expression.

Credits: 3

Prerequisite: MUS 610. Offered: Offered on occasion.

MUS 612 - Composition

Continuation of advanced composition pursuing mature, professional creative expression.

Credits: 3

Prerequisite: MUS 610 and MUS 611. Offered: Offered on occasion.

MUS 614 - The Pedagogy of Music Theory

Designed to provide the necessary background and practical instruction in the art of teaching music theory and aural skills acquisition. Students will engage in a critical evaluation of the philosophies, materials, curricula, and strategies essential to teaching music theory. The course provides pedagogical training geared toward music theory teaching of students at the K-12 and college levels and in the context of the classroom, rehearsal, and individual applied lesson.

Credits: 3

Offered: Offered on occasion.

MUS 615 - Graduate Diction for Singers

The purpose of the course is to review and expand the knowledge of the International Phonetic Alphabet, the recognized tool for pronunciation in the world of singing, and to address the rules that govern proper articulation and pronunciation of English, Italian, German, and French in both spoken and sung forms of these languages. In addition, students will learn to transcribe written poetic texts into the International Phonetic Alphabet.

Credits: 3

Offered: Offered on occasion.

MUS 624 - Analytic Techniques

The application of analytical methods, including Schenkerian reductive analysis, to Western tonal music since the latter 17th century. Includes the study of musical forms in Western music and entails a significant prose writing component.

Credits: 3

Offered: Offered on occasion.

MUS 631 - Art of Wind Conducting

Students will gain the score study skills necessary to conduct top quality repertoire and establish criterion and knowledge of quality repertoires. Students will gain the skills necessary to choose, teach and conduct quality repertoire at the professional level.

Credits: 1-3

Offered: Every year.

MUS 632 - Wind Conducting Symposium

Designed to enhance the skills of conductors at every level, topics include repertoire choices, rehearsal techniques, baton technique, ensemble development, and score study. Masterworks will be explored and conducted with development of musical interpretation, movement and conducting technique being the goal. Students will achieve a high level of aural, physical and emotional skill on the podium.

Credits: 1-3

Offered: Every year.

MUS 643 - Baroque Period in Music

Detailed study of styles, trends, and developments in music, 17th and 18th centuries through preclassic era. Music studied through scores, recordings, and performance. Review of important historical and theoretical developments.

Credits: 3

Offered: Every other year.

MUS 646 - Modern Period In Music

Detailed historical study of 20th century composers, musical trends, and developments. Variety of contemporary styles, experimentation, and performance practice in recent music emphasized.

Credits: 3

Offered: Every other year.

MUS 651 - Pedagogy of Music Composition

A seminar/discussion course that will prepare graduate students to teach music composition at the beginning levels. Class and private instruction observation, research and discussion with individual projects and presentations.

Credits: 3

Offered: Every other year.

MUS 652 - Schenkerian Analysis

The course covers the fundamental concepts of Schenkerian analysis beginning with the interpretation of brief phrases and themes and eventually progressing through short binary forms and larger designs such as sonata form.

Credits: 3

Prerequisite: MUS 624. Offered: Every other year.

MUS 653 - Post-Tonal Analysis

The course introduces students to a variety of post-tonal music and analytic approaches. Repertoires covered include free-atonality, twelve-tone music, integral serialism, early electronic music, aleatoric music and indeterminacy.

Credits: 3

Prerequisite: MUS 624. Offered: Every other year.

MUS 665 - Advanced Choral Conducting and Analysis

Advanced choral conducting techniques and analysis of choral scores. Students will conduct in class from choral repertoire which will be chosen from representative works of the important style periods in music history, including Gregorian Chant, the Middle Ages, Renaissance, Baroque, Classical, Romantic, and a variety of 20th century styles. Some class time will also be devoted to presentation and discussion of appropriate choral literature of high quality in the school curriculum. Students should have completed undergraduate fundamentals of conducting classes and all undergraduate theory courses.

Credits: 3

Offered: Offered on occasion.

MUS 666 - Choral Literature for Secondary Schools

Students will read and analyze, in class, a variety of choral repertoire, deemed by the instructor to be of the highest quality. Literature will be chosen from representative works of the important style periods in music history, from the Renaissance to the 20th century. Emphasis will be given to literature that is especially appropriate for junior and senior high school choral programs.

Credits: 3

Offered: Offered on occasion.

MUS 692 - Graduate Performance Major

Two semesters of advanced applied instruction for candidates for Master of Music in Performance degree culminating in a public performance.

Credits: 3

Prerequisite: MUS 593. Offered: Every semester.

MUS 693 - Graduate Performance Major

Two semesters of advanced applied instruction for candidates for Master of Music in Performance degree culminating in a public performance.

Credits: 3

Prerequisite: MUS 593. Offered: Every semester.

MUS 694 - Recital

Concurrently with MUS 693 or in any subsequent semester, candidate for major in Performance presents public recital under supervision of major instructor and two other instructors from same area.

Credits: 3

Offered: Every semester.

MUS 695 - Thesis

Candidate for degree in Theory-Composition engages in advanced work culminating in thesis project or composition/arrangement.

Credits: 1-3

Offered: Offered on occasion.

MUTY - Music Therapy

MUTY 112 - Music Therapy Clinical Observation and Seminar

Seminar designed to address beginning knowledge of American Music Therapy Professional Competencies in Clinical Foundations: Exceptionality, Principles of Therapy and the Therapeutic Relationship and Music Therapy: Foundations and Principles, Client Assessment, Treatment Planning, Therapy Implementation, Therapy

Evaluation, Documentation, Termination/Discharge Planning and Supervision. Structures experiences include 10 hours of clinical observation.

Credits: 1

Offered: Every year.

MUTY 115 - Introduction to Music Therapy

A basic orientation and general introduction to music therapy as a creative arts discipline. Lectures, classroom discussion, films and classroom demonstrations are used to introduce students to the target populations/disabilities.

Credits: 2

Offered: Every year.

MUTY 116 - Orientation to Clinical Practice

Course designed to introduce the American Music Therapy Association Professional Competencies in the area of Music Foundations: Composition and Arranging; Nonsymphonic Instrumental Skills and Improvisation Skill as well as Music Therapy Competencies: Clinical Foundations and Principles.

Credits: 2

Offered: Every year.

MUTY 211 - Clinical Placement and Seminar I

Seminar designed to address knowledge of American Music Therapy Professional Competencies in Clinical Foundations: exceptionality, principles of therapy and the therapeutic relationship and Music Therapy: Foundations and Principles, novice level Client Assessment, Treatment Planning, Therapy Implementation, Therapy Evaluation, Documentation, Termination/Discharge Planning and Supervision. Structured experiences include weekly field placements in area nursing homes, documentation and supervision appropriate to students' first clinical experience.

Credits: 1

Offered: Every year.

MUTY 212 - Clinical Placement and Seminar II

Seminar designed to address knowledge of American Music Therapy Professional Competencies in Clinical Foundations: exceptionality, principles of therapy and the therapeutic relationship and Music Therapy: Foundations and Principles, Client Assessment, Treatment Planning, Therapy Implementation, Therapy Evaluation, Documentation, Termination/Discharge Planning and Supervision. Structures experiences include the continuation of weekly field placements in the same area nursing homes as the previous semester, documentation and supervision.

Credits: 1

Offered: Every year.

MUTY 215 - Music Therapy Repertoire

Designed to address the development of American Music Therapy Association Competencies in foundational knowledge and repertoire of Music and Music Therapy experiences in singing, playing instruments, movement, listening, and creating (including composition and improvisation).

Credits: 2

Offered: Every year.

MUTY 216 - Impact of Music on Human Health and Behavior

Designed to address American Music Therapy Professional Competencies in Music Therapy: foundational knowledge of Psychological and Physiological aspects of musical behavior and experience; and Research Methods.

Credits: 2

Offered: Every year.

MUTY 240 - Music for Children with Disabilities

Introduction to the needs of students with disabilities, including categories of disabilities; identification and remediation of disabilities and how music can be used as a teaching method. Add INDS 299 Service Learning in Music for Children with Disabilities to this course to gain intern teaching experience teaching music for children with disabilities in classroom settings.

Credits: 1

Offered: Every semester.

MUTY 270 - Social Instruments

Group applied instruction on a variety of social/recreational non-traditional instruments (e.g. autoharp, dulcimer, recorder, ukulele, percussion instruments, tone bells). Designed to develop a playing competence sufficient to accompany general music classes/music therapy clinical sessions.

Credits: 2

Offered: Every semester.

MUTY 301 - Seminar in Music Therapy

Designed to support the clinical practicum experience. Fall semester seminars correspond to clinical population; spring semester seminars cover medical music therapy, clinical improvisation and senior music therapy competency audit.

Credits: 1

Prerequisite: MUTY 115 and MUTY 300. Offered: Every semester.

MUTY 302 - Practicum in Music Therapy

Designed to provide structured experience in a clinical setting under the supervision of a music therapist. Students work two hours per week, on a two-semester basis, with children, adolescents, adults, and elderly in area clinical facilities. Written monthly and semester reports are part of the clinical requirements.

Credits: 0

Offered: Every semester.

MUTY 311 - Clinical Placement and Seminar III

Seminar designed for music therapy students to address knowledge of American Music Therapy Professional Competencies in Clinical Foundations: exceptionality, principles of therapy and the Therapeutic Relationship and Music Therapy: Foundations and Principles, intermediate Client Assessment, Treatment Planning, Therapy Implementation, Therapy Evaluation, Documentation, Termination/Discharge Planning and Supervision. Structured experiences include weekly field placements in a school, day habilitation, or hospital setting, documentation and supervision developmentally appropriate for first semester junior music therapy students.

Credits: 1

Offered: Every year.

MUTY 312 - Clinical Placement and Seminar IV

Seminar designed to address knowledge of American Music Therapy Professional Competencies in Clinical Foundations: exceptionality, principles of therapy and the therapeutic relationship and Music Therapy: Foundations and Principles, Client Assessment, Treatment Planning, Therapy Implementation, Therapy Evaluation, Documentation, Termination/Discharge Planning and Supervision. Structures experiences include weekly field placements in school, day habilitation, or hospital settings, documentation and supervision developmentally appropriate for second semester junior music therapy students.

Credits: 1

Offered: Every year.

MUTY 315 - Methods of Music Therapy

Designed to address American Music Therapy Association Competencies of the demonstration of basic knowledge of existing music therapy methods and philosophical, psychological, physiological and sociological bases for the use of music as therapy (Music Therapy), as well as Principles of Therapy (Clinical Foundations).

Credits: 2

Offered: Every year.

MUTY 316 - Principles of Music Therapy

Designed to address American Music Therapy Association Professional Competencies of Professional Role/Ethics, Interdisciplinary Collaboration and Supervision and Administration. Includes the development of a job portfolio and a professional presentation.

Credits: 2

Offered: Every year.

MUTY 411 - Clinical Placement and Seminar V

Seminar designed to address knowledge of American Music Therapy Professional Competencies in Clinical Foundations: exceptionality, principles of therapy and the therapeutic relationship and Music Therapy: Foundations and Principles, Client Assessment, Treatment Planning, Therapy Implementation, Therapy Evaluation, Documentation, Termination/Discharge Planning and Supervision. Structures experiences include weekly field placements in school, day habilitation, or hospital settings, documentation and supervision. Senior students are expected to be more independent in their clinical work than previous clinical experiences.

Credits: 1

Offered: Every year.

MUTY 414 - Psychology of Music

Science of psychology related to fundamentals of musical talent. The musical mind, sensory capacities, individual differences and psychology of listening. An introduction to musical acoustics.

Credits: 3

Offered: Every other year.

MUTY 416 - Music Therapy Internship Seminar

The course serves as an audit of the senior music therapy students' knowledge and skills listed on the American Music Therapy Association Professional Competencies and results in the final Individualized Training Plan that is required for music therapy interns and their clinical directors upon beginning the internship.

Credits: 1

Offered: Every year.

MUTY 422 - Psychological Research in Music

Students propose, carry out, and write an experimental study in the area of music therapy or music education. Class and individual projects are required.

Credits: 3

Offered: Every other year.

MUTY 450 - Internship in Music Therapy

This fulfills 520 hours of the 1040 hour clinical internship requirement of the American Music Therapy Association leading toward Board Certification. Supervision by Board Certified Music Therapists.

Credits: 4

Offered: Every semester.

MUTY 505 - Foundations of Advanced Music Therapy I

Designed to focus on professional orientation issues related specifically to music therapists seeking licensure in Creative Arts Therapy. Students will examine their own professional awareness, knowledge and skill sets for successfully negotiating work life in music psychotherapy. Topics will include the study of professional responsibilities, history of music therapy, assessment, and group process. Professional involvement with the American Music Therapy Association and the Certification Board for Music Therapists through presentations, publications, or committee membership will be examined and encouraged.

Credits: 3

Offered: Every year.

MUTY 510 - Advanced Guitar Skills for Music Therapists

Designed to help music therapists to advance their skills using the guitar. The focus of the course centers on the fundamentals of guitar technique in music therapy. Course material will be implemented by the use of literature from varying styles and will cover melodic harmonization, chord voicing, strumming techniques, plectrum techniques, as well as reading various guitar notations.

Credits: 2

Offered: Every year.

MUTY 518 - Advanced Clinical Piano Improvisations

The training will develop the concept of clinical improvisation and provide specific strategies for developing and applying clinical improvisation skills within a therapeutic relationship. Piano is the primary medium and use of the voice will also be addressed. A variety of styles will be explored. In addition, the concept of developing improvisations based on classical repertoire will be presented. The importance of thematic development specific to individual client profiles will be discussed. Experiential work of improvising with others will provide opportunities for integrating the knowledge, skills and abilities addressed in the training. Required readings as well as video and audio recordings will be utilized as learning tools.

Credits: 2

Offered: Every year.

MUTY 520 - Theory of Vocal Psychotherapy

Students will learn the theories that underlie vocal psychotherapy, and experience this model of in-depth (reconstructive) music therapy that utilizes sounds, vocal improvisation, songs and dialog within a therapeutic relationship to promote intrapsychic and interpersonal change. They will have opportunities to observe and participate in voice-centered therapeutic experiences and interventions. The course format includes lecture, review of assigned readings, demonstration, and participation in individual and group vocal psychotherapy exercises and experiences.

Credits: 2

Offered: Every year.

MUTY 530 - Introduction to Guided Imagery and Music

Introduces the major components of the Guided Imagery and Music (GIM) process. In an overview, the topics include: the history, definitions and session format of GIM, as well as music and imagery; imagery, alternate states of consciousness; processing techniques; guiding techniques; music in alternate states of consciousness; ethics and contra-indications. The course will include an experiential component.

Credits: 2

Offered: Every year.

MUTY 550 - Internship in Music Therapy

This fulfills 520 hours of the 1040 hour clinical internship requirement of the American Music Therapy Association leading toward Board Certification, and fulfills the clinical internship requirement for the Office of the Professions of master's students pursuing their license as a Creative Arts Therapist. Supervision by Licensed Creative Arts Therapists.

Credits: 4

Offered: Every semester.

MUTY 560 - Lifespan Human Development

The purpose of this seminar is to provide advanced students with an in-depth knowledge of human growth and development from the prenatal period through old age and death. The course will focus on the interaction of biopsychosocial forces on physical, socio-emotional, and cognitive development across the lifespan with an eye toward application of the material to practical situations as encountered by human service providers, such as Licensed Creative Arts Therapists and other Mental Health practitioners. In addition, special attention will be paid to the major theories of human development as they pertain to

development from a lifespan perspective, as well as relevant recent research.

Credits: 3

Offered: Every year.

MUTY 570 - Psychopathology

This course covers theory and research in adult psychopathology, focusing on a comprehensive review and critical examination of behavioral and mental disorders under the most current Diagnostic and Statistical Manual (DSM) published by the American Psychiatric Association. Etiological, diagnostic, and treatment issues are emphasized, as are issues related to classification of mental disorders. In addition, special attention will be paid to the major theories of psychopathology with an eye toward application of the material to practical situations as encountered by human service providers, such as Licensed Creative Arts Therapists and other Mental Health practitioners.

Credits: 3

Offered: Every year.

MUTY 590 - Special Studies in Music Therapy

Studies not otherwise available as regular course offerings related to the work of Creative Arts Therapists (i.e., body work training, dance/movement or art therapy workshops) pursued in independent, directed or tutorial manner. Student must submit a proposal for approval, available in the School of Music office. Students must also secure agreement of faculty member to sponsor the study.

Credits: 1-3

Offered: Every year.

MUTY 605 - Foundations of Advanced Music Therapy II

The goals of this seminar are to provide an introduction to the concepts of theory building and philosophical inquiry in music therapy and qualitative research, to exchange ideas in a collaborative process and develop a personal theory and philosophy of music in/as therapy. Students will become familiar with the nature and process of philosophical inquiry and qualitative research, explore the concept of "meaning" in music, therapy and music therapy, and become familiar with existing literature in music therapy philosophical, theoretical and qualitative research.

Credits: 3

Offered: Every year.

MUTY 620 - Vocal Psychotherapy Practice

Students will be trained in vocal psychotherapy, a model of in-depth (reconstructive) music therapy that utilizes sounds, vocal improvisation, songs and dialogue within a therapeutic relationship to promote intrapsychic and

interpersonal change. Students will have opportunities to observe, participate in and conduct voice-centered therapeutic experiences and interventions. They will also become experienced in transitioning between musical interventions and verbal interventions. The course format includes lecture, review of assigned readings, demonstration, peer teaching and participation in individual and group vocal psychotherapy exercises and experiences.

Credits: 2

Offered: Every year.

MUTY 630 - Theory and Practice in Guided Imagery and Music

Guided Imagery and Music (GIM) is a form of advanced practice as outlined in the AMTA scope of practice standards and the AMTA Advanced Competencies in the areas of Professional Growth and Development, Clinical Administration, Advanced Clinical Skills, Personal Growth and Development, and Musical and Artistic Development. It also addresses the New York State License in Creative Arts Therapy curriculum in the areas of preparation in music therapy for the practice of creative arts therapy; theories in creative arts therapy; assessment and appraisal of individuals; and clinical instruction. It is the second of three courses in the development of GIM skills and knowledge.

Credits: 2

Offered: Every year.

MUTY 640 - Clinical Applications of Guided Imagery and Music Theory and Practice

Guided Imagery and Music (GIM) is a form of advanced practice as outlined in the AMTA scope of practice standards and addresses the AMTA New York State License in Creative Arts Therapy curriculum in the areas of preparation in music therapy for the practice of creative arts therapy; theories in creative arts therapy; and clinical instruction. It is the final of three courses that follow the development of GIM skills and knowledge. Students may be eligible to apply to become Fellows of Guided Imagery and Music.

Credits: 2

Offered: Every year.

MUTY 650 - Advanced Practicum in Music Therapy

This course accompanies Clinical Courses: Clinical Piano Improvisation, Vocal Psychotherapy and Guided Imagery Music. Clinical sites may be at the students' place of employment or at university created placements. Supervision is provided by Board Certified Music Therapists Licensed Creative Arts Therapists who are university affiliated supervisors. This course may be repeated. A minimum of 500 hours of Advanced Practicum

is required for students entering the program as Board-Certified Music Therapists

Credits: 2

Prerequisite: MUTY 518 and MUTY 520 and MUTY 530.
Offered: Every semester.

- **12 additional credit hours (see note below)**

Credits: 12

- **16 additional hours at the 200 level or above**

- **Additional courses from at least two of the three "streams": Texts, Contexts, and Theories (see announced course offerings for topics) ***

Credits: 6-9

- **Additional Performance Study, such as MUS 104, Jazz Improvisation, etc.**

Credits: 2

- **an additional Theoretical Approaches or Rhetorical Writing course**

Credits: 3

- **Electives in music theory, music history and literature, and music education**

Credits: 8-12

- **Ensembles (per advisement)**

Credits: 2

- **One course from each "stream" can include Texts, Contexts, and Theories (see announced course offerings for topics) ***

Credits: 9

- **or all of**

- **Two additional MATH or STAT courses numbered 311 or higher, as advised**

Credits: 6

- **Up to one additional directed study**

Credits: 0-1.5

- **16 additional credit hours at the 200-level or above**

Credits: 16

- **200-Level Art History courses**

Credits: 6

- **200 or 300-Level Art History Electives**

Credits: 6

- **200/300/400-level ACCT/BUAD/ECON-prefixed courses and/or 300/400-level non-ACCT/BUAD/ECON prefixed courses, by advisement**

Credits: 15

- **300-Level Art History courses**

Credits: 6

- **ARTS courses, as advised**

Credits: 6

- **American History**

Credits: 3

- **Basic Communication - Oral**

Credits: 3

- **Basic Communication - Written**

Credits: 3

- **Foreign Language**

Credits: 3

- **Mathematics**

Credits: 3

- **Natural Sciences**

Credits: 6

- **Other World Civilizations**

Credits: 3

- **Social Sciences**

Credits: 6

- **The Arts**

Credits: 3

- **The Humanities**

Credits: 3

- **Western Civilization**

Credits: 3

- **DANC electives, by advisement**

Credits: 6

- **Chemistry Elective**

Credits: 3

- **Chemistry Elective**

Credits: 3

- **MUS 021-048 Special Ensemble**

Credits: 0.5

- MUS 021-048 Special Ensemble

Credits: 0.5

- MUSB or MUS or BUAD course, by advising

Credits: 3

- Nine additional credit hours of 300-400 level electives (as per advisement)

Credits: 9

- Twelve additional credit hours of electives, 9 of which should concentrate in another discipline with the department of Visual Arts and New Media, per advisement

Credits: 12

- Upper-Level Electives in Biology or Chemistry (approved by advisement)

Credits: 6

- One course in Study Abroad in L2 context (by advisement)

- Other COMM courses

- Two additional MATH or STAT courses numbered 311 or higher

Credits: 6

- Two upper-level Production courses (4 credits each) in studio or documentary video production

Credits: 8

EDU 6XX -

Credits: 3

- Science Content Electives

Credits: 6

- Science Content Electives from offerings in BIOL CHEM GEOS PHYS SCI OR SCI ED upon advisement

Credits: 6

- any other introduction to statistics course

- Content Linked Pedagogy Courses (12 hrs)

EDU 5XX -

Credits: 3

- course

- Up to 3 credit hours of internship, ENGL 694

- Twelve ensemble participations (variable credit)

- SOC 350 Special Topics (as advised)

Credits: 1-3

- SOC 200 or any other 200-level introduction to statistics course

Credits: 3

- Course

- Art History Elective or approved Film Studies Elective

Credits: 3

- Course

- Any other 200-level introduction to statistics course

- Two 3XX/4XX GEO courses with labs, one of which may include a course in Geographic Information Systems

Credits: 8

COMM 200 -

Credits: 3

- Course

- Studio Electives (Electives may emphasize another concentration within the visual arts as advised)

Credits: 15

- Independent Lab research

Credits: 3

- One EDU course upon advisement (3)

PSY XXX - Second Course in Psychology

Credits: 3

- Two upper-level production courses (4 credits each) in studio or documentary video production

- 200-level ARTH courses

Credits: 6

- 2 semesters participation in Jazz Combo

- 2 semesters participation in Jazz Ensemble

- 300-400 level ARTH courses

Credits: 6

- Biology courses at the 300 or 400 level (not including BIOL 440)

Credits: 6

- A course in computer programming

- a course in computer programming *

Credits: 3

- A course in Computer Science
- A course in Geographic Information Systems
- A course in scientific writing, CHEM 295 is recommended.

Credits: 1

- A course in Statistics at the 200-level or higher
- A course in statistics at the 200 level or higher, or a course in computer programming
- Additional course from at least two of the three streams
- Additional courses from at least two of the three streams
- advanced grammar

Credits: 3

- Advanced Lecture course
- Advanced Lecture Elective (400 level)
- A minimum of 9 credit hours at the 300 level or above
- An additional course in Geology or Geographic information Systems with lab; GEO 330 Geomorphology is strongly recommended
- An additional course in Mathematics
- and
- Any course from the core not taken to fulfill core requirements excluding ARTH 276/FILM 220 and COMM 155.
- Any foreign language or culture course focusing on a European country
- Any four Economics courses outside the core at 300 level or above

Credits: 12

- Any two (BUAD courses or ECON 201) by advisement

ARTH - Art History Electives

Credits: 3

ARTH - Art History electives

Credits: 3

ARTH - Electives

Credits: 6

ARTS - Electives

Credits: 3

ARTS - Electives

Credits: 9

Cross-Listed as: 9.

ARTS - Electives

Credits: 12

ARTS - Art Studio electives

Credits: 15

ARTS - Electives

Credits: 21

ARTS - Studio Electives

Credits: 12

- a statistics course

- BIOL, CHEM, GEO, PHY, SCI, SCED: 6 cr hrs of electives, upon advisement

Credits: 6

BIOL XXX - One Biology Course

Credits: 3

BIOL XXX - One Biology course

- Biomembranes

CHEM 4XX - Advanced lecture elective (400 level)

Credits: 3

- Choose any three Piano Class courses (beginning with MUS 118)

COMM 111-118 - Any three of the 1 credit hour computer courses

Credits: 3

- Computational Physics Project (independent study or tutorial)

- Narrative Fiction Track

- Documentary Track

- Broadcast Track

- courses numbered 311 or higher

CSIT XXX - Any course (preferably CSIT 104 Introduction to Microcomputer Software)

- culture/civilization courses

Credits: 3

DANC - Electives by Advisement

Credits: 6

DANC XXX - Elective

DANC XXX - 2 electives

- Demonstrated proficiency at this level
- Electives (12 total credit hours taken from 2 different areas)

- Electives

Credits: 15

- Electives

Credits: 3

- Electives as advised

- Electives in music theory, musicology, string literature or chamber music literature

Credits: 6

- Electives taught in target language at the 300-400 level

Credits: 6

ENGL 299/399 - Special Topics

Credits: 3

ENGL 3XX - One 300-level writing course

ENGL 5XX - By advisement

ENGL 6XX - By advisement

ENGL 6xx - E-portfolio

Credits: 1

- English at the 200 level or above in National or World Literature by advisement

Credits: 9

- English at the 300 and/or 400 level by advisement. Must have "literary period" in the Course Attribute or "Literature" in the Course Title

Credits: 6

ENGL XXX - Literary period course

ENGL XXX - Major author course

ENGL XXX - One 300 or above elective

ENGL XXX - Two 200 or above elective

- Eukaryotic Gene Expression

- Experimental Physics Project (independent study or tutorial)

- Five courses in any combination from ARTS studio art courses offered in Visual and Media Arts

Credits: 15

- Foreign area study and/or international/comparative study

Credits: 9

- Four 3XX/4XX GEO courses with labs, one of which may include a course in Geographic Information Systems

- Four 4-credit hour courses, as advised, from the 200-300-400 levels

- four additional courses in American history

- four additional courses in European history

- four additional courses on the history of Mexico, Canada, and the United States

- Four electives as advised (3 credit hours each)

Credits: 12

- four semesters of MUS 104

- French at the 300 and/or 400 level by advisement

Credits: 15

- One GEO 300/400 level elective course with lab

Credits: 4

GEO XXX - Geology elective

- Graduation Recital

Credits: 0

HIST 5XX - By advisement

HIST 6XX - By advisement

- **Hormone Mechanisms**
- **Independent Laboratory Research**

INDS 106 - Introduction to African American Studies

INDS 206 - Introduction to African American Studies

INDS 225 - Introduction to Latino History and Culture

Cross-Listed as: HIST 225.

INDS 304 - Latina Literature and Cultural Studies

Cross-Listed as: WOST 304, ENGL 304.

INDS 359 - Ethnicity and Race

INDS 402 - Independent Study: African American Topics

INDS 403 - Contemporary Issues of Latino Studies

INDS 404 - American Indian Capstone

INED - Study Abroad (minimum of 3 credit hours)

- **Literary period course**
- **Literary Period Course**

Credits: 3

- **literature**

Credits: 12

MAED 5XX - By advisement

MAED 6XX - By advisement

- **Major author course**
- **Major Author Course**

Credits: 3

- MATH or STAT at the 300 or 400 level by advisement

Credits: 3

- **Microbial Genetics**
- **Molecular Basis for Disease**
- **MUA 139**

MUS 021-050 - Jazz Ensembles and combos

MUS 021-048 - Special Ensemble

- **MUS electives**

Credits: 6

- Music History courses 300 and/or 400 level by advisement

- One course from the following: EDU 5XX-6XX (upon advisement)

Credits: 3

- **Music History elective**
- **Music history or literature elective**
- **Music Theory elective**

MUTY 606 - Foundations of Advanced Music Therapy II

- Nine additional credit hours of biology electives at the 300-400 level

Credits: 9

- Nine additional credit hours of biology electives at the 300 to 400 level

Credits: 9

- One 300-level or above writing course

Credits: 3

- **One 4-credit hour course from the 300-400 levels**
- **One additional course with lab in Geology at the 300-level or 400-level**
- **One additional MATH or STAT course numbered 311 or higher**

Credits: 3

- One course from each "stream" category: Texts, Contexts, and Theories (see announced course offerings for topics)

Credits: 9

- One course in American Minority Studies
- One course in any History
- One course in European Studies
- One course in Non-Western Studies
- One course in U.S. History
- or

PHED 301 - Kinesiology

PHED 315 - Prevention and Care of Athletic Injuries

PHED 390 - Special Topics in Exercise Science

PHED 401 - Senior Seminar in Exercise Science

PHED, PSY, SOC - Internship

PHIL 211 - Philosophy of Sport

PHYS 321-479 -

- Physics from 321-479, 490

Credits: 4

- Physics from 321-479, 490

Credits: 6

- Physics from 321-479

Credits: 9

PHYS xxx - 6 credit hours of electives from PHYS 321 - PHYS 479

- Plus 4 additional credit hours of physics from 321-479, 490
- Plus 9 additional credit hours from Physics 321- 479, 490
- Plus 9 credit hours of supporting courses as advised
- Plus one course from the following:

POLI 5XX - By advisement

POLI 6XX - By advisement

PSY 5XX - Psychopathology

PSY 5YY - Lifespan Developmental Psychology

- Radiation Biology
- Safe Schools/Healthy Students

SCED 5XX -

SCED 6XX - By advisement

- Science, mathematics, computer science, engineering, or education

Credits: 12

- Senior Performance Recital (Capstone experience)
- Short-term study abroad
- Six (6) credit hours of Approved Social Work Electives

Credits: 6

- Spanish at the 300 and/or 400 level by advisement

Credits: 21

SPMG 499 - Independent Study

- Six (6) credit hours of Physics at the upper level (upon advisement)

Credits: 6

SPST 201 - Advanced Leadership Development

- Statistics as advised
- Statistics 200 level course or higher

Credits: 3

- Successful completion of Piano Proficiency Examination

- Three additional 200/300 level courses in Art History, as advised

- Three additional 300 level courses in American History, as advised

Credits: 9

- Three additional 300-level or 400-level GEO courses with labs

- three additional courses in global or non-Western history

- Three courses at the 300 or higher level.

- Three English electives

Credits: 9

- Twelve additional credit hours of biology electives at the 300 to 400 level

- Two additional 300 level courses in Anthropology, as advised

- Two additional Physics electives chosen from courses numbered 321 through 479

- Two GEO 300/400 level courses with labs

Credits: 8

- **Two GEO 3XX/4XX Geology courses with labs**

- **Up to 3 credits of internship**

- **Up to one additional directed study**

XXXX 200 - One 200 level Statistics course from one of the academic departments

Credits: 3

PHED - Physical Education

PHED 100 - Champs/Lifeskills

The course is based on the National Collegiate Athletic Association (NCAA) CHAMPS/Lifeskills Program. It is designed to assist first year student athletes with a variety of lifeskills components, including commitment, personal development, career development, service commitment and athletics commitment.

Credits: 2

Offered: Offered on occasion.

PHED 101 - Aqua-Aerobics

Course introduces a sequence of water exercises that enhances the student's aerobic fitness.

Credits: 1

Offered: Every semester.

PHED 102 - Learn to Swim

Course emphasizes the basic skills needed to learn to swim. Course is designed for non-swimmers.

Credits: 1

Offered: Every semester.

PHED 103 - Intermediate Swimming

Course emphasizes the intermediate skills needed to develop individual strokes.

Credits: 1

Offered: Every semester.

PHED 104 - Advanced Swimming

Course emphasizes advanced stroke development and training techniques involved in advanced swimming.

Credits: 1

Offered: Every semester.

PHED 105 - Swimming and Conditioning

Course educates students about how to use the swimming pool to develop and maintain a sensible level of physical fitness. Water exercises and technique are taught.

Credits: 1

Offered: Every semester.

PHED 106 - Lifeguard Training

Course emphasizes the skills and techniques needed to gain lifeguard certification. Lifeguard certification is possible at the end of the course.

Credits: 3

Offered: Every year.

PHED 107 - WSI-Water Safety Instructor

Course follows the Red Cross guidelines to train Water Safety Instructors. WSI is possible at the completion of this course.

Credits: 2

Offered: Every year.

PHED 108 - Basic Scuba

Course emphasizes the basic skills involved in learning how to SCUBA dive. Classroom sessions and open water dives are planned as part of this class.

Credits: 2

Offered: Every semester.

PHED 110 - Advanced Scuba Diving

Course introduces the advanced techniques of SCUBA diving needed for open water diving.

Credits: 1

Prerequisite: PHED 108. Offered: Every semester.

PHED 112 - Zumba®

The Zumba® program fuses hypnotic Latin rhythms and easy-to-follow moves to create a one-of-a-kind fitness program. The routines feature interval training sessions where fast and slow rhythms and resistance training are combined to tone and sculpt the body while burning fat. Add some Latin flavor and international zest into the mix and you've got a Zumba® class! The course is taught by a licensed Zumba instructor and a Zumba® Instructor Member.

Credits: 2

Offered: Every semester.

PHED 113 - Basic Bowling

Introduces students to the fundamentals of bowling including scoring, approaches and strategies needed to attain basic competencies as a beginning bowler.

Credits: 1

Offered: Every semester.

PHED 116 - Golf - Basic

Course introduces the student to the skills and rules needed to develop introductory golf proficiency.

Credits: 1

Offered: Every year.

PHED 117 - Running and Conditioning

Course teaches the student the basics of aerobic conditioning as a means of developing physical fitness.

Credits: 1

Offered: Every semester.

PHED 120 - Ice Skating - Basic

Student will learn the basic skills needed to begin ice skating. Balance, footwork, turning and stopping are emphasized in the course.

Credits: 1

Offered: Every semester.

PHED 121 - Ice Skating - Intermediate

Course emphasizes in-depth skills introduced in basic ice skating.

Credits: 1

Offered: Every semester.

PHED 122 - Figure Skating

Introduces the intermediate skater to the basics of figure skating, power crossovers; movement forward and backwards, 3 turns, mohawks, single jumps and spins. Course will also provide the advanced figure skater an opportunity to continue training in double and triple jumps, combination spins and connecting footwork.

Credits: 1

Offered: Every semester.

PHED 124 - Basic Aerobics

Aerobic exercise involves any physical movement that requires oxygen to perform. This course is designed to teach students about benefits of aerobic fitness and to engage them in aerobic-type activities. Activities may include traditional step aerobics, jump rope, jogging, and sustained rhythmic movement such as Zumba®.

Credits: 2

Offered: Every semester.

PHED 125 - Step Aerobics

Course introduces the student to aerobic exercise through a step aerobics technique.

Credits: 2

Offered: Every semester.

PHED 126 - Body Sculpting (Women)

Course introduces the student to strength training, body toning and the basics of aerobic exercise. The development of individual programs will be directed toward the fitness needs of women.

Credits: 2

Offered: Every semester.

PHED 127 - Yoga

An introduction to "Hatha" yoga. Students will learn basic postures (asanas) as well as breathing techniques (pranayama) and beginning meditation practices. Students will work to increase flexibility, develop balance, deepen respiration and mind-body awareness.

Credits: 2

Offered: Every semester.

PHED 128 - Racquetball - Basic

The basic skills, rules and techniques of scoring are taught in the course.

Credits: 1

Offered: Offered on occasion.

PHED 129 - Racquetball - Intermediate

Strategies of singles and doubles play are emphasized in the course.

Credits: 1

Offered: Offered on occasion.

PHED 131 - Self-Defense

Course emphasizes the basic techniques needed to defend oneself. Stances and defensive strategies are emphasized.

Credits: 1

Offered: Every semester.

PHED 132 - Skiing

The basic techniques needed to ski are taught. The course is designed to meet the needs of beginners as well as intermediate and advanced skiers.

Credits: 1

Offered: Every semester.

PHED 134 - Tennis - Basic

Course emphasizes the rules, grips, stances and elementary stroke development for the beginning player.

Credits: 1

Offered: Every semester.

PHED 135 - Tennis - Intermediate

Course introduces in-depth tennis skills and advanced techniques and strategies for singles and doubles play.

Credits: 1

Offered: Every semester.

PHED 138 - Volleyball

Course introduces basic volleyball skills necessary for the student interested in intramural or recreational play.

Credits: 1

Offered: Every semester.

PHED 139 - Weight Training

Course introduces the student to basic techniques of weight training and body toning. Emphasis is placed on learning specific exercises and training techniques necessary for establishing an effective weight training program.

Credits: 2

Offered: Every semester.

PHED 141 - Advanced Conditioning

The course introduces students to the fundamentals of advanced training techniques. Techniques include weight training, powerlifting, aerobics, agility, interval and plyometric training.

Credits: 1

Offered: Every other year.

PHED 171 - Conditioning for Today's Active Woman

This class is designed for the female student who would like to improve her overall core strength, flexibility, and anaerobic conditioning level. Instruction will be provided in proper active range of motion warm up techniques, proper body position for maximum performance and injury prevention, agility drills, plyometric and explosive training and anaerobic drills and conditioning.

Credits: 1

Offered: Every year.

PHED 180 - Assistant Scuba Instructor

The course will educate people who have basic aquatic skills and basic scuba certification to teach basic skills associated with scuba diving. The skills taught include skin diving skills, pool safety, equipment inspection, buddy systems, air emergencies, communications, and open water diving. Permission of instructor required.

Credits: 2

Prerequisite: PHED 108. Offered: Every semester.

PHED 199 - Special Topics

Special topics in wellness.

Credits: 1-6

Offered: Every semester.

PHED 200 - Human Physiology I

A comprehensive overview of the field without being overwhelming. It provides a solid foundation of basic physiology to better interpret and understand sport and exercise physiology. It reviews the major body systems and examines the body's acute response to exercise and its chronic response to training. Students will learn how the environment affects these responses. The course examines various approaches used to optimize performance and focuses on unique concerns of special populations involved in physical activity. It also examines the importance of physical activity to lifelong health.

Credits: 3

Offered: Every year.

PHED 201 - Human Physiology Lab I

Provides exercise science majors with lab exercises that are designed to expose them to the practical aspects of exercise physiology. Sample areas will include stress testing, heart rate and blood pressure and body fat analysis.

Credits: 1

Corequisite: PHED 200. Offered: Every year.

PHED 202 - Human Anatomy

The purpose of this course is to acquaint the student with major aspects of human anatomy from the cell and tissue level through the major organ systems, muscle, and skeletal groups. The emphasis will be on descriptive and structural aspects of human anatomy. The course will also stress function and inter-relationships between different body systems.

Credits: 3

Offered: Every year.

PHED 203 - Human Physiology II

This course is a continuation of Human Physiology I and is designed to provide students with the opportunity to study and learn concepts of human performance and exposes the student to the process of collecting scientific data and presenting those findings. This course emphasizes the digestive, endocrine, nervous and urinary systems, hydration, and ergogenic aids as they relate to human bioenergetics.

Credits: 3

Prerequisite: PHED 200 and PHED 201. Corequisite: PHED 204. Offered: Every year.

PHED 204 - Human Physiology II Laboratory

This course provides exercise science majors with lab exercises that are designed to expose them to the practical aspects of conducting research including formulating a hypothesis, conducting literature reviews, data collection and methodology and project presentations related to PHED 203 Human Physiology II. Laboratory meetings will include a brief instructional lecture, followed by laboratory exercises.

Credits: 1

Corequisite: PHED 203. Offered: Every year.

PHED 214 - Emergency Medical Technician (EMT-B)

The course offers training for pre-hospital care professionals performing emergency care. Students will gain a knowledge of first aid, cardiovascular emergency, shock, fractures, bleeding, defibrillation, and special problems in triage and extrication. The course follows the guidelines of the New York State Department of Health Emergency Services Program.

Credits: 4

Offered: Every year.

PHED 307 - Biomechanics Laboratory

The course is the laboratory component of the biomechanics course. Emphasis will be placed on the application of biomechanics concepts, hands-on activities and experiments involving contemporary forms of biomechanical analysis. Sample areas will include video analysis of motion and kinematics of running, jumping, throwing, linear motion and equilibrium.

Credits: 1

Corequisite: PHED 306. Offered: Every year.

PHED 311 - The Psychology of Coaching

A course for understanding the application of basic psychological principles to the coaching of the individual athlete, or teams in the competitive environment. One of several courses designed to meet state mandate for interscholastic coaching.

Credits: 2

Offered: Every year.

PHED 400 - Sports Studies Internship

Working under supervision in a community setting. The internship will emphasize theory, knowledge and skills needed when working with and within groups and organizations. Student will be expected to complete 67 clock hours of direct service to individuals, groups or organizations for each credit hour awarded. A Learning Contract encompassing job requirements, learning

objectives and methods will be utilized in student's evaluation.

Credits: 1-6

Prerequisite: PHED 398. Offered: Every semester.

PHED 499 - Independent Study

The study of a particular topic related to physical education and recreation. Periodic meetings with an appropriate instructor will be scheduled. The topic may encompass individual research or a practical experience.

Credits: 1-4

Offered: Every semester.

PHED 530 - Legal Aspects of Sport and Physical Activity

The course is designed for Athletic and Educational Administrators. The course covers the structure of the legal system, introduces the case study method, aspects of constitutional law, labor and anti-trust law, tort law, product liability, contract law, administrative and statutory law and risk management systems applicable to the sport industry and educational settings.

Credits: 3

Offered: Every year.

PHIL - Philosophy**PHIL 106 - Critical Thinking**

The course concerns the study and practice of critical thinking. Through analysis of dramatic examples of the critical thinking skills necessary for effective deliberation, it hones analytic skills and encourages careful thought. The primary feature of the course is the consideration of an abundance of exercises, examples, and applications from everyday life, ranging from the courtroom to political debate and from advertising to current social issues.

Credits: 3

Offered: Every other year.

PHIL 115 - Introduction to Philosophy

Discussion of some central problems in philosophy such as the existence of God, the ultimate nature of reality, the conditions for knowledge, the question of free will versus determinism, and the foundations of morality. How should one live? Why would God allow evil? How much can we know about the world around us? Do we have free will? Can we survive death? Such questions are universal and fundamental to all humanity.

Credits: 3

Offered: Every semester.

PHIL 116 - Introduction to Logic

The development of formal systems of propositional and predicate logic for the evaluation of reasoning. Truth table techniques to distinguish valid from fallacious inferences, symbolizing English in logical notation, proofs in propositional logic, predicate logic with quantifiers.

Credits: 3

Offered: Every year.

PHIL 218 - Introduction to Ethics

Ethics is the study of morality. It is central to issues relating to what a person should believe and how they should act. The investigation of morality occurs via an analysis of metaethics (the fundamental status of moral judgments), normative ethics (the nature of a right action and the nature of a virtuous person), and applied ethics (the application of normative ethics to particular moral issues). The areas are explored through the discussion of such issues as: Is morality relative to culture? Is morality independent of religion? Do the ends of one's action justify the means? What does it mean to be a virtuous person?

Credits: 3

Offered: Every other year.

PHIL 220 - Medical Ethics

Medical ethics is the study of morality in the context of health and pathology. It concerns metaphysical issues about the nature of physical and mental disorders, and moral issues about treatments and policies. Topics include the creation of life, euthanasia, the Hippocratic Oath, treatment of the diseased or disabled, and the distribution of limited healthcare resources. The course topics are at the heart of moral, metaphysical, and economic issues in applied ethics: for example, creation-of-life and end-of-life issues. This course explores these issues and their consequences for the theoretical and applied fields of healthcare.

Credits: 3

Offered: Offered on occasion.

PHIL 222 - The Greek Way

Introduces students to classical Greek philosophy in the context of the historical, cultural, social, and political conditions of ancient Greece. Part of the course is devoted to a careful examination of the social context of ancient Greece and to the sources and manifestations of Greek values: mythological, religious, literary, educational, and aesthetic.

Credits: 3

Offered: Every other year.

PHIL 223 - Roman Philosophy

This course chronicles philosophy in action -- in historical and political contexts. We examine the crucial role Platonism, Aristotelianism, Stoicism, and Epicureanism played during major social upheaval as Caesar, Pompey, Cicero, Cato, Brutus, and Cassius struggle with the often conflicting demands of seeking personal salvation, honoring philosophical conviction, and fulfilling patriotic duty in the final days of the Roman Republic. Later, during the building of the Roman empire, Seneca, Musonius Rufus, and Marcus Aurelius confronted the same conflicts but in different political settings.

Credits: 3

Offered: Offered on occasion.

PHIL 224 - Medieval Thought

Islamic, Judaic, and Latin-Christian thought of the Middle Ages, particularly the 11th to 13th centuries. The course examines the significance of the Greco-Roman tradition to medieval hopes and fears and addresses problems prevalent in all three cultures: the relationship between faith and reason; the nature of the Supreme Being; the connection between theology and art, politics, and metaphysics; and the origin and cause of the world.

Credits: 3

Offered: Every other year.

PHIL 226 - The Age of Reason and Its Legacy

The nature of reality, knowledge, and experience as portrayed by thinkers such as the Rationalists (Descartes, Leibniz, and Spinoza), the Empiricists (Locke, Berkeley, and Hume), Kant, and Reid. The legacy of these thinkers as reflected in standard notions of causality, truth, proof, and argument will be explored in relation to contemporary thinkers.

Credits: 3

Offered: Every other year.

PHIL 228 - American Philosophy

The political philosophy, epistemology, scientific method, and criteria of truth, argument, and reason which distinctively characterize the Founding Fathers, the Transcendentalists, the Pragmatists, and contemporary inheritors of the Pragmatist tradition. Includes consideration of the question: What is distinctively American about American philosophy?

Credits: 3

Offered: Every other year.

PHIL 238 - Philosophy of Religion

Careful examination of classical and contemporary issues such as the nature of religious experience, the relationship

of faith and reason, arguments for and against the existence of God, the significance of the problem of evil, knowing God without arguments, religious language, life after death, miracles, religious ethics, and the differences between Eastern and Western theisms.

Credits: 3

Offered: Every year.

PHIL 258 - Life and Death

The class explores fundamental issues relating to life and death. In particular, it looks at what constitutes life and what, if anything, makes life good. It also investigates what constitutes death and whether death is bad. Using these notions, the class then analyzes particular moral issues surrounding life and death, such as the moral status of the following practices: abortion, suicide, euthanasia, capital punishment, and war.

Credits: 3

Offered: Every year.

PHIL 265 - Social/Political Philosophy

The proper form of human association, the just balance of economic, political, and social power, and the nature of the relationship between the state and the individual are explored in the works of prominent historical and contemporary theorists. The course examines the nature of social commitment as viewed by major political philosophies.

Credits: 3

Offered: Every other year.

PHIL 270 - Philosophy of the Arts

Philosophical problems in the arts. Nature of art and aesthetic appreciation; aesthetic attitude, experience, and emotion; relations between art and art institutions; interpretation and evaluation of works of art are among topics considered. Problems specific to music, film, literature, painting, and sculpture are also discussed.

Credits: 3

Offered: Offered on occasion.

PHIL 274 - Existentialism

Existentialism is a philosophical realization of living in a broken, ambiguous, dislocated world into which we are thrown and condemned yet abandoned and free. The course examines the work of authors such as Kierkegaard, Dostoevsky, Nietzsche, Kafka, Heidegger, Sartre, Camus, and de Beauvoir. Students confront the main themes of life: anxiety, authentic living, meaning, love, relationships, God, and death.

Credits: 3

Offered: Offered on occasion.

PHIL 301 - Intermediate Deductive Logic

The development of a formal system of logic with relations and multiple quantifiers, identity and definite descriptions. Other topics may include non-classical logics, modal logic (the logic of possibility and necessity), set theory, or results concerning the scope and limits of logical systems.

Credits: 3

Prerequisite: PHIL 116. Offered: Offered on occasion.

PHIL 302 - Abortion, Philosophy, and Law

Students will explore abortion from theoretical and legal perspectives. They will investigate various underlying theoretical issues and the factual and legal aspects of abortion. Students will combine these concepts and explore the moral status of abortion.

Credits: 3

Offered: Offered on occasion.

PHIL 303 - Crime and Punishment

The course investigates the criminal justice system and the limits of state coercion. May the state coerce persons only to prevent some persons from harming others? May it do so to protect persons from harming themselves or to protect society's moral fabric? The class will then examine the justification of punishment. Is punishment justified because it reforms offenders, because offenders deserve punishment, or because punishment deters other potential offenders? Finally, the class explores contemporary moral issues such as whether the state should criminalize recreational drug use, hate crimes, or blackmail.

Credits: 3

Offered: Every other year.

PHIL 310 - Business Ethics

Careful examination of moral issues arising in business contexts such as the duty to tell the truth, the profit motive, the relationship between private ownership and the public interest, the rights and duties of employees and employers, the responsibilities and liabilities of businesses to consumers, the respective roles of business and government, and business trends and social responsibility.

Credits: 3

Offered: Offered on occasion.

PHIL 312 - Current Moral Issues and Principles

An examination of moral issues of significance today such as abortion, euthanasia, sexual ethics, affirmative action, animal rights, torture, and war. In exploring answers to these issues the course includes an introduction to moral principles produced by traditional theories such as natural law, utilitarianism, Kantianism, and the social contract tradition.

Credits: 3

Offered: Every year.

PHIL 313 - Sex and Love

Addresses three specific areas of sex and love, and includes cross-cultural components. First, sexual ethics: Which kinds of sexual activity are morally permissible under what sort of circumstances? Must morally permissible sex be based on love? What is good sex? Second, the politics of sex: Are versions of proper sexuality used as mechanisms to oppress women and homosexuals? Third, the ideals of love: What are the different kinds of love? Why should persons be concerned with analyzing love?

Credits: 3

Offered: Every year.

PHIL 317 - Philosophy of Science

An examination of the basic concepts and methods of the sciences through the study of topics such as the nature of scientific explanation, the status of laws of nature, the relation between observation and theory, and methods of confirming or refuting hypotheses. Other topics might include causality, scientific realism, scientific revolutions, evolution and natural functions, and the distinction between science and pseudo-science.

Credits: 3

Offered: Every other year.

PHIL 330 - Libertarianism

Libertarianism holds that the only proper function of the state is to protect its citizens from acts of force, fraud, or theft. The class will explore libertarianism and evaluate the arguments for and against it. The class will examine such issues as: whether the state has authority over persons, whether distributive justice allows the state to redistribute wealth, whether rights are inviolable, whether and to what extent property rights should be respected, and whether antidiscrimination laws are justified.

Credits: 3

Offered: Offered on occasion.

PHIL 331 - Eastern Thought

A survey of classic eastern philosophies and religions, including classical Chinese schools (Confucianism, Daoism), some varieties of Hinduism (Advaita Vedanta, Visistadvaita Vedanta), and some varieties of Theravada and Mahayana Buddhism. Topics include human nature, enlightenment, the nature of ultimate reality, reincarnation, karma, moral transformation of individuals and societies, supernatural beings, knowledge, truth, and idealism. Prerequisite: must have completed INDS 120 or at least one 3 credit Philosophy class.

Credits: 3

Offered: Every other year.

PHIL 337 - Religious Pluralism

Religions differ. What should we make of this fact of religious diversity? Theories of religious pluralism hold that in some sense or other, all religions are the same. In this course we'll explore four major religious traditions, and will then explore theories of religious pluralism, as well as critical responses to and theoretical alternatives to them.

Credits: 3

Offered: Offered on occasion.

PHIL 338 - Marxist Thought

Examines the central themes of the tradition: its view of history, economics, the nature of political struggle, the status of law and morality, and the effects of material living conditions on forms of thought. The relevance of Marxism to revolutionary political movements is explored in the works of thinkers such as Lenin, Stalin, Trotsky, Luxemburg, Gramsci, and Marcuse.

Credits: 3

Offered: Every other year.

PHIL 345 - The Meaning of Life

The course addresses the most fundamental questions of human existence in theistic, humanistic, and practical dimensions. Does life as a whole have inherent meaning? Does human life in particular have inherent meaning? If there is no God does that imply that life has no inherent meaning? Even if life has no inherent meaning, can life have meaning created by those who live it? If there is no inherent meaning of life, why do people exist? Does mortality rob human life of any significance it might have?

Credits: 3

Offered: Offered on occasion.

PHIL 346 - Human Happiness

A critical evaluation of major theories of happiness. If people are rational and actively loving, what should people teach their children about more durable forms of life satisfaction? What is success? What is happiness? Is happiness the greatest good? Are all meaningful lives happy? Are all happy lives meaningful lives? What are the sources or conditions of happiness? What is the relationship between heroic, meaningful, and happy lives?

Credits: 3

Offered: Offered on occasion.

PHIL 351 - Metaphysics

An examination of the fundamental categories of reality, such as existence, substance, property, identity, space, time, event, causation, necessity, essence, free will and mind. The philosophical questions in which these categories play a role will also be discussed; e.g., Is free will possible in a deterministic world? and How can something change its properties over time and still remain the very same thing? Prerequisite: 3 credit hours in philosophy.

Credits: 3

Offered: Every other year.

PHIL 353 - Theory of Knowledge

Inquiry into the nature of human knowledge and related concepts such as truth, belief and epistemic justification. Knowledge from experience and a priori knowledge. The course addresses theories of justification such as foundationalism, coherentism and reliabilism. It also confronts problems posed by Skepticism for the scope of human knowledge, especially knowledge about the external world. Prerequisite: 3 credit hours in philosophy.

Credits: 3

Offered: Every other year.

PHIL 362 - Philosophy of Law

The course explores the nature of law and judicial decision-making. Is law simply a union of rules, a social practice, or an attempt to apply justice to interpersonal disputes? The course also examines the content and interpretation of statutes. Should the interpretation take into account the statute's plain meaning? The intent of the legislature that voted for it? Considerations of justice? The class will then discuss the role of judges in interpreting both statutes and common law (judge-made law).

Credits: 3

Offered: Every other year.

PHIL 364 - Justice, Law, and Economics

The civil law system adjudicates contractual disputes and disputes involving claims to compensation for injury. The course begins with a discussion of the justification of the system. The class will investigate whether the system is justified by a concern for economic efficiency, justice or both. The class will look at economic rules that relate to the civil laws, such as the rules relating to breach of contract, automobile accidents, liability for defective products, and pollution control. The class will also explore whether justice allows economic factors to be considered.

Credits: 3

Offered: Offered on occasion.

PHIL 369 - Topics in Philosophy

Special topics in philosophy. Variable-content course which may be taken more than once for credit. An in-depth study beyond the standard curriculum.

Credits: 1-3

Offered: Offered on occasion.

PHIL 430 - Philosophy of Mind

Philosophical accounts of the mind and its relation to the world. Topics include the mind-body problem, the intentionality (or "aboutness") of thought, the nature of mental content, consciousness, introspection and knowledge of other minds. Consideration of theories on these topics, such as dualism, behaviorism, type-physicalism, functionalism and eliminativism. Prerequisite: 3 credit hours in philosophy.

Credits: 3

Offered: Every other year.

PHIL 432 - The Age of Analysis: Philosophy Since 1900

Major currents and themes in 20th century analytic philosophy. Attention devoted to the work of such philosophers as Russell, Moore, Wittgenstein, Quine and others. A critical examination of analytic approaches to the philosophy of language, metaphysics, epistemology and other traditional areas of philosophy. Likely topics are theories of meaning and reference, logical atomism, logical positivism, ordinary language philosophy, and recent debates concerning the nature of knowledge, meaning and necessity. Prerequisite: 3 credit hours in philosophy.

Credits: 3

Offered: Every other year.

PHIL 441 - Philosophy of Language and Semantics

Exploration into the nature of language through the examination of such topics as meaning, reference, truth, use, and convention. Contemporary theories about the semantic contribution to sentence meaning made by proper names and definite descriptions; the difference between linguistic and other forms of communication and representation; and the relations between language, thought and reality. Prerequisite: 3 credit hours in philosophy.

Credits: 3

Offered: Offered on occasion.

PHIL 446 - Selected Problems

Advanced special topics and problems not treated thoroughly in other courses. Past examples: Environmental Ethics, Philosophy of War, Philosophy of History, Rationality, Renaissance Philosophy, Autonomy, and Theories of the Good. Current topics specified in the online Course Offerings.

Credits: 3

Offered: Every other year.

PHIL 447 - Selected Problems

Advanced special topics and problems not treated thoroughly in other courses. Past examples: Environmental Ethics, Philosophy of War Philosophy of History, Rationality, Renaissance Philosophy, Autonomy, and Theories of the Good. Current topics specified in Course Offerings Bulletin.

Credits: 3

Offered: Every other year.

PHIL 448 - Selected Problems

Advanced special topics and problems not treated thoroughly in other courses. Past examples: Environmental Ethics, Philosophy of War Philosophy of History, Rationality, Renaissance Philosophy, Autonomy, and Theories of the Good. Current topics specified in Course Offerings Bulletin.

Credits: 3

Offered: Every other year.

PHIL 449 - Selected Problems

Advanced special topics and problems not treated thoroughly in other courses. Past examples: Environmental Ethics, Philosophy of War Philosophy of History, Rationality, Renaissance Philosophy, Autonomy, and Theories of the Good. Current topics specified in the online Course Offerings.

Credits: 3

Offered: Every other year.

PHIL 460 - Major Philosophers

Intensive study of thought of a major philosopher of historical or contemporary significance. Past examples: Socrates, Plato, Hume, Kant, Nietzsche, Wittgenstein, Locke, Berkeley, Russell. Current topics specified in the online Course Offerings.

Credits: 3

Offered: Every other year.

PHIL 461 - Major Philosophers

Intensive study of the thought of a major philosopher of historical or contemporary significance. Past examples: Socrates, Plato, Hume, Kant, Nietzsche, Wittgenstein, Locke, Berkeley, Russell. Current topics specified in Course Offerings Bulletin.

Credits: 3

Offered: Every other year.

PHIL 462 - Major Philosophers

Intensive study of the thought of a major philosopher of historical or contemporary significance. Past examples: Socrates, Plato, Hume, Kant, Nietzsche, Wittgenstein, Locke, Berkeley, Russell. Current topics specified in Course Offerings Bulletin.

Credits: 3

Offered: Every other year.

PHIL 463 - Major Philosophers

Intensive study of the thought of a major philosopher of historical or contemporary significance. past examples: Socrates, Plato, Hume, Kant, Nietzsche, Wittgenstein, Locke, Berkeley, Russell. Current topics specified in Course Offering Bulletin.

Credits: 3

Offered: Every other year.

PHIL 464 - Major Philosophers

Intensive study of the thought of a major philosopher of historical or contemporary significance. Past Examples: Socrates, Plato, Hume, Kant, Nietzsche, Wittgenstein, Locke, Berkeley, Russell. Current topics specified in Course Offerings Bulletin.

Credits: 3

Offered: Every other year.

PHIL 465 - Major Philosophers

Intensive study of the thought of a major philosopher of historical or contemporary significance. Past examples: Socrates, Plato, Hume, Kant, Nietzsche, Wittgenstein, Locke, Berkeley, Russell. Current topics specified in Course Offerings Bulletin.

Credits: 3

Offered: Every other year.

PHIL 466 - Major Philosophers

Intensive study of the thought of a major philosopher of historical or contemporary significance. past examples: Socrates, Plato, Hume, Kant, Nietzsche, Wittgenstein, Locke, Berkeley, Russell. Current topics specified in Course Offerings Bulletin.

Credits: 3

Offered: Every other year.

PHIL 467 - Major Philosophers

Intensive study of the thought of a major philosopher of historical or contemporary significance. Past examples: Socrates, Plato, Hume, Kant, Nietzsche, Wittgenstein, Locke, Berkeley, Russell. Current topics specified in Course Offerings Bulletin.

Credits: 3

Offered: Every other year.

PHIL 468 - Major Philosophers

Intensive study of the thought of a major philosopher of historical or contemporary significance. Past examples: Socrates, Plato, Hume, Kant, Nietzsche, Wittgenstein, Locke, Berkeley, Russell. Current topics specified in Course Offerings Bulletin.

Credits: 3

Offered: Every other year.

PHIL 469 - Major Philosophers

Intensive study of the thought of a major philosopher of historical or contemporary significance. Past examples: Socrates, Plato, Hume, Kant, Nietzsche, Wittgenstein, Locke, Berkeley, Russell. Current topics specified in the online Course Offerings.

Credits: 3

Offered: Every other year.

PHIL 477 - Capstone Seminar

The course centers on some of the following issues: (1) an in-depth study of a particular philosopher or specific topic; (2) detailed reflection on the discipline of philosophy, and the effects, if any, of being a philosophy major on the kind of person one becomes in terms of values, attitudes, and ways of viewing and acting in the world; (3) an examination of the art of philosophical research, writing, and oral presentations. Course format and focus vary depending on instructor. Prerequisite: Philosophy major with junior or senior standing, or by permission of instructor.

Credits: 3

Offered: Every year.

PHIL 481 - Directed Study

Student, with faculty member's guidance, will study a topic not currently offered, or will engage in studies in greater depth than current course offerings permit. Permission of instructor required.

Credits: 1-3

Offered: Every semester.

PHIL 485 - Independent Study

Student will pursue a course of independent study and present evidence of accomplishment at end of semester. Philosophy major and permission of instructor required.

Credits: 1-3

Offered: Every semester.

PHYS - Physics

PHYS 101 - Contemporary Physics for Non-Science Majors

(Designed for students majoring in humanities and social sciences.) Non-mathematical survey of selected areas of contemporary science. Emphasis on ideas and concepts of physics, including its role in society.

Credits: 3

Offered: Every semester.

PHYS 104 - The Big Bang

Non-mathematical presentation of selected topics regarding the latest theories of the formation of the universe including ideas from special and general relativity.

Credits: 1

Offered: Offered on occasion.

PHYS 107 - Particles and Waves

Introductory level course on topics of special interest not covered in regular courses.

Credits: 1-3

Offered: Offered on occasion.

PHYS 111 - Introduction to Physical Sciences

An inquiry and algebra based approach to the major topics of physics: motion, conservation laws, heat, electricity, optics, and introductory atomic physics.

Credits: 3

Offered: Offered on occasion.

PHYS 117 - Sound, Light and Color

A course for the non-major covering topics in acoustics (especially musical acoustics), optics, light, lasers, holograms, and theories of color. The approach is mostly conceptual with some use of simple algebra. Emphasis will be on the physics, but some discussion of perceptual issues concerning the ear, eye, and brain will be included.

Credits: 3

Offered: Every other year.

PHYS 118 - Introduction to Astronomy

An introduction to the study of astronomy, with particular emphasis on stars, galaxies, and cosmology. Intended for both non-majors and majors. The mathematics level will be that of basic high school algebra and geometry.

Credits: 3

Offered: Every year.

PHYS 121 - College Physics I

A non-calculus lecture sequence: motion, dynamics, conservation theorems, heat. Students requiring a laboratory component should include PHYS 123. Student must have taken MATH 105 or N.Y.S. Regents Math B.

Credits: 3

Offered: Every year.

PHYS 122 - College Physics II

A non-calculus lecture sequence: wave motion, sound, electromagnetic fields, circuits, optics, quantum phenomena. Students requiring a laboratory component should include PHYS 124.

Credits: 3

Prerequisite: PHYS 121. Offered: Every year.

PHYS 123 - College Physics Lab I

One three-hour laboratory session per week treating topics covered in PHYS 121.

Credits: 1

Corequisite: PHYS 121. Offered: Every year.

PHYS 124 - College Physics II Lab

One three-hour laboratory session per week treating topics covered in PHYS 122.

Credits: 1

Corequisite: PHYS 122. Offered: Every year.

PHYS 199 - Special Topics

Introductory level course on topics of special interest not covered in regular courses.

Credits: 1-3

Offered: Offered on occasion.

PHYS 200 - Engineering Graphics

Introduction to tools, language, and procedures basic to training of an engineering draftsman. Emphasis on drafting techniques, two-dimensional and isometric representation.

Credits: 2

Offered: Offered on occasion.

PHYS 205 - Science and Civilization

A survey of the major scientific discoveries, the scientists behind these discoveries, and the effect that these discoveries have had on the progress of civilization. The course will discuss historical developments from Thales to Einstein.

Credits: 3

Offered: Every year.

PHYS 206 - Genesis of the Universe

A non-mathematical course covering historical, philosophical, theological and scientific aspects concerning the genesis of the universe.

Credits: 3

Offered: Offered on occasion.

PHYS 230 - University Physics I

Calculus-based lecture sequence for science and mathematics majors who have completed a course or courses in University Calculus or the equivalent. Kinematics, dynamics, gravitation. A recitation is included.

Credits: 4

Prerequisite: MATH 122. Corequisite: PHYS 232.

Offered: Every year.

PHYS 231 - University Physics II

Calculus-based lecture sequence for science and mathematics majors who have completed a course or courses in University Calculus or the equivalent. Electricity and magnetism. A recitation is included.

Credits: 4

Prerequisite: MATH 123 and PHYS 230. Corequisite: PHYS 233. Offered: Every year.

PHYS 232 - University Physics I Lab

One three-hour laboratory session per week treating topics covered in PHYS 230.

Credits: 1

Corequisite: PHYS 230. Offered: Every year.

PHYS 233 - University Physics II Lab

One three-hour laboratory session per week treating topics covered in PHYS 231.

Credits: 1

Corequisite: PHYS 231. Offered: Every year.

PHYS 234 - Modern Physics

Special relativity, wave motion, basic concepts of quantum mechanics, atomic structure, solid state, and nuclear physics, including a weekly three hour lab.

Credits: 4

Prerequisite: PHYS 231. Offered: Every year.

PHYS 311 - Acoustics I

Elements of physics bearing directly on production and assimilation of musical tones: wave motion, resonance,

complex waves, physiology of hearing, musical scales, simple acoustical models of musical instruments, and architectural acoustics.

Credits: 3

Prerequisite: PHYS 121 or PHYS 230. Offered: Every year.

PHYS 312 - Acoustics II

Psychoacoustics and architectural acoustics. A study of the mechanics and neurological foundations of the perception of pitch, loudness, timbre, and direction, followed by a contrasting study of the behavior, measurement, and evaluation of sound and music in a variety of environments, utilizing both objective techniques and the psychoacoustical insights gained from the first part of the course.

Credits: 3

Prerequisite: PHYS 311. Offered: Offered on occasion.

PHYS 318 - Basic Electronics

Introduction to electronic circuits, devices, and systems with practical applications to recording engineering and biomedical instrumentation. Non-majors only.

Credits: 3

Prerequisite: (MATH 120 or MATH 122) and (PHYS 122 or PHYS 231). Offered: Every year.

PHYS 321 - Engineering Statics

A calculus treatment of statics applied to the equilibrium of rigid and elastic bodies, including fundamentals of mechanics, vector algebra, free body diagrams, equivalent force/moment systems, distributed forces, centroids and center of gravity, equilibrium of particles and rigid bodies, trusses, frames, beams, internal forces in structural members, friction, first and second moments of area and moments and products of inertia, and methods of virtual work and total potential energy.

Credits: 3

Prerequisite: PHYS 230. Offered: Every year.

PHYS 322 - Mechanics of Solids

Continuation of PHYS 321 including stress and strain tensors, mechanical properties of solids, multidimensional stress-strain relations, section forces in beams, stresses in beams, deflection of beams, torsion, stresses and strain relations at a point, Mohr's circle, energy methods, elastic stability, and vibrations.

Credits: 4

Prerequisite: PHYS 321. Offered: Every year.

PHYS 323 - Circuit Analysis

A development of network analysis including Ohm's and Kirchhoff's laws, dependent and independent voltage and current sources, circuit simplification techniques including node-voltage, mesh-current methods, Thevenin and Norton equivalents, energy-storage elements, operational amplifiers, natural and step response of RL, RC and RLC circuits, sinusoidal steady-state analysis, introduction to Laplace Transforms, passive filters.

Credits: 4

Prerequisite: PHYS 231. Offered: Every year.

PHYS 324 - Circuit Analysis II

Continuation of PHYS 323 including sinusoidal excitation and phasors, AC steady state analysis, three-phase circuits, complex frequency and network functions, frequency response, transformers, Fourier and Laplace transforms.

Credits: 3

Prerequisite: PHYS 323. Offered: Every year.

PHYS 325 - Electronics

Course treats analog electronics, AC and DC circuits and laws of network analysis. Elements of semiconductor physics. Diodes, rectifiers, filters and regulated power supplies. Bipolar and FET transistors and transistor amplifier circuits. Feedback and operational amplifiers. Discrete and integrated circuit oscillators, multivibrators, and waveshaping.

Credits: 3

Prerequisite: PHYS 231. Corequisite: PHYS 327. Offered: Every other year.

PHYS 326 - Digital Logic

TTL characteristics, Boolean algebra, logic functions, and minimization procedures. Logic gates and implementation. Design of combinational and sequential circuits. Flipflops, counters, shift registers, and arithmetic circuits. Analog to digital and digital to analog conversion. Solid state memories and simple processors.

Credits: 3

Corequisite: PHYS 328. Offered: Every year.

PHYS 327 - Electronics Lab

Laboratory to accompany and supplement PHYS 325.

Credits: 1

Corequisite: PHYS 325. Offered: Every other year.

PHYS 328 - Digital Lab

Laboratory to accompany and supplement PHYS 326.

Credits: 1

Corequisite: PHYS 326. Offered: Every year.

PHYS 329 - Engineering Dynamics

Mechanics applied to the motion of particles and rigid bodies, including kinematics and dynamics of particles, relative motion, work-energy and impulse-momentum methods, and kinematics and dynamics of rigid bodies, including rotation and simple vibration.

Credits: 3

Prerequisite: PHYS 230. Offered: Every year.

PHYS 330 - Thermodynamics

Concepts of temperature, laws of thermodynamics, entropy, thermodynamic relations and potentials, processes, properties and cycles, applications to physical systems, introduction to statistical mechanics. MATH 223 is recommended (may be taken concurrently).

Credits: 3

Prerequisite: PHYS 230. Offered: Every year.

PHYS 331 - Theoretical Mechanics

Vector-tensor approach to classical mechanics including kinematics, dynamics, oscillations, Lagrange's and Hamilton's equations, transformations, central force, and rigid body motion.

Credits: 3

Prerequisite: MATH 224 and PHYS 230. Offered: Every year.

PHYS 333 - Electricity and Magnetism

Mathematical theory of electrostatics and electromagnetism employing vector calculus. Applications of Maxwell's equations.

Credits: 3

Prerequisite: PHYS 231 and (PHYS 425 or MATH 420). Offered: Every year.

PHYS 340 - Optics

An introduction to geometrical, physical, and modern optics.

Credits: 3

Prerequisite: PHYS 231. Corequisite: PHYS 341. Offered: Every other year.

PHYS 341 - Optics Laboratory

Laboratory to accompany and supplement PHYS 340.

Credits: 1

Corequisite: PHYS 340. Offered: Every other year.

PHYS 400 - Undergraduate Seminar

Presentations by students discussing topics in physics. Counted once for the physics credit hour requirements.

Credits: 1

Offered: Every year.

PHYS 401 - Special Relativity

Tensor calculus approach to relativistic kinematics, dynamics, optics, electrodynamics, and selected applied topics.

Credits: 3

Prerequisite: PHYS 234. Offered: Offered on occasion.

PHYS 425 - Mathematical Physics I

Applied methods including cartesian and non-cartesian vector and tensor analysis, complex numbers and functions, linear algebra, vectors and coordinate transforms, eigenvectors and eigenvalues, infinite series, multiple integrals, Jacobians, Green's Theorem, Divergence Theorem, Stoke's Theorem and Fourier Series.

Credits: 3

Prerequisite: MATH 224. Offered: Every year.

PHYS 426 - Mathematical Physics II

Applied methods including Fourier and Laplace transforms, partial differential equations, boundary value problems, special functions, Green's functions, and functions of a complex variable.

Credits: 3

Prerequisite: PHYS 425. Offered: Every year.

PHYS 431 - Introduction to Quantum Mechanics

Concept of wave-particle duality, Schroedinger's wave equation with applications to potential problems, to the hydrogen atom, and to atomic spectra; perturbation theory, and spin-orbit interaction.

Credits: 3

Prerequisite: PHYS 234. Corequisite: PHYS 425. Offered: Every year.

PHYS 434 - Solid State Physics

Crystal structure, conduction theory, binding and energy levels and other properties of conductors, semiconductors, dielectrics, and magnetics.

Credits: 3

Prerequisite: PHYS 431. Offered: Offered on occasion.

PHYS 440 - Seminar: Wave Motion in Physics

The course will be devoted to the study of waves and its applications in different fields of physics. The principal

objective is to develop an understanding of basic wave concepts and of their relations with one another. Readings and discussions on topics such as free and forced oscillations, superposition principle, traveling and standing waves, modulations, pulses, wave packets, bandwidth, coherence time and polarization, will serve to reach the proposed goal. Applications of different physical systems as water waves, sound waves, light waves, transmission lines, quantum waves, etc. will be illustrated through interesting examples.

Credits: 1

Prerequisite: PHYS 234. Offered: Offered on occasion.

PHYS 442 - Computational Physics and Engineering

Numerical and computational techniques for solving a wide variety of problems in physics and engineering. Various methods for solving ordinary and partial differential equations describing mechanical oscillators (both periodic and chaotic), electrical and magnetic fields, and quantum mechanical wave functions will be explored. Students will be introduced to MATLAB, and some projects will be run in EXCEL. Familiarity with the physical systems involved is not a prerequisite. If time permits, Monte-Carlo methods will also be explored.

Credits: 1

Prerequisite: MATH 223 and PHYS 230. Offered: Offered on occasion.

PHYS 444 - Seminar: Quantum Information and Measurement

Readings and discussion on the measurement process in quantum mechanics. Entangled states, Einstein-Podolsky-Rosen paradox, Bell's inequality, quantum encryption and quantum computation. Experimental techniques. Philosophical issues raised by quantum theory.

Credits: 1

Prerequisite: PHYS 431. Offered: Offered on occasion.

PHYS 450 - Advanced Laboratory

Students explore advanced experimental techniques progressing through introductory stages to applications, devoting two to four weeks to each chosen topic. Student interest accommodated in topics (and respective applications) such as Nuclear Magnetic Resonance (Magnetic Resonance Imaging-MRI), X-Ray Techniques (crystallography/elemental analysis/medical imaging), Hall effect and related techniques (semiconductor characterization/Giant Magneto Resistive computer disc readers, etc.), and Magnetization measurements (data storage/electrical and mechanical power conversion/geological surveying/bird and insect navigation, etc.).

Credits: 1

Prerequisite: PHYS 234 or CHEM 316. Offered: Every other year.

PHYS 468 - Independent Study

Independent work on a theoretical or experimental topic under the supervision of a faculty member.

Credits: 1-3

Offered: Offered on occasion.

PHYS 469 - Directed Research

Theoretical or experimental research under the supervision of a faculty member.

Credits: 1-3

Offered: Offered on occasion.

PHYS 470 - Special Topics

Area not covered in regular courses. Broad range of topics consistent with teaching and research interests of department.

Credits: 1-3

Offered: Every semester.

PHYS 471 - Special Topics

Area not covered in regular courses. Broad range of topics consistent with teaching and research interests of department.

Credits: 1-3

Offered: Every semester.

PHYS 472 - Special Topics

Area not covered in regular courses. Broad range of topics consistent with teaching and research interests of department.

Credits: 1-3

Offered: Every semester.

PHYS 473 - Special Topics

Area not covered in regular courses. Broad range of topics consistent with teaching and research interests of department.

Credits: 1-3

Offered: Every semester.

PHYS 474 - Special Topics

Area not covered in regular courses. Broad range of topics consistent with teaching and research interests of department.

Credits: 1-3

Offered: Every semester.

PHYS 475 - Special Topics

Area not covered in regular courses. Broad range of topics consistent with teaching and research interests of department.

Credits: 1-3

Offered: Every semester.

PHYS 476 - Special Topics

Area not covered in regular courses. Broad range of topics consistent with teaching and research interests of department.

Credits: 1-3

Offered: Every semester.

PHYS 477 - Special Topics

Area not covered in regular courses. Broad range of topics consistent with teaching and research interests of department.

Credits: 1-3

Offered: Every semester.

PHYS 478 - Special Topics

Area not covered in regular courses. Broad range of topics consistent with teaching and research interests of department.

Credits: 1-3

Offered: Every semester.

PHYS 479 - Special Topics

Area not covered in regular courses. Broad range of topics consistent with teaching and research interests of department.

Credits: 1-3

Offered: Every semester.

PHYS 480 - Laboratory Supervision in Physics

Students enrolled serve as laboratory assistants under faculty supervision. Approval to register must be obtained from department. Three hours of work per week are expected for each hour of credit elected. Course may be repeated for a maximum of 6 credit hours applicable toward fulfillment of physics or mathematics-physics major's supporting course requirements. (A major in physics or mathematics-physics is not a prerequisite.)

Credits: 1-3

Offered: Every semester.

PHYS 490 - Honors Thesis

Research project culminating in a thesis. In most cases a full year of work will be required to complete both project and thesis.

Credits: 3

Offered: Every year.

PHYS 530 - Kinetic Theory and Statistical Mechanics

Maxwell-Boltzmann collision theory. H-theorem, transport equation, quantum statistics partition functions, equipartition theorem, applications to thermodynamic systems, ergodicity.

Credits: 3

Offered: Offered on occasion.

PHYS 531 - Mathematical Physics I

Mathematical methods including eigenfunctions and eigenvalues, variational principles, abstract vector spaces, integral equations, Green's functions, partial differential equations of physics.

Credits: 3

Offered: Offered on occasion.

PHYS 532 - Mathematical Physics II

Mathematical methods including eigenfunctions and eigenvalues, variational principles, abstract vector spaces, integral equations, Green's functions, partial differential equations of physics.

Credits: 3

Offered: Offered on occasion.

PHYS 533 - Electromagnetic Theory I

Potential theory and boundary value problems, electromagnetic field relations, magnetohydrodynamics, Leinard-Wiechert potentials.

Credits: 3

Prerequisite: PHYS 531. Offered: Offered on occasion.

PHYS 534 - Electromagnetic Theory II

Potential theory and boundary value problems, electromagnetic field relations, magnetohydrodynamics, Leinard-Wiechert potentials.

Credits: 3

Prerequisite: PHYS 531. Offered: Offered on occasion.

PHYS 540 - Modern Optics

Green's functions and linear theory, spatial filters, geometrical theory and aberrations, interference, diffraction and image formation, matrix and coherence theory, partial polarization, Fourier Methods.

Credits: 3

Offered: Offered on occasion.

PHYS 541 - Advanced Dynamics

Lagrangian and Hamiltonian methods, variational principles, relativistic mechanics, transformation theory, oscillations, fields.

Credits: 3

Prerequisite: PHYS 531. Offered: Offered on occasion.

PHYS 543 - Quantum Mechanics I

Solutions to wave equations, approximation methods, time dependent problems, vector spaces, matrix formulation, identical particles, scattering, radiation, second quantization.

Credits: 3

Prerequisite: PHYS 531. Offered: Offered on occasion.

PHYS 544 - Quantum Mechanics II

Solutions to wave equations, approximation methods, time dependent problems, vector spaces, matrix formulation, identical particles, scattering, radiation, second quantization.

Credits: 3

Prerequisite: PHYS 531. Offered: Offered on occasion.

PHYS 546 - Reactor Physics

Nuclear reactions and radiations, reactor theory, instrumentation, control, fuel, shielding, heat transfer, and applications of nuclear reactors.

Credits: 3

Prerequisite: PHYS 432. Offered: Offered on occasion.

PHYS 570 - Special Topics

Areas not covered in regular courses. Broad range of advanced topics consistent with teaching and research interests of department.

Credits: 1-3

Offered: Offered on occasion.

PHYS 630 - Advanced Nuclear Physics

Current experimental and theoretical topics including nuclear properties and systematics, nucleon scattering, nuclear forces and structure, reactions, decay processes, nuclear spectroscopy.

Credits: 3

Prerequisite: PHYS 531 and PHYS 432. Offered: Offered on occasion.

PHYS 631 - Atomic and Molecular Structure

Quantum mechanical treatment of atomic and molecular energy levels including transitions, fine and hyperfine structure, isotopic effects, beam methods, collision and ionization phenomena.

Credits: 3

Prerequisite: PHYS 543. Offered: Offered on occasion.

PHYS 690 - Research

Experimental or theoretical research in physics including a thesis.

Credits: 3

Offered: Offered on occasion.

PHYS 691 - Research

Experimental or theoretical research in physics including a thesis.

Credits: 3

Offered: Offered on occasion.

POLI - Political Science

POLI 100 - Freshman Seminar

The Freshman Seminar in Political Science introduces students to some central aspects of thriving and surviving at Fredonia in academic and social terms and to what is going on in political science. It is an opportunity for freshmen in Political Science to get to know one another, since they will be sharing classes and learning for the next four years. It is also an opportunity for students and political science faculty to get to know one another, their interests, and fields. It is a modest effort to ensure that some fundamental ideas about learning at college are offered to students.

Credits: 1

Offered: Offered on occasion.

POLI 120 - American Politics

Critical examination of key aspects of the American political system. What are the major institutions of political power? How is power obtained? Which groups or social classes tend to possess more power in these institutions and why? How does the political system manage change?

Credits: 3

Offered: Every semester.

POLI 121 - American Public Policy

Introduction to the political economy of policy formation. Emphasis is placed upon the questions of why government intervention in the economy is necessary and the cost-

benefit evaluation of the intervention. Political failure is contrasted with market failure in evaluating government public policies. Substantive policy areas such as health care and education policies will be analyzed.

Credits: 3

Prerequisite: POLI 120. Offered: Every semester.

POLI 150 - U.S. and World Affairs

Studies key reasons for how and why countries behave as they do in international politics. Emphasis upon the changing sources of international power, colonialism, the Cold War and U.S.-U.S.S.R. struggle for power, and contemporary issues such as the arms race, Middle East conflicts, and struggle for economic power between rich and poor countries. Close study of the usefulness and morality of U.S. interventions abroad from the Gulf War to Panama, Haiti, and Bosnia.

Credits: 3

Offered: Every year.

POLI 200 - Statistics

Introduction to the substantive and technological methodology used in study of politics commonly employed by government and business offices. Attendance required. Note: Credit for at most one of the following courses may be applied towards a student's requirements for graduation: BUAD 200, ECON 200, EDU 200, POLI 200, SOC 200, and STAT 200.

Credits: 3

Offered: Every year.

POLI 210 - Research Methods

Introduction to the variety of methods of analysis employed in the empirical study of politics. Consideration of the debates concerning the character of social science. A discussion of normative and positive methods of analysis and evaluation of topics suited for quantitative and non-quantitative treatments. Research design, data analysis, and reporting of results.

Credits: 3

Prerequisite: POLI 200 or STAT 200. Offered: Every other year.

POLI 240 - Urbanization and Environmental Challenges

Focuses on the dilemmas posed by urbanization in developing countries, where the relentless process of city growth is challenging governments and placing an enormous burden on societies. The course addresses a key question underlying the studies on development and urbanization: how can cities develop economically, and at the same time preserve the quality of the urban space? The interdisciplinary course relies on concepts and theories

drawn from the disciplines of political science, sociology and history, and from the subfields of international political economy, public policy, urban planning and environmental studies. It may be taught abroad with a fieldwork component directed by the instructor.

Credits: 3

Offered: Offered on occasion.

POLI 241 - Introduction to Comparative Politics

An introduction to the general issues and methods of inquiry involved in comparative politics. Issues such as economic development, political system, government structure, representation, political culture, or failed states are discussed by examining in greater depth particular country cases from both the industrialized and developing world as well as those at different stages of democratization.

Credits: 3

Offered: Every year.

POLI 276 - Law and Society

Introductory examination of law as an instrument of social control; philosophies regarding appropriate operations and functions of law and courts; and controversies surrounding questions of proper relationships between law, morals, and governmental policy.

Credits: 3

Offered: Every semester.

POLI 277 - Introduction to Law

An examination of Anglo-American legal principles based upon the analysis of leading court cases. A broad range of topics are covered, including criminal and civil law, legal remedies, punishment, torts, contracts and family law. The course will emphasize the development of legally defined rights and the methods involved in the legal resolution of disputes.

Credits: 3

Offered: Every year.

POLI 280 - Special Topics in Politics

Examination of a current topic in politics, such as presidential or congressional elections. May be taken more than once as topics change.

Credits: 1-4

Offered: Offered on occasion.

POLI 285 - Mock Trial I

Preparation of case materials for participation in the trial competition sponsored by the American Mock Trial

Association. Competition includes both civil and criminal litigation.

Credits: 0

Offered: Every year.

POLI 287 - Mock Trial II

Preparation of case materials for participation in the trial competition sponsored by the American Mock Trial Association. Competition includes both civil and criminal litigation.

Credits: 3

Prerequisite: INDS 285 or POLI 285. Offered: Every year.

POLI 311 - Fundamentals of Public Administration

Examination of role of bureaucracy and administration in America. Initial focus on political setting of the bureaucracy as it interacts with other key actors and institutions. Then consideration of internal characteristics and processes, and examination of topics such as organization theory, decision-making, personnel, and budgeting.

Credits: 3

Prerequisite: POLI 120. Offered: Every year.

POLI 313 - American Power Structures

Examination of the power structures of the United States. Analysis of how factors such as economic class, race, or ethnicity influence who holds or controls political power in federal, state, and local governments. Contrasting theories of who governs are studied: pluralist, elite, and class-based models. Students will learn techniques of organizing people to exercise power in behalf of their common interests.

Credits: 3

Prerequisite: POLI 120. Offered: Every other year.

POLI 321 - Political Parties and Interest Groups

The role of political parties and interest groups in the shaping of government policies and the ordering of society is analyzed. Internal structures and membership of both parties and groups is emphasized, especially how the collective action problem is solved. The influences of parties and interest groups upon public policies are evaluated. Proposals to reform parties and groups are presented.

Credits: 3

Prerequisite: POLI 120. Offered: Every other year.

POLI 322 - New York Government

Study of the legal framework of New York's state and local governments. Analysis of state and local executive

organization, politics, political participation, and policy making. Critical examination of the economic competitiveness of N.Y. state in the U.S. and global economy. Attention also to the idea of reinventing government techniques and models.

Credits: 3

Prerequisite: POLI 120. Offered: Every other year.

POLI 323 - Elections in America

Critical examination of the social, psychological, and rational choice explanations of voting. Emphasis is placed on the evidence supporting the alternative explanations. In the process of evaluating the alternative explanations, the determinants of voting, the extent of ideological thinking trends in turnout, the political business cycle and historical changes in voting patterns are examined.

Credits: 3

Prerequisite: POLI 120. Offered: Every other year.

POLI 324 - President and Congress

Critical examination of the frequently overlapping and conflicting roles of the American President and Congress in making decisions about public policy in the U.S. Attention will be given to recruitment patterns and behavior while in office as well as the nature of the policy outputs. Analysis of institutional forms in other nations will be included to provide a comparative perspective.

Credits: 3

Prerequisite: POLI 120. Offered: Every year.

POLI 325 - Public Opinion and Participation

The course examines public opinion, political participation, and civic engagement in American democracy. Study of the formation and change in attitudes, preferences, values and identity, and the influence of socialization, media, political and social context. Assesses public trust in government and political behavior including voting and protest. Provides theoretical and practical understanding through data collection and analysis.

Credits: 3

Prerequisite: POLI 120. Offered: Offered on occasion.

POLI 326 - Media and Politics

The study of mass media in American politics, investigating print, broadcast and new media sources and technologies, content and effect. An examination of the media's watchdog role, ownership, regulation, freedom of the press, news management and reform. Analyzes ongoing media coverage of political events, figures and issues, researching the impact of agenda setting, framing and priming on attention and learning.

Credits: 3

Offered: Every other year.

POLI 328 - African American Politics

African Americans have historically been confronted with a number of obstacles when attempting to act in the American political system. Students will critically assess how African Americans can best overcome the obstacles in order to obtain desired policy responses from the political system. In doing so, students will explore the historical context from which these constraints arose, how they have been overcome in the past, and contemplate what factors contribute to their persistence today. Included will be investigations into the role of parties and elections, protest politics, and the Supreme Court.

Credits: 3

Prerequisite: POLI 120. Offered: Offered on occasion.

POLI 329 - Topics in American Politics

Examination in depth of current topic in American politics not falling within any other American politics course. May be taken more than once as topics change.

Credits: 3

Prerequisite: POLI 120. Offered: Offered on occasion.

POLI 330 - Western European Politics

Comparative study and analysis of governments and politics of the United Kingdom, France, Germany, Italy, and other Western European nations. Considerable attention will be given to the changing socioeconomic characteristics of the nations in the context of the evolving European Community and the drive for European integration.

Credits: 3

Prerequisite: POLI 120 or POLI 150. Offered: Every other year.

POLI 331 - Canadian Politics

Examination of the background and socioeconomic foundations of contemporary Canadian politics with special emphasis to the impact of linguistic, cultural and geographic divisions and their impact on the institutions and decision making processes in Canada. Attention will also be given to the influence of the U.S., the United Kingdom and France on Canada.

Credits: 3

Prerequisite: POLI 120 or POLI 150. Offered: Every other year.

POLI 332 - Russian Politics

Critical introduction to the theory and practice of Russian governmental institutions and political processes in light of Russian history, the Soviet and Marxist efforts to redirect that history, and the rapid political, social, economic and

cultural changes in Russia and the former Soviet Union at the end of the 20th century.

Credits: 3

Prerequisite: POLI 120 or POLI 150. Offered: Every other year.

POLI 334 - African Politics

Study of contemporary African politics focuses upon processes of political change and conflict. It includes analysis of patterns of colonial rule, nationalist protest, modern political parties and political systems, ethnic conflict, problems of economic development, and the role of social groups, parties, the military, and ideology in the struggle for civil liberties and democracy. Studies of specific countries such as Nigeria, Ghana, South Africa.

Credits: 3

Prerequisite: POLI 120 or POLI 150. Offered: Every other year.

POLI 335 - Germany and Europe

The course seeks, through an analysis of post war developments in an occupied, then divided, Germany, to trace the origins of the "German Question" and its impact on Germany within the broader context of East-West relations in Europe. The course then seeks to analyze the changing nature of inter-German relations and the factors leading to the dramatic events of 1989/90 and to consider the implications for Germany and Europe.

Credits: 3

Prerequisite: POLI 120 or POLI 150 or HIST 116. Offered: Offered on occasion.

POLI 341 - Political Economy of Development

Examines the ways political-economic factors and relationships condition the patterns of economic development and political change. The course explores: how do economies develop? does class power, domestic and international, determine economic growth patterns and which social groups benefit? Contrasting Marxist and non-Marxist analyses are used. Contemporary and historical studies of development in Europe, the Middle East, Latin America, and Africa are used.

Credits: 3

Prerequisite: POLI 120 or POLI 150. Offered: Every other year.

POLI 343 - International Migration and Immigration Politics

Examination of immigration from a comparative historical and political perspective. The course explores theories of migration and its interrelation with globalization, and focuses on the sociology of immigration and integration.

Beyond this comparative focus, current U.S. immigration politics and policies receive special attention.

Credits: 3

Prerequisite: POLI 241. Offered: Every other year.

POLI 344 - Comparative Public Policy

Survey and comparative analysis of public policies in advanced industrial democracies, with emphasis on the U.S., Western Europe, Japan, and Canada. Special emphasis on government-business relations, labor relations, regional trading blocs, industrial planning, public ownership of economic enterprises, privatization, tax policy, and government-delivered health care systems.

Credits: 3

Prerequisite: POLI 120. Offered: Every other year.

POLI 345 - Film and Politics

The course uses film to explore major aspects of political life and the cultural creation of meaning about social and political power, values, and activities. Films are studied as social and political products and to enhance understanding of political phenomena in the American and other cultures. These phenomena include social/political movements, war, law, and race, gender, and class differences and conflicts. Major feature films are used.

Credits: 4

Offered: Every other year.

POLI 346 - East Asian Political Economy

The course focuses on the political, social and economic institutions that have driven the economic development of these East Asian countries which are increasingly creating competitive problems for the United States. Extensive discussion of the role of government planning and group structures such as the keiretsu and chaebol. Also analyzed are the determinants and extent of the development of democratic government in Confucian societies.

Credits: 3

Prerequisite: POLI 120 or POLI 150. Offered: Every other year.

POLI 348 - The European Union

Study and analysis of the politics of the European Union (EU). Topics include: theories of international organization and functional integration; the EU institutions (e.g., EU Commission, Parliament, Council of Ministers, European Council); and the treaties and substantive policies. Students may participate in a model EU at SUNY Fredonia or in Europe in alternate years.

Credits: 3

Prerequisite: POLI 120. Offered: Every other year.

POLI 349 - Topics in Comparative Politics

Examination in-depth of current topics in comparative politics not falling within any other comparative politics course. May be taken more than once as topics change.

Credits: 3

Prerequisite: POLI 120 or POLI 150. Offered: Offered on occasion.

POLI 351 - The Inter-American System

Comparative course focusing on the political development of Western Hemisphere countries, encompassing North, Central, South America and the Caribbean. Examines the Americas as a continent of contrasts and similarities, sources of conflict, and the potential for cooperation in the region. Special emphasis on the political/economic relations between the United States, Mexico and South America; also explores the new role played by Canada as a conflict mediator in the continent.

Credits: 3

Prerequisite: POLI 150 or POLI 241. Offered: Every other year.

POLI 352 - World Political Geography

Examination of the ways humans have arranged the territory of the Earth's surface, including how personal space, territoriality, and perception inform an understanding of politics; the analysis of countries within a geopolitical framework; case studies of how geography has impacted empires, civil divisions, and international relations; comparison of distribution of major political systems and their applications to territory.

Credits: 3

Prerequisite: POLI 120. Offered: Every year.

POLI 353 - International Law and Organization

Examination of the role of public international law in regulating relations among sovereign states. Explores the sources of international law as well as its institutions, such as international organizations and international tribunals. Includes topics such as the use of force, the conduct of war, human rights, economics and the environment.

Credits: 3

Prerequisite: POLI 150. Offered: Every other year.

POLI 354 - Politics of the Middle East

Analysis of Middle East politics, society, and international conflicts. Covers the historical and cultural background of Middle East states, the rise of Arab, Israeli, and other nationalisms, and the contemporary politics and political economy of major Middle East states. Assesses three entangled dimensions of conflict: inter-Arab struggles, the

Arab-Israeli conflict, and the contest for influence by external powers.

Credits: 3

Prerequisite: POLI 120 or POLI 150. Offered: Every other year.

POLI 355 - International Political Economy

Focuses on the dynamics of the international economy, economic policies and problems of major states, postwar international institutions, and trade and monetary systems. Considers theories and practices of the role of major powers and multinational corporations in the international economy. Interest in the dramatic changes in the division of world productive power, impact of globalization of capital and production upon the well-being of countries and outbreak of crises, and developing country struggles to change their economic relationships with the world economy. ECON 202 recommended.

Credits: 3

Prerequisite: ECON 201. Offered: Every other year.

POLI 356 - U.S. Foreign Policy

Analysis of U.S. foreign policy in the post-World War II period. Assesses the corporate, ideological, institutional, and strategic influences in policy-making. Studies patterns of U.S. relations with the U.S.S.R., Europe, Latin America, and the Third World up to the present in the context of the Cold War, the arms race, Third World struggles, U.S. responses to revolutionary change, and U.S. efforts to maintain a world order.

Credits: 3

Prerequisite: POLI 150. Offered: Every other year.

POLI 359 - Topics in International Politics

Examination in-depth of current topic in international politics not falling within any other international politics course. May be taken more than once as topics change.

Credits: 3

Prerequisite: POLI 150. Offered: Offered on occasion.

POLI 360 - Classical Political Theory

Analytical treatment of main problems of political theory by examination of the writings of Plato and Aristotle. Discussion of contending theories of justice, equality, and political obligation.

Credits: 3

Prerequisite: POLI 120 or POLI 150 or POLI 276 or POLI 277. Offered: Every other year.

POLI 361 - Modern Political Theory

Analytical treatment of main problems of political theory by examination of the writings of Machiavelli, Hobbes, Locke, Rousseau, Marx, Mill, and Rawls. Discussion of contending theories of individual rights and obligations, as well as the justification and limits of the state.

Credits: 3

Prerequisite: POLI 120 or POLI 150 or POLI 276 or POLI 277. Offered: Every other year.

POLI 362 - Terrorism and Counterterrorism

The course is designed to introduce students to many aspects of modern terrorism, its evolution through history and efforts to counter it. Topics will cover both theoretical and conceptual questions in studies of terrorism as well as empirical case studies of terrorism.

Credits: 3

Prerequisite: POLI 150. Offered: Every year.

POLI 363 - Game Theory

The course will use rational choice theory to analyze how individuals and groups make decisions in strategic and non-strategic situations. Strategic situations are the result of the interdependent decisions of several individuals, e.g., nuclear deterrence or business competition. Problems covered include how computers beat humans at chess to the evolution processes of society. How do group norms arise where individual competition is the usual course of action? A low level of mathematical background is required.

Credits: 3

Prerequisite: POLI 200 or BUAD 200 or ECON 200 or EDU 200 or POLI 200 or PSY 200 or SOC 200 or STAT 200. Offered: Every other year.

POLI 365 - American Political Thought

Critical examination of the development of American political thought, Colonial period to the present. Discussion of questions regarding the status of rights, the limits of the state, equality, and social justice. Includes analysis of the role in American politics of such ideologies as liberalism, conservatism, communitarianism, and socialism.

Credits: 3

Prerequisite: POLI 120. Offered: Every other year.

POLI 369 - Topics in Political Theory

Examination in-depth of topics in political theory not falling within any other political theory course. May be taken more than once as topics change.

Credits: 3

Prerequisite: POLI 120 or POLI 150 or POLI 276 or POLI 277. Offered: Offered on occasion.

POLI 370 - American Constitutional Law

Study of nature and limitations of judicial review and Supreme Court decisions regarding distribution of powers among national and state governments, division of powers between president and Congress, and limitations upon congressional and presidential powers.

Credits: 3

Prerequisite: POLI 120 or POLI 276. Offered: Every year.

POLI 371 - Civil Rights and Liberties

Study of judicial cases involving safeguarding of individual civil and property rights, special emphasis upon recent developments in interpretation of the due process and equal protection of the law clauses and First Amendment of the U.S. Constitution.

Credits: 3

Prerequisite: POLI 120 or POLI 276. Offered: Every year.

POLI 375 - The Judicial Branch

American courts make decisions that impact major political issues. Justices are political appointees, and their decisions often reflect the biases of the president who selected them. The course examines the political role of courts in relation to the other branches of government, and to the political system as a whole.

Credits: 3

Prerequisite: POLI 120. Offered: Every other year.

POLI 379 - Topics in Public Law

Examination in-depth of topics in public law not falling within any other public law course. May be taken more than once as topics vary.

Credits: 3

Prerequisite: POLI 120 or POLI 150 or POLI 276 or POLI 277. Offered: Offered on occasion.

POLI 380 - Policy Evaluation

In-depth examination of the methods and techniques used to assess the success/failure of public policies. Students learn how to evaluate, acquiring skills that could be applied to any policy area. Topics include choice of goals, identification of measures, collection of data, interpretation of data and use of an appropriate yardstick of success. Familiarity with statistics not required. Student learning reinforced by use of several case studies of specific evaluations.

Credits: 3

Prerequisite: POLI 120 and POLI 210 and (POLI 200 or STAT 200). Offered: Every other year.

POLI 381 - Urban Politics and Policy

Investigation of the events and processes that have shaped the development and decline of U.S. cities. Topics include the evolution of cities, urban form and design, theories of urban planning, urban politics and governance, urban policy and economics, racial and socioeconomic isolation, urban unrest, and the impact of technology.

Credits: 3

Prerequisite: POLI 120. Offered: Every other year.

POLI 382 - Social Welfare Policy

Examination of the politics and operation of the social welfare system in the United States. Emphasis on a policy analysis of current social welfare issues such as the Social Security crisis, welfare reform, the relationship between welfare and national economic policy, the functions of public welfare versus private charity, and the connections between direct service and social reform.

Credits: 3

Prerequisite: POLI 120 or SOCW 249. Offered: Every year.

POLI 383 - Courts and Social Policy

Examines role of the Supreme Court and other courts in the shaping of public policies in such areas as school systems in desegregation cases, mental hospitals, prisons, and nursing homes. The course will choose from current cases involving major social policy issues such as abortion, prayer in public schools, affirmative action, and capital punishment in order to illustrate the dramatic and controversial role of the courts, especially the Supreme Court, in the shaping of policies in America.

Credits: 3

Prerequisite: POLI 276. Offered: Every other year.

POLI 387 - Environmental Policy

A synthesis of the political, ecological, economic, historical and cultural events and issues shaping U.S. and international environmental policy. A broad range of topics are covered, including environmental history, population growth, the global commons, environmental justice, natural hazards, nuclear growth, the role of business, and regulations governing endangered species and habitats, waste disposal, water and air.

Credits: 3

Prerequisite: ECON 101 or ECON 102 or ECON 201 or ECON 202 or BIOL 111 or BIOL 115 or CHEM 107 or CHEM 113 or CHEM 114 or CHEM 115 or GEO 140 or GEO 141 or GEO 142 or GEO 145 or GEO 148 or GEO 149 or GEO 160 or GEO 165 or GEO 180 or PHYS 101 or

PHYS 111 or PHYS 121 or PHYS 230. Offered: Every other year.

POLI 389 - Topics in Public Policy

Examination in-depth of topics in public policy not falling within any other public policy course. May be taken more than once as topics vary.

Credits: 3

Prerequisite: POLI 120 or POLI 150. Offered: Offered on occasion.

POLI 401 - Washington (D.C.) Seminar

Prior selection required.

Credits: 3

Offered: Every semester.

POLI 402 - Washington (D.C.) Internship

Prior selection required.

Credits: 1-12

Offered: Every semester.

POLI 403 - Independent Study (Washington, D.C.)

Prior selection required.

Credits: 3

Offered: Every semester.

POLI 405 - Independent Study (Albany, N.Y.)

Prior selection required.

Credits: 3

Offered: Every semester.

POLI 406 - Seminar in State Politics - Albany, N.Y.

Prior selection required.

Credits: 3

Offered: Every semester.

POLI 407 - Albany (N.Y.) Internship

Prior selection required.

Credits: 3-12

Offered: Every semester.

POLI 419 - Directed Study: Public Administration

Directed Studies courses are taken for individual work not available in regular courses, according to the field to be studied. Topics determined through prior consultation with instructor.

Credits: 1-3

Prerequisite: POLI 120 and POLI 311. Offered: Offered on occasion.

POLI 429 - Directed Study: American Politics

Directed Studies courses are taken for individual work not available in regular courses, according to the field to be studied. Topics determined through prior consultation with instructor.

Credits: 1-3

Prerequisite: POLI 311 or POLI 313 or POLI 321 or POLI 322 or POLI 323 or POLI 324. Offered: Offered on occasion.

POLI 439 - Directed Study: Comparative Politics

Directed Studies courses are taken for individual work not available in regular courses, according to the field to be studied. Topics determined through prior consultation with instructor.

Credits: 1-3

Prerequisite: POLI 120 and POLI 150 and (POLI 330 or POLI 331 or POLI 332 or POLI 334 or POLI 341 or POLI 344 or POLI 346 or POLI 352 or POLI 354 or POLI 355 or POLI 356). Offered: Offered on occasion.

POLI 440 - Senior Seminar Preparation

This course will prepare students for their senior seminar thesis, which will be written as part of POLI 450. The class will meet every other week. Each student will choose a research question, have it approved, choose a faculty member to supervise the thesis, and begin to review the literature relevant to the chosen topic.

Credits: 1

Offered: Every year.

POLI 449 - Directed Study: Political Economy

Directed Studies courses are taken for individual work not available in regular courses, according to the field to be studied. Topics determined through prior consultation with instructor.

Credits: 1-3

Prerequisite: POLI 120 and POLI 150 and (POLI 334 or POLI 341 or POLI 344 or POLI 346 or POLI 354). Offered: Offered on occasion.

POLI 450 - Capstone Seminar

A capstone seminar requiring Political Science majors to integrate the theoretical, empirical and methodological skills developed by previous course work in the major. Students will complete a research project and present it to the class. The seminar will emphasize the student's research and presentation skills. The course is required of all Political Science majors.

Credits: 3

Offered: Every semester.

POLI 459 - Directed Study: International Politics

Directed Studies courses are taken for individual work not available in regular courses, according to the field to be studied. Topics determined through prior consultation with instructor.

Credits: 1-3

Prerequisite: POLI 120 and POLI 150 and (POLI 341 or POLI 346 or POLI 354 or POLI 355 or POLI 356).

Offered: Offered on occasion.

POLI 469 - Directed Study: Political Theory

Directed Studies courses are taken for individual work not available in regular courses, according to the field to be studied. Topics determined through prior consultation with instructor.

Credits: 1-3

Prerequisite: POLI 120 and POLI 150 and (POLI 360 or POLI 361 or POLI 363 or POLI 365). Offered: Offered on occasion.

POLI 479 - Directed Study: Law

Directed Studies courses are taken for individual work not available in regular courses, according to the field to be studied. Topics determined through prior consultation with instructor.

Credits: 1-3

Prerequisite: POLI 120 and (POLI 276 or POLI 277 or POLI 370 or POLI 371 or POLI 383). Offered: Offered on occasion.

POLI 489 - Directed Study: Public Policy

Directed Studies courses are taken for individual work not available in regular courses, according to the field to be studied. Topics determined through prior consultation with instructor.

Credits: 1-3

Prerequisite: POLI 380 or POLI 381 or POLI 382 or POLI 383 or POLI 387. Offered: Offered on occasion.

POLI 490 - Internship in Local Politics and Government

Assignment to office of county, city, or village administrative official, public service agency, legislator, political party, judge, or attorney. Provides opportunities for testing theories and concepts developed in classroom. Involves full-time work during part of semester.

Credits: 1-9

Offered: Every semester.

POLI 491 - Seminar in Local Politics and Government

Discussion and reporting on selected readings and experiences encountered in internships at local government level, including assessment of roles and/or power position of particular agencies, offices, or departments to which interns are assigned. Also involves writing a research paper.

Credits: 3

Prerequisite: POLI 490. Offered: Every semester.

POLI 492 - Legal Intern

Assignment to law-related office. Provides opportunities for testing theories and concepts developed in classroom. Involves full-time work during part of semester.

Credits: 3-6

Offered: Every year.

POLI 494 - Legal Internship Seminar

Discussion and reporting on selected readings and experiences encountered in legal internships. Also involves writing a research paper.

Credits: 3

Prerequisite: POLI 492. Offered: Offered on occasion.

POLI 495 - Political Science Honors Thesis I

A zero credit course to be taken in the fall of a student's senior year. The purpose of the course is to start a student on a major research paper. It is expected that the student will define their research question, and begin their bibliographic research and/or data collection during the fall semester. Only students admitted by the department to the honors sequence are eligible.

Credits: 0

Offered: Every year.

POLI 496 - Political Science Honors Thesis II

To be taken in the spring semester of a student's senior year. The course will allow the student the time to complete the writing of their research paper. The requirement for the course will be an oral presentation of the student's research presented at a joint student-faculty reception, and a major research paper. The length of the research paper will be at least 45 pages for an analytical or case study, and at least 25 pages for a quantitative research paper. Only students admitted by the department to the honors sequence are eligible.

Credits: 3

Prerequisite: POLI 495. Offered: Every year.

POLI 499 - Directed Study: Political Science

Directed Studies courses are taken for individual work not available in regular courses, according to the field to be studied. Topics determined through prior consultation with instructor.

Credits: 1-3

Prerequisite: POLI 150 and POLI 200 and POLI 210.

Offered: Offered on occasion.

POLI 520 - Civic Education and Engagement

The course covers the evolution and contemporary shape of political knowledge, learning, and civic engagement in American democracy. To be studied is formation and change in political learning, attitudes, values and identities, and the influence of socialization, media, and the cultural and educational environment. Students learn how to gather data, conduct analysis, and report on the state of civic education and engagement through oral presentation, research, and written analysis.

Credits: 3

Offered: Offered on occasion.

POLI 525 - The Presidency and the Law

The course examines the intersection of the presidency, the Congress, and the judiciary under the dictates of the Constitution. Topics covered include: the powers and the weaknesses of the presidency as an institution; the authority of unilateral action; presidential prerogatives; presidential war powers; the relationship between the president and the Congress; the presidency and civil rights and civil liberties; presidential efforts to alter judicial interpretation.

Credits: 3

Offered: Offered on occasion.

POLI 530 - Seminar in Comparative Politics: Western Europe

Intensive cross national comparative study and analysis of the government and politics of several of the states of Western Europe including the United Kingdom, France, Germany and other countries. The course will also examine the growing impact of the European Union on domestic politics and growth of multilayered governance in an era of increasing social change and globalization.

Credits: 3

Offered: Offered on occasion.

POLI 535 - Political Economy of Macro Political Institutions

The course will compare and contrast the macro-institutions of societies. The course will review the theoretical literature, case studies and empirical tests of

the various hypotheses of how macro-political institutions affect public policy and/or protect minority rights.

Credits: 3

Offered: Offered on occasion.

POLI 548 - European Union

The course covers, broadly, six areas: creating the new Europe, institutions and decision-making processes of the European Union (EU), policies of the EU, enlargement, EU in the world, and transatlantic relations.

Credits: 3

Offered: Offered on occasion.

POLI 550 - Seminar in International Politics

The graduate seminar focuses on the nature of foreign policy, the American foreign policy process and the challenges the United States faces abroad.

Credits: 3

Offered: Offered on occasion.

POLI 595 - Special Topics in Political Science

An in-depth examination of selected areas of political science for graduate students. Topics are determined by faculty and student interests and emphasize recent developments in the discipline. Examples of topics may include the following: Public Opinion and Elections, Issues in Constitutional Law, Comparative Political Institutions, The Foundations of Political Parties and Interest Groups, Congressional Delegation of Authority, The Growth of the Executive Branch and Topics in Public Policy.

Credits: 1-6

Offered: Offered on occasion.

POLI 596 - Special Topics in Political Science

An in-depth examination of selected areas of political science for graduate students. Topics are determined by faculty and student interests and emphasize recent developments in the discipline. Examples of topics may include the following: Public Opinion and Elections, Issues in Constitutional Law, Comparative Political Institutions, The Foundations of Political Parties and Interest Groups, Congressional Delegation of Authority, The Growth of the Executive Branch and Topics in Public Policy.

Credits: 1-6

Offered: Offered on occasion.

POLI 599 - Independent Study

The course is intended for individual work at the graduate level in areas where regular courses are unavailable.

Topics determined through prior consultation with instructor.

Credits: 3

Offered: Offered on occasion.

PSY - Psychology

PSY 100 - Freshman Seminar

New Psychology majors will learn about the department and what it has to offer. Career options will be explored and students will be introduced to the faculty. Students also will be made aware of campus resources and taught appropriate study skills.

Credits: 1

Offered: Every year.

PSY 129 - Introduction to Psychology

Basic concepts, methods, and points of view in psychology. Specific topics span the range from biological to personal to social determinants of behavior.

Credits: 3

Offered: Every semester.

PSY 130 - Psychology Laboratory

A series of computer-based laboratories to give the student hands on experience with a variety of phenomena in psychology. After the computer exercise, students discuss findings, implications, and applications in small groups. Attendance is required. PSY 129 must be taken at the same time, or must have been successfully completed in a previous semester. The course is considered part of the department's first year experience, therefore, it is taken by all majors who enter the program with under 30 hours of undergraduate coursework completed.

Credits: 1

Prerequisite: PSY 129*. Cross-Listed as: * Indicates that the course can be taken in the same semester. Offered: Every semester.

PSY 200 - Statistics

Investigation of basic principles of descriptive and inferential statistics used in the social sciences. A sample of the topics covered includes probability, hypothesis testing (e.g., t-tests, analysis of variance, non-parametrics), correlation and regression. Both raw score formulas and computer software are employed for computational purposes.

Credits: 3

Offered: Every semester.

PSY 210 - Research Methods

Introduction to various research methodologies employed in the social sciences ranging from observational through experimental research. Students are familiarized with basic principles of research design, data collection, data analysis, and manuscript preparation (APA format).

Credits: 4

Prerequisite: PSY 129 and PSY 200. Offered: Every semester.

PSY 227 - Applied Psychology

Discussion of emerging areas in psychology and the application of psychological principles to real-world settings. Focus on relationship between psychology and various other areas, such as law, medicine, business, and mental health.

Credits: 3

Prerequisite: PSY 129. Offered: Every other year.

PSY 237 - Sport Psychology

An introduction to the basic concepts, principles, and techniques employed in the field of sport psychology. Major topics include research methods, behavioral principles, personality and assessment, the social psychology of sport, the coach, exercise psychology, youth sport, the female athlete, the minority athlete and ethical issues.

Credits: 3

Prerequisite: PSY 129. Offered: Every year.

PSY 238 - Performance Enhancement

An applied course for students interested in developing key psychological skills with the goal of performance enhancement. Especially recommended and designed for students in performance-related majors; e.g., sports, music, theatre, dance, etc. The course will teach mental skills such as focus/concentration, emotional control, arousal management, visualization, and goal setting. It also addresses special issues such as overcoming obstacles, building self-confidence, dealing with performance anxiety, and performance-related group issues.

Credits: 3

Prerequisite: PSY 129. Offered: Every other year.

PSY 244 - Cognitive Psychology

Examines the mental operations involved in information processing at the conceptual level. Topics include pattern recognition and attention, memory structures and processes, imagery, the interaction of language and thought, the basic thought process of problem-solving, reasoning and decision-making.

Credits: 3

Prerequisite: PSY 129. Offered: Every semester.

PSY 245 - Social Psychology

Introduction to interpersonal behavior. Topics include attraction, prejudice and discrimination, attitudes, social influence, aggression, social perception, and group behavior.

Credits: 3

Prerequisite: PSY 129. Offered: Every semester.

PSY 246 - Personality

Biological and social determinants of personality and its development. Methods of studying personality.

Credits: 3

Prerequisite: PSY 129. Offered: Every year.

PSY 247 - Health Psychology

Explores the role of psychological factors in the prevention of illness and maintenance of good health, the treatment of already existing illness, and the recovery from or adjustment to ongoing illness.

Credits: 3

Prerequisite: PSY 129. Offered: Every other year.

PSY 255 - Psychology of Women

An examination of the biological, psychological and sociological factors that shape women's lives. Attention to the intersection of gender with ethnicity, sexual orientation, and social class. Specific topics include theories of gender development, images of women in the media, work, childbirth and motherhood, violence, and physical and mental health.

Credits: 3

Prerequisite: PSY 129 or WOST 201. Offered: Every year.

PSY 273 - States of Consciousness

Scientific overview of ordinary consciousness and other states of consciousness including sleep and dreams, meditation, biofeedback, hypnosis, drug-induced states, and parapsychology. The potentials, limitations, and dangers of the various states of consciousness are considered.

Credits: 3

Offered: Every year.

PSY 276 - Human Sexuality

Introduction to theoretical explanations of empirical evidence regarding human sexual behavior. Consideration of reproductive anatomy and physiology; sexually transmitted diseases; sexual attitudes and behaviors throughout the life cycle; contraception; social issues

related to sexuality; sexual dysfunctions; and communication in intimate relationships.

Credits: 3

Prerequisite: PSY 129. Offered: Every other year.

PSY 280 - Special Topics

Special topics in psychology not covered in detail by regular courses and not offered on a regular basis.

Credits: 3

Prerequisite: PSY 129. Offered: Offered on occasion.

PSY 289 - Lifespan Human Development

Survey of human life cycle, covering physical, mental, personality, and social development taking place during different periods (infancy, childhood, adolescence, adulthood). Attention to developmental issues and particular processes operating within and between specific periods (e.g., marriage, parenthood, career, death, and bereavement).

Credits: 3

Prerequisite: PSY 129. Offered: Offered on occasion.

PSY 291 - Psychology of Religion

Introduction to the major issues, theories, and research in the psychology of religion through critical analysis of classical and modern literature from Western and Eastern cultures. Topics discussed will help illuminate the role of religion as a powerful meaning system that can affect the lives of individuals in terms of their beliefs, motivations, emotions and behaviors.

Credits: 3

Prerequisite: PSY 129. Offered: Every other year.

PSY 300 - Intermediate Statistics

Application of statistical concepts to experimental design in psychological research.

Credits: 3

Prerequisite: PSY 200. Offered: Offered on occasion.

PSY 310 - Advanced Research Methods

In-depth examination of various methodologies employed in psychology, including factorial design.

Credits: 3

Prerequisite: PSY 210. Offered: Every other year.

PSY 317 - Tests and Measurements

Introduction to the principles of testing including reliability and validity. The nature and application of different types of tests (measures of achievement, aptitude, intelligence,

personality, and interests) are discussed. Both occupational and educational testing are covered.

Credits: 3

Prerequisite: PSY 129 and PSY 200. Offered: Every other year.

PSY 328 - Positive Psychology

Positive Psychology focuses on human strengths and positive outcomes. Research on positive psychological states such as optimism, hope, wisdom, courage, mindfulness, flow, and self-efficacy will be presented. We will consider how empathy, gratitude, and forgiveness contribute to positive interpersonal relations; and how our educational system, sense of community, and institutional priorities can contribute to our self-fulfillment.

Credits: 3

Prerequisite: PSY 129. Offered: Every year.

PSY 342 - Perception

An investigation of the mental operations involved in the process of obtaining information from one's everyday environment and constructing the psychological representations that form the basis of the capacity to adapt to that environment. Topics include the perception of space, motion, and form; perceptual constancies; perceptual organization; attention and search; learning and development.

Credits: 3

Prerequisite: PSY 129. Offered: Every semester.

PSY 344 - Psychology of Language

The study of human language and thought processes. The course covers the following topics: speech perception, the role of memory systems in processing sentences and storing knowledge, the development of the language rule system in children, the influence of mother's language on the acquisition process, and second language acquisition.

Credits: 3

Prerequisite: PSY 129. Offered: Every other year.

PSY 347 - Organizational Psychology

Examination of the dynamic nature of interpersonal behavior within an organizational context. Topics include motivation, group processes, leadership, stress, decision-making, and communication. Personnel matters including selection, training, and appraisal are discussed.

Credits: 3

Prerequisite: PSY 129. Offered: Every other year.

PSY 349 - Child Psychology

A review of research findings and normative data pertaining to children in such areas as perception, learning, cognition, and personality.

Credits: 3

Prerequisite: PSY 129. Offered: Every year.

PSY 351 - Physiological Psychology

Study of physiological basis of behavior.

Credits: 3

Prerequisite: PSY 129. Offered: Every semester.

PSY 355 - Group Dynamics

Analysis and evaluation of concepts, hypotheses, techniques, and research in group dynamics.

Credits: 3

Prerequisite: PSY 129. Offered: Every other year.

PSY 356 - Abnormal Psychology

Introduction to psychological disorders, focusing on theoretical approaches to conceptualizing abnormal behavior and current research regarding the symptomatology, etiology, and treatment of disorders. Methods of assessment and diagnosis of mental disorders will also be examined.

Credits: 3

Prerequisite: PSY 129. Offered: Every semester.

PSY 358 - Psychology and the Law

An examination of the legal system through the use of psychological concepts, methods, and research results. Controversial legal issues will be examined. Topics will include theories of crime, forensic assessment, the insanity defense, the trial process, and the impact of gender and ethnicity. Influential cases will be analyzed from a psychological perspective.

Credits: 3

Prerequisite: PSY 129. Offered: Every year.

PSY 361 - Cognitive Neuroscience

Cognitive neuroscience is the study of the biology of the mind. The disciplines of cognitive psychology, behavioral neurology, and neuroscience, have combined to form this relatively new field. The course will address the neural bases of cognition including topics such as perception, attention, memory, language, cerebral lateralization and specialization, motor control and development.

Credits: 3

Prerequisite: PSY 129. Offered: Every year.

PSY 364 - Cognitive Development

A study of the conceptual changes which occur during childhood. Topics include theories of cognitive development, infant perceptual capabilities, the evolution of representations, memory systems, language acquisition, and reasoning. Focus is on current research and theory.

Credits: 3

Prerequisite: PSY 129. Offered: Every year.

PSY 365 - Social Development

Explores the process of socialization. Theories and research relating to social development in areas such as achievement, self-concept, aggression, altruism, and gender roles are covered. Emphasis on the impact of and linkage between various socialization agents (e.g., parents, peers, and school). Social issues (e.g., divorce, drug abuse, etc.) and intervention programs will be considered.

Credits: 3

Prerequisite: PSY 129. Offered: Every year.

PSY 366 - Psychology of Adulthood

Examination of data and theory having to do with psychological issues of importance in adult development (perception, cognition, identity, intimacy, socialization, life phases, etc.), and implications of these for adults and those working with them.

Credits: 3

Prerequisite: PSY 129. Offered: Offered on occasion.

PSY 370 - Cross-Cultural Psychology

An introduction to psychological theory and research from the perspective of other cultures. Investigates the origins of psychological thought and overviews the development of the discipline in various historical and political contexts. Focus will vary from semester to semester depending upon instructor.

Credits: 3

Prerequisite: PSY 129. Offered: Every year.

PSY 373 - Human Factors

The study of how humans perceive, think about, and interact with technology and machines. Includes evaluating human performance with technological systems, and designing such systems for reducing human error.

Credits: 3

Prerequisite: PSY 129. Offered: Every year.

PSY 379 - Child Psychopathology

An introduction to the assessment, diagnosis, and treatment of abnormal behavior in children and adolescents, with

consideration of variability in symptomatology and treatment as a function of developmental status.

Credits: 3

Prerequisite: PSY 356. Offered: Every year.

PSY 380 - Special Topics

Special topics in psychology not covered in detail by regular courses and not offered on a regular basis.

Credits: 3

Prerequisite: PSY 129. Offered: Offered on occasion.

PSY 391 - Multicultural Counseling

The course will focus on the effects of culture on the nature and behavior of individuals, their adaptations to institutions and environments, and their relations within and outside of their culture. The impact of concepts like ethnocentrism, stereotypes, racism and prejudice will be explored in-depth to help students understand how they are ever-present, especially during the counseling process. Issues relevant to providing effective multicultural counseling will be explored from a theoretical perspective. The course will provide a solid foundation for an applied course in multicultural counseling at the graduate level.

Credits: 3

Prerequisite: PSY 129. Offered: Every other year.

PSY 429 - History and Systems of Psychology

An examination of the ideas, people, and historical contexts that have shaped psychology. Psychology will be explored as an outgrowth of philosophy and the natural sciences that have undergone major shifts in definition, methods, and focus. Special attention is given to the development, progression, and decline of schools of thought such as radical behaviorism and psychoanalysis.

Credits: 3

Prerequisite: PSY 210. Offered: Every year.

PSY 430 - Theories of Psychology

A discussion of the principles, assumptions, construction, and application of various theories of human behavior.

Credits: 3

Prerequisite: PSY 210. Offered: Every year.

PSY 439 - Senior Honors Seminar

In-depth analysis of selected topics.

Credits: 3

Prerequisite: PSY 210. Offered: Every year.

PSY 445 - Seminar in Social Psychology

In-depth exploration of a specific topic in Social Psychology. Topics covered will vary with the instructor, e.g., Psychology of Ethnicity, Leadership and Achievement, Social Cognition and Attribution Processes, Intimate Relationships, Prejudice and Discrimination.

Credits: 3

Prerequisite: PSY 210 and PSY 245. Offered: Every other year.

PSY 447 - Introduction to Counseling

Provides an overview to the fields of counseling and clinical psychology, focusing on current theoretical approaches to conducting psychotherapy and counseling, assessment tools and techniques used in the fields of clinical and counseling psychology, and the basic skills (e.g., interviewing, problem-solving, active listening) used in counseling interventions with clients. Abnormal Psychology is a recommended prerequisite.

Credits: 3

Prerequisite: PSY 129. Offered: Every semester.

PSY 454 - Theories of Memory

In-depth exploration of several theoretical approaches to the study of human memory. Past, present, and future implications of the theories will be evaluated and discussed.

Credits: 3

Prerequisite: PSY 210 and (PSY 244 or PSY 364).
Offered: Every year.

PSY 458 - Practicum in Teaching

With supervision, learning assistants (LAs) experience various aspects of teaching including class preparation, leading discussions, and student evaluation. Each LA is responsible for sections of PSY 130 Psychology Laboratory.

Credits: 3

Prerequisite: PSY 210. Offered: Every semester.

PSY 479 - Internship in Psychology

A number of internships are available to psychology students. These vary in setting but all involve work under supervision in a community setting. Students should see the department internship director for a description of internships available.

Credits: 1-6

Offered: Every semester.

PSY 489 - Independent Study

Individual student research conducted under guidance of selected instructors, with permission of instructor.

Credits: 1-3

Offered: Every semester.

PSY 510 - Contemporary Issues in Psychology

Critical review of recent contributions to the field, including topics such as motivation, learning, personality, perception, and social influence.

Credits: 3

Offered: Offered on occasion.

PSY 546 - Classroom Expectancy Effects

The formation and impact of expectancies will be discussed. Research in both psychology and education will be presented. The creation of self fulfilling prophecies and their effect on student achievement will be emphasized. (Cross-listed as EDU 582.)

Credits: 3

Offered: Every year.

PSY 550 - Studies in Psychology

Exploration in-depth of selected topics in psychology. Major focus varies from semester to semester.

Credits: 1-3

Offered: Offered on occasion.

PSY 570 - Japanese Culture and Education

The course overviews the Japanese educational system and Japanese educational psychology. Historical influences on Japanese educational values are considered. An in-depth examination of the nature of typical Japanese schools at all levels of compulsory education is included. Unique educational approaches, such as juku and kumon, are reviewed. (Cross-listed as EDU 581.)

Credits: 3

Offered: Every year.

RUSS - Russian**RUSS 115 - Elementary Russian I**

Designed for students with no previous preparation. Study of fundamental speech patterns in Russian. Initial emphasis on developing listening comprehension, speaking skills, including pronunciation, with progressive emphasis on reading and writing skills.

Credits: 3

Offered: Offered on occasion.

RUSS 116 - Elementary Russian II

Continuation of RUSS 115. Further introduction to fundamental speech patterns. For students with one semester of college level Russian or equivalent. Stress on listening comprehension, oral ability, reading, and writing skills.

Credits: 3

Prerequisite: RUSS 115. Offered: Offered on occasion.

SCED - Science Education**SCED 105 - Nature of Science and Science Education**

The course provides an introduction to planning, teaching styles, classroom management, and instructional materials for the secondary classroom. It will also examine the history and foundations of education and the roles of school staff, students, parents and the community in student learning. In addition, the course will prepare (7-12) science teachers to have knowledge and skills in order to accurately represent what scientists do, how scientific knowledge is produced and debated, and what are the limits to scientific inquiry. Direct experiences with children are an integral part of the course via the field component, SCED 106.

Credits: 3

Corequisite: SCED 106. Offered: Every year.

SCED 106 - Nature of Science Education Field Experience

The course is the field component to SCED 105 and provides candidates the opportunity to gain experience teaching the nature of science in 7-12 classroom.

Credits: 0

Corequisite: SCED 105. Offered: Every year.

SCED 276 - Literacy and Technology for Science and Mathematics

The course provides an overview of the processes involved in literacy acquisition and instructional technologies available to enhance teaching in science and mathematics. The relationship of reading and writing, and aspects of writing development and writing process appropriate to each stage of reading development will be presented. Topics: conceptual and methodological issues related to instruction and acquisition of reading, the role and use of technology in literacy instruction, assessment of candidate's reading and writing, diversity in reading acquisition, and use of computers, graphing calculators and other multimedia applications.

Credits: 3

Offered: Every Spring Semester.

SCED 303 - Assessment for Inquiry-Based Science

Different models of evaluation and various techniques used in the assessment of science knowledge and skills will be developed. Examples and procedures directly related to the teaching of inquiry-based science will be stressed. The course will introduce students to action research, a form of self-reflective systematic inquiry by practitioners on their own practice.

Credits: 3

Prerequisite: SCED 105 and SCED 106 or (EDU 105 and EDU 106). Offered: Every year.

SCED 305 - Diversity in the Teaching of Science and Mathematics

The course provides a theoretical framework for exploring and developing a culturally responsive approach to the teaching of mathematics and sciences. In exploring different instructional formats, the course allows candidates to develop approaches that prepare them for an ever-increasing population of students that reflect diverse backgrounds and abilities. The field experience is a co-requisite that allows the candidates the opportunity to apply their knowledge on the issues presented in the course work to a diverse population.

Credits: 3

Prerequisite: SCED 105. Corequisite: SCED 313. Offered: Every year.

SCED 313 - Diversity in Teaching Math and Science Field Experience

The course is the field component to SCED 305. Candidates will use different instructional formats to develop effective approaches for teaching science and math to students with different backgrounds and abilities in diverse educational learning environments.

Credits: 0

Corequisite: SCED 305. Offered: Every Fall semester.

SCED 419 - Adolescence Science Methods

The course is an active inquiry into how and why science is taught, considering from what science is, how science literacy could be achieved, what "learning" entails, and what kinds of curricula and teaching best enable science learning.

Credits: 3

Offered: Every year.

SCED 491 - Special Topics in Science Education

Courses which are interdisciplinary in science and education. Titles and topics will vary each semester based on instructor and student interest.

Credits: 3

Offered: Every year.

SCED 510 - Nature in the School Curriculum

Students will focus on using the local environment as a unifying theme for interdisciplinary learning at all grade levels. Field work will predominate. Students will investigate soils, rocks and fossils; plants; animals; and other components of natural systems; and how these factors interact to create ecosystems. Students will write and model lesson plans and accompanying assessments which will address N.Y.S. learning standards.

Credits: 3

Offered: Every year.

SCED 511 - Teaming with Nature

Students learn how to use a one-square-kilometer area surrounding their school as an outdoor laboratory for interdisciplinary learning. Students learn how to keep field journals, read and create maps, do ecological survey, use community resources, and create a plan for interdisciplinary place-based natural and cultural studies linked to their curriculum.

Credits: 3

Offered: Every year.

SCED 512 - Vernal Pool Project

Students will learn how to use a specific component of the local natural environment - vernal pools - in their standards-based curriculum. Students will learn how to keep field journals, read and create maps, identify vernal pool organisms, enter data into the project Website, and become part of a growing community of citizen scientists focused on these unique and threatened ecosystems.

Credits: 3

Offered: Every year.

SCED 540 - The Earth in Space

An examination of how science ideas are constructed in informal and formal social settings. Exemplary science teaching methods will be demonstrated and evaluated. Research focusing on elementary students' formal and naive science understanding concerning the relationships between the Earth, Moon, and the Sun will be investigated in detail.

Credits: 3

Offered: Every other year.

SCED 541 - Electricity and Magnetism

The behavior of simple electronic circuits is examined as a basis for the construction of scientific models, which allow for the prediction and explanation of electrical phenomena.

The course concludes by examining magnetic interactions to develop a model of behavior of magnets and magnetic materials.

Credits: 3

Offered: Every other year.

SCED 542 - Light and Color

An examination of how science ideas are constructed in informal and formal social settings. The course investigates and begins with the investigation of the formation of shadows and images. The course then develops a mental model that helps students account for the behavior of light in the formation of images and the effects of color. Exemplary science teaching methods will be demonstrated and evaluated. Research focusing on elementary students' formal and naive science understanding of light and color will be examined.

Credits: 3

Offered: Every other year.

SCED 543 - Moving Objects

The course studies how motion can be described in terms of the concepts of position, displacement, force and speed. Graphical and algebraic representations are introduced and used to predict and represent the motion of objects.

Credits: 3

Offered: Every other year.

SCED 544 - Properties of Matter

An examination of how science ideas are constructed in informal and formal social settings. The course investigates some basic properties of matter. The course will also develop the concepts of mass, volume, and density and use these in the context of how students explain physical phenomena. The inquiry will be extended to the study of solutions while providing a context for developing the important scientific skills of proportional reasoning, reasoning by analogy, and control of variables.

Credits: 3

Offered: Every other year.

SCED 560 - Foundations of Teaching Science to Adolescent Learners

Participants will develop foundational science teaching knowledge, skills, and reflective dispositions that are characteristic of effective beginning secondary science teachers. The course is an active inquiry into the nature and purposes of teaching science. Participants will strengthen their content knowledge, learn ways to investigate their students' prior ideas in science, and design responsive instruction using inquiry approaches. Participants will develop professional reasoning and dispositions by participating in field experiences,

professional activities in the community and science education organizations. The course is accompanied by a 50-hour field component.

Credits: 3

Offered: Every year.

SCED 561 - Foundations of Teaching Science Field Experience

This course is the field component to SCED 560: Foundations of Teaching of Science, and provides candidates the opportunity to observe teaching in diverse classrooms, and assist teachers with school related tasks, including beginning teaching. Candidates will reflect upon their experiences with reference to learning objectives and materials in SCED 560 and submit weekly reports with analysis. Candidates will spend 1-2 days weekly, or the equivalent in middle and high school classrooms, prior to student teaching. Co-requisite(s): SCED 561 Credits: 1

Credits: 1

Offered: Every Fall semester.

SCED 591 - Special Topics in Science Education

Courses which are interdisciplinary in science and education. Titles and topics will vary each semester based on instructor and student interest.

Credits: 1-3

Offered: Every year.

SCED 600 - Graduate Seminar for Science Teachers

Presentations by students, faculty and visitors on current science teaching practices. Students will engage in professional literature searching, and the preparation and presentation of a professional seminar.

Credits: 1

Offered: Every year.

SCED 660 - Developing Expertise in Science Teaching

Students in the course will use a reflective approach based on research and classroom experiences, to examine three aspects of teacher knowledge that are known to contribute to science teaching expertise: Teachers' knowledge about their subject area, knowledge of student's understandings and preconceptions, and ways teachers design instruction by transforming their subject so that it is accessible to their students. The "teacher as inquirer" disposition will be fostered through the planning of projects to teach problematic concepts and investigate student learning. Developing ways to effectively assess student learning throughout the instructional process will be a focus in the class. A 50-hour field component is also a part of the course.

Credits: 3

Offered: Every year.

SCED 661 - Developing Expertise in Science Teaching Field Experience

This course is the field component to SCED 660 Developing Expertise in Science Teaching, and provides candidates the opportunity to observe teaching in diverse classrooms, and assist teachers with school related tasks, including beginning teaching. Candidates will reflect upon their experiences with reference to learning objectives and materials in SCED 660 and submit weekly reports with analysis. Candidates will spend 1-2 days weekly, or the equivalent in middle and high school classrooms, prior to student teaching. Co-requisite(s): SCED 661 Credits: 1

Credits: 1

Offered: Every Fall semester.

SCED 670 - Student Teaching - Middle School Science

A field assignment to teach middle school science. Assignments provided in grades 5 through 9; arrangements made by the Office of Field Experiences. Open only to students in the MAT Science program.

Credits: 6

Prerequisite: SCED 560 and SCED 660. Corequisite: SCED 680. Offered: Every year.

SCED 671 - Student Teaching - Secondary School Science

A field assignment to teach secondary school science. Assignments provided in grades 7 through 12; arrangements made by the Office of Field Experiences. Open only to students in the M.A.T. Science program.

Credits: 6

Prerequisite: SCED 560 and SCED 660. Corequisite: SCED 680. Offered: Every year.

SCED 680 - Inquiry into Science Teaching in Context

This seminar, which accompanies student teaching, is designed to provide the support necessary to apply and develop professional competencies while working with students and educators in the school setting. In this context, participants will have the opportunity to analyze student learning through action research projects, engage in collaborative problem solving with colleagues, and strengthen professional dispositions. Using classroom experiences as a focus, the class will use collaborative reflection, theories and research to frame new understandings of expertise in science teaching.

Credits: 3

Prerequisite: SCED 560 and SCED 660. Corequisite: SCED 670 or SCED 671. Offered: Every year.

SCED 690 - Graduate Research Project in Science Learning

Students will design, implement and analyze a research project concerning science learning in a 7-12 classroom. This will include an oral research proposal, written thesis and oral defense.

Credits: 3

Offered: Every year.

SCI - Science**SCI 301 - Essential Science I**

In-depth focus on key concepts in the areas of chemistry and physics. Application of these concepts to real world situations are emphasized.

Credits: 3

Offered: Every semester.

SCI 302 - Essential Science Lab

Designed for hands-on exploration of everyday phenomena, the laboratory engages students in experiments from biology, chemistry, geology and physics. Most of the experiments are interdisciplinary in nature. The students will plan and execute experiments and then evaluate their data and document their conclusions. Evaluation will be based on laboratory notebook, written lab reports and oral presentation of experimental results

Credits: 1

Offered: Every semester.

SCI 303 - Essential Science II

In-depth focus on key concepts in the areas of biology and geology. Applications of these concepts to real world situations are emphasized.

Credits: 3

Offered: Every semester.

SCI 325 - Science Teaching Assistantship

The course is designed to provide science education majors with science teaching experience guided by science faculty. Students will assist in curriculum development, preparation and instruction for interactive and laboratory experiments in the areas of biology, chemistry, earth science and physics. The students will be learning assistants for SCI 301, 302, and/or 303 and outreach to local schools.

Credits: 1-2

Prerequisite: SCI 301 and SCI 302 and SCI 303. Offered: Every semester.

SCI 491 - Special Topics in Interdisciplinary Science

Courses which are interdisciplinary in science. Titles and topics will vary each semester based on instructor and student interest.

Credits: 1-6

Offered: Every year.

SCI 591 - Special Topics in Interdisciplinary Science

Courses which are interdisciplinary in science. Titles and topics will vary each semester based on instructor and student interest.

Credits: 3

Offered: Every year.

SDEG - Time Shortened Degree**SDEG 100 - Humanities**

Advanced English 12 class taken by students in the 3-1-3 Program. A year-long writing intensive course that provides a survey of western literary texts.

Credits: 3-6

Offered: Every year.

SDEG 102 - Chemistry

Students from specific area high schools earn general education credits for fourth year high school Chemistry. Students must pass the Regents or earn a C or better if non-Regents. For specific course description, contact 3-1-3 Program (Fourth Floor Reed Library (716) 673-3550).

Credits: 3-6

Offered: Every year.

SEN - Seneca**SEN 115 - Elementary Seneca I**

For students with no previous preparation. Study of fundamentals of speech patterns. Initial stress on listening comprehension and oral ability. Progressively greater emphasis on reading and writing skills.

Credits: 3

Offered: Offered on occasion.

SOC - Sociology**SOC 116 - Introductory Sociology**

The methods, insights, and perspectives of sociology; how sociologists do their work; how individuals are influenced by society and culture; how people learn to become members of society (the socialization process), and how

people interact with others in it. Review of major topics of sociological interest and concern.

Credits: 3

Offered: Every semester.

SOC 160 - Special Topics

A course covering material not covered by existing courses. Offered on an occasional basis.

Credits: 3

Offered: Offered on occasion.

SOC 200 - Social Statistics

An introduction to the place of statistics in the research process; develops understanding of statistics as a valuable tool in analyzing data. Deals with probability, sampling, tables, graphs, averages, measure of variation, measures of association, tests of significance, and multivariate statistics. Special emphasis given to analysis of survey data using computers. Note: Credit for at most one of the following courses may be applied towards a student's requirements for graduation: BUAD 200, ECON 200, EDU 200, POLI 200, SOC 200, and STAT 200.

Credits: 3

Prerequisite: SOC 116. Offered: Every semester.

SOC 201 - Social Problems

Review of the causes, nature, dynamics, and modes of alleviating some major social problems in contemporary U.S. Among the problems which may be reviewed are poverty, deviance, crime and delinquency, discrimination (racism, sexism, ageism), ecological-environmental threats, and over population, as well as problems of vital institutions (familial, medical, political, economic).

Credits: 3

Prerequisite: SOC 116. Offered: Every other year.

SOC 202 - Social Analysis

Seeks to orient students toward a broad range of social phenomena in such a way that they can begin to systematically question, analyze, and articulate a sociological point of view.

Credits: 3

Prerequisite: SOC 116. Offered: Every semester.

SOC 204 - Social Psychology

The forms of social interaction that relate people to each other in everyday life and the consequences for individuals of their social experiences. Theoretical models applied and evaluated for their explanatory power in illuminating such issues as socialization into roles, attitude formation, development of self concept, conflict resolution, etc.

Credits: 3

Prerequisite: SOC 116. Offered: Offered on occasion.

SOC 215 - Introduction to Public Health

Public Health is an interdisciplinary field concerned with the physical, mental and environmental health concerns of communities and populations at risk for disease and injury. Topics examined in this course include "traditional public health" issues: infectious and chronic diseases, injuries, diet, maternal/child health and threats to the natural environment. The course will also examine "newer public health" concerns including bioterrorism/superterrorism, human-generated and natural disasters, risk communication, and public health hoaxes.

Credits: 3

Offered: Every year.

SOC 218 - Introduction to Social Work

Introduction to theoretical and practical foundations of social work. Examination of values, knowledge, and skills underlying a generalist approach to social work. Analysis of role of social workers in such settings as hospitals, schools, mental health agencies, and family and child welfare agencies.

Credits: 3

Prerequisite: SOC 116. Offered: Every year.

SOC 240 - Health and Society

Examines the social psychology of health and illness, social epidemiology and the social correlates of illness, and the organization of health care, including the doctor-patient relationship, the health professionals, and health institutions.

Credits: 3

Prerequisite: SOC 116. Offered: Offered on occasion.

SOC 272 - Exploring Community-Based Social Work

Explores how communities and the social work profession respond to social problems. Traditional classroom-based learning is combined with service learning activities to increase student knowledge of the social service delivery system.

Credits: 3

Prerequisite: SOC 218. Offered: Every year.

SOC 275 - Social Inequalities

This class addresses the complexity and interactions of contemporary social inequality, as contemporary societies are stratified by a combination of social class, race/ethnicity, gender, and sexuality. Marginalized social groups construct moral systems to define dignity, a sense of worth, and social status. They display agency by

challenging dominant regimes. Students will learn about social inequalities from a national and a global perspective, and explore how marginalized groups mobilize for rights and social equality.

Credits: 3

Prerequisite: SOC 116. Offered: Every year.

SOC 300 - Research Methods

A course concerned with knowing; emphasis is placed on the evaluation of information and the research process: conceptualization, design, measurement, and data collections methods of survey, experiment and observation are discussed.

Credits: 3

Prerequisite: SOC 116 and (SOC 200 or BUAD 200 or ECON 200 or EDU 200 or POLI 200 or PSY 200 or STAT 200). Offered: Every semester.

SOC 303 - Social Class and Inequality

Examines the sources, forms, and consequences of social inequality, with major emphasis on social stratification in the United States. Emphasis on social class, but also includes racial and ethnic stratification, and gender inequality. Also analyses on debate over the inevitability of inequality, and examines related issues in social policy.

Credits: 3

Prerequisite: SOC 116. Offered: Every year.

SOC 306 - Sex and Gender

Description and analysis of sex and gender roles and relationships from a variety of societies at different levels of socio-cultural complexity. Note: Also listed as ANTH 300 and WOST 302.

Credits: 3

Prerequisite: SOC 116 or ANTH 115 or ANTH 219.
Offered: Every semester.

SOC 310 - Sociology of Deviant Behavior

Covers theoretical and empirical issues in the sociological understanding of deviant behavior. Research studies of several forms of career deviance analyzed and critiqued: suicide, skid row, addiction, prostitution, homosexuality, mental illness, physical handicaps.

Credits: 3

Prerequisite: SOC 116. Offered: Every other year.

SOC 311 - Sociology of Addiction

Examination of all that behavior which has come to be identified as addiction including tobacco smoking, alcoholism, substance abuse, eating disorders and gambling. An analysis of competing theories of addiction

and treatment. The political, economic and social ramifications of addiction control.

Credits: 3

Prerequisite: SOC 116. Offered: Offered on occasion.

SOC 312 - Plagues and Peoples

The course explores the impact of disease on human populations in terms of demographic, cultural and social changes. The rise of health care delivery systems is addressed as a response to epidemics. Examples include the bubonic plague of the 14th and 17th centuries, cholera, influenza, polio and AIDS. Note: Also listed as ANTH 301.

Credits: 3

Prerequisite: SOC 116 or ANTH 115. Offered: Every year.

SOC 316 - Minority Groups

Study of discrimination against ethnic groups (race, religion, national origins); major groupings within the U.S. such as blacks, Jews, Native Americans, Hispanics, and Asian Americans. Ethnic relations in countries throughout the world, with an emphasis on the impact of colonialism on ethnic relations.

Credits: 3

Prerequisite: SOC 116. Offered: Every year.

SOC 320 - Family Sociology

Overview of sociological perspectives on the family; emphasis on current state of the family in society. Topics include premarital sexual behavior and attitudes; dynamics of mate selection; marriage as an institution; marriage and sex roles; family dynamics (parenthood, childhood, family politics, violence in the family, divorce, etc.); marriage and the family as a subjective reality; alternative family forms; and the future of the family. Relationship between family and other social institutions.

Credits: 3

Prerequisite: SOC 116. Offered: Every year.

SOC 321 - Population and Society

An introduction to social demography, the course provides an overview of the three basic demographic processes: fertility, mortality, and migration. It evaluates the relationships among these population processes and their interaction with population structures and characteristics, such as age, sex, marital status, race/ethnicity, social class and religion. It also examines contemporary social issues associated with the population processes, including equality, aging, urbanization, women and household structure, economic development and environmental concerns.

Credits: 3

Prerequisite: SOC 116. Offered: Every year.

SOC 331 - Anthropology of American Utopias

An examination of the background conditions producing utopias and an ethnographic/historical analysis of selected utopian ventures (e.g. Amish, Shakers, Counterculture Communes).

Credits: 3

Prerequisite: ANTH 115 or ANTH 219 or SOC 116 or HIST 105 or HIST 106. Offered: Every other year.

SOC 335 - Sociology of Sport

Introduction to sport as a social institution; social function of sport; sport and culture, schools, and socialization; sport and women, race, and ethnic groups; sport and mass media; sport and stratification and social change.

Credits: 3

Prerequisite: SOC 116. Offered: Every year.

SOC 337 - Sociology of Aging

In-depth overview of social gerontology, focusing on aging in modern societies. How major institutional changes affect the aged. Review of major problems: status as a minority, retirement adjustment, income, social attitude towards the aged, kinship and other roles.

Credits: 3

Prerequisite: SOC 116. Offered: Offered on occasion.

SOC 338 - Sociology of Death and Dying

Examines the growing body of sociological and social psychological literature on humankind's last major status passage. Institutions which structure death are considered and the processes accompanying dying are investigated. Cross-cultural as well as American death phenomena are included.

Credits: 3

Prerequisite: SOC 116. Offered: Offered on occasion.

SOC 340 - Medical Sociology

Examines the social psychology of health and illness, social epidemiology and the social correlates of illness, and the organization of health care, including the doctor-patient relationship, the health professionals, and health institutions.

Credits: 3

Prerequisite: SOC 116. Offered: Every year.

SOC 342 - Food and Culture

This course offers a critical look at the role of foodways in human prehistory, history, and contemporary life. Food is examined as an integral part of culture in terms of creating

social bonds, identity, economies, and political systems. These issues are explored through diverse topics such as gender, food taboos, ethnicity, industrialization, human health, and the environment. The course includes discussion of attempts to address problems related to food by looking at policy, technologies, and movements towards sustainable food systems.

Credits: 3

Prerequisite: ANTH 115 or ANTH 219 or SOC 116. Offered: Every year.

SOC 345 - Women, Health and Society

Examines ways in which health and illness for women are defined and managed. Topics include the medicalization of pregnancy and birth, adolescence and sexuality, addiction, mental health, menopause, body image, and, women as health care providers.

Credits: 3

Prerequisite: SOC 116. Offered: Every year.

SOC 350 - Special Topics

Special topics in sociology not covered in detail by regular courses and not offered on a regular basis.

Credits: 1-3

Prerequisite: SOC 116. Offered: Offered on occasion.

SOC 361 - Law in the World

Compares criminal law and justice systems of a variety of contemporary societies. Details characteristics of common law, civil law, and socialist law legal systems as contexts to explore the practices of specific countries. Examines crime patterns across countries.

Credits: 3

Prerequisite: SOC 116. Offered: Every other year.

SOC 363 - Victimology

Introduction to the study of victim-criminal relationships. Issues of conceptual and empirical interest covered include: history of the status of victims of crime in Western criminal justice systems; sociological characteristics of victims; victim-risk; victim-precipitated crimes; and victim compensation programs.

Credits: 3

Prerequisite: SOC 116. Offered: Every other year.

SOC 364 - Juvenile Delinquency

An examination of delinquent behavior and its distribution in society. Topical issues discussed include the juvenile justice system, theories of delinquency, and methods of social control of this behavior.

Credits: 3

Prerequisite: SOC 116. Offered: Every other year.

SOC 365 - Family Violence

The variety of forms of family violence child abuse, partner abuse, and elder abuse are examined with regard to its range and scope as well as legal and cultural issues. Explanations of and societal responses to the phenomena are detailed and evaluated. Junior standing required.

Credits: 3

Prerequisite: SOC 116. Offered: Offered on occasion.

SOC 380 - Sociological Theory

The evolution of sociological theory is traced from the traditions established by Marx, Durkheim, Weber, and Mead through contemporary phenomenological, critical, feminist, postmodern, and late modern schools of thought in order to understand the different assumptions and claims about what human beings are like, what society is, and what society can know about the two that have arisen in different social contexts.

Credits: 3

Prerequisite: SOC 116 and SOC 202. Offered: Every year.

SOC 400 - Senior Seminar

A capstone course required for senior sociology majors designed to provide the opportunity to engage in an intensive examination of a topic of broad and enduring social and sociological significance. The topic will be of sufficient breadth to raise theoretical, methodological, and substantive issues, some of which may have been already encountered in other courses. The seminar format and the senior status of its members will provide a context in which these issues can be examined in greater depth and integrated into a more developed and coherent sociological perspective through extensive reading and writing. The seminar format also demands that students assume greater responsibilities for their own learning and that of their fellow members.

Credits: 3

Prerequisite: SOC 116. Offered: Every year.

SOC 415 - Seminar in Public Health

In-depth exploration of selected topics in public health, with special emphasis on epidemiological investigations and applications. Major focus varies from semester to semester depending on interests of students and instructor. The general goal of the course is to help students (a) further develop their skills in epidemiology, the science of public health; and (b) integrate course topics and themes from disciplines comprising the Public Health minor, so that they can use this knowledge to explore jobs, careers and graduate education in public health. Students must have completed 15 hours of course work in the Public

Health minor, including Introduction to Public Health. Permission of instructor required.

Credits: 1

Offered: Every year.

SOC 470 - Directed Study

One to 3 credit hours of credit for individualized study under guidance of a member of the faculty. Permission of instructor.

Credits: 1-6

Offered: Every semester.

SOC 472 - Sociology Internship

Supervised placement with a public or private organization. A limited number of opportunities to observe and participate in sociology-related endeavors in the workplace. Permission of department.

Credits: 1-15

Prerequisite: SOC 116. Offered: Every semester.

SOCW - Social Work

SOCW 249 - Social Welfare Institutions

Introduces students to the basic public and private sector mechanisms of social welfare policy and services through the lens of history. The importance of values/attitudes/beliefs in the political process and the concept of social justice are analyzed. The development of the social work profession is featured.

Credits: 3

Prerequisite: SOC 116 or SOC 218 or POLI 120. Offered: Every year.

SOCW 315 - Child Welfare

A survey of the child welfare field of practice. Emphasis is on services provided to children and their families and the local, national, and state policies that guide them.

Credits: 3

Prerequisite: SOC 116 or SOC 218. Offered: Every other year.

SOCW 325 - Foundations of Generalist Practice

The first of four sequenced social work practice courses in which students learn generalist social work practice theory and method. In-depth presentation and study of the foundation layers of knowledge needed to implement generalist problem-solving within and between micro, mezzo and macro systems. Advanced status required.

Credits: 3

Offered: Every year.

SOCW 340 - Human Behavior in Social Environment I

Introduces theory and knowledge used in the person-in-environment perspective to prepare a foundation on which to build generalist practice skills. A focus on systems theory approach will lead to an understanding of how the biological, psychological, and social systems are interrelated and affect human development throughout the lifespan. Advanced status required.

Credits: 3

Prerequisite: BIOL 110*. Corequisite: SOCW 325. Cross-Listed as: * Indicates that the course can be taken in the same semester. Offered: Every year.

SOCW 341 - Human Behavior in Social Environment II

Builds on the knowledge and theory learned in Human Behavior in Social Environment I. A combination of social systems and life span theoretical frameworks will continue to be utilized to provide a foundation for understanding human behavior from middle adulthood through late adulthood.

Credits: 3

Prerequisite: SOCW 340. Offered: Every year.

SOCW 370 - Generalist Practice Skills

Second course in the social work course practice sequence builds on SOCW 325. Focus is on the skills needed to implement the generalist problem solving method within and between micro, mezzo and macro systems.

Credits: 3

Prerequisite: SOCW 325. Offered: Every year.

SOCW 390 - Practice with Individuals, Families and Small Groups

The third practice methods course challenges the students to increase their generalist problem-solving, communication, assessment, and intervention skills with multiple systems. The Monitoring and Evaluation stage of generalist problem solving is highlighted.

Credits: 3

Prerequisite: SOCW 340 and SOCW 341 and SOCW 370. Corequisite: SOCW 480 or SOCW 485. Offered: Every year.

SOCW 399 - Selected Topics

Variable-content course; topic will be announced in the online Course Offerings each semester offered.

Credits: 3

Offered: Every semester.

SOCW 400 - Practice with Organizations and Larger Social Systems

This final course in the practice sequence builds on all the preceding practice courses with a specific focus on indirect practice. The content and activities are designed toward mastery of the skills, values and knowledge competencies needed to work with, and in, organizations, communities, political institutions and global contexts.

Credits: 3

Prerequisite: SOCW 390. Corequisite: SOCW 490 or SOCW 495. Offered: Every year.

SOCW 470 - Directed Study

Individualized study with a social work faculty member. Permission of instructor required.

Credits: 1-3

Offered: Every semester.

SOCW 480 - Field Practicum I

The first semester of a professionally supervised 500 total hour placement in a human services agency. Students are expected to complete 250 hours of direct service to individuals, families, groups or communities and/or other duties expected of a beginning-level social worker during the semester. Students are expected to apply social work theory, knowledge and method to actual cases, identify areas of professional growth, process their experiences, and begin assessing their practice using standard research methods. Social Work majors only.

Credits: 3

Prerequisite: SOCW 325 and SOCW 340 and SOCW 341 and SOCW 370 and SOC 300 and POLI 382. Corequisite: SOCW 390 or SOCW 485. Offered: Every year.

SOCW 485 - Field Practicum I with Seminar

An extension of SOCW 480: Field Practicum I allowing for the sectioning of practicum students into small peer groups for weekly group meetings. Students are divided into sections and assigned faculty field liaisons who assist students develop and implement an individualized professional learning contract for their practicum placements. Weekly meetings are held to analyze issues discovered through the practicum experience. Faculty liaisons monitor and evaluate student performance for the entire practicum experience (SOCW 480 and 485).

Credits: 3

Prerequisite: SOCW 325 and SOCW 370 and SOC 300 and POLI 382. Corequisite: SOCW 390 or SOCW 480. Offered: Every year.

SOCW 490 - Field Practicum II

The continuation of the student's experiential learning at the same agency in which the student was placed in during SOCW 480. Students need to complete 250 or more hours of direct service practice and/or other duties expected of the beginning level social worker.

Credits: 3

Prerequisite: SOCW 480 and SOCW 485 and SOCW 390.
Corequisite: SOCW 495. Offered: Every year.

SOCW 495 - Field Practicum II with Seminar

An extension of SOCW 490: Field Practicum II which allows for the sectioning of practicum students into small peer groups for weekly group meetings. Expectations for student performance increase and new Learning Contracts are constructed and implemented. Weekly meetings focus on the critical assessment of the student's use of skill, knowledge, and theory in their practicum placement. Faculty field liaisons facilitate group meetings and monitor the practicum experience, evaluating student performance for both SOCW 490 and 495.

Credits: 3

Prerequisite: SOCW 480 and SOCW 485. Corequisite: SOCW 490. Offered: Every year.

SPAN - Spanish**SPAN 115 - Introduction to Spanish**

Introduction to the fundamentals of the Spanish language. Emphasis will be given to all four communicative skills: speaking, writing, listening, and reading. Course is designed for students with less than two years of high school Spanish or no background at all. Enrollment by permission of the department.

Credits: 3

Offered: Every semester.

SPAN 116 - Elementary Spanish II

Continuation of SPAN 115. Further introduction to fundamental speech patterns. For students with one semester of college-level Spanish or equivalent. Stress on listening comprehension, oral ability, reading and writing skills.

Credits: 3

Prerequisite: SPAN 115 or NY Regents Spanish Exam Score of an 80 or better. Offered: Every semester.

SPAN 120 - Spanish in Action: Online Component

Provides intensive practice of Spanish vocabulary and grammatical structures. Online activities are self-paced and are required preparation for SPAN 121. Successful completion of SPAN 120 and 121 fulfills the College Core

Curriculum Foreign Language requirement at the proficiency level for students enrolled in programs granting the B.A. degree. For students with two or more years of high school Spanish or equivalent.

Credits: 2

Corequisite: SPAN 121. Offered: Every year.

SPAN 121 - Spanish in Action: In-Class Component

The course builds on the fundamentals of Spanish and applies them to real situations. It is also an introduction to the different Hispanic cultures. It emphasizes communicative skills applying the vocabulary and grammar concepts learned in SPAN 120. Successful completion of SPAN 120 and 121 fulfills the College Core Curriculum Foreign Language requirement at the proficiency level for students enrolled in programs granting the B.A. degree. For students with two or more years of high school Spanish.

Credits: 3

Corequisite: SPAN 120. Offered: Every year.

SPAN 215 - Intermediate Spanish I

Increases proficiency in listening, speaking, reading and writing skills in Spanish. Further development of vocabulary and grammar. Selected cultural and literary readings.

Credits: 3

Prerequisite: SPAN 116 or (SPAN 120 and SPAN 121) or NY Regents Spanish Exam Score of an 85 or better.
Offered: Every semester.

SPAN 216 - Intermediate Spanish II

Development of listening, speaking, reading and writing skills to attain proficiency required for upper level courses in Spanish. Expansion of vocabulary and advanced grammar. Selected cultural and literary readings.

Credits: 3

Prerequisite: SPAN 215. Offered: Every semester.

SPAN 280 - Topics in Spanish Grammar

The mini course provides an in-depth study of a specific topic of Spanish grammar such as past tense, pronouns, use of prepositions, etc. Intensive practice of oral and written skills in Spanish will focus on the grammar topic. Students can repeat course as its content changes.

Credits: 1

Prerequisite: SPAN 216. Offered: Every year.

SPAN 301 - Intensive Spanish Grammar

An in-depth examination and review of grammar categories in Spanish. It will provide extensive oral and written practice.

Credits: 3

Prerequisite: SPAN 216. Offered: Offered on occasion.

SPAN 307 - Special Topics

Topics in Spanish language and literature.

Credits: 3

Prerequisite: SPAN 216. Offered: Offered on occasion.

SPAN 308 - Advanced Spanish Phonetics and Diction

Detailed study of rules of pronunciation and transcription into International Phonetic Alphabet (IPA). Pronunciation drills, exercises in sound discrimination and intonation.

Credits: 3

Prerequisite: SPAN 216. Offered: Every year.

SPAN 313 - Spanish Conversation

Oral-aural drills, conversational exercises to provide practice in understanding and speaking Spanish. Emphasis on improving pronunciation and fluency.

Credits: 3

Prerequisite: SPAN 216. Offered: Every semester.

SPAN 314 - Spanish Composition

Writing colloquial and formal Spanish. Translations and free compositions.

Credits: 3

Prerequisite: SPAN 216. Offered: Every year.

SPAN 315 - Introduction to Readings in Hispanic Literature

A study of literary works in the Spanish language in various genres, from Spain and Spanish-America, including poetry, short story, essay, short novel and/or excerpts from novels, and drama. Understanding of the literary works will include internal factors as well as external ones.

Credits: 3

Prerequisite: SPAN 313 or SPAN 314 or SPAN 317.
Offered: Every year.

SPAN 319 - Survey of Spanish Literature I

Principal literary movements and writers studied against historical, social, and cultural backgrounds. Selected masterpieces through the 17th century. Outside readings.

Credits: 3

Prerequisite: SPAN 315. Offered: Every year.

SPAN 320 - Survey of Spanish Literature II

Principal literary movements and writers studied against historical, social, and cultural backgrounds. Selected masterpieces from the 18th century to the present. Outside readings.

Credits: 3

Prerequisite: SPAN 315. Offered: Every year.

SPAN 325 - Survey of Spanish-American Literature

Principal literary movements in Spanish America from Colonial period. with emphasis on post-Independence literature.

Credits: 3

Prerequisite: SPAN 315. Offered: Every year.

SPAN 329 - Introduction to Spanish Linguistics

The course introduces students to the various areas of modern Spanish linguistics concentrating in phonology, morphology, and syntax, with special reference to contrasts with English. It will also explore areas of pragmatics, sociolinguistics, and second language acquisition.

Credits: 3

Prerequisite: SPAN 314 and SPAN 315. Offered: Every other year.

SPAN 340 - Cultural Issues in the Hispanic World

The study of a cultural issue or theme during a specific period and/or region. Students will gain insight into what the issues are and their ramifications, while developing an understanding of the diversity and complexity of contemporary societies in the Spanish-speaking world.

Credits: 3

Prerequisite: SPAN 314 and SPAN 315. Offered: Every other year.

SPAN 375 - Themes in Hispanic Literature

The course focuses a major theme or issue in literature written in Spanish. Students will follow the explorations of different writers in order to gain a better understanding of the issue at hand.

Credits: 3

Prerequisite: SPAN 314 and SPAN 315. Offered: Every other year.

SPAN 377 - Special Topics

Topics in Spanish language and literature.

Credits: 1-3

Prerequisite: SPAN 315. Offered: Offered on occasion.

SPAN 388 - Spanish Civilization and Culture

A comprehensive introduction to aspects of Spanish civilization and culture: geography, history, social customs, political movements, literature and art.

Credits: 3

Prerequisite: SPAN 313 or SPAN 314 or SPAN 317.

Offered: Offered on occasion.

SPAN 400 - Special Topics in Spanish

Special areas in Spanish language, literature, or culture and civilization not covered by regular courses.

Credits: 1-3

Prerequisite: SPAN 313 or SPAN 314 or SPAN 317.

Offered: Offered on occasion.

SPAN 401 - Imperial Spain

Analysis of main currents of Spanish culture in Siglo de Oro through readings in history, sociology, and literature.

Credits: 3

Prerequisite: SPAN 319. Offered: Offered on occasion.

SPAN 407 - Special Topics

Special areas in Spanish not covered by regular courses.

Credits: 3

Offered: Every year.

SPAN 410 - Directed Study

Individual directed study of a particular area or topic in Spanish language or literature. Periodic meetings with instructor, writing of a substantial paper.

Credits: 1-3

Offered: Offered on occasion.

SPAN 413 - Advanced Communication in Spanish

Practice of different styles and levels of communication such as narrative, critical commentary, debate, and dramatic dialogue to strengthen oral skills and develop advanced oral proficiency. Study of idiomatic expressions.

Credits: 3

Prerequisite: SPAN 313 and SPAN 314. Offered: Every year.

SPAN 415 - Individual Oral Proficiency Development In Spanish

Student will develop a list of weekly activities, such as watching movies, listening to music, reading of articles and books, etc. that will further enhance the student's oral proficiency in Spanish. Student will meet once a week with instructor to discuss the activities. The course will

end with retaking of Oral Proficiency Interview (OPI) exam. Student is responsible for the cost of the exam.

Credits: 1

Offered: Every year.

SPAN 423 - Senior Seminar

In-depth study of a literary or cultural topic selected by the instructor. Major written paper and oral presentation required. All work to be done in Spanish.

Credits: 3

Prerequisite: (SPAN 319 and SPAN 320) or (SPAN 319 and SPAN 325) or (SPAN 320 and SPAN 325). Offered: Every year.

SPAN 424 - Spanish Creative Writing

Study of literary techniques. Direct composition in Spanish to encourage incorporation of these devices into student's own writing.

Credits: 3

Prerequisite: SPAN 315 and (SPAN 318 or SPAN 314).

Offered: Every year.

SPAN 425 - Spanish-American Fiction

Prose fiction in Spanish America with special emphasis on 20th century authors.

Credits: 3

Prerequisite: SPAN 325. Offered: Offered on occasion.

SPAN 427 - The Art and Craft of Translation

Discussions of translation theory and problems of translation, followed by translation from Spanish to English, ending with translation from English to Spanish.

Credits: 3

Prerequisite: SPAN 315 and (SPAN 318 or SPAN 314) and (SPAN 320 or SPAN 325). Offered: Every year.

SPAN 472 - Hispanic Literary Figures

The course focuses on a writer whose work has made significant contributions to the literature written in Spanish. The writer's work provides new ways of examining and understanding the history and culture of the Spanish-speaking world.

Credits: 3

Prerequisite: SPAN 315 and SPAN 319 or SPAN 320 or SPAN 325 or SPAN 375. Offered: Every other year.

SPAN 478 - Great Moments in Hispanic Literature

The study of a significant period or movement in literature written in Spanish: how the intersections of artists, writers, and cultural ideas of that moment have impacted what we

now know as the Spanish-speaking world. SPAN 315 is required, at least one 300 level Spanish course recommended.

Credits: 3

Prerequisite: SPAN 315 and SPAN 319 or SPAN 320 or SPAN 325 or SPAN 375 or SPAN 424 or SPAN 425 or SPAN 427 or LANG 327. Offered: Every other year.

SPAN 480 - Internship in Spanish

Students will be sponsored by a faculty in the Modern Languages and Literature department. Additionally, they must have completed the application required by the campus Office of Internships.

Credits: 1-6

Offered: Offered on occasion.

SPAN 485 - Undergraduate Learning Assistant for Spanish

Students serve as undergraduate learning assistant for the hybrid course, Spanish in Action. Assistants help the instructor both in the classroom as well as outside the classroom monitoring class activities online and offering tutoring. Assistants are also responsible for developing and teaching a lesson on a topic agreed upon with the instructor. Assistants learn and develop best practices in language teaching. Students in education certification programs preferred.

Credits: 3

Prerequisite: SPAN 313 and SPAN 314 and SPAN 315.
Offered: Every semester.

SPAN 500 - Special Topics

Special areas in Spanish not covered by regular courses. Permission of department required.

Credits: 3

Offered: Offered on occasion.

SPAN 507 - Special Topics in Spanish

Special areas in Spanish not covered by regular courses.

Credits: 1-3

Offered: Every year.

SPAN 510 - Directed Study in Spanish

Individual supervised study of particular area or topic in any of the department's Spanish language or literature offerings. Periodic meetings with instructor and writing of a substantial paper. Permission of department required.

Credits: 1-3

Offered: Offered on occasion.

SPMG - Sport Management

SPMG 210 - Principles of Sports Management

The course provides the student with an overview of the basic philosophies, principles and organizational structure of sport programs. The course will cover leadership, communications, business structure, marketing, management styles, sportsmanship, ethical behavior, diversity, liability, and child abuse. The course further explores career opportunities and the skills needed to manage sport programs ranging from youth sports to professional sports.

Credits: 3

Offered: Every semester.

SPMG 211 - Facility Management

The course is designed to introduce the student to a comprehensive understanding of designing and managing facilities related to sports, recreation and leisure industries. The course covers facilities planning, design, management liability, personnel management, supervision and health and safety. Program promotion, facility scheduling and fundraising will also be covered in the course.

Credits: 3

Offered: Every year.

SPMG 212 - Event Management

The course will introduce the concepts involved in athletic event management. The student will gain an understanding of the key components of organizing, marketing, and planning of on-campus intercollegiate athletic events. After several weeks of instruction, students will be responsible for the coordination, supervision, and progression toward the management of on-campus athletic events during the semester.

Credits: 3

Offered: Every year.

SPMG 218 - Technology in Sports

The course introduces the student to the fundamentals of videoing and video editing utilizing the Dartfish Software platforms. Additionally the course covers video breakdown for game strategy, situations, sound and music enhancements and creating highlight and recruiting videos. Further exploration includes the use of technology in a variety of sport contexts including social media and the evolving role of technology in the sport industry.

Credits: 3

Prerequisite: CSIT 104 or CSIT 151. Offered: Every semester.

SPMG 220 - Health Sciences Applied to Coaching

The course will fulfill the NYSED Health Sciences Applied to Coaching requirement for certification as a coach in New York State. The components for certification include a basic knowledge of health sciences, including anatomy, physiology, kinesiology, human growth and development and maturation, risk minimization, sport-specific fitness and conditioning, and coaching psychology.

Credits: 3

Prerequisite: HLTH 115. Offered: Every year.

SPMG 221 - Philosophy, Principles and Organization of Athletics in Education

The course will fulfill the NYSED Philosophy, Principles and Organization of Athletics in Education requirement for certification as a coach in New York State. The components for certification include a basic knowledge of coaching philosophy, and principles and organization of associations and leagues. Child maltreatment and abuse are also covered in the course.

Credits: 3

Offered: Every year.

SPMG 230 - Sport in American Culture

This course examines the philosophical and sociological foundations of sport and sport management in America. Through lecture, small and large group discussions, film, personal reflection, and research, students will explore the people, ideas, places, and events that have influenced current notions of sport. Students will be challenged to reflect upon the meaning of sport as a human activity, develop their own personal philosophy, and explore various philosophical and sociological issues in American sport. The course content is in line with recommendations of the relevant professional associations regarding the philosophy and sociology of sport management.

Credits: 3

Prerequisite: PHIL 115 and SOC 116*. Cross-Listed as: * Indicates that the course can be taken in the same semester. Offered: Every year.

SPMG 298 - Pre-Internship

The course is a prerequisite to SPMG 400 Internship. The intent of the pre-internship is to increase a student's awareness of the critical aspects of preparing for an internship. The experiences are designed to give students an opportunity to begin career exploration, develop skills to make contacts in the Sport Management and Exercise Science profession, and apply what they learn to real world situations. At least sophomore standing required.

Credits: 1

Offered: Every semester.

SPMG 300 - Sport Law and Risk Management

The structure of the legal system, introduces the case study method, aspects of constitutional law, labor and anti-trust law, tort law, product liability, contract law, administrative and statutory law applicable to the sport industry. The course also covers establishing a risk management system for facilities and sports programs.

Credits: 2

Prerequisite: SPMG 211 or PHED 211. Offered: Every year.

SPMG 305 - Economics of Sport

Course covers the principles of macro and micro economics related to the sport industry on a regional and national level, supply and demand, growth of the sport industry, venues and events, economic impact of facilities manufacture and television on intercollegiate and professional sport.

Credits: 3

Prerequisite: ECON 201 and ECON 202. Offered: Every year.

SPMG 321 - Theory and Techniques of Coaching

A course designed to introduce the prospective coach to the basic skills, strategies and coaching techniques required in organizing a particular sport. While the course is one of several courses designed to meet state mandates for interscholastic coaching, the student is expected to have completed all other courses in the mandate before enrolling in PHED 321 or attain the permission of the instructor.

Credits: 2

Offered: Every semester.

SPMG 328 - Marketing and Public Relations in Sport

The course is designed to prepare students with the tools needed to develop effective marketing and public relations strategies for sports and athletic programs. A myriad of topics such as marketing, advertising, public relations theories, consumer behavior and practical applications will be explored. Emphasis will be on developing students' written and verbal communication skills. The course content is in line with recommendations of the relevant professional associations regarding the marketing and public relations of sport management.

Credits: 3

Prerequisite: ECON 201 and ECON 202. Offered: Every year.

SPMG 330 - Leadership and Management in Sports

The course investigates the important aspects of leadership theory, management practices and human resource

allocation for sports management. The course follows the guidelines of the North American Association for Sports Management. The guidelines mandate that students learn to define the elements of leadership theory and describe the various skills, roles and functions of sport managers as they relate to managerial responsibilities. Students will learn about the role of leadership, management and resource allocation for sport operations.

Credits: 3

Prerequisite: SPMG 210 or PHED 210. Offered: Every year.

SPMG 398 - Pre-Internship

The course is a prerequisite to PHED 400 Internship. The intent of the pre-internship is to increase a student's awareness of the critical aspects of preparing for an internship. The experiences are designed to give students an opportunity to begin career exploration, develop skills to make contacts in the Sport Management and Exercise Science profession, and apply what they learn to real world situations.

Credits: 1

Offered: Every semester.

SPMG 399 - Special Topics in Sport Management

Variable-content course; topic announced in the online Course Offerings each semester.

Credits: 1-6

Offered: Every semester.

SPMG 400 - Sport Studies Internship

Working under supervision in a community setting, the internship will emphasize theory, knowledge and skills needed when working with and within groups and organizations. Student will be expected to complete 67 clock hours of direct service to individuals, groups or organizations for each credit hour awarded. A learning Contract encompassing job requirements, learning objectives and methods will be utilized in student's evaluation.

Credits: 1-12

Prerequisite: SPMG 298. Offered: Every semester.

SPMG 410 - Sport Law and Risk Management

The structure of the legal system, introduces the case study method, aspects of constitutional law, labor and anti-trust law, tort law, product liability, contract law, administrative and statutory law applicable to the sport industry. The course also covers establishing a risk management system for facilities and sports programs.

Credits: 3

Prerequisite: ENGL 100 and COMM 235 and SPMG 211. Offered: Every year.

SPMG 428 - Marketing and Public Relations in Sport

The course is designed to prepare students with the tools needed to develop effective marketing and public relations strategies for sports and athletic programs. A myriad of topics such as marketing, advertising, public relations theories, consumer behavior and practical applications will be explored. Emphasis will be on developing students' written and verbal communication skills. The course content is in line with recommendations of the relevant professional associations regarding the marketing and public relations of sport management.

Credits: 3

Prerequisite: ENGL 100 and (SPMG 211 or PHED 211) and (SPMG 212 or PHED 211) and ECON 201 and ECON 202. Offered: Every semester.

SPST - Special Studies

SPST 101 - Biology Study Skills

The course, offered by the Educational Development Program, is designed to meet the needs of program participants enrolled in BIOL 111 Introduction to Biology. Intended for students with limited biological backgrounds, it enhances the understanding of biological skills in the following areas: biological chemistry, energy, genetics, evolution, physiology, development, and ecology.

Credits: 1

Corequisite: BIOL 111. Offered: Every year.

SPST 107 - Writing in the Arts and Sciences

Study of the writing and analysis process used for the explanatory and persuasive prose for the humanities, social sciences, and natural sciences. The course work focuses on coherence, development, organization, and conventions of writing papers in each discipline.

Credits: 3

Offered: Every year.

SPST 114 - Survey of Pre-calculus Lab

The course, offered by the Educational Development Program, is designed to meet the needs of program participants enrolled in MATH 105, Survey of Precalculus. Intended for students with a limited mathematics background, it enhances the understanding of skills necessary for success in precalculus and calculus in the following areas: algebra, solutions to equations, factoring, simplification of algebraic expressions, etc.

Credits: 1

Corequisite: MATH 105. Offered: Offered on occasion.

SPST 115 - College Communication Skills

Entry level skills in written and oral communication. Presents systematic introduction to skills needed for success in mastering content of materials used by academic disciplines. Augments and strengthens skills needed for continuing success in college level courses.

Credits: 1

Offered: Every Fall semester.

SPST 118 - Survey of Calculus Laboratory

The purpose of the course is to provide students enrolled in the Educational Development Program with the opportunity to develop and improve the study skills necessary to successfully complete the required coursework for MATH 120.

Credits: 1

Corequisite: MATH 120. Offered: Every year.

SPST 127 - Educational Development Program Freshman Orientation I

Designed to assist Educational Development Program students manage the demands of the college experience by helping them develop life management and study skills necessary to reach their academic and personal goals.

Credits: 1-2

Offered: Every year.

SPST 132 - Topics in Contemporary Science Recitation

A 1 credit recitation course mainly to supplement PHYS 101 Topics in Contemporary Science for students from the Educational Development Program. Provides additional drill for solving simple physics problems to understand PHYS 101 topics.

Credits: 1

Corequisite: PHYS 101. Offered: Every semester.

SPST 137 - Reading First

Designed to help students with the working requirements of being an America Reads Tutor and to familiarize students with the public school setting, requirements, and expectations. The 15-hour training program is to help students develop the range of skill they may need to work with K-3 students.

Credits: 1

Prerequisite: ENGL 357 or EDU 250 or EDU 275 or EDU 221 or SPA 250. Offered: Offered on occasion.

SPST 138 - Advanced Reading First

Designed to meet the needs of continuing America Reads tutors. Tutors will learn more about the reading process, learn to establish a tutoring goal and develop an activity to

achieve that goal, and continue to gain experience in public school classrooms.

Credits: 1

Offered: Offered on occasion.

SPST 147 - Educational Development Program Freshmen Orientation II

A continuation of SPST 127 focusing on assisting students develop the basic tools necessary to engage in self-discovery, acquaint them with career planning and exploration of major and career choices.

Credits: 1

Offered: Every year.

SPST 160 - Project Success

SPST 160 is a 1 credit, satisfactory/unsatisfactory course designed to provide resources, tools, and skills for students who are not in good academic standing. Class meetings will include discussions, activities, and assignments related to motivation, attitude, study aids, concentration, learning styles, and other student-success techniques.

Credits: 1

Offered: Every semester.

SPST 302 - Exploring Leadership and Ethics

Through this course students will gain a broad understanding of historical and current theories of leadership and management and the shift from the dominant paradigm to the emergent paradigm. Students will also explore how normative ethics affects their leadership philosophy and decision making. As a way to recognize their leadership strengths, students will participate in several instruments that will assist them in defining their leadership strength and style.

Credits: 3

Prerequisite: SPST 201. Offered: Every Fall semester.

SRT - Sound Recording Technology**SRT 105 - Recording Techniques for Music**

A non-technical introduction to recording technology. Students will learn established recording techniques, how to make good audition tapes, the possibilities of digital editing, how to purchase the right equipment, and other recording essentials.

Credits: 1

Offered: Every year.

SRT 200 - Recording Practicum

Applied instruction in basic audio techniques. Includes studio instruction in the use of microphones, loudspeakers,

tape recorders. Taken concurrently with SRT 250-251. Open to majors only.

Credits: 2

Corequisite: SRT 250. Offered: Every year.

SRT 201 - Recording Practicum

Applied instruction in basic audio techniques. Includes studio instruction in the use of microphones, loudspeakers, tape recorders. Taken concurrently with SRT 250-251. Open to majors only.

Credits: 2

Corequisite: SRT 251. Offered: Every year.

SRT 250 - Recording Techniques

A two-semester course in recording, including audio measurements, use of loudspeakers, microphones, tape recorders, and mixing consoles. Emphasis on stereophony, live recording, and the development of high standards of audio craft. Open to majors only.

Credits: 2

Offered: Every year.

SRT 251 - Recording Techniques

A two-semester course in recording, including audio measurements, use of loudspeakers, microphones, tape recorders, and mixing consoles. Emphasis on stereophony, live recording, and the development of high standards of audio craft. Open to majors only.

Credits: 2

Offered: Every year.

SRT 300 - Recording Practicum

Applied instruction in multi-track recording, sound reinforcement, and audio systems analysis techniques. Includes in-depth study of mixing consoles, tape recorders, and signal processors. Students will record assigned projects and assist seniors in production projects. Taken concurrently with SRT 350-351. Open to majors only.

Credits: 2

Prerequisite: SRT 200 and SRT 201 and SRT 250 and SRT 251. Corequisite: SRT 350. Offered: Every year.

SRT 301 - Recording Practicum

Applied instruction in multi-track recording, sound reinforcement, and audio systems analysis techniques. Includes in-depth study of mixing consoles, tape recorders, and signal processors. Students will record assigned projects and assist seniors in production projects. Taken concurrently with SRT 350-351. Open to majors only.

Credits: 2

Prerequisite: SRT 200 and SRT 201 and SRT 250 and SRT 251. Corequisite: SRT 351. Offered: Every year.

SRT 310 - Studio Installation and Maintenance

Provides maximum hands-on experience in recording studio installation and maintenance. Students will learn to analyze signal flow and troubleshoot equipment with passive (resistors, capacitors, inductors) and active components (transistors and op-amps). Transmission lines are discussed by evaluating principles and standards of connectors and cabling for audio and video. Further emphasis is placed on the phenomenon of noise in audio/video circuits and transmission lines: evaluating and measuring noise in individual components and systems, and minimizing or eliminating noise through the principles of grounding, shielding and filtering. Students will learn soldering and wiring techniques as well as a variety of audio measurement procedures.

Credits: 1

Offered: Offered on occasion.

SRT 320 - Studio Installation and Maintenance Laboratory

The one semester, 1-credithour course, provides maximum hands-on experience in recording studio installation and maintenance. Students will learn to analyze signal flow and troubleshoot equipment with passive (resistors, capacitors, inductors) and active components (transistors and op-amps). Transmission lines are discussed by evaluating principles and standards of connectors and cabling for audio and video. Further emphasis is placed on the phenomenon of noise in measuring noise in individual components and systems, and minimizing or eliminating noise through the principles of grounding, shielding and filtering. Students will learn soldering and wiring techniques as well as a variety of audio measurement procedures.

Credits: 1

Prerequisite: MATH 121 or MATH 123 and PHYS 123. Offered: Offered on occasion.

SRT 350 - Technology and Practices of the Recording Industry

A two-semester course in multi-track recording technology, and Digital Signal Processing (DSP). Open to majors only.

Credits: 3

Prerequisite: SRT 200 and SRT 201 and SRT 250 and SRT 251. Offered: Every year.

SRT 351 - Technology and Practices of the Recording Industry

A two-semester course in multi-track recording technology, and Digital Signal Processing (DSP). Open to majors only.

Credits: 3

Prerequisite: SRT 200 and SRT 201 and SRT 250 and SRT 251. Offered: Every year.

SRT 450 - Senior Seminar/Project

Each student will prepare a professional quality recording production and a research paper. In addition, the seminar will address areas of professional concern, including career development and survival skills, current studio developments, and elements of style in recording. Open to majors only.

Credits: 2

Prerequisite: SRT 300 and SRT 301 and SRT 350 and SRT 351. Offered: Every year.

SRT 451 - Senior Seminar/Project

Each student will prepare a professional quality recording production and a research paper. In addition, the seminar will address areas of professional concern, including career development and survival skills, current studio developments, and elements of style in recording. Open to majors only.

Credits: 2

Prerequisite: SRT 300 and SRT 301 and SRT 350 and SRT 351. Offered: Every year.

SRT 460 - Independent Study

Studies in studio maintenance, booking, traffic management, and research are available on a limited basis. Maximum of 6 credit hours of MUS, MUED, or SRT independent study. Open to majors only.

Credits: 2

Offered: Every semester.

SRT 461 - Independent Study

Studies in studio maintenance, booking, traffic management, and research are available on a limited basis. Maximum of 6 hours of MUS, MUED, or SRT independent study. Open to majors only.

Credits: 1-3

Offered: Every semester.

SRT 470 - Studio Supervision

Students supervise recording studio inventory and use. Open to majors only. Permission of instructor required.

Credits: 2

Offered: Offered on occasion.

SRT 480 - Internship

A 15-week, full-time work position in a facility appropriate for the individual student's goals. Duties are specified by college and sponsoring firm. Open to majors only.

Credits: 1-15

Offered: Every semester.

SSED - Social Studies Education**SSED 204 - World Regional Geography**

Interrelationship of location, climate, landforms, and natural resources with the history and cultural economic and political systems of the world's realms and regions.

Credits: 3

Offered: Every year.

SSED 205 - Economics for Social Studies Educators

The course provides an introduction to micro and macro economic concepts and to United States and world economic history. Intended for students who plan to teach social studies at the middle or high school level.

Credits: 3

Offered: Every year.

SSED 299 - Special Topics in Social Studies Adolescence Education

Varies in content from semester to semester. Students should consult the online Course Offerings and department notices for specific subject covered each semester.

Credits: 3

Offered: Offered on occasion.

SSED 419 - Secondary (Adolescence) Social Studies Teaching Methods

Principles, materials and methods for teaching social studies in the secondary schools. Note: Must be taken before student teaching. Required for Adolescence Education.

Credits: 3

Offered: Every year.

SSED 420 - Student Teaching Colloquium

The course complements the student teaching practicum in Adolescence Social Studies Education. Candidates receive detailed instruction in the completion of the applied teaching and learning projects associated with their student teaching placements.

Credits: 3

Prerequisite: SSED 419. Corequisite: SSED 430 or SSED 431. Offered: Every Spring Semester.

SSED 430 - Student Teaching for Social Studies/Adolescence Education - Grades 7-9 Placement

A field assignment to teach social studies at the adolescence level. Assignments provided in grades 7 through 9 during this placement. Arrangements made by the Office of Field Experiences.

Credits: 6

Prerequisite: SSED 419. Corequisite: SSED 420 or SSED 431. Offered: Every semester.

SSED 431 - Student Teaching for Social Studies/Adolescence Education – Grades 10-12 Placement

A field assignment to teach social studies at the adolescence level. Assignments provided in grades 10 through 12 during this placement. Arrangements made by the Office of Field Experiences.

Credits: 6

Prerequisite: SSED 419. Corequisite: SSED 420 or SSED 430. Offered: Every semester.

STAT - Statistics**STAT 150 - Statistical Ideas**

Introduction to the field of statistics, including sampling, experiments, measurement, descriptive statistics, probability, inference, correlation, regression and prediction. The emphasis will be on data and concepts rather than on calculations and mathematical theory. Not open to students who have completed a 200-level statistics course with a grade of C- or better. Background assumed: N.Y.S. Algebra II and Trigonometry (or Math B), or equivalent.

Credits: 3

Offered: Every other year.

STAT 200 - Statistical Methods I

An introductory study of statistical methods with applications to business, economics, education, and the social sciences. Topics covered include: descriptive statistics and graphs, probability and probability distributions, estimation, confidence intervals, hypothesis testing and linear regression. The course focuses on when to use each of the different methods. Note: Credit for at most one of the following courses may be applied towards a student's requirements for graduation: BUAD 200, ECON 200, EDU 200, POLI 200, SOC 200, and STAT 200. Background assumed: N.Y.S. Algebra II and Trigonometry (or Math B), or equivalent.

Credits: 3

Offered: Every semester.

STAT 250 - Statistics for Scientists

Introduction to statistical methods with special emphasis on uses in the natural sciences. Topics will include descriptive statistics, data collection, probability distributions, confidence intervals, hypothesis testing, regression, and analysis of variance. The course will include use of analytical labs and statistical computer packages. Background assumed: N.Y.S. Algebra II and Trigonometry (or Math B), or equivalent.

Credits: 3

Offered: Every year.

STAT 300 - Statistical Methods II

Continuation of STAT 200. Review of the basics of estimation, confidence intervals and hypothesis testing. Simple and multiple regression, time series, analysis of variance and non-parametric methods. A statistical software package will be used extensively.

Credits: 3

Prerequisite: STAT 200 or BUAD 200 or ECON 200 or EDU 200 or POLI 200 or PSY 200 or SOC 200 or STAT 250 or STAT 350. Offered: Offered on occasion.

STAT 350 - Probability and Statistics

Basics of probability; descriptive statistics; discrete and continuous distributions; confidence intervals and tests of hypotheses concerning means and proportions; simple linear regression; statistical software. MATH 210 is recommended, in addition to the prerequisites listed.

Credits: 3

Prerequisite: MATH 121 or MATH 123. Offered: Every semester.

STAT 351 - Regression and Analysis of Variance

Simple linear regression and multiple regression including inference, diagnostics and transformations. One-way and multi-way analysis of variance including inference, diagnostics and transformations. Use of professional statistical software.

Credits: 3

Prerequisite: (STAT 350 or STAT 250 or STAT 200 or BUAD 200 or ECON 200 or SOC 200 or POLI 200 or PSY 200) and (MATH 108 or MATH 231) and (MATH 120 or MATH 122). Offered: Every other year.

STAT 352 - Categorical Data Analysis

Techniques for analyzing categorical response data – confidence intervals, tests of significance for a proportion, the difference of two proportions, contingency tables,

regression, odds, odds ratios, logistic regression, logit models, loglinear models and diagnostics.

Credits: 3

Prerequisite: (STAT 350 or STAT 250 or STAT 200 or BUAD 200 or ECON 200 or SOC 200 or POLI 200 or PSY 200) and (MATH 108 or MATH 231) and (MATH 120 or MATH 122). Offered: Every other year.

STAT 355 - Mathematical Statistics

Probability, probability distributions, moments and moment-generating functions, conditional expectations, multivariate distributions, functions of random variables, sampling distributions, theory of estimation and hypothesis testing.

Credits: 3

Prerequisite: MATH 223. Offered: Every other year.

STAT 400 - Independent Study

Independent study of a selected list of readings approved by the faculty advisor. Departmental approval required.

Credits: 1-3

Offered: Offered on occasion.

STAT 405 - Statistics Seminar

This is a capstone course for the statistics minor. Students will complete a major statistics project. It will include designing an experiment, collecting the data, analyzing the data, and giving oral and written reports explaining the analysis and conclusions. Senior standing or permission of the instructor is required.

Credits: 1

Prerequisite: BUAD 300 or ECON 300 or STAT 351.
Offered: Every Spring Semester.

STAT 407 - Special Topics

Selected readings, discussions, data analysis on a topic in statistics. Permission of department required.

Credits: 1-2

Offered: Offered on occasion.

STAT 408 - Special Topics

Selected readings, discussions, data analysis on a topic in statistics. Permission of department required.

Credits: 3

Prerequisite: (STAT 200 or STAT 250 or STAT 350 or PSY 200 or SOC 200 or ECON 200 or BUAD 200 or EDU 200 or POLI 200). Offered: Offered on occasion.

STAT 451 - Time Series

Study of linear time series, moving averages and autoregressive models. Estimation, confidence intervals, forecasting and data analysis with time series models will be examined.

Credits: 1

Corequisite: STAT 351. Offered: Offered on occasion.

STAT 460 - Risk Management for Actuarial Science

Development of fundamental mathematical tools and language of quantitative risk management. Multivariate probability distributions including joint, conditional and marginal distributions, probabilities, moments, variance and covariance.

Credits: 2

Prerequisite: MATH 223 and STAT 350. Corequisite: STAT 355. Offered: Every other year.

THEA - Theatre Arts

THEA 100 - Theatre Majors Seminar

An introductory course for first year students declared as theatre majors. Introduction to policies, procedures and academic requirements in the theatre program.

Credits: 1

Offered: Every year.

THEA 101 - Theatre and Dance Productions

Laboratory in performance or production involving applications of theatre techniques to the various aspects of departmental productions. Majors and minors only.

Credits: 1

Offered: Every year.

THEA 102 - Theatre and Dance Productions

Laboratory in performance of production involving applications of theatre techniques to the various aspects of departmental productions. Majors and minors only.

Credits: 1

Offered: Every year.

THEA 110 - Practicum

Areas of theatre not covered in regular curriculum such as travel courses, practical experiences in the field, etc. May be repeated for credit. Permission of instructor.

Credits: .5

Offered: Offered on occasion.

THEA 114 - Introduction to the Performing Arts

A broad introduction to the Performing Arts including an historical perspective, elements of the performer's craft and repertoire, representative contributors to each Performing Art and the role of the audience member. The Performing Arts areas include theatre, music, dance, musical theatre and opera. Attendance at five Performing Arts events is required.

Credits: 3

Offered: Every semester.

THEA 117 - Script Analysis

Explores the process in evaluating/discovering production and performance values in a playscript.

Credits: 3

Offered: Every year.

THEA 121 - Introduction to Technical Theatre

One-semester course covering terminology and processes of stage production including stagecraft, materials, lighting, sound, properties, costumes, etc. Lecture and laboratory participation. Concurrent enrollment in THEA 101 or 102 by majors and minors strongly suggested. Written production critiques required.

Credits: 3

Offered: Every semester.

THEA 123 - Introduction to Technical Production

Explores the responsibility of technical personnel, safety and organization of the backstage and scene shop, stage rigging, drafting for the stage, scenic materials and hardware. Practical work on department productions may be required. Lab fee required.

Credits: 3

Prerequisite: THEA 121. Offered: Offered on occasion.

THEA 125 - Drawing and Drafting for the Theatre

Provides the student with a working knowledge of hand drafting as applied to theatre. Includes but is not limited to reading and interpreting set design plans, light plots, costume pattern drafting, creation of single and multiple plate drafting packets including plan views, design and construction elevations, section views, and detail drawings. B.F.A. Theatrical Production and Design majors only. Other theatre majors by permission of instructor.

Credits: 3

Prerequisite: THEA 121. Cross-Listed as: * Indicates that the course can be taken in the same semester. Offered: Every year.

THEA 129 - Backstage Magic

Ever been to a play, musical, opera or rock concert and wonder, "How did they do that?" This course will study the elements of design, tools and technology in the behind the scenes creation for the performing arts. This course delves into the areas of scenic, lighting, costume, and sound design and how they are implemented. The student will critique selected works as well as the works of classmate projects. Concurrent enrollment in THEA 229 CAD Lab is required and includes a \$40 lab fee.

Credits: 3

Corequisite: THEA 229. Offered: Offered on occasion.

THEA 130 - Acting for Non-Majors

Basic techniques of acting with emphasis on improvisation, script analysis and scene study. Attendance at campus theatrical events required.

Credits: 3

Offered: Every semester.

THEA 131 - Acting Studio: Acting I

Introduction to basic craft skills of acting with emphasis on self-awareness and discovery, spontaneity, and improvisation. B.F.A Acting and Musical Theatre majors only.

Credits: 3

Offered: Every year.

THEA 132 - Acting Studio: Acting II

Introduction to theory and practice of the basic principles of Stanislavski realism with emphasis on character exploration and analysis. B.F.A. Acting and Musical Theatre majors only.

Credits: 3

Prerequisite: THEA 131. Offered: Every year.

THEA 133 - Introduction to Acting

Basic craft skills of acting with emphasis on improvisation, character study, analysis and scene work. B.A. Theatre Arts majors and minors only.

Credits: 3

Offered: Every year.

THEA 140 - Stage Dialects

Acquisition of basic skills by the performer or director in the use of major dialects. B.F.A. Acting and Musical Theatre majors only.

Credits: 3

Offered: Every other year.

THEA 201 - Theatre and Dance Productions

Continuation of THEA 101-102.

Credits: 1

Offered: Every year.

THEA 202 - Theatre and Dance Productions

Continuation of THEA 101-102.

Credits: 1

Offered: Every year.

THEA 215 - Movement For The Stage

This course is an introductory course designed to support the actor in freeing the physical instrument for creative use. It is designed to enhance the study of acting by placing considerable focus on how the body is used in the creation of character on stage.

Credits: 3

Offered: Every Fall semester.

THEA 220 - Makeup

Selection, application, and evaluation of stage makeup. Includes wiggling and facial hair techniques. Theatre majors and minors only.

Credits: 1

Offered: Every year.

THEA 221 - Digital Tools for the Performing Arts

Introduces the student to the use of discipline-specific software programs and peripheral hardware used in the creation of designs and preparation of drawings used in technical production and for scenic costumes and lighting design. Includes in-depth training in Computer Aided Drafting techniques, and the study of VectorWorks software. 2-D drafting will be covered with an introduction to drawing in 3-D.

Credits: 3

Prerequisite: THEA 125. Offered: Every year.

THEA 222 - Stagecraft I

Hands-on introductory course that covers standard theatrical scenic construction methods including metal and wood tools and fabrication, rigging and safety. Shop participation required. Lab fee required.

Credits: 3

Prerequisite: THEA 121. Offered: Every year.

THEA 223 - Lighting and Sound Technology

This course is an introduction to the mechanics of stage lighting and sound. It includes basic electricity, tools, equipment, distribution and control for theatrical lighting

and sound. The course will deal with the many aspects of implementing lighting and sound for a production.

Credits: 3

Prerequisite: THEA 121. Offered: Every year.

THEA 226 - Scene Painting I

Color theory, preparation of painting surfaces, and basic painting techniques as they pertain to the theatre. B.F.A. Theatrical Production and Design majors only.

Credits: 3

Prerequisite: THEA 123 or THEA 125. Offered: Every year.

THEA 228 - Costume Construction I

Laboratory exploration of basic costume construction techniques. Majors only.

Credits: 3

Offered: Every year.

THEA 229 - Computer Aided Drafting Lab

Non-credit lab allowing the B.F.A Theatrical Production and Design student access to the theatre CAD Lab. Open to B.F.A. Theatrical Production and Design majors only.

Credits: 0

Offered: Every semester.

THEA 230 - Introduction to Scene Study

The course will present the fundamental principles of approaching the creation of a character on stage using the techniques of Stanislavski realism. B.A. Theatre Arts majors only.

Credits: 3

Prerequisite: THEA 133 and THEA 117. Offered: Every year.

THEA 231 - Acting Studio: Scene Study I

Skills and techniques for role analysis and performance in realistic plays. B.F.A. Acting and Musical Theatre majors only.

Credits: 3

Prerequisite: THEA 132. Offered: Every year.

THEA 232 - Acting Studio: Scene Study II

Skills and techniques for role analysis and performance in realistic plays. B.F.A. Acting and Musical Theatre majors only.

Credits: 3

Prerequisite: THEA 231. Offered: Every year.

THEA 233 - Acting Lab I

A laboratory for exploration and development of scene study technique.

Credits: 1

Offered: Every year.

THEA 234 - Acting Lab II

A laboratory for exploration and development of scene study technique.

Credits: 1

Offered: Every year.

THEA 242 - Acting Studio: Introduction to Voice and Movement I

Designed to support the actor in freeing the voice/body and imagination for creative response. Physical/vocal awareness and ability are enhanced through the exploration of relaxation, alignment, flexibility, strength, breath, sound, and resonance.

Credits: 3

Prerequisite: THEA 132. Offered: Every year.

THEA 243 - Acting Studio: Introduction to Voice and Movement II

A continuation of THEA 242 in supporting the actor in freeing the voice/body and imagination for creative response. Exercises to reinforce basic skills and further develop the actor's physical and vocal range, power, flexibility, and articulation.

Credits: 3

Prerequisite: THEA 242. Offered: Every year.

THEA 245 - Sound for the Theatre

Study of the artistic elements of sound for the theatre and build upon the technical elements studied in THEA 223 Lighting and Sound Technology. Areas of study include: sound systems, electricity, recording techniques, script analysis for sound design, principles of sound design and the controllable qualities of sound. Each will be studied through class lectures, practical examples, and projects.

Credits: 3

Prerequisite: THEA 315 and THEA 223. Offered: Every other year.

THEA 301 - Theatre and Dance Productions

Continuation of THEA 201-202.

Credits: 1

Offered: Every year.

THEA 302 - Theatre and Dance Productions

Continuation of THEA 201-202.

Credits: 1

Offered: Every year.

THEA 303 - Rendering Technique I

Explores the graphic media and drawing techniques used by the designer in preparing drawings for the theatre with a focus on freehand sketching, gridding, and drop point perspective.

Credits: 3

Prerequisite: THEA 125. Offered: Every year.

THEA 304 - Rendering Technique II

Continuation of THEA 303. Explores the graphic media, drawing techniques, color theory and composition used by the designer in preparing drawing and painting for the theatre. With emphasis in graphite, water color, gouache, acrylic and marker.

Credits: 3

Prerequisite: THEA 303. Offered: Every year.

THEA 305 - Rendering Technique III

Continuation of THEA 304. Explores the graphic media and drawing techniques used by the designer in preparing drawings for the theatre.

Credits: 1

Prerequisite: THEA 123 and THEA 125. Offered: Offered on occasion.

THEA 315 - The Dramatic Imagination

Design students study the nature of the relationship between playscripts and theatrical designs through script and text analysis, literary criticism and research. Exploration of how dialogue and themes can be visualized through design. B.F.A. Theatrical Production and Design majors only.

Credits: 3

Prerequisite: THEA 121. Corequisite: THEA 229. Offered: Every year.

THEA 319 - Costume Construction II

Intensive laboratory exploration of advanced costume construction techniques. Focus on growth of stitching skills.

Credits: 3

Prerequisite: THEA 228. Offered: Every year.

THEA 320 - Advanced Makeup

Design and application of special effects, 3-D prosthetics, and appliances. Majors only.

Credits: 3

Prerequisite: THEA 220. Offered: Offered on occasion.

THEA 321 - Costume Crafts, Dyeing and Painting

A rotation of basic costume accessory design and construction including but not limited to millinery, mask making, leather work, etc. As well as a laboratory exploration of the art and craft of dye/paint techniques for costumes. Union, acid, and fibre-reactive dyes, silk and fabric paints, and health and safety for costume artisans are covered. B.F.A. Theatrical Production and Design majors only. Theatre and Dance majors by permission.

Credits: 3

Offered: Every year.

THEA 322 - Stagecraft II

Course covers the planning, organization and management skills needed to execute the construction of a theatrical scenic design. Lecture and computer lab participation required. Lab fee required.

Credits: 3

Prerequisite: THEA 222. Offered: Every year.

THEA 324 - Lighting Design I

Principle of Stage Lighting Design and its application to a theatrical production. Will study the what and why lighting can bring to a production through practical projects.

Credits: 3

Prerequisite: THEA 315 and THEA 125. Offered: Every year.

THEA 325 - History of Costume

Chronological survey of clothing and fashion; their sociological and artistic implications from the Egyptians to the 20th century.

Credits: 3

Offered: Every year.

THEA 326 - Scene Design I

Principles, procedures, and development of scene design. Students must enroll in THEA 303, 304 or 305 simultaneously. B.F.A. Theatrical Production and Design majors only.

Credits: 3

Prerequisite: THEA 315. Offered: Every year.

THEA 327 - Costume Design I

Costume design methods and concepts. Students must enroll in THEA 303, 304 or 305 simultaneously. B.F.A. Theatrical Production and Design majors only.

Credits: 3

Prerequisite: THEA 325. Offered: Every year.

THEA 328 - Costume Design II

Continuation of THEA 327: development of more complicated sophisticated concepts. Students must enroll in THEA 303, 304 or 305 simultaneously. B.F.A. Theatrical Production and Design majors only.

Credits: 3

Prerequisite: THEA 327. Offered: Every year.

THEA 329 - Flat Patterning

Flat pattern techniques as applied to the costume cutter. Use of slopers, methodology, and interpretation of sketches are emphasized. B.F.A. Theatrical Production and Design majors only.

Credits: 3

Prerequisite: THEA 228. Offered: Every year.

THEA 330 - Introduction to Styles

A continuation/culmination of the Intro to Acting (technique and craft), Intro to Scene Study (elements of characterization, scene arc, fine tuning craft) sequence. The Introduction to Styles allows a modified departure from the Realism we have studied to heightened language and period movement (Shakespeare, Coward, Moliere), physicalization (Comedy, Restoration, Melodrama) or elements of both (Soap Opera, Slap-stick, Sit-com, Simon).

Credits: 3

Prerequisite: THEA 230. Offered: Offered on occasion.

THEA 331 - Acting Studio: Styles

Introduction to various acting tools for creating and sustaining characters and action in elevated and poetic texts from major periods of theatre history. Emphasis on ability to approach historical periods and genres while remaining intimately connected to personal truth.

Credits: 3

Prerequisite: THEA 232. Offered: Offered on occasion.

THEA 334 - Digital Tools for the Performing Arts II

Exploration in creating theatre in a digital age. The class will focus on digital rendering but will also include some drafting, budget tracking and an artists digital presence on the web. Programs explored in the class will be Photo Shop, Corel Paint, Vectorworks and others.

Credits: 3

Prerequisite: THEA 221 and THEA 304. Offered: Every year.

THEA 337 - Properties for the Stage

This course is an introduction to the craft, process, and administration associated with the work of the theatrical properties artisan and master. Topics covered will include found properties, refurbishment, creation of new properties, consumables, budgeting, and tracking.

Credits: 3

Prerequisite: THEA 121 and THEA 125. Offered: Every other year.

THEA 338 - Special Topics

Study of selected areas of theatre arts not covered in regular curricular program. May be repeated for credit. Permission of instructor.

Credits: .5-3

Offered: Offered on occasion.

THEA 339 - Stage Management

Introductory course that covers the organizational and interpersonal skills needed to stage manage live productions of theater, musical theater, or dance. Topics include the stage manager's role during casting, design process, rehearsals, technical production and performance.

Credits: 3

Prerequisite: THEA 121. Offered: Every other year.

THEA 341 - Acting Studio: Shakespeare

An introduction to the basic techniques used in Shakespearean acting. Major emphasis is placed on approaching Shakespeare through a careful analysis of the use of language and construction of the text. Enrollment limited to B.F.A. Acting/Musical Theatre majors or permission of instructor.

Credits: 3

Prerequisite: THEA 230 or THEA 232. Offered: Every year.

THEA 345 - Acting Studio: Voice and Movement III

Explores additional methods to increase flexibility and range in speaking with an emphasis on heightened responsiveness to imagery and rhythms, along with additional methods to increase precision and range of movement with an emphasis on physical character work. B.F.A. Acting and Musical Theatre majors only.

Credits: 3

Prerequisite: THEA 243. Offered: Every year.

THEA 346 - Acting Studio: Voice and Movement IV

Explores additional methods to increase precision and range of movement with an emphasis on unarmed and armed stage combat.

Credits: 3

Prerequisite: THEA 242 and THEA 243. Offered: Every year.

THEA 347 - Stage Combat: Unarmed

This is a preliminary acting class designed to instruct students in the performance techniques, skills and illusions of unarmed stage combat.

Credits: 3

Prerequisite: THEA 215. Offered: Every year.

THEA 350 - Introduction to Musical Theatre

The course will offer an introduction to the techniques of performing in, and auditioning for, musical theatre. Students will work on duet, solo, and group dance numbers, and on finding appropriate audition material. The class will focus on strengthening all aspects of the performer: singing, acting, and dancing. The class will treat musical theatre material with respect, approaching the texts as actors, as well as singers/dancers.

Credits: 3

Prerequisite: THEA 131 and THEA 133. Offered: Every other year.

THEA 353 - History of Musical Theatre

Development of the theatrical genre known as musical theatre. Special emphasis on musical comedy roots in 19th century America to the present.

Credits: 3

Offered: Every other year.

THEA 359 - Commedia dell'Arte

A performance based course exploring the masks, characters, movement, scenarios, and history of the Italian commedia dell'arte.

Credits: 3

Prerequisite: THEA 232 and THEA 243. Offered: Every year.

THEA 381 - Technical Theatre Seminar

Discussion seminar on problems and procedures of mounting theatrical productions. Includes scheduling personnel, weekly rehearsals and other pertinent current production needs. Does not apply to the required hours for major in Theatre Arts. May be repeated

Credits: .5

Offered: Every semester.

THEA 382 - Musical Theatre Styles I

The course, through scene study of musical theatre repertory, focuses on integration of song, dance and acting skills for the junior B.F.A. Musical Theatre student.

Credits: 3

Prerequisite: THEA 232 and MUS 236. Offered: Every year.

THEA 383 - Acting Studio: Theatre Games

Through the study of improvisational techniques in the theatre, students will be exposed to a variety of long-form improvisation techniques designed to enhance spontaneity on the stage, develop sensory and perceptive skills, and approach character creation from a non-analytical perspective.

Credits: 3

Prerequisite: THEA 232. Offered: Every other year.

THEA 384 - History of Architecture and Decor for Theatre

This course is a study of architecture, decorative arts, and stage technology throughout history as they impact design for theatre. This course will look at periods of design from ancient Greece to the early Twentieth Century.

Credits: 3

Prerequisite: THEA 125 and THEA 315. Offered: Every year.

THEA 401 - Theatre and Dance Productions

Continuation of THEA 301-302.

Credits: 1

Offered: Every year.

THEA 402 - Theatre and Dance Productions

Continuation of THEA 401.

Credits: 1

Offered: Every year.

THEA 410 - Acting for Media

This course is designed to introduce the actor to fundamental theories and practices of acting for the camera.

Credits: 3

Offered: Every semester.

THEA 415 - Stage Combat: Medieval Weapons

This is an advanced acting class designed to instruct students in the performance techniques, skills and illusions of medieval weapons for stage combat.

Credits: 3

Prerequisite: THEA 347. Offered: Every year.

THEA 420 - Special Studies in Technical Theatre

Seminar and laboratory experience exploring a variety of processes and techniques in depth. B.F.A. Theatrical Production and Design majors only.

Credits: 3

Offered: Every semester.

THEA 422 - Stagecraft III

Intermediate to advanced scenic construction techniques as well as an introduction to scenic automation. Topics covered include: simple engineering principles and structural analysis, pneumatic power, electric motors and control systems.

Credits: 3

Prerequisite: THEA 222. Offered: Every other year.

THEA 423 - Acting Studio: Alternative Acting Styles

An exploration of alternative acting techniques such as non-realistic and non-western styles of acting. B.F.A. Acting/Musical Theatre majors only.

Credits: 3

Prerequisite: THEA 232. Offered: Every year.

THEA 424 - Acting Studio: Audition Techniques

Intensive study of skills needed by actors to increase their marketability in today's theatre. Open to B.F.A. Acting and Musical Theatre majors only.

Credits: 3

Prerequisite: THEA 232. Offered: Every other year.

THEA 426 - Scene Design II

Continuation of Scene Design I with specific emphasis on artistic requirements of the production. B.F.A. Production and Design majors only.

Credits: 3

Prerequisite: THEA 326. Offered: Every year.

THEA 427 - Scene Painting II

An intensive laboratory experience exploring advanced techniques in painting, dimensional texture and surface treatments. May require practical work on productions. Will also co-supervise and mentor Scene Painting I students on some projects as part of learning how to run a

paint crew. B.F.A. Theatrical Production and Design majors only

Credits: 3

Prerequisite: THEA 226. Offered: Every year.

THEA 429 - Lighting Design II

This course is an introduction to the mechanics of stage lighting and sound. It includes basic electricity, tools, equipment, distribution and control for theatrical lighting and sound. The course will deal with the many aspects of implementing lighting and sound for a production.

Credits: 3

Prerequisite: THEA 324. Offered: Every other year.

THEA 432 - Musical Theatre Styles

Advanced scene study and techniques for integrating all resources of the singing actor in musical theatre. B.F.A. Musical Theatre majors only or by permission of instructor.

Credits: 3

Prerequisite: THEA 232. Corequisite: THEA 434. Offered: Every year.

THEA 434 - Musical Theatre Styles Lab

A co-requisite for THEA 432, the laboratory allows for exploration, musical coaching and preparation for the Musical Theatre Styles acting class.

Credits: 1

Prerequisite: THEA 232. Offered: Every year.

THEA 435 - Rehearsal and Performance

Application of advanced techniques in preparation for studio and major productions.

Credits: 0

Offered: Every semester.

THEA 436 - Design/Technical Production

Application of advanced techniques in preparation for studio and major productions.

Credits: 1-2

Offered: Every semester.

THEA 441 - Directing I

Director's functions and responsibilities including play selection, auditioning/casting, staging techniques and script analysis using the motivational unit as a basis of approach. Emphasis on preparation and presentation of a one-act play. Majors only. Junior or senior standing in the department.

Credits: 3

Offered: Every semester.

THEA 442 - Directing II

Continuation of THEA 441; emphasis on theories of directing, as well as concerns and responsibilities of the director in productions involving period styles and/or alternative forms of staging. Majors only.

Credits: 3

Prerequisite: THEA 441. Offered: Offered on occasion.

THEA 451 - History of the Theatre I

A survey of theatre history from pre-Greek to the 18th century. Performance and production elements in all ages will be covered. Junior or senior standing.

Credits: 3

Offered: Every year.

THEA 452 - History of the Theatre II

A survey of theatre history from 18th century to present. Performance and production elements in all ages will be covered. Prerequisite: Junior or senior standing.

Credits: 3

Offered: Every year.

THEA 460 - Theatre Organization and Management

Theatre management including philosophy, management procedures, budgets, publicity/promotion, ticket office and house management procedures for educational, community and professional resident theatres. For Theatre and Dance majors or permission of instructor.

Credits: 3

Offered: Every year.

THEA 468 - Devising Theatre

The course is designed to give the student of theatre opportunities to create original theatre in a workshop setting. The course will introduce students to various processes of creating original theatre texts, scenarios and performances through group collaboration for a variety of contexts. Permission of instructor is required.

Credits: 3

Offered: Every year.

THEA 481 - Senior Projects Seminar

A seminar course that discusses challenges that BA and BFA students often face after graduation and starts to prepare them for their capstone projects. Topics may include, but are not limited to: resumes, cover letters, graduate schools, portfolios, and life as an artist.

Credits: 1

Offered: Every year.

THEA 482 - Directed Study

Intensive individual study of some particular aspect of theatre involving preparation of a paper or project in support of the findings. Request for enrollment must be made in the form of a written proposal prior to the end of the second week of the semester. May be repeated for credit. Permission of department required.

Credits: 1-3

Offered: Every semester.

THEA 490 - Professional Theatre Intern

Approved and supervised work-training experience in professional theatre company. Permission of department required.

Credits: 1-15

Offered: Every semester.

THEA 498 - Senior Project

Development of a capstone project intended for public presentation. Students will be expected to execute a theatrical project in either performance, design, or other area in theatre as approved by faculty advisement. The project should demonstrate competence in all aspects of the student's degree program.

Credits: 3

Prerequisite: THEA 481. Offered: Every semester.

THEA 499 - Performance/Production Seminar

Development and public presentation of a creative project as a senior recital. Senior standing; B.F.A. Acting or Theatrical Production and Design majors only.

Credits: 3

Offered: Every semester.

THEA 530 - Selected Studies in Theatre Arts

In-depth study of various specific areas in the theatre, either literature or production. Student should have an undergraduate degree in Theatre; permission of department required.

Credits: 1-12

Offered: Offered on occasion.

THEA 531 - Selected Studies in Theatre Arts

In-depth study of various specific areas in the theatre, either literature or production. Student should have an undergraduate degree in Theatre; permission of the department required.

Credits: 1-12

Offered: Offered on occasion.

WGST-Women-Gender-Studies

WGST 200 - CMA Service Learning

This one-credit service learning course allows students who are on the executive board of one of the Center for Multicultural Affairs student groups to further their knowledge about the relationship between the student group and the academic pursuits of ETHN minors and WGST majors and minors.

Credits: 1

Offered: Every semester.

WGST 201 - Introduction to Gender Studies

Interdisciplinary study of the social construction of gender and its relationship to class, race, age, ethnicity, nationality and sexual identity. Analysis of the causes and implications for the changing definition of women in the contemporary world, especially in the United States.

Credits: 3

Offered: Every year.

WGST 203 - Chicana Writers/Visual Artists

Who is the Virgin of Guadalupe? When was the Mexican Revolution? What is a "Zootsuit"? Students will explore these questions and more in the interdisciplinary course taught in English. In the class, students will become familiar with Chicana Mexican American history and culture through installation art, mural art, altar designs, and paintings by artists such as Frida Kahlo, Judy Baca, Amalia Mesa-Bains, and Yolanda Lopez among others. Students will also discuss issues of race, class, gender, and sexuality through texts by Chicana writers Gloria Anzaldua, Ana Castillo, Sandra Cisneros, and Demetria Martinez.

Credits: 3

Offered: Offered on occasion.

WGST 205 - Women in Art

A thematic and topical course exploring women's roles as both productive subjects and depicted objects in western visual culture. Cross-listed as ARTH 205.

Credits: 3

Prerequisite: ART 115 or ARTH 101 or ART 116 or ARTH 102 or WOST 201. Offered: Every other year.

WGST 255 - Psychology of Women

An examination of the biological, psychological and sociological factors that shape women's lives. Attention to the intersection of gender with ethnicity, sexual orientation, and social class. Specific topics include

theories of gender development, images of women in the media, work, childbirth and motherhood, violence, physical and mental health. Cross-listed as PSY 255.

Credits: 3

Prerequisite: PSY 129 or WOST 201 or WGST 201.

Offered: Offered on occasion.

WGST 301 - Theories of Gender

A multidisciplinary approach grounded in the humanities and arts will be employed to account for the social, economic, political, historical and cultural ways that gender is constructed and represented in contemporary societies.

Credits: 3

Prerequisite: ENGL 345 or WGST 201. Offered: Every year.

WGST 302 - Sex and Gender

Description and analysis of sex and gender roles and relationships from a variety of societies at different levels of socio-cultural complexity. Cross-listed as ANTH 300/SOC 306.

Credits: 3

Prerequisite: SOC 116 or ANTH 115 or ANTH 219.

Offered: Every year.

WGST 304 - Latina Literary and Cultural Studies

An examination of contemporary Latina literary productions in the context of representations of Latinas in mainstream U.S. society. The focus of the course is on women of Hispanic descent living and writing in the United States, including work by and about Chicanas, Puerto Ricans, Dominican Americans, and Cuban Americans. Previous course work in Latina/Latino literature not required, but some previous course work related to African American or other ethnic literature, women's literature/feminism, and/or film studies is strongly recommended. Cross-listed as ENGL 304/INDS 304.

Credits: 3

Offered: Every other year.

WGST 314 - Women Writers

An in-depth study of novels written by women. The course explores questions regarding gender, language, perception, and experience through the genre of the novel. Cross-listed as ENGL 314.

Credits: 3

Offered: Every other year.

WGST 335 - American Women

A survey of women's history from colonial times to present with emphasis on the changing status and definition of women's roles, race and ethnicity, and women's writings. Cross-listed as HIST 355.

Credits: 3

Prerequisite: HIST 106 or HIST 133 or WGST 201 or WOST 201. Offered: Offered on occasion.

WGST 336 - African American Women's History

Explores the history of women of African descent in the Americas, with a particular focus on the United States. Covers black women's experience from their African origins, through the Middle Passage, in enslavement, and in freedom. Issues addressed include labor, the black family, cultural expression, and radical identity (in comparative perspective). Cross-listed as HIST 336.

Credits: 3

Prerequisite: HIST 333 or HIST 334 or ENGL 240 or ENGL 340. Offered: Every other year.

WGST 340 - Black Women Writers

Study of the literature written by and often about black women, including poetry, short and long fictions, novels, drama, biography, and autobiography from the 18th century to the present. Cross-listed as ENGL 340.

Credits: 3

Offered: Every other year.

WGST 345 - Women, Health and Society

Examines ways in which health and illness for women are defined and managed. Topics include the medicalization of pregnancy and birth, adolescence and sexuality, addiction, mental health, menopause, body image, and, women as health care providers. Cross-listed as SOC 345.

Credits: 3

Prerequisite: SOC 116. Offered: Every year.

WGST 359 - Ethnicity and Race

Interdisciplinary approach to race and ethnicity in the United States and other contemporary multiethnic/multiracial societies. Because these courses are equivalents, students who have earned credit for HIST/INDS/WOST 220 are not able to earn credit for this course.

Credits: 3

Offered: Every year.

WGST 373 - Gender and Communication

Using a variety of theoretical models and critical approaches, students examine everyday communication

practices to identify how gender, communication, and culture create a complex and dynamic web of meaning with significant implications for individuals and society. Cross-listed as COMM 373.

Credits: 3

Prerequisite: COMM 101 or WOST 201 or WGST 201.

Offered: Offered on occasion.

WGST 377 - Special Topics

Variable content course. Topics announced in the online Course Offerings when offered.

Credits: 3

Offered: Offered on occasion.

WGST 386 - Women in Global Cinema

A study of films by and about women in global cinema. The course focuses on women filmmakers primarily, and their uses of documentary, experimental, and/or narrative forms.

Credits: 4

Offered: Every other year.

WGST 401 - Gender and Social Change

Directed study of student's own area of interest within gender studies, serving as a capstone to the interdisciplinary experience of the Women's Gender Studies Program. The capstone may be a final project, undergraduate thesis, or community-based internship. For Women's Gender Studies majors and minors only. Includes a required weekly meeting time with all WGST 401 enrollees.

Credits: 3

Offered: Every semester.

WGST 405 - French Women Writers

An evaluation of the contributions of French women writers to the social, economic, and political institutions which form the basis of Western philosophical tradition.

Credits: 3

Offered: Every year.

WGST 406 - Women in French Literature

An examination of how texts about women written by Francophone males have through history described women, defined their lives and destinies in keeping with the needs and requirements of these writers.

Credits: 3

Offered: Every year.

WGST 430 - Independent Study

For non-Women's Studies minors only. Independent Study of an issue using gender as a primary category of analysis. Students must find an instructor willing to supervise the project - all disciplines are appropriate. Students must develop a proposal, obtain necessary approval of instructor and obtain final approval from the Women's Studies director.

Credits: 1-3

Offered: Every semester.

WGST 450 - Internship in Women's and Gender Studies

Participation in on-campus or off-campus professional and subject related experience. Requires learning contract proposal prepared in consultation with direct supervisor and faculty sponsor, describing the experience, learning goals, and method of evaluation. Approval of Women's and Gender Studies Coordinator required in advance.

Credits: 1-4

Offered: Every semester.

WGST 490 - Portfolio Completion

Required for all Women's Studies majors. Involves compilation of papers from courses in the Women's Studies core, reflecting engagement with the goals of the major. Must be taken concurrently with WGST Gender and Social Change.

Credits: 0

Offered: Every semester.

WGST 491 - Gender and Social Change

Directed study of student's own area of interest within women's studies, serving as a capstone to the interdisciplinary experience of the Women's Studies Program. The capstone may be a final project, undergraduate thesis, or community-based internship. For Women's Studies majors and minors only. Includes a required weekly meeting time with all Gender and Social Change enrollees.

Credits: 3

Offered: Every semester.

FRED - Fredonia Seminar

FRED 101 - First-Year Seminar

Fredonia educates, challenges, and inspires students to become skilled, connected, creative, and responsible global citizens and professionals. This signature course will introduce students to these baccalaureate goals through an engaging and intellectually rigorous curriculum. Students

will work with some of the finest faculty and professional staff at Fredonia in both digital and traditional formats.

Credits: 3

Offered: Every Fall semester.

EXTENDED LEARNING

2146 Fenton Hall
(716) 673-3177

Eric Skowronski, Director

Email: extendedlearning@fredonia.edu

Website: <https://home.fredonia.edu/extendedlearning>

Extended Learning offers a diverse set of education and training opportunities, both credit bearing and noncredit. There are six main program categories affiliated with this office, including the Extended Learning Credit Program, Noncredit Training, Course Auditing, Summer Sessions, J-Term (Joining Term), and Online Education.

For additional information on any of these programs, please contact Extended Learning or visit <https://home.fredonia.edu/extendedlearning>.

Online Education

Credit-bearing, instructor-led, asynchronous online courses are offered by many SUNY colleges and universities across New York State, including Fredonia, in conjunction with Open SUNY, <http://navigator.suny.edu>.

For additional information, please contact Extended Learning or visit <https://home.fredonia.edu/extendedlearning>.

Joining Term (J-Term) at Fredonia

Every winter, Fredonia offers a select group of undergraduate and graduate courses - on campus, online and abroad. Most offerings begin and end within two or three weeks. For additional information about Fredonia's J-Term, please contact Extended Learning or visit <https://home.fredonia.edu/jterm>.

Summer Sessions at Fredonia

During Summer Sessions, students have the opportunity to get ahead in their studies, explore courses outside of their disciplines, or get back on track. Every summer, Fredonia offers a comprehensive program of undergraduate and graduate course work - on campus, online, and abroad.

The availability of residence hall living, a wide range of recreational activities, and a busy schedule of cultural events, enable the summer student to enjoy a well-rounded college experience. The combination of intellectual stimulation can be very rewarding.

For additional information, please contact Extended Learning or visit <https://home.fredonia.edu/summer>.

GENERAL EDUCATION

The objective of general education at the State University of New York at Fredonia is to further the development of a total human being who seeks to relate learning and living, ideas and actions. The purpose of general education is to provide a broad context in which specialized education becomes more meaningful and with which students can thrive in a changing world regardless of their specializations. The general education requirements at Fredonia are provided within the framework of the College Core Curriculum (CCC).

General Education Program Requirements (College Core Curriculum)

Each CCC category has essential student learning outcomes. All approved courses each category have gone through a rigorous review and are assessed regularly.

Approved courses, distributed as follows.

Category	Credit Hours
1. Mathematics	3
2. Natural Sciences (Two courses from different disciplines; only one may be from Mathematical Sciences or Computer & Information Sciences. Requirements for certification or licensure may be different; check with program Advisor.)	6
3. Social Sciences (Two courses from different disciplines; only one may be from	6

Business Administration, Education, History, Communication or Communication Disorders.)

4. American History (Students who scored below 85 on the NYS American History and Government Regents Exam must take either HIST 105 or HIST 106 or HIST 133 to meet this category; all other students may take a course in American History-A or American History-B.)	3
5. Western Civilization	3
6. Other World Civilizations	3
7. Humanities	3
8. Arts	3
9. Foreign Language	0-6
10. Basic Communication - Written	3
11. Basic Communication - Oral	0-3

NOTE:

To demonstrate proficiency, students may do one of the following:

- *Score 85 or higher on a N.Y.S. Regents Foreign Language Exam.*
- *Complete the externally-administered standardized test for foreign language of either the AP (3 or higher) or CLEP (50th percentile or higher).*
- *Have native fluency of a language other than English. See World Languages and Cultures Department Chairperson for more information.*
- *Study abroad with a language component (and submit a Course Appeal/Substitution request to the Office of the Associate Provost for Curriculum, Assessment, and Academic Support prior to traveling abroad), or*
- *Successfully complete a 3-6 credit foreign language course at Fredonia in this category at the appropriate level (115 or 116 or 120/121).*

Students enrolled in a Bachelor of Arts program must demonstrate a language proficiency at the 116 level or beyond; in some cases this may mean also taking a 115 level course as a prerequisite. For BA students, this prerequisite course does not count as completion of this category.

To demonstrate proficiency, students enrolled in some professional programs, those leading to certification in elementary or secondary education, or programs leading to careers where there is likely to be significant contact with the hearing impaired (e.g., Early Childhood Education, Childhood Education, Childhood Inclusive Education, Middle Childhood Education, Adolescence Education, Music Education, Communication Disorders and Sciences, Criminal Justice, Psychology, Social Work, Sociology), may successfully complete 3 or 6 credits of ASL). Inquiries related to the ASL proficiency should be directed to the Associate Provost for Curriculum, Assessment, and Academic Support.

Students unsure of their proficiency in any area other than ASL should consult with the Chair of the Department of World Languages and Cultures.

Only the completion of a 115, 116, SPAN 120/121 or ASL course will earn credit hours; all other options will fulfill this category but earn 0 credit hours.

Transfer Students

Transfer students may receive credit in categories 1 through 11 of the General Education Program for similar courses taken at other colleges or approved advanced placement courses and exams. Any course approved for the SUNY General Education Requirements from a SUNY college or university will be accepted as a course in the corresponding Fredonia CCC Category.

Questions pertaining to the CCC Program may be directed to the Associate Provost for Curriculum, Assessment, and Academic Support, 810 Maytum Hall, (716) 673-3717. More information on the General Education Program can be found on the general education web page at <http://home.fredonia.edu/generaleducation> or by emailing ccc.office@fredonia.edu.

For more information on approved courses in each category, see the General Education Master List on the general education webpage.

HONORS

Graduation with Honors

Students whose cumulative quality point average indicates high scholastic attainment will be awarded their degree as follows:

1. *Summa Cum Laude* - Quality Point Average 3.7 or higher.
2. *Magna Cum Laude* - Quality Point Average between 3.50 and 3.69.
3. *Cum Laude* - Quality Point Average between 3.30 and 3.49.

Students may graduate with honors only when they have completed at least 45 hours of graded work at Fredonia. Graded work includes all courses that carry quality points and excludes courses that are graded "satisfactory-unsatisfactory" or "pass-fail." Only those credits earned at Fredonia will be computed in the final average.

Lanford Prize

The Lanford Presidential Prize from the Oscar and Esther Lanford Endowment of the Fredonia College Foundation is presented at Commencement to a member of the graduating class who has demonstrated balanced achievement. The recipient is selected by nomination from among those students whose accomplishments exemplify the university's ideals. Criteria for selection include a high degree of personal honesty and integrity, substantial intellectual growth and achievement during university years, a minimum grade point average of 3.25, and exemplary service to Fredonia, including active participation in more than one area of university life. The award is named for President Emeritus Oscar Lanford.

Dean's List

About one month after the end of each semester, the university announces the names of students who are recorded on the Dean's List. The list includes all students who have earned a quality point average of 3.30 or higher for that semester with a course load of at least 12 credit hours. Courses with P or S grades are not included in the 12 hours.

Honors Program

Within the framework of the general education program, the Honors Program is open to well-prepared students who enjoy intellectual challenges and are excited by ideas. The core of our program consists of a series of honors seminars that change from semester to semester. Course topics have included "Cooking and Science," "Video Games: Their

Evolution and Impact," "The Politics of Sport," and "Street and Graffiti Art." Students are required to take four honors courses, ideally within their first two years of study, which will replace four general education courses. Students with questions pertaining to the Honors Program are advised to contact the Director, Dr. David Kinkela, at E314 Thompson Hall, or at (716) 673-3876 or by emailing honors.program@fredonia.edu.

In addition to participating in the honors courses and working closely with faculty members distinguished both for scholarship and teaching ability, honors students plan a number of extra-curricular activities and meet regularly to discuss the program in relation to their own developing perceptions of themselves, their values, and their future lives. The one-credit first-year honors colloquium provides students with the opportunity to situate their learning in a larger context, including experiences that connect them to the campus and local community. In addition, the Honors House provides a unique living and learning experience for students in the program.

Students entering the program in the fall of 2013 must maintain at least a 3.3 GPA to remain in good standing. Students will receive a one-time, one-semester grace period to meet the GPA requirement if they fall under the minimum requirements.

Opportunities for honors students are also available at the junior and senior levels in the form of departmental honors in a number of programs, the Honors Thesis, and an upper-level colloquium designed to help students transition into their post-graduate lives.

Students who complete the program graduate with Honors in Liberal Education.

Application to the Honors Program is separate from application to the university. While most Honors Program applicants are high school seniors, qualified high school juniors who are considering early entry to the university are encouraged to inquire about the Honors Program.

Please consult the <http://www.fredonia.edu/honors/> web page for more information.

Societies

Alma Mater Society. An honorary organization of students selected annually by the student body at Fredonia. The society was established in 1966 by the Student Association for the purpose of recognizing those students, faculty and staff who have exhibited outstanding qualities of character and leadership in support of the student body and the campus community as a whole during their university years.

Alpha Epsilon Rho (AERho). The National Broadcasting Society. An honors organization comprised of student and professional broadcasters whose primary goal is to bridge the gap between the academic and professional worlds of broadcasting in order to better prepare students to enter the broadcasting industry. Student national members must have a GPA of 3.0 in communication courses. Local membership requires a 2.5 GPA in communication courses.

Alpha Kappa Delta. Sociology majors and minors who maintain a minimum 3.0 grade point average in their major or minor and overall are eligible for induction into *Alpha Kappa Delta*, the International Sociology Honorary Society.

Alpha Lambda Delta. A national honor society recognizing first year students who have maintained a 3.5 or higher GPA and are in the top 20 percent of their class during their first year of higher education. *Alpha Lambda Delta* was re-chartered at Fredonia in 2006.

Alpha Psi Omega. A national dramatic society for students in theatre arts at the junior or senior level who have attained an overall grade point average of 3.25 in their major and who contribute significantly to the theatre program.

Beta Beta Beta. A national honor society recognizing superior scholarship and research in the biological sciences. The *Upsilon Chi* chapter of *Beta Beta Beta* was installed at Fredonia in 1966.

Chi Alpha Epsilon. A national honor society recognizing continued academic achievement of students admitted to colleges and universities through non-traditional criteria, developmental or Higher Education Opportunity-type programs. Students must be full-time and have a 3.0 GPA for two consecutive semesters. The *Alpha Mu* chapter was established at Fredonia in September 1999.

Delta Mu Delta. A national honor society in business administration.

Financial Management Association National Honor Society. Established in 1976, the membership is composed of outstanding students in the field of business finance.

Golden Key International Honour Society. A national honor society recognizing superior academic achievement and excellence among students from all academic disciplines. Open to juniors and seniors in the top 15 percent of their class. Golden Key has nearly 350 chapters at colleges and universities in six countries and the U.S.

Kappa Delta Pi. A national honor society in education. The local chapter is Zeta Upsilon. Membership is by invitation.

Omicron Delta Epsilon. A national academic honor society granting recognition in the field of economics. *Tau* chapter was installed at Fredonia in 1971.

Phi Alpha Theta. An international honor society in history whose membership is composed of students and professors and whose purpose is to recognize, through its membership, excellence in the study of history. Membership is open to any student who has completed 12 or more credit hours of history and who has achieved prescribed standards of academic proficiency.

Phi Mu Alpha Sinfonia. *Rho Chi* chapter of *Phi Mu Alpha Sinfonia* Fraternity of America was installed at Fredonia in May 1966. As a national professional music fraternity for men, Sinfonia endeavors to advance the cause of music in America and to foster the mutual welfare and brotherhood of students of music.

Pi Delta Phi. A national French honor society whose local chapter, *Epsilon Rho*, was installed in May 1968. The society recognizes outstanding scholarship in French and strives to stimulate cultural activities that will lead to deeper appreciation of France and its people. Members are nominated in recognition of academic achievement.

Pi Kappa Lambda. A national music honor society, first organized in 1918. The society's primary objective is "the recognition and encouragement of the highest level of musical achievement and academic scholarship." Initiates are elected by the society's membership on the basis of this objective. Fredonia's chapter of *Pi Kappa Lambda* is *Delta Omega*.

Pi Mu Epsilon. A national honorary society for the promotion of scholarly activity in mathematics among students in academic institutions. Members are elected on an honorary basis according to their proficiency in mathematics.

Pi Sigma Alpha. The political science department is a member of *Pi Sigma Alpha*, the national political honor society. Outstanding undergraduates majoring in Political Science are admitted to membership.

Psi Chi. A national honor society in psychology. This organization recognizes academic achievement of students with majors or minors in Psychology. The purpose is to advance the science of psychology and to encourage scholarship among members.

Sigma Alpha Iota. Incorporated as a woman's international music fraternity whose purposes are to foster interest in music and to promote social contact among persons sharing a general interest in that art form. *Delta Lambda* chapter was installed at Fredonia in 1964.

Sigma Delta Pi. National Spanish honor society whose local chapter, *Eta Alpha*, was installed in May 1968. The society promotes the understanding and appreciation of Hispanic culture. Members are selected from advanced students who exhibit outstanding ability and interest in Spanish studies.

Sigma Iota Rho. The purpose of this organization is to promote and reward scholarship and service among

students and practitioners of International Studies, International Affairs, and Global Studies and to foster integrity and creative performance in the conduct of world affairs.

Sigma Pi Sigma. A national honor society, the sole purpose of which is to recognize excellence in the study of physics coupled with high overall academic scholarship. Membership is open to qualified first-semester juniors, seniors, graduate students, and faculty. The Fredonia chapter was installed in May 1970 as a subdivision of the existing chapter of the Society of Physics Students, a national organization open to all persons with active interest in physics.

Sigma Tau Delta. The International English Honor Society. Undergraduate and graduate students in English and English Adolescence Education maintaining advanced academic standing and interest in the profession are eligible for induction to the *Alpha Xi Omicron* chapter. Founded in 1924, the society "confers distinction for high achievement in English language and literature; provides cultural stimulation and promotes interest in literature and the English language; fosters all aspects of the discipline of English, including literature, language and writing; promotes exemplary character and good fellowship among its members, exhibits high standards of academic excellence, and serves society by fostering literacy." Fredonia's charter was granted in 2006.

Sigma Xi. National organization for the promotion of scientific research. It has an active club at Fredonia with membership open to both faculty and students who have done publishable work.

Tau Sigma. Tau Sigma is a national honor society designed specifically to recognize and promote the academic excellence and involvement of transfer students. A minimum 3.50 grade point average at Fredonia is required for membership.

Other Academic Honors

The State University of New York at Fredonia has many honor societies, some for students majoring in particular fields, and some for students at large (see above for a current list). In addition, students in the School of Music may qualify for a large number of awards and may be chosen to offer honors recitals. Students in chemistry may choose to conduct honors research projects. Students in art may qualify to present honors exhibitions of their work. Prizes and honors for outstanding work are also offered to students in English, history, psychology, and the natural sciences. In addition, a good number of scholarships and partial scholarships are available to high-achieving students.

ACADEMIC AND STUDENT SUPPORT SERVICES

The university provides a variety of services and programs designed to support and enhance its educational programs and to assist students in solving problems that may interfere with their academic achievement. The services are directed and implemented by an expert professional staff.

Included in the section are a few of the educational outreach programs designed to assist the western region such as the Native American Consortium, Henry C. Youngerman Center, and the Center for Regional Advancement. Also included in the Educational Community Outreach section are a few of the programs hosted by the College of Education and a description of the Fredonia College Foundation, the not-for-profit corporation that assists Fredonia in fundraising and development efforts, as well as alumni connections.

Reed Library

Daniel A. Reed Library plays a vital role in the teaching and learning process at Fredonia by providing a wide array of materials, services and spaces needed for collegiate study.

Through Reed Library, thousands of books, millions of articles, and various media are available in electronic and print forms. Interlibrary Loan gives students and staff access to additional resources from around the world.

Reference librarians provide assistance using these materials in a variety of ways including drop-in assistance at the Reference Desk, individual research appointments, email, phone, and a 24/7 virtual reference chat service. From the Library's website, subject-specific databases and research guides make scholarly exploration efficient and accessible from any location.

Reed Library houses strong specialized collections in Music, the Holland Land Company, the Coalition on West Valley Nuclear Waste, saxophonist Sigurd Rascher, and author Stefan Zweig. The Library is also the site of exhibits, quiet and group study spaces, computers, copy machines, printers, and scanners.

To learn more, please visit Reed Library in person, or online at www.fredonia.edu/library, or call the Research Desk at (716) 673-3222. We look forward to working with you.

Information Technology Services

Information Technology Services (ITS) provides a wide range of services for students and employees. The robust campus network provides local area network and Internet access for approximately 2,400 ResNet (student residential network) connections and approximately 3,400 academic/administrative connections for classrooms,

teaching/student laboratories and computer labs, Reed Library, and offices. The robust wireless network provides access in all campus buildings and includes some outdoor spaces. Collaboration and learning management tools are provided via Google Apps for Education and the ANGEL Learning Management System, and personal working/storage server space is available. "Your Connection" is the secure web interface providing student access to financial aid and billing information, course search and registration for classes, final grades, and information on how to access e-mail and ANGEL services.

Students are encouraged to purchase laptops and are required to maintain anti-virus protection on all devices logged into the campus network. Anti-virus software is licensed for enrolled students and available for download from the "Your Connection" interface. Recommended laptop specifications are available at <http://www.fredonia.edu/its/Computer>. Recommendations regarding anti-virus software are available at <http://www.fredonia.edu/helpdesk/Virus>.

Even though the majority of students bring their personal desktop or laptop to campus, students continue to utilize three general-purpose open computer labs in Reed Library, G22 McEwen Hall, and in the Media Center located at W203 Thompson Hall. In addition to general purpose labs, ITS supports a number of computer teaching labs that are utilized primarily for classroom instruction and then open for general use when classes are not in session. Interested persons should refer to <http://home.fredonia.edu/its/labs> for a complete listing of computer labs, equipment, and software.

Printing is available in all labs, including wirelessly in Reed Library and the Thompson Hall Media Center, with 600 single-page prints provided to each student per semester. Additional information about the print quota is available at <https://home.fredonia.edu/its/printing-quota>.

The Help Desk Team is the initial point of contact via the FredQuest request system at <https://fredquest.fredonia.edu> or by telephone at (716) 673-3150 for questions or assistance regarding the computing environment.

For more information regarding suggested personal computer configurations, email configurations, listserv policy and the Fredonia Computer and Network Usage Policy, interested persons should refer to the ITS website at <http://www.fredonia.edu/its>.

Learning Center/Disability Support Services

The Learning Center, located on the fourth floor of Reed Library, is a place where any Fredonia student can go to

get help from student tutors. Tutoring is free and is available in most subject areas on a drop-in basis. Subject areas include but are not limited to: math, English/writing, computer science, physics, chemistry, psychology, sociology, Spanish, economics, business administration, accounting, biology, geology and history.

The Learning Center philosophy is that tutoring is not teaching and tutoring sessions are based on where the student is in his or her understanding of course material. Students must have at least attempted their assignments. The goal of tutoring is to help students with their assignments in a way that will help them become successful in all of their classes.

The center also has computers available for students to work independently or with tutors on assignments and projects. Students are encouraged to use the Learning Center for resources to help develop successful study skill strategies, and to get assistance with understanding course material.

Learning Center tutors are successful students who have been recommended by faculty to become tutors. Applications are accepted for tutoring positions in March. Final decisions are made by the end of April after a series of interviews. Tutors are then hired for both semesters of the following academic year.

The Learning Center provides language support services for English as a second language (ESL) and is also the home of Disability Support Services for Students, the Full Opportunity Program, and the 3-1-3 Program. The Learning Center can be reached by calling (716) 673-3550 or by email at learning.center@fredonia.edu. The Learning Center's website is located at <http://www.fredonia.edu/tlc>. More information regarding the Full Opportunity Program (FOP) can be found at <https://home.fredonia.edu/tlc/full-opportunity>.

For more information about Disability Services, please refer to the college policies on disability support services for students (<http://fredonia.smartcatalogiq.com/en/2016-2017/Catalog/Academic-Policies/Academic-Policy-and-Procedures-with-Regard-to-Students-with-Disabilities>).

Office of International Education

Office: 54 LoGrasso Hall
(716) 673-3451

Email: international.education@fredonia.edu

Website: <http://home.fredonia.edu/internationaleducation>

Fredonia students are encouraged to take an active role in global society by engaging in a variety of initiatives designed to strengthen their international awareness. The Office of International Education provides opportunities from a variety of international and global perspectives, and encourages faculty to include an international point of view in course work and curriculum across the disciplines. The office provides support for, and organizes, a variety of

programs that bring artists, musicians, guest lecturers and speakers from other countries to campus.

International Student and Scholar Services

Fredonia welcomes international students, whose presence makes our institution a global village vast in ethnicities, languages, politics, nationalities, religions and traditions.

The International Student Services (ISS) staff understands the unique needs of international students and strives to provide them with a welcoming and educational environment to assure their successful transition to Fredonia. International students can find information about a variety of subjects including: admissions requirements, housing, working in the US, orientation and more at <http://home.fredonia.edu/internationaleducation>.

COIL – Internationalizing the Curriculum

The Coordinator of International Learning encourages the development of international scholarship, and works collaboratively with the staff in the Office of International Education. On campus, the coordinator brings together faculty to recognize international research and promote interdisciplinary programming that highlights globalization. The Coordinator also encourages faculty to teach or conduct research abroad, publicizes faculty development opportunities abroad, and assists faculty in applying for Fulbright opportunities.

Study Abroad

Fredonia encourages as many students as possible to study abroad to enrich their academic program by broadening their knowledge of the world. A full time professional advises students in the selection of programs and assist in all facets of application processing. Fredonia has a large number of programs for students to choose from including semester or academic year programs, and winter/summer programs. These days, Fredonia students are choosing to do internships, service learning, and even student teaching abroad to give themselves a marketable edge in the workplace. For more information, interested persons should visit Fredonia's Office of International Education's webpage at <http://home.fredonia.edu/internationaleducation> or email international.education@fredonia.edu.

International Health Insurance

Health and accident insurance is **required** of all State University of New York study abroad program participants. We strongly advise a policy that is designed especially for students studying abroad. Such a policy should minimally include overseas urgent and emergency medical care and accidental death and dismemberment coverage. Medical evacuation and repatriation coverage is also required. The coverage must be in effect for the entire period away from home. Those who do not have such coverage must purchase the insurance provided by SUNY.

All students are required to purchase the MEDEX rider, as it includes evacuation for other than medical reasons.

Complete descriptions of the SUNY International Student and Scholar Health Insurance Plan and the MEDEX Medical Evacuation, Repatriation and Security Rider are available online at <http://home.fredonia.edu/studyabroad/health-safety-abroad>.

Neither the State of New York, through its agents, nor the State University of New York through its agents and employees, is responsible in any manner whatsoever for the payment of any claim for health-related services provided to individuals covered under this insurance policy. The State of New York and State University of New York are not responsible for obligations incurred by individuals who are not covered by this insurance policy. All individuals participating in the University's health insurance programs described herein are responsible for reviewing all descriptions of the scope and level of coverage offered by this policy. Such participants will be solely responsible for obtaining additional coverage not provided under this program if such is deemed necessary by the participant.

Educational Development Program

The Educational Development Program (EDP), known statewide as the Educational Opportunity Program (EOP), is an academic and student support services program administered by the State University of New York. It is designed to provide college access to talented students who have not had an opportunity to realize their full academic potential. EDP serves students from diverse backgrounds with priority for admission given to the "historically disadvantaged."

In addition to support at the undergraduate level, EDP graduates may apply for a waiver of tuition for full-time graduate study upon acceptance at any SUNY college or university.

The Educational Development Program is a comprehensive, academically oriented program offering supportive services in three areas:

1. Academic Support
 - a. First-Year Seminar course
 - b. Tutorial assistance
 - c. Supplemental instruction
2. Counseling Services
 - a. Academic advisement
 - b. Individual and group
 - c. Career
 - d. Personal and social
 - e. Peer advising
3. Financial Assistance

- a. Financial aid for qualified students
- b. Financial planning

Scholarships and awards that are given to program students who excel academically and are involved in leadership and community service are include: Chi Alpha Epsilon National Honor Society, Dr. Jeffrey J. Wallace Scholarship, the Alan and Annmarie Nichter Going Above and Beyond EDP Scholarship, Arthur O. Eve Scholarship, Director's Award, Gregory Antonio Fund Award, and the Ralph Wilson, Jr. EDP Book Award.

Students interested in the program should visit the EDP home page at <http://www.fredonia.edu/edp> or email edp.office@fredonia.edu.

Career Development Office

<http://www.fredonia.edu/cdo>

The Career Development Office (CDO) provides students with a link between the campus and the workplace. Professional career counselors help freshmen through alumni to:

- explore options and make career/major/job choices
- plan strategies to gain experience and skills to become competitive
- identify and apply for internship opportunities
- develop skills to implement a successful job search
- learn how to apply to graduate or professional school
- locate information and opportunities to make decisions or implement plans
- get connected to employers and graduate schools

CDO Services

Individual Counseling. Students are encouraged to make an appointment early in their university experience to examine the expectations they may have for a degree program, major, and possible occupations. Career assessments, career information, and informational interviewing are used to supplement counseling appointments. A counseling appointment is also recommended to find internships, review cover letter and resume drafts, identify job search strategies and resources, apply to graduate or professional school, or to prepare for interviews.

Career Videos and Information. Students can explore careers by viewing over 4,900 online video interviews from professionals in a wide variety of careers. Career advice videos and links are available on the CDO website, containing information about work tasks, desired academic background, personal qualities and experiences, salary, hiring organizations, and the job market. A series of Fredonia intern videos and Wall of Fame web page are also available for students considering internships.

Career Pathways. Learn about career pathways and get connected to programs at Fredonia. Explore majors, career outlooks, sample job titles, internships and job opportunities, student organizations and clubs, as well as industry-specific professional associations. Videos of professionals working in related industries are included.

Internships. An internship is a learning experience gained by working in a position related to a student's major or career field. Internships provide hands-on experience that can confirm or reject tentative career choices; help to develop useful career building skills; show potential employers evidence of the ability to apply skills in a related work environment; and make students more attractive candidates for employment or graduate school.

Internships are available in a variety of disciplines, including: art and photography, biology and environmental science, business and accounting, chemistry, communication, computer and information sciences, counseling, law enforcement and legal offices, journalism and public relations, health administration, music industry, sound recording technology, sport management, exercise science, and theatre arts.

Credit bearing internships are open to any registered student who has completed at least 30 credit hours and has a minimum GPA of 2.0. Internships may be in a student's major or in another department. Students may earn up to 15 hours of internship credit per semester and may count a maximum of 24 hours of internship credit toward the 120 hours required for an undergraduate degree. Students must complete a Learning Contract and have it approved by their faculty sponsor, internship site supervisor and the Internship Coordinator in the CDO. In addition, they must register for the appropriate course and pay the registration fee to receive credit.

The *Internships* section of the CDO website lists a wide variety of internship opportunities, a searchable database of internships previously held by Fredonia students, and current internship policies and procedures. Career counselors can help students find internship opportunities related to their interests and goals, as well as create an effective resume and cover letter.

Job Search Information. Online job search videos, employer directories, resources and links are available in the *Looking for a Job* section of the CDO website. Books about how to look for a job, interviewing, writing cover letters and resumes, as well as sample resumes, are available on the job search information shelves in the resource area.

Job Vacancy Listings. FREDNetwork is a web-based system that each enrolled student has a personal account in. It provides access to internship, student employment, summer, and professional job listings; an employer database; a mentor database of Fredonia alumni and

community members; and a listing of special events. Search agents provide email alerts of job and internship opportunities. Additional job databases, directories and resources are available with over four million organizations represented.

Resumes/Cover Letters. Assistance is available in developing resumes and writing cover letters, including individual appointments with career counselors, access to sample resumes, handouts, and online resources.

Practice Interviews. Students can practice interview skills by scheduling a videotaped or mock interview. With *InterviewStream*, students with Internet access and a webcam can also practice and record interviews whenever they want and email these to counselors for review. Suggestions for improving interviewing skills will be discussed.

Graduate School. Assistance is available in finding and applying to graduate and professional school. Directories of graduate programs, books on financial aid and how to write an application essay, as well as test preparation software, books and videos for the GRE, GMAT, LSAT, MCAT and PCAT are available in the resource area. Each year the CDO sponsors a Graduate School Fair on campus with over 60 programs represented.

Workshops. Career counselors make customized presentations to student clubs, classes and residence halls about career options, internships, summer jobs, resume writing, job searching, social media, interviewing, and graduate or professional school applications.

Recruitment and Networking Events. Each year organizations visit the campus to interview students about prospective job and internship opportunities. Students can also participate in special annual programs such as the Job & Internship Expo, Teacher Recruitment Days, and Jobsapalooza. Professionals also visit the campus to make presentations about career fields, internship programs and job opportunities through the Network on the Go and CDO Spotlight programs.

Career Resources. Check out the CDO's Pinterest page to learn about interviewing, writing resumes and cover letters, researching employers, conducting a successful internship or job search, applying to graduate school, and more. The CDO library consists of books, magazines, pamphlets, articles, and DVDs about a variety of career fields; directories of potential employers, internships and graduate school programs; and how to write resumes, cover letters, find a job and interview successfully. A series of handouts on career choice, internships, resumes and cover letters, interviewing, job search, and graduate school is also available. Resources are organized for easy browsing on shelves in the resource area. These materials are also available for sign-out.

Recruitment and Networking Events. Each year employers visit the campus to interview students about prospective job and internship opportunities. Students can participate in special annual events such as the Job & Internship Expo, Summer Job Fair, Teacher Recruitment Days, and Jobsapalooza. Employers also visit the campus to make presentations about career fields, as well as internship and job opportunities through the Network on the Go and CDO Spotlight programs.

Credentials File. Students about to complete a degree program are eligible to establish a file which includes a resume, transcript, course list, and letters of recommendation to be sent to prospective employers or graduate admissions personnel to support an application.

First Destination Survey. Each year the office contacts the graduates of the university to determine their plans for the first year after graduation. Members of each class choose to accept diverse opportunities for further study and employment. Education organizations are the most frequent first-time employers of Fredonia graduates, followed by business and industry; non-profit/social service; government; media or arts organizations and self-employment.

Graduates are pursuing advanced degrees in science, law, business, education, music, medicine, and a variety of other disciplines at graduate institutions across the country, many widely recognized for their excellence. Information about the first year plans of recent graduates is available on request from the Career Development Office.

Contact Information. The Career Development Office is located on the second floor of Gregory Hall. Appointments can be made online from the CDO website at <http://www.fredonia.edu/cdo/>, in person at the reception desk or by phone at (716) 673-3327. The CDO can also be contacted via fax at (716) 673-3593 or by email at careers@fredonia.edu.

Center for Multicultural Affairs

The Center for Multicultural Affairs is the principal foundation for multicultural programming and outreach on Fredonia's campus and in the surrounding community. The center strives to offer a safe educational and social space to all members of the university community. Through advocacy, education and program development, the center supports the creation of a diverse university community for the purpose of enhancing the student population's academic development, level of cultural awareness and commitment to promote social justice.

The center houses the Black Student Union, Latinos Unidos, Women's Student Union, Pride Alliance, Jewish Student Union, and the Native American Student Union, while providing support to the Gospel Choir and Sister Circle discussion group. Each of the groups provide a wide

array of cultural programming and enrichment to the campus and community.

Additional services provided by the Center for Multicultural Affairs include academic, personal, group, and career services; student advocacy; leadership development; mentoring programs; and various other campus-wide diversity initiatives. For more information about the Center for Multicultural Affairs, students should call (716) 673-3398 or stop by the office at E125 Thompson Hall or email multicultural.affairs@fredonia.edu. The office's website is available at <http://www.fredonia.edu/cma/>.

Professional Development Center

The Fredonia Professional Development Center in Reed Library strives to meet the professional development needs of all Fredonia employees by coordinating and providing educational opportunities for faculty and staff at various stages in their careers, and providing consultation and training opportunities for technology-related issues. The center's goal is to provide a centralized location for collecting and disseminating information about professional development opportunities taking place on campus and beyond. The center is committed to fostering a culture in which knowledge and expertise are shared among diverse constituencies and will provide a gathering place in which this dialog can occur.

The Professional Development Center can be contacted at (716) 673-4864. For more information on PDC events, interested persons should check the web page at <http://www.fredonia.edu/pdc/>.

Community Outreach

Engagement and Economic Development

The **Division of Engagement and Economic Development (EED)** facilitates and supports university-community collaborations that enhance the intellectual, cultural, artistic and economic vibrancy of the region. Such collaborations include active community engagement and partnerships with local and regional organizations, governments, businesses and universities. The Division oversees the Fredonia Technology Incubator located in the City of Dunkirk. **The Fredonia Technology Incubator (FTI)** promotes economic growth in the Western Southern Tier of New York State by supporting entrepreneurship and the development of new, innovative, arts and technology-based companies into successful business ventures. FTI also serves as a regional economic development hub. EED administers the **StartUp NY program** for the university. StartUP NY creates tax free zones on or near approved colleges and universities throughout New York State. The goal is to attract businesses that would not otherwise locate in the state, and it provides incentives to retain and expand jobs. It is

intended to benefit all residents through new direct spending, resident taxes, and home-ownership demand in communities. StartUP provides major tax incentives for businesses to relocate, start or expand businesses in the state. Approved businesses will be granted ten years of state tax benefits if they operate on or near academic campuses. New employees of sponsored businesses will not pay state income tax while in the program. In addition, businesses may be eligible for addition incentives. Businesses must be approved and sponsored by a campus that has an approved Campus Plan. In addition, the Division contains the **Center for Regional Advancement (CRA)** that strives to enhance our regional vitality through community engagement by connecting the talents, knowledge and passions of Fredonia's faculty and staff to community needs and opportunities. Fredonia's EED also oversees and supports the endeavors of **Native American SUNY: Western Consortium** which focuses upon educational access, opportunity, and development for Native American students and communities. The consortium is comprised of Tribal representatives and Western New York region SUNY Campuses. For more information about the community outreach, interested persons should contact the Office of Engagement and Economic Development, 701 Maytum Hall, at (716) 673-3758, visit our website at <http://home.fredonia.edu/engagement>, or email us at engagement.economicdevelopment@fredonia.edu.

Fredonia College Foundation, Inc.

The Fredonia College Foundation, Inc., a not-for-profit corporation, was formed in 1964 to encourage and accept gifts and endowments in support of the priority needs of the State University of New York at Fredonia, its faculty and students.

In order to maintain the quality of academic offerings at Fredonia and to realize the university's commitment to public service for western New York and the state, the university must look to non-state sources to assist in its development. The foundation seeks support for scholarships and those programs and events that enrich the university and community that cannot be supported by state funds.

Contributions from alumni, parents, friends, faculty/staff, emeriti, business and industry, the professions, foundations, and other public and private sources have strengthened many university programs. Gifts of cash, appreciated stock, real estate and insurance, gifts-in-kind, works of art, books, equipment, and teaching materials, as well as planned gifts such as bequests and gift annuities, have enabled the university to move forward, even in times of budgetary restraint.

The work of the Fredonia College Foundation is overseen by a volunteer board of directors, whose members serve three-year terms. The board is drawn from alumni, as well as local and regional community leaders. For information

on opportunities for giving through the Fredonia College Foundation, interested persons should visit the foundation's website at <http://home.fredonia.edu/foundation> or email college.foundation@fredonia.edu.

Henry C. Youngerman Center for Communication Disorders

The Henry C. Youngerman Center for Communication Disorders is located in Thompson Hall. The center, a major component of the Department of Communication Disorders and Sciences, contains an audiology clinic, a speech-language clinic, laboratories and classrooms. Speech, language, and hearing evaluations and treatment are provided to students and residents of the neighboring communities. Students in Communication Disorders and Sciences participate as observers and as clinicians under the supervision of licensed and certified speech pathologists and audiologists.

Extended Learning

The Office of Extended Learning is located in Fenton Hall. This program brings together a unique combination of university and community support services.

Non-Credit Courses, Conferences, Institutes, and Workshops

The office works with university faculty and staff, community groups, and local industry to identify and provide for their specialized education and training needs.

Lifelong Learning Credit Program

Designed for those who would like to begin their college studies on a part-time basis, this program enables individuals to enroll in regular undergraduate courses for credit without the more formal college admissions procedures associated with full-time study. Although the application process is greatly simplified, Lifelong Learning Credit Program students are held to the same academic standards as their matriculated colleagues – and experience the same high quality Fredonia education.

Applications for admission are available in the Office of Extended Learning, 2146 Fenton Hall, or the Office of Admissions, 178 Central Avenue (Fenner House), Fredonia, N.Y. 14063.

Qualified students are eligible to enroll in regular day or evening courses, including a number scheduled in the late afternoon and early evening. The Lifelong Learning Credit Program is especially appropriate for those who wish to pursue non-degree university studies on a part-time schedule - for personal growth, job advancement, or other reasons. Academic advisement is provided to assist students with course selection. After a designated number of credit hours, students are encouraged to seek admission to a baccalaureate degree program at that time. Credit earned through Lifelong Learning course work will apply toward any degree program at the university.

A student with prior academic experience who is seeking degree study on a full-time or part-time basis should pursue admission as a transfer applicant (see Transfer Admissions (p. 578)).

Visiting Student Program

Students presently enrolled at another college or university who wish to pursue academic study at Fredonia for one or two semesters may apply for admission through the Visiting Student Program. Advantages of the program, in addition to expanding academic options, include getting to know other new students, faculty and geographic areas, as well as having an opportunity to see oneself, one's education, and future plans from a new perspective. To qualify for the program, students must receive approval for a proposed academic program from an appropriate official at their present college. Applications are reviewed following the procedures used in evaluating requests for admission from transfer applicants. Registration in specific courses is offered on a space-available basis.

For information on any of the above, students should call (716) 673-3177, email lifelong.learning@fredonia.edu, visit Extended Learning in 2146 Fenton Hall.

J-Term (Joining Term) and Summer Sessions

Many community members take advantage of summer and J-Term offerings, which include study on campus, online, and abroad. Extended Learning coordinates the schedules for these intersessions. More information can be obtained on the web regarding these opportunities - <http://home.fredonia.edu/jterm> and <http://home.fredonia.edu/summer>.

STUDENT LIFE ON CAMPUS

Residence Life

<http://www.fredonia.edu/reslife>

Residence Life

The Residence Life Office is located on the first floor of Gregory hall. There are 14 residence halls for students to choose from, including 4 single gender buildings and 10 co-educational buildings; 2 of which are considered independent style halls. Students also have a choice of corridor, suite or kitchen suite living. All residence halls are smoke free and tobacco free. University Village Townhouses opened in Fall 2014. This newer living option provides students with an off-campus feel but provides all the benefits of being on campus. Each townhouse has 4 single bedrooms with full-sized beds, a full kitchen with dishwasher, and furnished living and dining area. Each unit also includes a washer and dryer. The townhouses share a common building, the Village Center. Located in this center is the central office, resident mailboxes, lounge areas, a full kitchen, fireplaces, and group meeting areas. Residence hall living is all about convenience and belonging. Living right on campus in the middle of everything is the best and fastest way to become part of Fredonia. Reed Library is a short walk from anywhere on campus as are Blue Devil sporting events and regular activities in the Williams Center. It is our goal to make the residence halls feel like home away from home, a place where you belong. From Hall Council to Meetups to Resident Assistant programs to employment opportunities as a Night Desk Attendant, opportunities to connect and engage with other students in the residence halls are vast. We hope that you feel at home here.

Residence Halls

Fredonia is composed of a variety of residence halls in corridor and suite configurations, all of which have a 24-hour intervisitation policy. Each hall is home to a staff that will provide programming and offer a warm, caring atmosphere conducive to educational and social growth. The single gender hall for men: Chautauqua (corridor); and for women: Alumni (corridor), Kasling (suite), Nixon (corridor). The co-educational halls include: Disney (suite), Eisenhower (suite), Grissom (suite), Hemingway (suite), Hendrix (suite), Igoe (suite) McGinnies (corridor), Schulz (suite). Kitchen Suites: Three- bedroom suites including a full kitchen are available to upper level students in Disney and Eisenhower halls. Gregory Hall (corridor) and University Commons (suite) are co-ed, independent living halls (i.e., guests do not sign in) and restricted to upper level students.

University Commons consists of 124-premium spaces, featuring single and double rooms. Every two rooms share a bathroom and each room is equipped with heat and air

conditioning which can be controlled in the room, and a micro-fridge unit.

University Village Townhouses are new to Fredonia as of Fall 2014. These townhouse units offer an independent living experience for upper level students. Each unit contains 4 single rooms, laundry facilities, kitchen area and living room area. Every 2 rooms share a bathroom and each room is equipped with a full-size bed. All residence halls are locked on a 24-hour basis. Residents are provided with electronic door access, and their guests must be escorted at all times.

Freshmen and sophomores (two years post high school) who do not live with parent(s) or spouse within 50 miles of the campus are required, as a matter of policy, to live in university housing for the full academic year. Any exemption to the regulation must be granted, in writing, by the Director of Residence Life. The housing license is for the entire academic year and cannot be canceled during this period as long as the student is registered, regardless of class standing. There is a \$350 fee for *approved* termination of the housing license.

Assignment to a residence hall is first-come, first-served, based on the date of submission of a completed housing application and license.

Detailed information about university housing facilities for students will be provided upon request by the Office of Residence Life, Gregory Hall, State University of New York at Fredonia, Fredonia, NY 14063, at the website listed above, or residence.life@fredonia.edu.

Regulations governing occupancy of residence hall rooms will be provided by the Office of Residence Life at the time the housing packet is forwarded to students. All occupants within the halls are expected to comply with the appropriate regulations.

For the cost of housing, see the Admissions and Financial Aid (p. 581) section of the catalog on University Expenses.

Residence Life Staff

The Residence Life staff is dedicated to providing essential services for resident students and fostering an environment that promotes personal and community development. We look forward to your participation and good citizenship.

Residence Directors

Each residence hall is supervised by a Residence Director (RD) who either has achieved or is working towards a Master's degree. The RD is responsible for establishing an environment that fosters the academic and personal growth of resident students. The RD promotes educational programs, provides personal counseling and referrals, maintains consistent behavioral expectations for residents, and supervises the Resident Assistants (RAs).

Resident Assistants

Resident Assistants carry out a wide range of functions that benefit resident students and the overall residential community.

RAs provide peer counseling, sponsor educational and social programs, enforce rules and regulations, serve as a referral resource and generally assist in the operation of the residence hall. Administrative Staff The Administrative Staff includes the Director, Associate Director, Assistant Director and Agency Program Aide. Collectively they are responsible for housing administration, staff hiring and supervision, purchasing furnishings and supplies for the residence halls, information systems, inventory control, and budget management. The Office of Residence Life is located on the first floor in Gregory Hall.

ResNet Staff

The ResNet Office of the ITS Service Center provides services and support for students, staff and guests living in the residence halls. The primary services provided include Internet connectivity support and campus access control services to students living in the residence halls. The administrative staff includes the Residential Technology Manager, ResNet Coordinator, and student ResNet Technicians. The staff works closely as a team to facilitate computer, access control and network support calls as well as other projects throughout the year. The ResNet office is located on the first floor of McGinnies Hall.

ResNet provides the following services for students, staff and guests living in the residence halls:

- ResNet High Speed Ethernet Connections
- ResNet Secure Wireless Access
- Hardware and Software Assistance
- Electronic FredCard Door Access
- Residential Network Security
- Residence Life Staff Multi-Media Equipment
- Residence Life Smart Classroom
- Fredonia Computer Purchasing Program
- Residence Life Axis TVs

Students living on-campus may bring their computers into the ResNet Office for repair or they may schedule an in-room appointment to have a ResNet Technician assist them with their computer related problems. For more information, students should contact the office at (716) 673-3668 or by emailing resnet@fredonia.edu.

Off Campus

Off-campus housing information is maintained in the Student Association Office located in the Williams Center. An online search for available office-campus housing is available at <http://www.fredonia.edu/sa>.

Counseling Center

Counseling Center

The mission of the Fredonia Counseling Center is to promote student intellectual, social and emotional development that fosters academic and personal success within a global and culturally diverse society. The Counseling Center offers individual and group counseling sessions, skills workshops, outreach presentations and includes services aimed at preventing substance abuse and violence on campus. Professional counselors work individually and with groups to help students understand themselves better, resolve problems, come to terms with difficult issues, and/or address important decisions. Additionally, a psychiatric consultant visits weekly to assist those students in need of psychiatric evaluation and medication. Free, confidential mental health counseling services are available to all registered students.

The **Substance Abuse and Violence Prevention (SAVP)** program, an outreach service of the Fredonia Counseling Center, strives to create a campus culture in which members make informed and responsible decisions regarding their personal and community health. SAVP works to reduce the incidence, prevalence, and severity of substance abuse and interpersonal violence related problems among Fredonia students. This comprehensive program coordinates initiatives; facilitates collaboration; provides training, advocacy, and intervention services; and educational opportunities in the following areas: alcohol and other drugs; rape and sexual assault; relationship issues including dating and domestic violence; and stalking.

For more information on the services offered through SAVP, please contact the Counseling Center or visit the website: <http://www.fredonia.edu/savp>.

The Counseling Center is located in LoGrasso Hall. Appointments can be made in person at the reception desk or by telephone at 673-3424. Information about services being offered for the current semester including groups, workshops, and wellness ideas can be accessed through the website: <http://www.fredonia.edu/counseling/>.

In most circumstances, the difficulties that students face can be addressed through the usual process of setting up an appointment with a counselor and discussing the issues concerning the student. However, there are circumstances when crisis situations in which immediate or same-day intervention by a counselor is called for. Emergency psychological services are provided to the campus community by Counseling Center staff for such crises.

Fredonia's Counseling Center provides a 24-hour emergency service to the University.

- If a crisis arises during working hours, students should contact the Counseling Center directly by either calling

716-673-3424 or by going directly to the Counseling office located in LoGrasso Hall.

- When students come to the Counseling Center in crisis, they should make the secretary aware that they require immediate and/or same-day assistance.
- Outside of regularly scheduled working hours, students living on campus are advised to notify their Resident Advisor (RA) or Resident Director (RD) of the crisis, who may then decide to engage Counseling Center emergency services.
- Students may also reach the Counseling Center emergency services by contacting University Police (716-673-3333).

A Note About Confidentiality

Counseling Center client information is confidential within ethical and legal guidelines. Information can only be released with the written consent of the student, except in situations where a student poses a threat of serious harm to self or to others, or in the case of abuse/neglect of a minor, or in the case of a court-ordered release of information.

Student Health Center

The Student Health Center, located in LoGrasso Hall, provides currently enrolled Fredonia students with confidential primary care of acute illness and injury, health education, allergy injections, immunizations, preventative health and laboratory services. Most services provided in the Student Health Center are provided without any additional charge to the student as they are funded by the mandatory health fee paid each semester. Maintenance allergy injections, vaccinations, and PPD tests are provided for an additional charge to the student on their FRED card.

The Student Health Center is open Monday through Friday from 8:00 a.m. – 5:00 p.m. during the academic year. The medical staff includes a board certified physician, nurse practitioners and registered nurses. When necessary, referrals can be made to private physicians or specialists in the local area. For more information regarding the Student Health Center services and staff, please visit the center's website at <http://www.fredonia.edu/healthcenter>. Specific questions can be directed to our email at health.center@fredonia.edu, or by calling the Student Health Center at (716) 673-3131.

When the Student Health Center is closed, emergency care is always available at Brooks Memorial Hospital. The hospital is located at 529 Central Ave., Dunkirk, approximately 3 miles from the campus. For any emergency on campus or when an ambulance is needed, the University Police should be called at 673-3333. If there is an emergency when you are off campus, dial 911.

All services provided outside the Student Health Center, such as outpatient laboratories, x-rays, and emergency room visits are the student's responsibility, and are not covered by the student health fee.

Student Health Advisory Committee (S.H.A.C.)

The role of S.H.A.C. is to advise the campus President or designee on the status of health and wellness services and health education programs on campus. S.H.A.C. is composed of students members, faculty/staff, a Chairperson; Director of the Counseling Center, the Director of the Health Center, and Associate Vice President of Student Affairs or their designee are ex-officio members.

University Police Department

The University Police Department, located on the second floor of Gregory Hall, is responsible for all law enforcement related issues on campus.

Members of the department are trained in a community policing environment where students and the campus community share in keeping the university a safe place to study and work. University Police Officers are responsible for the security of all buildings and the protection of students, employees, and visitors. Duties include community policing, parking enforcement and all investigations.

The Chief of University Police is assisted by four lieutenants and ten officers. The office maintains a close working relationship with the Fredonia Police Department and other law enforcement agencies in Chautauqua County.

For additional information about University Police, please visit their website at <http://students.fredonia.edu/upd> or call (716) 673-3333.

Office of Veterans Affairs

Office: 158 Nixon Hall
(716) 673-3423

Mark Mackey, *Veterans Affairs Administrator*

Email: veteransaffairs@fredonia.edu

Website: <https://students.fredonia.edu/veteransaffairs/>

Fredonia takes pride in serving the men and women in uniform and assisting them in their educational goals. Located on the main floor of Nixon Hall, the Office of Veterans Affairs provides information, advice and processes the paperwork for the certification of veterans educational benefits. The office is staffed by part-time student veteran employees under the supervision of the Office of Veterans Affairs Coordinator and is open for business Monday through Friday; however, hours of operation will vary and be posted on the office door.

Please note that Fredonia provides special services to students receiving VA educational entitlements:

- Late Fee Waivers - Please visit the Student Accounts office web page for further details at <http://www.fredonia.edu/admin/studentaccounts/payments.asp>.
- Tutoring - The Fredonia Veterans Affairs Office participates in the GI Bill Tutorial Assistance Program.
- VA Work-Study Program - The Fredonia Veterans Office participates in the federal VA Work-Study Program.
- Counseling Services - Trained staff within the Counseling Center provide confidential counseling services.
- On-Campus Housing Residency - While Fredonia requires all freshmen and sophomores to reside on-campus unless they live within 50 miles of the University, this residency requirement is waived for all students who have served on active duty and are receiving VA educational entitlements.
- Deployments Without Penalty - Students serving in the military that are placed on active duty during a semester may withdraw and return to the university normally without academic penalty. However, it is left to the discretion of the course instructor to determine the appropriate course of action depending on the course of study. Students will need to provide the university a copy of official orders and follow the normal Leave of Absence Policy and Continuing Enrollment.
- Military Credit Evaluation - Fredonia will evaluate all military transcripts (AARTS, SMARTS, ACE etc.) and provide as much transfer credit as possible in accordance with the program of study and university policies.

Fredonia has created the Veterans Affairs Support Team which includes specific staff members across campus from key departments who specialize in assisting students with veterans related issues. The departments include the following: Financial Aid Office, Admissions Office, Counseling Center, Academic Advising, Student Accounts and Career Development.

FACULTY STUDENT ASSOCIATION

The Faculty Student Association (FSA) is a New York State not-for-profit corporation governed by a board of directors composed of seven students, three university administrators, three faculty, one classified staff member, and one alumni member all representing the State University of New York at Fredonia. It operates under a contract with Fredonia in conformance with guidelines established for all campuses. The FSA receives no government subsidies, and is self-supporting through revenues generated from its services. Any income after operating expenses is used to benefit the university by supporting campus programs. The FSA administrative offices are located in Gregory Hall. For general information, students should call (716) 680-6228 or visit the FSA website at fsa.fredonia.edu or email fsa.office@fredonia.edu.

Other FSA Services

ID Cards - A university ID card; the FREDCard is required for all enrolled Fredonia students. The cards are initially issued free of charge to students by the FSA office. In addition to being a required form of identification on campus, they are also the official card used for all meal plans, Fredonia debit and FREDFunds accounts. More information can be obtained at <http://www.MyFREDCard.com>.

The **University Bookstore** provides new and used textbooks as well as a variety of reference and study aids. Located on the ground floor of University Commons, the bookstore also offers school and art supplies, health and beauty aids, imprinted items, clothing, greeting cards and a unique array of gift items including products from local artists and vendors. The store's computer department features hardware, software and a wide range of peripherals. The **Convenience Store**, located adjacent to the bookstore, offers health and beauty aids, beverages, and a variety of food items. FREDExpress, located in Thompson Hall, offers a variety of grab and go items. For more information, please email fsa.bookstore@fredonia.edu.

The **Fredonia Debit Account** is a prepaid taxable debit account. The account offers the convenience of making purchases at any FSA location without carrying cash. Students signing up for a Fredonia Debit Account Plan of \$600.00 or more are entitled to take advantage of the Textbook Pre-Pack option. The bookstore will prepackage a student's textbooks and subtract the cost from the student's Fredonia Debit Account. When the student arrives on campus they simply go to the Pre-Pack area in the University Commons, show their FREDCard and pick up their books. The debit account may also be used for online purchases and book rentals through the Bookstore

website. Please visit the site at <http://www.fredoniabookstore.com/>.

FREDFunds is a prepaid, taxable declining balance account designed to offer you a convenient and flexible payment option that is accepted at a wide range of locations both on and off campus. This account also offers the convenience of making purchases without carrying cash. More information may be found at <http://www.MyFREDCard.com>.

The FSA provides **check-cashing** services on campus. Students who possess a valid Fredonia I.D. (FREDCard) may cash checks in the bookstore. Fees for check cashing may apply and there is a \$25.00 limit. In addition, electronic banking machines are available on campus.

The FSA's **vending program** on campus includes snacks and beverages.

Cable television service is provided to all students living within the residence halls on campus. A diverse channel lineup offers students a wide variety of programming.

The Faculty Student Association and Residence life have teamed together to provide use of **washers and dryers** for all resident students on campus at no extra charge. The washers and dryers are located in a designated laundry room within each residence hall.

The **Alumni House and Conference Center**, located at 286 Central Avenue at the main entrance to the campus, is available by reservation for private parties and meetings.

The **Herbert C. Mackie Memorial Camp** (College Lodge) in Brocton, located 12 miles from the campus on Route 380, is a 203-acre refuge featuring a beautiful and rustic lodge and hiking trails. The facility is available by reservation for weddings, parties, cross-country ski outings, and other events. The camp also has a sleeping lodge that will accommodate up to 90 guests. More information may be found at <http://www.collegelodge.com>.

Student Employment - The FSA provides jobs ranging from 10 to 20 hours per week for approximately 200 students. A variety of student jobs are available, with the majority being in dining service locations. The jobs are not based on financial need.

FREDONIA ORGANIZATIONS AND ACTIVITIES

Campus Life Office

<http://www.fredonia.edu/campuslife/>

The Campus Life Office, located in the Williams Center, provides many exciting activities for students to participate in to fill the hours when they are not in the classroom. The office is a place for students to schedule concerts, dances, movies, lectures, student organization meetings and a host of campus activities. Some of the services the office and staff provide are:

- Advisement to student organizations
- Provide a meeting place, by reservation, for groups and organizations
- Maintain leadership development programs and workshops for students, organizations and advisors
- Facilitate advertisement for campus/organization events
- Encourage students to participate in Volunteer and Community service projects

In addition to the above services, the Campus Life Office plans Family Weekend, Commencement, Summer Orientation, and works closely with Residence Life events, Homecoming, Admissions Open Houses, Multicultural Affairs, and the conference committee.

For more information regarding Campus Life, students should contact the Campus Life Office at (716) 673-3143 or email campus.life@fredonia.edu.

Leadership Program

<http://www.fredonia.edu/campuslife/leadership>

The Leadership Program through Student Affairs offers workshops for freshmen and sophomores who are nominated by Fredonia faculty and staff. The workshops are designed to introduce students to leadership theories. The junior and senior program introduces students to tasks, strategies and skills of effective leadership. Course activities move students from theory to practice of leadership skills through the use of experiential learning, oral expression, and teamwork activities. For additional information about the Leadership Program, please call (716) 673-3143 or email leadership.program@fredonia.edu.

Note: The Leadership Studies minor is an interdisciplinary program offered through Academic Affairs that requires 21 credit hours of course work, offering classes from the following disciplines: global, communication, groups and organizations and presentation skills, as well as internship credit. The Leadership Studies minor is selective.

Applications must be submitted via the program requirements (see Leadership Studies program information). The Leadership Program and the Leadership Studies program work together to provide unique experiences for Fredonia students. For additional information about the Interdisciplinary Studies - Leadership Studies minor, please call (716) 673-3679 or email leadership.studies@fredonia.edu.

Fredonia Ticket Office

<http://www.fredonia.edu/tickets>

The Fredonia Ticket Office is located in the Williams Center, Room G-140 . It provides a variety of services for the campus and surrounding communities. In addition to handling tickets for events in the Michael C. Rockefeller Arts Center, Juliet J. Rosch Recital Hall and student activities across campus, the ticket office is an authorized ticketing agent for Coach USA, Greyhound and NY Trailways bus companies. The ticket office also sells tickets for shuttle service to the Buffalo airport and train stations at the beginning and end of each semester, and for downstate motor coach charters for the Thanksgiving, Winter, and Spring breaks. Hours of operation during the academic year are Monday through Friday from 9:00 a.m. until 7:00 p.m., and Saturday from 1:00 p.m. until 5:00 p.m. The office is closed on Sundays and most major holidays.

Volunteer and Community Services

<http://www.fredonia.edu/campuslife/volunteer/>

The Office of Volunteer and Community Services is a part of Campus Life. Its purpose is to connect students with the community and to provide volunteer opportunities. Students will be able to incorporate these into the classroom. The Office serves as a central resource for information about area opportunities in service.

Student Association

All fee-paying students at Fredonia are members of the Student Association. The Representative Assembly, which is the governing body, is divided into the five classes (freshman through graduate) and has one elected representative for every 100 students in the class.

The representatives have a very important responsibility. Besides representing their constituents at the assembly meetings, they are individually appointed to faculty committees of their choice. Through these committees, students voice their opinions on such matters as academics, food services and Student Affairs. Student membership on these committees is not limited to assembly members; however, everyone is encouraged to participate.

The association also has committees and departments of its own which require student input.

Elections for the office of president and vice president of the Student Association are held every November for a one-year term that runs from January to December. The Student Association President has the privilege of appointing a comptroller. The Speaker of the House is nominated and elected annually by assembly.

Students are encouraged to become involved with the Student Association. The association determines how the resources (activity fee) of the students are allocated and released over the year and submit for approval by the University President an annual budget.

The Student Association Office is located in the Williams Center, Room G-107. Students may stop in any time to join a committee, become a representative or just to ask questions. The office is open Monday through Friday from 9:00 a.m. until 5:00 p.m. For additional information, please call (716) 673-3381.

Art Forum

Art Forum presents programs that broaden the awareness of the visual arts; gives interested students the opportunity through participation to develop student and community appreciation for the visual arts; and helps to develop an effective and informal network of professional assistance that is a resource to the profession and the public. The group participates in many activities ranging from exhibitions to weekend trips to major cities.

Black Student Union (BSU)

The Black Student Union, which has been in existence for over 40 years at Fredonia, is an organization that seeks to promote a feeling of unity and pride among students of African descent as well as provide a sense of cultural awareness throughout the campus community. The BSU contributes to the richness and diversity of student life by sponsoring lectures, artists, dancers, poets and musical productions throughout the year. The organization holds many annual events that continue to place affirmation of cultural self-determination. Such people as Dr. Na'im Akbar, Kwami Toure, Dr. Bruce Bridges, Dr. Ivan van Setima, Jill Nelson, Bill Bellamy, Omar Tyree, Dr. Mark Anthony Neal and Dr. Ali Rashad Umrani, are just a few of the many who have joined the BSU family at Fredonia.

Ethos

The purpose of Ethos is to set and maintain a standard of excellence in music composition; to create an environment within which composition at Fredonia can flourish; to create a vehicle for the performance of student compositions; and to organize two music festivals a year including, as well as student compositions, works by other

composers. Activities include attending theory and composition conferences.

Fredonia Jazz Workshop

The purpose of the Fredonia Jazz Workshop is to provide a source of education in jazz for the campus community, as well as educational and musical experiences in jazz to the local community through concerts and campus sponsored dances.

The Leader

The Leader is Fredonia's award-winning, student-run campus newspaper. It is published every Wednesday during the academic year and is sustained independently through advertising revenue. *The Leader* is run by a student editorial board that is composed of its editorial, business, and production staff. Each paper includes five sections: News, Sports, Campus Life, Arts, and the Lampoon (comics).

Positions are open to students of any major, regardless of experience. All editorial seats are voted on in April for the following academic year. Students interested in English, journalism, communication, public relations, graphic design, photography, illustration, business administration, sales, marketing or advertising are encouraged to join the staff. Some positions are paid.

Student Opera Theatre Association (SOTA)

The purpose of Opera Theatre is to provide a source of education in the production and performance aspects of opera. The opera is represented through live performances, guest speakers and artists, lectures, master classes and other forms of the opera. Membership is open to all fee-paying students, faculty and staff.

Orchesis

Orchesis is a student-run organization open to all interested students and dedicated to the appreciation of dance as an art form. Two evening-length concerts are presented annually, and feature works by student choreographers as well as by professional guest artists. In addition, Orchesis sponsors numerous workshops, master classes, and community events each year.

Performing Arts Company (PAC)

The Performing Arts Company is a student-run theatre group at Fredonia. PAC presents four productions a year, two per semester, and also sponsors workshops. It is a creative outlet for all interested students and is frequently a stepping-stone to Walter Gloor Mainstage Series shows.

Spectrum Entertainment Board

Spectrum Entertainment Board is a student organization dedicated to enriching the university curriculum by presenting stimulating arts, entertainment, and cultural programs for the campus community. Members of Spectrum are educated on negotiating contracts, dealing with agents and artists, and coordinating large, campus-wide events. Programs include lectures, films, concerts, weekly music series, comedy, and special events such as Activities Night, Family Weekend entertainment, and Hanging of the Greens. Past performers have included: O.A.R., Recycled Percussion, Ben Folds, Anthony Rapp, Dashboard Confessional, Max Weinberg, Stephen Lynch and Mo Rocca.

Fredonia Radio Systems

Fredonia Radio Systems includes both WDWL-Cable and Internet 89.5 FM and WCVF 88.9 FM. The two stations provide Fredonia students and Northern Chautauqua County with radio programming designed to inform as well as entertain. It also provides valuable training for those interested in any aspect of broadcast communication.

WDVL, "The Inferno," began operations as WCVF-AM in the early 1940s and is the oldest radio station in the SUNY system. As a commercial station it programs contemporary rock as well as campus news and sports to an on-campus audience of students. WCVF, "The Voice," went on the air in 1978, broadcasting to Fredonia and surrounding communities. It is a non-commercial station licensed by the FCC to the SUNY Board of Trustees, and features a variety of public affairs, news (both local and National Public Radio), sports, and a progressive blend of alternative music styles from jazz, folk and blues, to reggae, techno, world beat and rock, with an emphasis on new music.

Fredonia Radio Systems offers all students, regardless of major, the opportunity to work in the following departments: management, business, promotion, sales, traffic, music, production, news, sports, community service, and engineering. The station is managed and staffed by volunteers. Its offices and studios are located in McEwen Hall.

WNYF-TV

WNYF-TV is a completely student-operated cable television station located in the lower level of Hendrix Hall, equipped for studio and field production and editing, with some of the latest digital technology. WNYF gives its student members experience in television production, fostering a real esprit de corps as a fun, hardworking campus group. The station cablecasts a variety of programming to the village of Fredonia, the city of Dunkirk, and the university campus.

Absolutely no experience is required to join the staff of WNYF, and all majors are welcome. Students can gain experience in all production areas by producing, writing, directing, and editing, or taking on-air roles from news and sports to drama. Members have the opportunity to create, develop, and produce their own programs, as well as join the decision making board. An Oscars-style awards ceremony (The Freddy's) is held each year to honor the best of station production.

Interested students should look for the first general meeting announcement at the beginning of each semester, or call (716) 673-3571, or stop by the station. Email for WNYF-TV is wnyf@fredonia.edu and their ustream channel is <http://www.ustream.tv/channel/wnyf-tv-live-stream>.

United States Institute for Theatre Technology Student Chapter (FUSITT)

The purpose of the organization is to encourage and support the development and advancement of knowledge and skills of its members in all aspects of production and design in the performing arts, entertainment and presentation industries. Membership in FUSITT shall be open to all fee-paying members of Fredonia. The organization shall not limit membership to members in good standing of USITT or to the Fredonia Department of Theatre and Dance.

Writers' Ring

The Writers' Ring unites Fredonia students with the works of national and international writers. Students help decide on inviting visiting writers to campus readings that routinely draw over 100 audience members. Students also have the opportunity to edit the campus literary magazine, *The Trident*. Its mission is to encourage literary exchanges among students at Fredonia and to promote creative writing outside of the classroom and into the community by providing a forum for readings and lively discussions of fiction, poetry, and mixed genre literary work.

Other Student Clubs and Interest Groups

Student life is enriched by the availability of a wide variety of formal and informal group activities, some of long standing, some only newly established. In addition to honor societies, there are service groups, clubs relating to specific majors and career fields, a growing social fraternity and sorority system, and interest groups involved with sports, hobbies, areas of social concern, etc. It is not possible to give more than a sampling here; students who have a specific interest or just want to find out the full range of possibilities are encouraged to visit our organization site FSU4U. All department clubs, independent organizations, associations and societies must

be recognized by the Student Association in order to have access to campus facilities and association funds.

Accounting Society
 Alma Mater Society
 Alpha Lambda Delta
 Alpha Phi Omega
 Alpha Psi Omega
 American Choral Directors Association
 American Marketing Association
 American String Teachers Association
 Amnesty International
 Applied Communication Association
 Art Forum
 Beta Beta Beta
 Biology Club
 Black Horse Rugby
 Black Student Union
 Business Club
 Campus Climate Challenge
 Campus Greens
 Catholic Student Union
 Chemistry Club
 Chi Tau Omega
 Chinese Club
 Club Hockey
 Club Soccer
 College Democrats
 College Libertarians
 College Republicans
 Colleges Against Cancer
 Computer Science Club
 Conservative and Republican Club
 Criminal Justice Club
 Dance Team
 Delta Chi Fraternity
 Delta Phi Epsilon Sorority
 Economics Club
 Engineering and Physics Society
 Envied Xpression
 Fencing Club
 Field Hockey Club
 Figure Skating Club
 Financial Management Association
 Fred A.S.S.I.S.T.
 Fredonia Ballroom Dancing
 Fredonia Brass Association
 Fredonia for St. Judge
 Fredonia State Boxing Club
 Fredonia Gospel Choir
 Fredonia Jazz Workshop
 Fredonia ROTARACT Club
 Fredonia State Blue Ice Step Team
 Fredonia State Golf Club
 Fredonia State Pep Band
 Fredonia State Show Choir
 French Club
 Genetics Club

Geology Club
 Golden Key International Honour Society
 Habitat for Humanity
 Haunted Forest Association
 Hillel: Jewish Student Union
 History Club
 Improv-Collective
 Improv Society
 Inner Room Christian Association
 Kappa Delta Pi
 Korean International Student Society
 Lacrosse Club
 Latinos Unidos
 The Leader
 Leadership Corps
 M.E.N.C.
 Media Arts Club
 Model European Union Club
 Morning Star
 Much More Chill
 Music Industry Club
 Music Therapy Club
 Native American Student Association
 Pagan Student Union
 Panhellenic Council
 Percussion Guild
 Phi Mu Alpha Sinfonia
 Philosophical Society
 Poetry in Motion Winterguard
 Political Science Association
 Premium Blend
 Pride Alliance
 Psi Chi
 Psychology Club
 Public Relations Student Society of America
 Resident Assistant Advisory Board
 Rock Stars Anonymous
 Sci-Fi Fantasy Gamers Club
 Sigma Alpha Iota
 Sigma Gamma Phi Sorority
 Sigma Kappa Sorority
 Sigma Phi Epsilon Fraternity
 Sister Circle
 Ski and Ride Club
 Some Like It Hot
 Sound Services
 Speech Pathology and Audiology Society (SPAS)
 Strive Ministries
 Students Against Cancer
 Students Teaching Equals Positive Sexuality (STEPS)
 Super Dance
 Tau Kappa Epsilon Fraternity
 Teacher Education Club
 Theatrical Combat Association
 Tonmeisters
 Wilderness Club
 Women's Student Union
 WNYF-TV

The formal and informal activities mentioned above are further supplemented by some traditional events in student campus life that normally involve large groups of students. They include the following: Activities Night, Culture Night, Relay for Life, and Homecoming.

Other Campus Activities

The groups and activities previously mentioned are joined by some other non-classroom events and activities in student campus life. This section lists a sampling of these other activities.

Alumni Association

Membership in the Alumni Association of the State University of New York at Fredonia is open to enrolled students, graduates of the university, and present and retired faculty members.

Supported by alumni gifts and student dues, the association provides all its constituents and parents with its biannual publication, the Fredonia Statement.

Contributions are primarily used to support scholarships and grants for deserving students, student recruitment, career counseling, Homecoming Weekend, and various programs for which funds are unavailable through normal state sources.

Students are encouraged to participate in the Undergraduate Alumni Council (UAC), which assists in the coordination of alumni/student activities. Actively involved students are considered for Undergraduate Alumni Awards. The \$1,000 awards are annually given to those UAC members who are in good academic standing and have shown an interest in improving the quality of campus life by their extra-curricular involvement.

The Office of Alumni Affairs also sponsors the College Ambassador program (undergraduate students who assist at official university functions and at the President's home) and coordinates the Senior Challenge fundraising campaign to assist members of the graduating class with the class gift.

Art Exhibitions

Each season, many art exhibits are presented on campus. The 2,000 square-foot Cathy and Jesse Marion Art Gallery, housed within the Michael C. Rockefeller Arts Center, hosts several curated contemporary art exhibits each season. The emphasis of the shows is on contemporary work in painting, printmaking, photography, sculpture, graphic design and media arts. The gallery also hosts exhibits by the visual arts department faculty current students. All exhibits feature a public reception open to students, faculty, and community residents. The Emmitt Christian Gallery on the second floor of the arts center is

used to exhibit class projects, solo student shows, visiting artist work, and other small exhibits throughout the year.

Athletics

Fredonia has a long and storied history of successful competition on athletic fields, courts and rinks across the state. A highly respected coaching staff has produced over 120 collegiate All-Americans, a number of National Champions, and a plethora of team championships at the conference and regional level.

Fredonia's coaches also serve on advisory committees throughout the east and have held top positions in a number of statewide, regional and national organizations.

Offering a wide range of programs for students wishing to participate at a competitive level, Fredonia sponsors athletic teams for men in the following sports: baseball, basketball, cross country, hockey, soccer, swimming, and track and field. Offerings on the women's side include: basketball, cheerleading, cross country, lacrosse, soccer, softball, swimming, tennis, track and field, and volleyball.

All full-time undergraduate students are eligible to try out for Fredonia's athletic teams. Athletic eligibility is determined through the office of the Director of Athletics. Varsity athletes must comply with all appropriate rules and regulations of Fredonia, as well as those of all playing conferences with which Fredonia is affiliated. In addition to being certified eligible to participate through the Athletic Director's office, each prospective student-athlete must receive clearance from the Student Health Center prior to participating in team activities including practice, staff-supervised pre-season conditioning, and contests. All student-athletes are encouraged to enroll in the university's insurance program or provide the Director of Athletics with evidence of personal health and accident insurance coverage.

The athletic policies of Fredonia are developed by the Director of Athletics in conjunction with the Intercollegiate Athletic Board, an advisory board to the University President composed of faculty, students and administrators. Athletic affiliations are maintained with the NCAA, ECAC and SUNYAC. While programs range in strength from national level competition to competitive conference play, the university encourages students try out for teams if their ability warrants.

Intramural and Recreational Activities

Office: 154 Dods Hall
(716) 673-3590

Geoff Braun, Director

Email: recreational.sports@fredonia.edu

Website: <http://intramurals.fredonia.edu/>

The Intramural and Recreational Sports Program is conducted under the direction of the Department of

Athletics and Recreation, and is funded by the State of New York and Student Association fees.

The university facilities are outstanding and include Dods Hall, with its classrooms, gymnasium, fitness center, dance studio, and racquetball courts, and Steele Hall, which contains an ice rink, basketball courts, an indoor track, and a natatorium. Facilities also include outdoor tennis and basketball courts, an outdoor track, and numerous playing fields. A new complex, containing both a natural grass field and a state-of-the-art artificial turf field, serves as home to the varsity soccer and lacrosse teams as well as recreational space for intramurals and club teams.

Intramurals offers a variety of sports and recreational activities to meet the needs of the campus population while striving to provide a safe and fun environment for the students, faculty, and staff. Intramurals employs approximately 45 students to serve as sport commissioners, field supervisors and officials. In the fall programs include dodgeball, sand volleyball, flag football, broomball and indoor volleyball. The spring semester includes basketball, floor hockey, soccer, tennis, softball, innertube waterpolo and broomball. Women's, men's, and co-ed leagues are offered for each sport and leagues can run four to ten weeks during the semester.

The program also oversees a strong club sport offering which includes Club Ice Hockey, Blackhorse Rugby (Men's & Women's), Ultimate Frisbee, Extreme Sports, Field Hockey, Soccer, Figure Skating, Basketball, Soccer, Dance, Volleyball (Men's & Women's) and Men's Lacrosse.

Blue Devils Fitness Center

Fredonia held a ribbon cutting ceremony for its new \$3.25 million dollar Blue Devil Fitness Center in March of 2013. The 7,900 square foot state-of-the-art facility consists of four work-out areas - a cardio zone, a selected circuit zone, a free weight zone and a rock climbing wall. In addition to providing a well-planned and extremely attractive fitness space, the wide variety of exercise equipment meets the needs of Fredonia's recreational users as well as more highly trained students and athletes.

Dods Hall Gymnasium

The Dods Hall gymnasium is adjacent to the fitness center and consists of over 9,000 square feet of space in which the department conducts aerobics and step aerobics classes and a variety of recreational, intramural and athletic activities. The space can accommodate large fitness classes of over 100 students per class. The department's facility schedule can be accessed by visiting <http://www.fredonia.edu/athletics>.

Steele Hall Fieldhouse

The fieldhouse measures 155 feet x 130 feet (19,500 sq. ft.) and is capable of seating 3,500 people. The Steele Hall Fieldhouse houses a varsity basketball court, two

intramural/recreational courts, four competitive volleyball courts, a four lane all weather indoor track, and a walking aerobic exercise area for students, faculty and staff. The area is also used for special events, Commencement, and concerts.

Outdoor Tennis and Basketball Facilities

Eight outdoor lighted tennis courts were constructed in 2000. There are two outdoor basketball courts adjacent to the new tennis courts. These additions to the university's facilities allow the department to offer beginning and advanced tennis, recreational and intramural programs and intercollegiate tennis for women.

University Stadium

The University Stadium is composed of a natural grass playing field and a synthetic turf field. Both areas are lighted for evening games and intramural and recreational sports activities.

Steele Hall Ice Rink

The Steele Hall Ice Rink measures 200 feet x 85 feet. The rink hosts many student activities including beginning, intermediate and advanced skating classes, figure skating classes, and student club sports such as figure skating and club hockey. Recreational skating is offered to students at no charge on Monday, Friday, Saturday and Sunday evenings. Intramural broomball and floor hockey are conducted in this area once ice is removed in the early spring.

Natatorium

The natatorium, which officially opened in the fall of 2001, consists of an eight-lane competitive swimming pool and separate diving area which houses two 1-meter and one 3-meter diving boards. The permanent bleacher area seats 650 spectators. The pool deck has a special extra wide teaching area. Space is available for on-deck fitness equipment for the training of competitive swimmers. A separate area is available for the SCUBA cascade system that allows the university to offer both beginning and advanced SCUBA classes. The natatorium programs consist of intercollegiate swimming and diving; beginning, intermediate and advanced swimming classes; fitness through swim classes; aqua-aerobics; intramural water polo and water basketball; recreational swim and learn to swim classes. A large meeting-special event room exists adjacent to the natatorium and is available for meetings and special events.

Music Faculty Performances

Throughout each academic year, members of the artist faculty of the School of Music present public recitals. Most often the performances feature an individual faculty member; on occasion, however, several faculty members join together to present a program. Performances are also presented each year by the Fredonia Woodwind Quintet and the Faculty Brass Quintet.

The Western New York Chamber Orchestra, an independent, regional chamber orchestra, is an ensemble-in-residence at the Fredonia School of Music. The chamber orchestra presents a series of concerts on campus and is also active in presenting concerts and educational events throughout the area. The orchestra is comprised of faculty, other area professional musicians, and outstanding School of Music students, with repertoire spanning all stylistic periods.

Michael C. Rockefeller Arts Center and Visiting Artists, Ensembles and Speakers

The Michael C. Rockefeller Arts Center, a magnificent performing and visual arts facility, includes the 1,200-seat King Concert Hall, the 400-seat Marvel Theatre, the 200-seat Bartlett Theatre, and the 2,500 square foot Marion Art Gallery.

Over 150 public events are presented each season for the benefit of campus and community audiences.

Fredonia has a rich cultural life, not only because of the many artistic events produced on campus, but also because of a full schedule of visiting artists and speakers, many brought to campus by the arts center.

Each season, the center presents the *DFT Communications Pops Series*, three evenings of musical relaxation and enjoyment. Guest ensembles on the series have included The Hit Men, Roger Williams, the Three Phantoms in Concert, the Moscow Boys Choir, and the Boston Brass. Rockefeller Arts Center also produces the traditional Commencement-Eve Pops Concert, providing additional performance opportunities for students from the Department of Theatre and Dance and the School of Music. Other noted artists and speakers who have visited campus in recent years include Yo-Yo Ma, Arturo Sandoval, Neil DeGrasse Tyson, Maya Angelou and Robert F. Kennedy, Jr.

Student Music Activities

The following music activities provide opportunities for development of proficiency in performance and for personal enjoyment for the performer, the university, and the community. Many of the ensembles are auditioned and are used to fulfill the music ensemble requirement for Music majors. Performing opportunities are available to all students. For more information, students should contact the School of Music.

The Masterworks Chorus is a large choir comprised of members from the other select choirs on campus. The group performs masterpieces of choral literature.

The College Symphony Orchestra is open to all students by audition and offers complete instrumentation and a repertoire of major works of classical, romantic, and

modern orchestral and operatic literature. Maintaining high standards, it performs several times each year.

The College Chamber Orchestra is a more select ensemble.

The Fredonia Wind Ensemble is the premier wind/percussion ensemble in the School of Music. It performs a wide variety of repertoire consisting of contemporary, historical, and standard wind works that range from chamber music to literature that utilizes the full ensemble.

The Fredonia Wind Symphony is a select ensemble that utilizes the full resources of the large wind/percussion ensemble to perform outstanding wind ensemble and concert band works from a wide variety of styles and music periods.

The Fredonia Concert Band performs the finest in traditional and contemporary literature composed for the wind ensemble and concert band. The repertoire is drawn from a variety of genres and stylistic periods, with an emphasis on the standard band repertoire. The Concert Band is open to all students by audition, regardless of major.

The Fredonia All-College Band is a unique mixture of music majors, students from all academic disciplines, and community members. The combination creates a dynamic environment that provides an opportunity for the entire Fredonia community to perform music at a high level, without the pressure of an auditioned ensemble. The All-College Band performs music from the traditional band and wind ensemble repertoire. The All-College Band is open to all students on a space-available basis, regardless of major, and no audition is required for participation.

Jazz Ensemble opportunities are available through the School of Music and through the Fredonia Jazz Workshop, a student organization. There are several groups in existence, from big band to small combo, from high skilled touring groups to training ensembles dedicated to teaching improvisation, jazz rhythms and other basics. All jazz groups work together to foster a wider understanding of jazz through the exploration and performance of a variety of styles.

The Fredonia Chamber Singers, a group of 24 mixed voices selected by individual auditions for musical ability, flexibility, quality, and rhythmic sense, performs frequently both on and off campus. The *Chamber Singers* is a touring ensemble.

The College Choir, with approximately 60 selected mixed voices, studies and performs major choral works in addition to standard sacred and secular music. The *College Choir* is a touring ensemble.

The Women's Choir studies and performs sacred and secular literature from all style periods.

The University Chorus is the largest choral ensemble on campus, ranging in size from 150 to over 200 singers in any given semester. Its membership comprises university faculty members and people from the community-at-large, as well as Music majors (vocal and instrumental) and students from other academic disciplines. The University Chorus rehearses and performs a wide variety of music each semester. No audition is required for membership.

Flute Ensemble - performs music composed or arranged for 12 flutes.

Guitar Ensemble and Guitar Quartet - ensemble of 12 guitar majors and quartet, both touring groups, perform transcriptions and original music.

Percussion Ensemble - performs mainly contemporary works.

African Drumming Ensemble - performs African music with particular emphasis on the music of Ghana. Practical instruction in traditional instrumental techniques. Admittance to the ensemble is by permission of the instructor.

Piano Ensemble - systematic study in piano sight reading and accompanying.

Saxophone Ensemble - performs original and transcribed works.

Small Ensembles - perform basically chamber ensemble literature and include woodwind, string and brass trios, quartets and quintets, and clarinet and trombone choirs.

The Opera Theatre Workshop provides a workshop situation for students to deal with repertoire that has limited production requirements. The wide range of possible experiences provided includes performing, conducting, directing, design and management.

The Music Educators National Conference, Student Chapter 151 at SUNY Fredonia, is affiliated with the New York State School Music Association. The activities of the chapter encourage professional interests and ideals.

The Music Therapy Club is affiliated with the Mid-Atlantic Region and national chapters of the National Association for Music Therapy. Activities of the club encourage the professional interests and growth of the students entering the field of music therapy.

Student Theatre Activities

Walter Gloor Mainstage Series Productions. Five major theatrical productions are presented each year. These efforts of the Department of Theatre and Dance have become known for their excellence in all aspects of production, from outstanding acting, singing and dancing to magnificent scenery, lighting and costumes. Auditions and production work are open to all students, regardless of major.

ADMISSIONS AND FINANCIAL AID

Admissions website:
<http://home.fredonia.edu/admissions>

Financial Aid website: <http://home.fredonia.edu/finaid/>

Undergraduate Admissions

<http://home.fredonia.edu/apply>

Submitting the Application

The State University of New York at Fredonia accepts both the SUNY application and the Common Application. We encourage you to apply online at <http://home.fredonia.edu/apply>. The fee for applying is \$50, but students can submit a fee waiver based on financial need through their school counselor. As a transfer student from a SUNY community college who is graduating with an associate degree, you can have the application fee waived by talking to your advising office on your campus.

Your application will be reviewed individually by our Admissions Committee, a complete application for first year students consists of a high school transcript, admissions essay, resume, at least 1 letter of

recommendation, and standardized test scores (SAT or ACT for domestic students). Transfer students will need to submit their college transcript and proof of high school graduation, we encourage an essay and resume but is not required. Students can send in all supporting materials directly to the Office of Admissions, Fenner House, 178 Central Avenue, Fredonia, N.Y. 14063.

While there is no stated application deadline, we recommend that you submit your request for admission as soon as possible, as there are a limited number of openings in some academic programs. Consider November 1 for the spring semester and March 1 for the fall semester as recommended deadlines.

Campus Visit

A campus visit is extremely important. It is your opportunity to learn more about the university from those directly involved in the educational process at Fredonia.

You are invited to visit the campus to discuss your application with an admissions counselor, meet with a faculty member in your chosen field of study, and tour the facilities. We offer small group information sessions and campus tours weekdays while classes are in session. There

are a number of special visitation programs throughout the academic year, including holiday open house programs on Columbus Day, Veterans Day and Presidents Day. Saturday visits are available to meet the needs of prospective students who are unable to visit the campus when classes are in session. You may visit during the summer as well. Request information about specific dates and times for arranging an appointment by writing the Office of Admissions, calling (716) 673-3251, dialing toll-free at (800) 252-1212, accessing our website at <http://home.fredonia.edu/admissions/visit> or email admissions@fredonia.edu.

We schedule an open house for accepted students during the spring semester. At this program, members of the university faculty, administration, and student body discuss our curricular options, financial aid, social and cultural activities, the residence halls, and student support services.

The campus is situated in the village of Fredonia at Exit 59 of the New York State Thruway (Interstate 90), 40 miles from Buffalo, N.Y. The Southern Tier Expressway (Rt. 17/86) provides an alternate route to the campus. Use the Greater Buffalo International Airport if you are traveling by air. Several buses operate daily between Buffalo and Fredonia. Amtrak provides rail service to the area. Check with your local travel agent to determine the best connections for you.

Decision Process

We offer you the opportunity to declare your major program of study when you enroll at Fredonia. Approximately three-quarters of all new freshmen select a specific academic major, although the decision to choose your program of study is optional. You must select a major by the end of your sophomore year. Since some programs are highly specialized and require careful academic planning, you may wish to discuss declaring your major with an admissions counselor. Transfer students who have accumulated 45 credit hours must declare a specific major. You will be notified by mail of an official decision after the Office of Admissions receives all required credentials. All acceptances are conditional upon receipt of a high school or college transcript indicating successful completion of courses in progress, submission of your medical history, and evidence of appropriate immunization. You must submit an advance deposit to reserve your place in the entering class.

Advance deposits secure a place in the class and room in a residence hall for a specific semester and are not transferable to another semester. Requests for refunds must be made in writing to the Director of Admissions prior to May 1 (for fall enrollment) and November 1 (for spring enrollment), or 30 days after acceptance, whichever is later.

Early Decision: The Early Decision option provides you with an opportunity to identify Fredonia as your university

of choice. This admissions program permits you to tell us of your interest in pursuing your studies here. Universities participating in an early decision program anticipate that those candidates who are accepted through Early Decision will submit an admission deposit and withdraw all other university applications. Early Decision allows you to finalize your university plans early in your senior year of high school. To be eligible the Admissions Office must receive your application and all supporting credentials by November 1. By December 1 the Admissions Office notify all early decision applicants and begin to review all other requests for admission.

Freshman Admission: The Admissions Committee considers a variety of criteria when reviewing applications, evaluating quality of academic preparation including depth and breadth of course work, academic achievement, and the results of your SAT or ACT. Our university is committed to a liberal arts education for all undergraduates, and preference is given to those applicants who present strong academic programs in English, social studies, mathematics, science and foreign languages. We ask that you send us the results of your SAT or ACT for review. Admission to college is a matter of meeting the competition among applicants, and a comprehensive, challenging university preparatory program combined with good achievement will help ensure that your application is competitive. The Admissions Committee also reviews supporting credentials including special talents, activities, essay, individual accomplishments, and recommendations. Appropriate faculty evaluates the results of a required audition if you seek admission into our music or B.F.A. theatre programs. As an applicant to our Department of Visual Arts and New Media you must present a portfolio for review.

Fredonia in 4

Graduation rates of our entering freshmen are among the highest in the nation. To ensure that our success continues, we have implemented Fredonia in 4, a program for first-time freshmen which stipulates that the university pledges to adhere to a commonly understood agreement to provide the necessary courses and academic advising which will guarantee that you finish your degree program in four years (with the exception of Music Therapy which will require a clinical internship of at least an additional six months).

SUNY Transfer Applicants

SUNY is committed to helping SUNY students complete their baccalaureate goals. Students are guaranteed a minimum of 60 credits which is junior standing for earning an AA or AS degree and transfer to a parallel program at a SUNY four-year campus. SUNY students can also feel confident that courses they took to complete their general education requirements (SUNY-GER) at their current school will apply towards the general education

requirements at any SUNY school. In addition to your official SUNY college transcript, we will receive a General Education Transcript Addendum (GETA). The GETA lists the SUNY General Education Courses that you completed at your previous SUNY institution. We will award SUNY General Education credit as indicated on your GETA. SUNY Transfer Paths were developed to help students select appropriate lower division courses to apply towards major requirements at any SUNY institution. Additional information on SUNY's commitment to seamless transfer can be located on the SUNY Transfer Mobility website: <http://www.suny.edu/attend/get-started/transfer-students/>.

Transfer Admission

Fredonia considers all requests for admission from transfer students in good standing at both two-and four-year colleges and universities, including SUNY and non-SUNY institutions. The admission review process focuses upon an evaluation of academic achievement, program of study, and the major program of study that you request. There are special audition requirements for music and B.F.A. theatre programs, as well as portfolio requirements for the Department of Visual Arts and New Media.

Admission to most of our certification programs in teacher education requires at least a 3.0 grade point average to be eligible for consideration. Admission to the Communication Disorders and Sciences Program requires a 3.0. The Communication Department requires a 2.75 for admission. The Mathematics Education program requires an overall grade point average of 2.5 with at least a C+ grade in any mathematics courses at the level of calculus or above.

We require an official transcript from each college you previously attended, and a high school transcript and SAT or ACT results if you have completed less than 30 credit hours when you apply. If you have been out of high school for more than two years, SAT or ACT scores are not required. All transfers students must submit an official final high school transcript for verification purposes, unless they graduate with an AA or an AS degree.

Special Admissions Programs

Full Opportunity Program: Through the Full Opportunity Program an effort is made to identify and recruit students from under-represented groups, students with special talents in the fine and performing arts and athletics, those who have participated extensively in school and community affairs, or have strong personal recommendations. The Full Opportunity Program provides you with a chance to enhance your academic credentials with a description of your individual talents and accomplishments.

Acceptance into the program provides you with access to support services designed to help you make a successful transition from high school to college, and to help guide

you toward successful completion of your academic and career goals.

If you wish to identify yourself as a special talent applicant, you should include a personal statement and resume as well as three letters of recommendation in addition to submitting the SUNY Common Supplemental Form.

Students accepted through the Full Opportunity Program are guided through their first year at Fredonia beginning with academic advising that takes place during Summer Orientation. In cooperation with the student's academic advisor, the Full Opportunity Program Director has the responsibility for designing programming to meet the academic needs of the students in the program. Some of the services offered include: mentoring programs, free assigned tutoring, workshops by faculty members, electronic newsletters, and assistance with course selection.

Educational Development Program: Applicants who demonstrate potential for completing a degree program, meet financial and academic guidelines, and have historically experienced educational and economic disadvantages, may seek admission through the Educational Opportunity Program (called the Educational Development Program at Fredonia). To be eligible for consideration you must be a New York State resident and have earned a high school diploma or its equivalent.

To be considered "financially eligible," you must meet the economic criteria established by the New York State Education Department. Check the current *SUNY Application Guidebook* for the updated economic criteria listed under Educational Opportunity Programs in the booklet.

You are required to submit appropriate financial aid applications and verification of family income to supplement your request for admission as an EDP student. We may request additional information from you, as needed. A SUNY EOP Information form mailed to you from the APC must be filed as part of the application process.

You do not need to prove that you meet the economic guidelines if you can show that:

- Your family receives payment through the New York State County Department of Social Services;
- You live with foster parents who do not provide support for college, and your natural parents provide no financial support to you, or;
- You are a ward of the state or county.

To be considered "educationally eligible" means you do not meet the usual Fredonia admissions standards. However, you must demonstrate academic potential, proper motivation, and a strong desire for a college education. You apply for our EDP program by checking

“yes” when answering the EOP question on the SUNY application. Transfer applicants receive consideration if they have previously been enrolled in a similar EOP/HEOP/College Discovery/SEEK program.

If you attended a college that does not have a EOP-type program, then we attempt to determine whether you would have been deemed eligible for EOP at the time of your acceptance to the other college.

For more information about the Educational Development Program support services, interested persons should refer to the Educational Development Program.

Joint Admission: Fredonia has implemented joint admission agreements with several two-year colleges, both public and private. Joint admission program students request admission to Fredonia by applying to the admissions office at the two-year college and completing requirements for the associate degree.

You must meet all requirements as stated in our University Catalog and the joint admission agreements in order to continue with your studies at Fredonia. You may obtain information from our transfer counselor in the Office of Admissions at Fredonia or the two-year college.

1. *Time-Shortened Degree Program.* Students enrolling at Fredonia may select from a variety of individually determined and contracted time-shortened degree options. Because some academic programs at the university are incompatible with the time-shortened degree, counseling from an academic or admissions counselor is advisable.

The following options are available:

1. *Early Admission.* Accelerated high school juniors who wish to enroll as university freshmen without a high school diploma, may apply for early admission. We expect applicants to have completed four units of study in college preparatory mathematics and sciences and a sequence in foreign languages with above-average academic achievement and SAT or ACT scores. Your high school counselor must submit a recommendation in support of your request for early admission. Since Fredonia does not award you a high school diploma you must make arrangements to receive high school credit for your college course work in lieu of the courses you would have taken in your senior year.
2. *3-1-3 Program.* Local area high school juniors interested in beginning college during the senior year of high school may wish to explore this opportunity. 3-1-3 stands for three years of high school, one year cooperatively taught by an area high school and Fredonia, and three years at the university. As a 3-1-3 applicant you must present above-average test results on the PSAT, SAT or ACT, and a B high school average.

A counselor recommendation is required. Submit the SUNY application available in your high school guidance office and select curriculum code 0199. A conference with you and your high school counselor will develop your joint college and high school class schedule. For more information, interested persons should see 3-1-3 Program.

Transfer Credit from Other Institutions

After a student has been admitted to Fredonia, the Office of the Registrar evaluates transcripts from other colleges and/or universities. Faculty are consulted in establishing course equivalencies. Credit will be awarded for parallel liberal arts courses, taken at regionally accredited institutions, in which a passing grade was earned. However, academic departments may have minimum grade requirements and courses may need to be repeated. Students should consult the academic program section in the college catalog for minimum grade requirements. Official transcripts are required for evaluation. College credit that is over 10 years old will be reviewed by the academic department and may not apply to current degree requirements. The student is responsible for requesting course descriptions from the original institution if deemed necessary.

Students may transfer up to 75 hours of college credit from their previous college(s). Your academic department chairperson or designee determines the distribution of specific courses in fulfillment of departmental requirements in your chosen field of study and provides information about which courses you will need to complete degree requirements in a timely manner.

Your grade point average does not transfer; only credit hours are awarded. Your Fredonia transcript will only display the transfer college name and the total number of credits accepted by Fredonia. You must fulfill all university and departmental requirements for the baccalaureate degree, including a residency requirement of 45 semester hours of credit at Fredonia. Additional requirements for the Bachelor's Degree are located in the All Programs (p. 9) section in the catalog.

Visit our Transfer Student Services web page <http://www.fredonia.edu/registrar/transferstudentservices/> to view our transfer credit equivalency database and a list of current articulation agreements. As a prospective transfer student, we encourage you to visit the university to discuss transfer credit and graduation requirements with a departmental academic advisor or our admissions transfer counselor.

Transfer Credit Appeal Process

The appeal process can be used when a student wishes to contest the way his or her transfer course was evaluated (that is, whether the course was equated to a specific Fredonia course or applied to a particular degree

requirement). The appeal must be made during the student's first semester of enrollment at Fredonia.

The appeal process is initiated in the Registrar's Office where a counselor will explain the process and determine if a formal appeal needs to be made. Students wishing to pursue the appeal process must complete the transfer credit appeal form and submit it to the appropriate department for review. Instructions regarding this process and the appeal form are available on our transfer student services web page:

<http://www.fredonia.edu/registrar/transferstudentservices/>.

Students transferring from SUNY schools, who are not satisfied with Fredonia's final decision, can appeal to the SUNY Provost. The appeal form and instructions are available at: <http://system.suny.edu/academic-affairs/student-mobility/student-transfer-appeal-process/>.

Advanced Standing Credit

Credit by Examination . The university welcomes the opportunity to allow you to complete graduation requirements at an accelerated rate by submitting the results of proficiency examinations for credit evaluation. The following website includes all credit by examination that are acceptable:

http://www.fredonia.edu/admissions/advance_credit_list.asp#ap. Students may earn a maximum of 30 credits for course work earned through examination.

Advanced Placement . Submit the results of your Advanced Placement Examinations to the Office of Admissions. If you achieve a score of three, four, or five you will receive placement and/or credit in some programs. These examinations fulfill many requirements in the College Core Curriculum program (liberal arts core courses).

College-Level Examination Program . CLEP General Examinations substitute for some of the College Core Curriculum requirements. Subject Examinations substitute for specific course requirements. To determine which examinations are acceptable for credit, check with the Office of Admissions before scheduling one of the tests. We accept most, but not all, examinations for credit toward graduation. You must score at the fiftieth percentile in order to receive credit. Students who have earned more than 60 college credits may earn credit for CLEP Subject Exams but not General Exams.

College Course Work . A number of freshman applicants seek transfer credit for college courses successfully completed while enrolled in high school. Submit an official transcript from the college awarding credit indicating that you have successfully completed course work. While credit hours may be awarded toward graduation, your grades do not transfer to Fredonia as part of your Fredonia grade point average.

Military Service Experience . Credit for military service experience and education is evaluated on an individual basis according to the guidelines established by the American Council on Education. Forward official military (AARTS/SMART) transcripts and DD-214s to the Office of Admissions for evaluation.

International Baccalaureate Exams . College credit will be given for Higher Level (HL) exam scores of five or higher. In addition, some departments may offer university credit for an HL exam score of four. Students who have earned an IB Diploma may be awarded a maximum of 30 credits (including all course work completed through examination).

International Students

Fredonia welcomes applications from international students who enrich our learning environment with their pluralistic perspectives.

Early submission of applications is recommended and helps to ensure adequate time to acquire the F-1 student visa. International students should complete the on-line application (<http://home.fredonia.edu/internationaladmissions>) and then submit original transcripts (translated in English), proof of English language proficiency (IBT, TOEFL, IELTS), and financial statement with proof of income, via regular mail. International student applications are accepted on a rolling basis.

Interested persons can obtain additional information by emailing the director at international.education@fredonia.edu or by visiting <http://home.fredonia.edu/internationaleducation>.

Readmission / Reinstatement

Students who have withdrawn from the university and wish to return may obtain an application for Readmission/Reinstatement from the Office of Student Affairs. Applications are reviewed by the appropriate academic dean, department chairperson, and the Vice President for Student Affairs or designee.

Reinstatement: Students who return to the university after an absence of one calendar year or less, and who left the university in good academic standing (defined by a GPA of 2.00 or higher, and not on academic probation) are eligible to be reinstated. A student who has been reinstated will keep the major(s), minor(s), and/or concentration he or she had at the time of separation from the university. However, such students may be given a one-semester probationary status within the major program, if the major requires a higher level of academic achievement to be considered "in good standing."

Readmission: Students who have left the university either on probation or because of Academic Dismissal, or who have been absent from the university for more than one

calendar year, will need to apply for readmission. The student's application for readmission will be reviewed by the appropriate dean and the department chairperson or program director of the major into which the student seeks readmission.

All students who are returning to the university after at least a one-semester absence will have an opportunity to apply for the Restart Option. Students may apply for this option after completion of at least 12 additional credit hours at Fredonia, with a minimum 2.00 GPA subsequent to their return. This option allows a new grade point average to be established from the time of readmission/reinstatement. The student's academic record from the time of initial enrollment at Fredonia will be reflected on the transcript, but the student will receive credit only for those courses in which the student earned a grade of C- or above (including S grades). In addition, a student electing this option must complete at least 45 credit hours of graded work (excluding pass/fail) at Fredonia prior to graduation. Information on applying for the Restart Option may be obtained at Fredonia website through the Registrar's Office web page.

It is the student's responsibility to consider and possibly apply for the Restart Option after they have completed at least one additional semester at Fredonia. Students may also wish to discuss this option with their advisor.

Undergraduate Expenses

This section presents an estimate of the cost of attending Fredonia for one year. University charges (tuition, fees, room rent, board) are paid on a semester basis, at one-half of the rates listed below. The semester charges must be paid on or before the registration date for each semester. Students will receive up-to-date information concerning charges and payment procedures several weeks prior to the registration date.

All charges are subject to change.

Annual University Charges Applicable to all Students

Estimated expenses per year for a full-time (12 or more credit hours) *undergraduate* :

* Undergraduate Tuition

In-State	\$ 6,470.00
Out-of-State	\$16,320.00
College Fee	\$ 25.00
Student Services and Programs Charge	\$ 1,594.00

New students who have paid a \$50 Advance Admission Deposit will have this amount deducted from the tuition charge for their initial semester at Fredonia.

All rates and fees are subject to change. Individuals should view the Student Accounts web page for the current university charges at www.fredonia.edu/admin/studentaccounts.

Full-time rates do not apply for summer or J-Term semesters; tuition is calculated at the part-time per credit hour rate.

Estimated Additional Costs

Books, supplies, personal and	\$2,000 -
transportation expenses	\$2,500

Additional Charges for Residents in Residence Halls

Room Rent	\$7,600 - \$9,000
Board (Food Service)	\$4,000 - \$5,130

Student Services and Programs Charge

The Student Services and Programs Charge combines all university fees for student services, programs and activities in one composite amount for all students. As a result, there are no general university fees and no additional mandatory fees once a student arrives on campus (although some departments may assess individual departmental fees). The Student Services and Programs Charge includes support for the following programs and activities:

Advanced Technologies for Classroom Use
AIGA/Art Forum
Alumni Affairs
Bicycle Use on Fredonia Campus
Blue Devil Fitness Center
Campus Community Bus
Campus Internet Access
Campus Microcomputer Labs
Campus Fine Arts
Fredonia Ticket Office
Counseling Center
Coupons for Discounts at Area Merchants
Cross Country Skis at College Lodge
Family Weekend Events
Fredonia College Jazz Workshop
Fredonia Radio Systems
Intercollegiate Athletic Sports Program
Intramural and Recreational Program
Legal Services
Homecoming Weekend Events
Microcomputer Support
On-Campus Student Employment
On-site Medical Care
Health Education Programs
Medical Laboratory Work
Over-the-Counter Medications
Prescription Medications
Wellness Checkup
Orientation Program
Parking Services

Parking Shuttle Service
 Student Engagement
 Student Government
 Student Organizations and Clubs
 Student Scholarships
 Transcripts
The Leader (university newspaper)
 University Special Events
 University Transcripts
 Upper Class Buddy Program
 Van Service to Hospital/Clinic
 WNYF-TV

The Student Services and Programs Charge waiver policy can be found at www.fredonia.edu/admin/policy.

Room Charge

The standard rate when two students are assigned to a room is \$3,800 per semester. Single rooms are primarily for seniors and are \$4,400 per semester, if available. Kitchen suites (double occupancy), where available, are \$4,000 per semester. Single and double rooms in University Commons are \$4,450 and \$4,050 per semester, respectively. University Village Townhouses (single occupancy) are \$4,500 per semester. Inquiries as to charges and accommodations should be addressed to the Office of Residence Life, Gregory Hall. (Figures reflect 2015-2016 rates.)

The \$50 Advance Room Deposit necessary to secure housing will be deducted from the room charge upon payment of charges. The rates indicated above are subject to change on a yearly basis. Information about the Office of Residence Life may be found on the website www.fredonia.edu/reslife, calling (716) 673-3341 or email residence.life@fredonia.edu.

Board (Food Service)

University policy requires all on-campus residents to select from a variety of full board plans if they are residing in non-kitchen suite residence halls. Seniors and residents of Disney and Eisenhower kitchen suites, University Village Townhouses and commuter students are not required to maintain a meal plan, however, they may choose any plan. Also, resident freshmen are required to maintain Meal Plan 1 for their first semester and may change plans for future semesters.

Meal plans are not active during recess or break periods in excess of four days such as Thanksgiving week, winter recess, spring break, and summer recess.

The FSA offers a combination of declining balance (points) and traditional meal plans to suit the needs of each student. The costs for meal plans are priced per semester and are subject to change annually. Costs begin at \$2,000 for resident students required to participate in a meal plan. Commuter point meal plan options are available for off-campus students.

Unused points from the fall semester may be rolled over to the spring semester adhering to the university policy. However, students must select a meal plan for the spring semester in order to receive the rollover. No refund of unused points will be given if the student does not return for the spring semester. Unused points do not roll over to the following fall semester.

Specific information concerning pricing and descriptions of each plan may be obtained by contacting the FSA office in Gregory Hall or calling (716) 680-6228, or by logging onto the FSA web page at www.fsa.fredonia.edu or email fsa.office@fredonia.edu.

Miscellaneous Fees, Fines or Deposits

All of the major university expenses have been outlined. However, individual courses may require payment of a fee that will be reflected on the student's semester eBill. Students should consult the online *Courses by Term* for specific courses and charges. Students majoring in Music Education, Music Applied Studies, Theory of Music, Performance, Music Composition, Sound Recording Technology, Music Therapy, Music History/Literature and Musical Theatre (B.F.A.), are assessed a \$250 Music Fee each semester. Students enrolled in music courses that are not majoring in the above, will be assessed a \$50 non-music major course fee.

In addition, the State University authorizes charges for such items as returned checks (\$20), late registration (\$40), first-year orientation (\$150), transfer orientation (\$80), late payment/administrative (\$30), and drop/add fees (\$20). Fines are authorized for parking violations, the late return or loss of library materials, and failure to return physical education or infirmary equipment. All fees are subject to change.

Part-Time Study

* In-State Tuition	\$270.00 per credit hour
* Out-of-State Tuition	\$680.00 per credit hour
College Fee	\$0.85 per credit hour
Student Services and Programs Charge	\$66.45 per credit hour

** State University policy requires that a student be a resident of New York State for one year prior to registration in order to qualify for in-state resident tuition charges. Persons should contact the Student Accounts Office for complete information governing residency requirements.*

All rates and fees are subject to change. Persons should see the Student Accounts web page for the current university charges at <http://www.fredonia.edu/admin/studentaccounts>.

Full-time rates do not apply for summer or J-Term semesters; tuition is calculated at the part-time per credit hour rate.

College Fee

This is a uniform, mandatory charge for all students, established by the State University of New York.

Student Health Insurance

All students are strongly encouraged to have Health Insurance coverage. Fredonia does not offer health insurance coverage due to the Affordable Care Act. Please note that all International student must carry health insurance. International students must consult with the Office of International Education for more information regarding specific insurance needs by calling (716) 673-3451 or by emailing international.education@fredonia.edu.

State University Refund Policies

The Advance Admission Deposit of \$50 is refundable until April 30 (November 1 for spring enrollment) or 30 days after the day of acceptance, whichever is later. After this it may not be refunded except in cases of withdrawal for reasons beyond the control of the student and with approval of the University President or his/her designee.

The Advance Room Deposit of \$50 is refundable until July 1 (December 1 for spring enrollment). Refunds may not be made after this date except in cases of withdrawal for reasons beyond the control of the student and with approval of the University President or his/her designee.

Tuition . A student withdrawing from the university or individual courses during the fall or spring semester is eligible for the following tuition refunds:

- 100 percent for withdrawal during the first week of classes
- 70 percent for withdrawal during the second week of classes
- 50 percent for withdrawal during the third week of classes
- 30 percent for withdrawal during the fourth week of classes
- 0 percent for withdrawal beyond the fourth week of classes

A full refund of tuition may be granted if a student must withdraw for reasons beyond his/her control with the approval of the University President or his/her designee.

Please note that Thanksgiving and Spring Break do not count as a week during the semester. As a rule, students should always check with the Student Accounts Office and the Financial Aid Office when considering a withdrawal from courses or the university.

The *College Fee* is not refundable after registration.

Refunds for the *Student Services and Programs Charge* are granted based on the week of withdrawal following the same schedule listed above for tuition.

Residence Hall Room Rental. Once a student has registered for and occupied a room in a university-operated residence, no refund may be made except in cases of withdrawal beyond the control of the student and with approval of the University President or his/her designee. Rooms are contracted for the entire academic year and cannot be canceled during this period as long as the student is registered. There is a fee of \$350 for approved termination of the housing license.

Food Service is refundable on a pro-rated basis, less a small service charge, only upon withdrawal from the university.

Refund/Repayment of Financial Aid Due to Discontinuance of Study

When a student has received Title IV federal funds (such as: Subsidized/Unsubsidized Stafford loans, Perkins Loan, PLUS Loan, PELL grant, SEOG grant, TEACH grant) and discontinues study prior to the completion of the semester for which the Title IV funds were disbursed, a Title IV repayment calculation must be completed.

A student's charges will be reduced based on the refund policy. The purpose of the repayment calculation is to determine the amount of Title IV federal aid the student is eligible for and insure that the student has not been over awarded federal financial aid due to the student's withdrawal. The initial step in the calculation is to identify all of the Title IV federal aid that the student was awarded in the semester that the student withdrew. If a student is subject to the 30-day delayed disbursement, as a first time borrower, and withdraws during the first 30 days, the student is not eligible for the Stafford Loan, and it will not be included in the calculation.

The next step is to determine the number of days the student was enrolled for the semester and divide that by the total number of days in the semester to calculate the percentage of Title IV federal aid earned by the student. If this percentage is greater than 60 percent, the student is eligible for 100 percent of their Title IV federal funds. (Note: Any break of five or more consecutive days is excluded from the calculation. For example: Thanksgiving and Spring Break would be excluded.) If the percentage of Title IV federal aid earned is less than or equal to 60 percent, the percentage is then multiplied by the amount of Title IV federal aid the student has been awarded for the semester. This determines the amount of Title IV federal aid that the student is eligible for and can be applied toward their charges for the semester they withdrew.

A comparison is done between the amount of Title IV aid that the student is eligible for and the amount that has

already been disbursed into the account. If the disbursed amount is less than the eligible amount, any additional funds up to the eligible amount may be disbursed to the student's account and then to the student if any excess funds are available. If loan proceeds are to be utilized as a late disbursement, the student (or parent for a PLUS Loan) will be notified. If the disbursed amount is greater than the eligible amount, the student has been over awarded due to their discontinuance of study. When a student has been over awarded, the amount of earned aid is subtracted from the amount of disbursed aid to determine the amount that the student is not eligible for. Any Title IV federal aid that the student is not eligible for must be returned to the appropriate federal program. Title IV federal aid is returned in the following order: Unsubsidized Stafford Loan, Subsidized Stafford Loan, Perkins Loan, PLUS Loan, PELL grant, Federal SEOG grant, TEACH grant and other Title IV program aid excluding Federal Work-Study.

For additional information regarding the repayment of Title IV federal aid, persons should contact the Student Accounts Office at (716) 673-3236, 306 Maytum Hall, or email student.accounts@fredonia.edu.

Graduate Admissions

All students who wish to take graduate courses and/or pursue an advanced degree or certificate must complete the application process. Application packets are available in the Office of Graduate Studies at E230A Thompson Hall or applications can be printed from the graduate website. Completed applications must be submitted to the Office of Graduate Studies by February 15 for admission to Communication Disorders and Sciences for the summer and fall semesters, by April 1 for all other programs for the summer and fall semesters, and by November 1 for admission to all programs beginning in the subsequent spring semester.

All applications must be accompanied by a non-refundable application fee of \$50. Checks or money orders are to be made out to State University of New York at Fredonia. Applications received after the dates above will be processed on an incoming basis, but the fee rate for late applications will be \$100. At the discretion of the Graduate Studies Office and based on extenuating circumstances, a student whose application is incomplete may temporarily be granted non-degree status until a final and late acceptance decision has been reached. Non-degree students are permitted to take no more than a total of 9 credit hours.

Admission to graduate study is based on the following requirements:

Completion of the baccalaureate degree at an accredited four-year institution with an appropriate major and depth of undergraduate preparation. Some departments may accept students who have successfully earned a degree from an accredited institution with a different major but applicants should at least have a minor of 18 credit hours

in the major applied for, but each of these decisions is made on an individual basis during the departmental review of the full application and all transcripts.

The completed Application for Admission to Graduate Study must be filed with the Graduate Studies office, reviewed by the desired department(s), and approved by the Graduate Studies Office.

Submission of official transcripts is required from all institutions attended (except Fredonia) covering prior graduate as well as all undergraduate preparation.

Submission of at least two recent letters of recommendation, preferably written during the last six months, from individuals who can attest to the applicants qualifications for advanced study. Each reference must include the form provided in the application packet, but the letter itself may be on a separate sheet. For teacher certification programs, one letter may be submitted by a teaching supervisor. If the applicant has been out of school for several years, letters from work supervisors may be acceptable.

For students in programs leading to permanent certification to teach, proof of the appropriate initial or provisional certification is required.

Individual departments/programs may have other admissions requirements that must be met. Students should check departmental pages in this catalog, the application packet itself, and the graduate and/or departmental websites.

Inquiries about the application process and/or an applicant's status must be initiated by the applicant directly and addressed to the Office of Graduate Studies. Once a completed application is received (i.e. including all letters, documents, application fees, and official transcripts), the application review process generally takes four to six weeks. At the final stage of the review process, applicants will receive decision letters from the Graduate Studies Office.

Graduate Tuition and Fees

All fees and rates listed below represent current charges for matriculated students attending fall and spring semesters. All charges are subject to change. Interested persons should refer to the Student Accounts web pages at <http://www.fredonia.edu/admin/studentaccounts> for updated charges.

Graduate Degree Tuition and Fees

Full-time, per semester (12+ credit hours):

*New York State Resident Tuition	\$ 5,435.00
Out-of-State Resident Tuition	\$11,105.00
College Fee	\$ 12.50

Student Services and Programs Charge	\$ 797.00
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Part-time (per credit hour):

*New York State Resident Tuition	\$ 453.00
Out-of-State Resident Tuition	\$ 925.00
College Fee	\$.85
Student Services and Programs Charge	\$ 66.45

All rates and fees are subject to change. Individuals should view the Student Accounts web page for the current university charges at:

www.fredonia.edu/admin/studentaccounts.

Full-time rates do not apply for summer or J-Term semesters; tuition is calculated at the part-time per credit hour rate.

* State University policy requires that a student be a resident of New York State for one year prior to registration in order to qualify for in-state resident tuition charges. Students should contact the Student Accounts Office for complete information governing residency requirements.

Note: Non-matriculated graduate students are charged tuition according to the level of the course. During the fall and spring semesters only, students taking 12 or more hours will be charged according to the course level combination with a minimum charge equal to the full-time undergraduate rate and the maximum capped at the full-time graduate rate, determined also by their residency status.

Billing Procedures and Payment Requirements

Billing Procedures

The Student Accounts Office creates an electronic bill (eBill) for students who have course selected prior to the start of a semester. Semester bills are created in mid-July for the Fall semester and mid-December for the Spring semester. Upon creation, an email notification is sent to the student's Fredonia email address in addition to any authorized users email address. Students and authorized users may also enroll to receive text messages when an eBill is created. If the student would like their parent, guardian or another person to receive a copy of their semester bill, the student would need to sign them up as an Authorized User in our TouchNet system, or they may print a copy of the eBill and mail it. Authorized Users have access to view semester eBills, 1098-T tax notifications and current account activity, make payments, and enroll in payment plans.

A student must submit the required payment prior to the billing due date. Failure to make payment by the due date

will result in the assessment of a \$30 late payment/administrative fee. It is the responsibility of the student to notify the Student Affairs Office if they are not returning so that the charges may be removed and courses may be dropped.

Students are billed for each semester individually. The university bill lists the following mandatory charges: Tuition, College Fee, and Student Services and Programs Charge. Charges for Residence Hall Room, Food Service, FSA Debit Account, Orientation, Course and Music fees may also be included on the eBill. A deduction from the total billed amount is made for the Advance Admission Deposit (\$50) and Advance Housing Deposit (\$50) when applicable. Deferments are granted only for authorized deferrable financial aid.

Deferment Policy

Deferment of university charges is not permitted except for approved, deferrable financial aid. Estimated financial aid awards may not be used as deferments. Financial aid awards that may be used as deferments against university charges include:

- Tuition Assistance Program (TAP Awards)
SUNY Tuition Credit
- Stafford Student Loans
- Veteran benefits (only when they are payable directly to the university)
- PELL Awards
- TEACH grant
- Supplemental Education Opportunity Grants (SEOG)
- Perkins Loan
- Aid for Part-Time Study (APTS)
- Private Scholarships (only when they are payable directly to the university)
- Parent Loans
- Alternative Student Loans

Work Study Awards and personal loans are not deferrable against university charges.

Payment Requirements and Distribution of Financial Aid

Full payment, less approved deferrable financial aid and pre-payments, must be made by the due date. Cash, personal checks, money orders, VISA, MasterCard, Discover, and American Express are all acceptable forms of payment. Payments can be made online via personal check, MasterCard, or VISA by logging on to "Your Connection."

Fredonia Installment Payment Plans (FIPP) are available to all students. Students and authorized users can enroll in a two-, three- or four-payment plan on a semester basis; the plan includes all semester charges less any approved financial aid. Students/Authorized users would need to enroll each semester, and can enroll online when viewing the eBill. Payments can be scheduled to automatically be taken from a credit card, checking or savings account, or can be initiated for each individual due date by logging in and making the payment.

Students attending In-Person Registration will have an eBill created and receive email notification at their Fredonia email address and text message (if they have provided a cell phone number in their profile) near the end of the first week of classes. The due date for payment will be September 15th. A late payment/administrative fee of \$30 will be added to an account outstanding as of the close of business on the due date.

The majority of financial aid is distributed during the third and fourth week of classes. Tuition Assistance Program (TAP) and SUNY Tuition Credit funds are not distributed until after mid-semester. Students who file for their financial aid late will receive their aid later in the semester.

All financial aid received by the university is applied to student accounts on a first-received, first-applied basis after allowing for a pending Tuition Assistance Program (TAP) Award. Excess financial aid is generally returned to students within two business days. Checks that are not picked up in the Student Accounts Office are mailed to home addresses.

Failure to Pay University Charges

Changes in a student's registration status, residence hall occupancy, food service selection or a reduction in financial aid may result in a balance due after the initial payment has been made. The Student Accounts Office will bill students monthly throughout the semester. Students who fail to make timely payments will be assessed a \$30 late payment/administrative fee each time their account is billed.

A student who fails to pay any university related charges (this includes tuition, fees, library and parking fines and expenses for equipment and supplies) prior to the end of the current semester will be placed on "hold." A student on "hold" will not: receive a diploma at graduation, be permitted to register for additional semesters at Fredonia or receive a university transcript.

A student who fails to make payment to the university at the end of the semester will be referred for further collection efforts to the New York State Attorney General's Office in Albany or to a collection agency contracted by the university. Accounts transferred to these agencies will be subject to additional charges for interest and collection costs of up to 22 percent.

Scholarship Opportunities

Fredonia offers approximately \$2 million in merit- and need-based scholarships to academically qualified students each year. For scholarship application procedures, go to <http://home.fredonia.edu/finaid/scholarship-opportunities>. For the 2016-2017 aid year, scholarship recipients will be notified on a rolling basis beginning in December. Scholarship review continues until all awards are offered and accepted.

Alumni Scholarships

The Fredonia Alumni Association awards scholarships yearly to students who are children and grandchildren of Fredonia alumni. Interested persons should contact the Alumni Affairs office at (716) 673-3553 or email alumni.office@fredonia.edu for more information.

For information on scholarships open to all majors, contact the University Scholarship Committee, Office of Student Affairs, 605 Maytum Hall, (716) 673-3271 or email student.affairs@fredonia.edu. For departmental scholarships for specific majors, persons should contact the appropriate department.

Fredonia College Foundation

Department Scholarships/Awards/Funds (as of 6/15)

Following is a list of scholarships/funds that are awarded through the academic departments. The awards are based on academics, talent, financial need or other criteria established within the discipline. Interested persons should contact the department in their major directly to obtain specific requirements and application procedures for the awards.

Athletics

James H. and Eleanor Annis Endowment (alumni '38, '40 respectively)
 Athletics Department*
 Blue Devil Boosters Club*
 Blue Devil Boosters Individual Funds*
 Blue Devil Director of Athletics*
 Corydon Crowell Memorial Fund (alumnus '80)
 Depledge/Poummit Basketball Award (alumni '31, '33, respectively)
 The Gregory Fund
 Sandra Haight Memorial Scholarship
 Kirk J. Krull Basketball Endowment (alumnus '78)
 Jim and Mike Lawlor Soccer Program Endowment (alumni '73, '74, respectively)
 Doris Newman Memorial Scholarship
 Phillips Cross Country and Track/Field Endowment
 Greg and Linda Prechtel Scholarship (alumni '69, '71, respectively)

* *Department Funds*

Biochemistry

Dennis R. and Kathryn L. Costello Scholarship (alumnus '72)
Adele Maytum Hunter Scholarship
Kelly Family Scholarship Endowment (alumnus '82)
Mary J. Marletta Memorial Scholarship

Biology

1929 Graduate's Award - Bioethics
Constantine Barker Fund
Biology Department Endowment
Biology Department Fund*
Dennis R. and Kathryn L. Costello Scholarship (alumnus '72)
Joseph and Jane (Schuster) Falcone Endowment for Scholarship and Research (alumni '74)
Archer and Mabel Fox Scholarship
Bruce and Nancy Garlapow Memorial Scholarship (alumni '74, '75, respectively)
The Holmberg-Wettingfeld/Dr. Robert Wettingfeld Science Endowment
Adele Maytum Hunter Scholarship
Kourelis-Stavrides Award for Outdoor Interests (alumna '46)
Ken Mantai Endowment
Medical Technology Program Fund*
Molecular Genetics and Recombinant Gene Technology
Major Alice M. Sam, USAF Ret. Biology Scholarship
Willard Stanley Memorial Scholarship
Michael and Marie Kaufman Yochym Biology Scholarship
Yunghans-Dietter Research Award (formerly Merlin Biology Fund)
Yunghans-Mirabelli Science Achievement Scholarship

** Department Funds*

Business

Bennett Accounting Endowment
Donald C. Brandt Memorial Scholarship
Business Administration Alumni Achievement Scholarship
Business and Accounting Fund*
Business Administration Alumni Fund
Morton and Barbara Cherney Educational Scholarship
Enactus Endowment (formerly SIFE)
Enactus Music Business Award (formerly SIFE)
Franklin B. Krohn Memorial Scholarship Endowment
Raymond Lai Professional Development Fund for International Business (alumnus '75)
Mancuso Family Fund
M.R. Poummit Achievement Award (alumnus '33)
School of Business Fund*

Gary M. Tripp Memorial Scholarship (alumnus '02)
Stephen and Carol Eck Ward School of Business Scholarship (alumna '81)

** Department Funds*

Chemistry

Raffaele Borriello, M.D. and Suzanne T. Casden Chemistry Department Endowment (alumni '77, '76, respectively)
Prudence Bradley First Generation Student Scholarship Endowment
Chemistry Department Fund*
Frank J. Costanza's Greenhouse Memorial Fund
Dennis R. and Kathryn L. Costello Scholarship (alumnus '72)
David Dingley Memorial Scholarship
Gavin Family Scholarship (alumni '92, '93, respectively)
James J. Kaminski Scholars Endowment (alumnus '69)
Kelly Family Scholarship Endowment
Dr. Robert Maytum Scholarship
Carolyn Ruth Moos Scholarship
Gilbert and Ruth Moos Outstanding Senior Award
OUR (Outstanding Undergraduate Research) Future Award
Dr. Jerome H. Supple Memorial Scholarship
Byron A. Thumm Scholarship

** Department Funds*

College of Liberal Arts and Sciences

Arts and Sciences Fund
Title III Endowment

Communication

Louis C. and Dr. S. David Adler Scholarship (alumni '52, '48, respectively)
Dan Berggren Excellence in Audio/Radio (EAR) Scholarship
Anne Bernstein Memorial Scholarship (alumna '82)
Communication Department Endowment
Corydon Crowell Memorial Fund (alumnus '80)
Edward S. Edelman Scholarship
Anthony J. Ellis Memorial Scholarship
Arthur R. Maytum Scholarship
Arlie Muller Parks Award (alumna '59)
A.J. Pierce Scholarship
Richard G. and Pamela C. Ryan Endowment Scholarship Fund

** Department Funds*

Communication Disorders and Sciences

Constantine Barker Fund
Mitchell R. Burkowsky Memorial Award
Communication Disorders and Sciences Department Fund*
Friends Forever – Class of 1958 Scholarship
Kristen M. Luther Memorial Scholarship (alumna 2001, 2002)

Alan Nichter and Annmarie Woloszyn Nichter
Scholarship in Communication Disorders and Sciences
(alumni '69, '70, respectively)

Esau A. and Susan S. Sam Family Scholarship
Schaffer Family Scholarship
Rebecca Snyder Memorial Scholarship (alumna '83)
Gustave and Geraldine Werner Scholarship (alumna
'29)

Lt. Gen. Louis E. Woods Scholarship
Henry C. and Ida H. Youngerman Scholarship

* *Department Funds*

Computer and Information Sciences

John Beck Memorial Scholarship
Feng Chiang Scholarship
Computer Science Endowment
Computer Science Fund*
Debbie Joy Scholarship (alumna '76)
Arthur R. Maytum Scholarship

* *Department Funds*

Cooperative Engineering

Herbert P. Carlyon Scholarship for Cooperative
Engineering
Cooperative Engineering Scholarship
Dr. Robert Maytum Scholarship

Criminal Justice

Steven C. Croglia Endowment (alumnus '97)
Charles H. Patrick Jr. Memorial Scholarship
University Police Criminal Justice Endowment

Economics

Dennis R. and Kathryn L. Costello Scholarship
(alumnus '72)
Christine Dilacqua Endowment (alumna '75)
Economics Department Fund*
Hart-Gorman Economics Fund
Arthur R. Maytum Scholarship

* *Department Funds*

Education

Bill & Peg '81 Adams Pay it Forward Endowment
Baross-Clothier Scholarship (alumni '47, '43,
respectively)
Fanny Bartlett Award
Jessica Mary Beal Scholarship
Faith Elizabeth Bean Memorial Scholarship
Thelma Brynolfson Scholarship (alumna '38)
Winifred Budd Elementary Education Scholarship
Helen Buderkin Award
Laura A. Cirrincione Education Scholarship (alumna
'76)
Class of 1953 Dr. Neil Postman Memorial Award for
Education

Class of 1954 Scholarship
Class of 1955 Scholarship
Class of 1965 Scholarship
Clifton Scholarship (alumna '66)
College of Education Alumni - Committee of Friends
Scholarship
College of Education Endowment Scholarship
College of Education Fund*
Dr. Estelle M. Crino Educational Leadership
Scholarship for Promising Women Leaders (alumna
'77)
Anthony M. Deiulio Scholarship
Charles R. and Shirley Miller Erbsmehl Award (alumna
'58)
Tom Everett, '68 Memorial Scholarship
Friends Forever – Class of 1958 Scholarship
Heichberger Family and Scholars of Leadership
Endowment
Helen L. Johnson Legacy Scholarship (alumna '52)
Dr. Arthur L. Kaiser and Katherine Kaiser Burch
Education Scholarship (alumni '44, '53, respectively)
Annette Hartigan Koch, '52 Elementary Education
Scholarship
Philip Kochman Scholarship
Helen Kelly Lillie Memorial Scholarship (alumna '37)
Richard and Arlene LoGuidice Award (alumni '65)
Lucille Ellis Mack Scholarship (alumna '50)
Herbert Clark Mackie and Marion C. Mackie Award
Floyd and Mabel Smith Melvin Scholarship (alumni
1899, 1910, respectively)
Samuel F. Nixon Memorial Scholarship
Carol Scrace Pierce Award
Louis E. Rath's Scholarship
Byron E. and Carrie L. Record Fund
Reinbold Elementary Education Scholarship (alumna
'53)
Dr. Daniel Roselle - Class of 1956-1957 Scholarship
Margaret Sawkins Award (alumna, '44)
Ruth Meda Cutis Wheeler Scholarship
Colonel C. Ross Willson '39 and Phyllis Willson
Scholarship '39
Marjorie E. Woods Scholarship
Sanford and Lillian Zeman Award

* *Department Funds*

Educational Development Program

Educational Development Program*
The Gregory Fund
Alan and Annmarie Nichter Above and Beyond
Scholarship
Jeffrey J. Wallace Leadership and Excellence
Endowment (alumnus '68)
Ralph Wilson Jr. EDP Book Award

* *Department Funds*

English

1929 Graduate's Award - Nineteenth Century Literature
 John and Eleanor A. Courts Memorial Scholarship
 Randall and Arlene Cronk Endowment Scholarship
 Albert A. Dunn Memorial Scholarship/Book Grant
 Endowment
 Crescence Ehmke Graham Scholarship
 English Department*
 Mac Nelson Scholarship
 Henry F. Salerno Scholarship
 Dr. Robert and Joanne L. Schweik Scholarship
 Howard Herkimer and Hildegard Maytum Strong
 Scholarship (alumni 1911)
 Mary Louise White Fund

* *Department Funds*

Environmental Sciences

Dennis R. and Kathryn L. Costello Scholarship
 (alumnus '72)
 Bruce and Nancy Garlapow Memorial Scholarship
 (alumni '74, '75, respectively)
 Herbert Clark Mackie and Marion C. Mackie Award
 Willard Stanley Memorial Scholarship

Geosciences

Walther M. Barnard Scholarship
 Walther M. Barnard Geosciences Lab Endowment
 Dennis R. and Kathryn L. Costello Scholarship
 (alumnus '72)
 Florence M. Eikenburg Scholarship in Geosciences
 Fahnestock Memorial Fund
 Geographic Information Systems*
 Geosciences Alumni Scholarship Fund
 Geosciences Department*
 Gary and Eileen Lash Geosciences Endowment
 Roy A. MacDiarmid Award
 Susan J. Mara Scholarship (alumna '73)
 Dr. Robert Maytum Scholarship
 Mark D. and April Hoefner Orgren Scholarship (alumni
 '75 '76, respectively)
 Paul D. Willette Scholarship (alumnus, '70)
 Dr. Michael P. Wilson Award for Spatial Studies
 (alumnus '71)
 Dr. Michael P. Wilson Award for Temporal Studies
 (alumnus '71)

* *Department Funds*

Graduate Studies

Mitchell R. Burkowsky Memorial Award
 Clifton Scholarship (alumna '66)
 Len and Carole Faulk Graduate Scholarship
 Granger Percussion Graduate Award (alumnus '66)
 Robert and Elinor Grennell Scholarship
 Kristen M. Luther Memorial Scholarship (alumna 2001,
 2002)
 Mallette Family Scholarship

Suzanne McLain Scholarship
 Schaffer Family Scholarship
 Rebecca Snyder Memorial Scholarship (alumna '83)

History

David H. Carnahan Scholarship
 William and Helen Chazanof Award
 Scholarship in Honor of Dr. Kenneth E. Cutler
 Graebner-Bennett History Department Cultural Fund
 History Department*
 History Department Endowment
 Kim Korhummel Scholarship
 MacPhee Scholarship
 John J. and Helen B. Mancuso Scholarship (alumnus
 '56)
 Robert and Marilyn Maytum Scholarship
 Robert f Sabia Endowment
 Zimmer History Scholarship

* *Department Funds*

International Education

Graham E. Andrus Memorial Scholarship
 Deming Family International Scholarship
 Debbie Joy Scholarship (alumna '76)
 Raymond Lai Scholarship (alumnus '75)
 Lundquist International Fellowship
 Xylia Peterson Memorial Fund (alumna '85)
 Winch Endowment Fund

Library

Carnahan Jackson Library Endowment
 William and Helen Chazanof Award
 Jack T. Ericson Endowment
 Friends of Reed Library
 Holland Land Company Project
 Holocaust Library Fund
 Litchfield-French Local History Fund
 Nichols Fund*
 C. Malcolm and Jeanette Nichols Fund
 Reed Library*
 Reed Library Endowment
 Robert f Sabia Endowment for Library Archives
 Schaffer Family Library Fund
 Zweig Collection*

* *Department Funds*

Mathematical Sciences

John Beck Memorial Scholarship
 Kenneth and Mary Boynton Scholarship in
 Mathematical Sciences
 Mark Buckenmeyer Scholarship
 Feng Chiang Scholarship
 Myron T. Dana and Dana McKinstry Wheelock
 Scholarship
 Santa A.B. DiPasquale Memorial Scholarship
 Mathematics Department*

Mathematics Endowment
 Earl G. Mathewson Scholarship
 Frank R. Olson Scholarship
 Dr. Nelson and Louise A. Wood Scholarship

* *Department Funds*

Music

School of Music Scholarships are awarded to qualified new and returning students. A prospective student whose audition for admission is outstanding will be considered for music scholarships. Scholarships for returning music students are awarded on the basis of music talent, academic achievement, service to the School of Music, and other criteria specified by the awards.

Carol Hepp Adragna Music Education Scholarship (alumna '66)
 Charles D. Arnold Scholarship
 Donald Bohlen Music Composition Scholarship
 Lucia Gracia Bolton Scholarship
 Bromeley Piano Scholarship (alumna '81)
 Lisa Nielsen Burkett Piano Scholarship
 Elizabeth S. Carlyon Scholarship for Piano Performance
 Class of 1953 Award for Excellence in Music Education
 Class of 1954 Scholarship
 Class of 1955 Scholarship
 Class of 1965 Scholarship
 Max and Anne Davis Piano Scholarship
 Diers Family Endowment
 John C. Dubnicki Jr. Scholarship
 John C. Dubnicki Sr. Scholarship
 Charles C. Eikenburg Scholarship in Opera/Vocal Performance
 Craig Einhorn Guitar Award and Fellowship
 Charles R. and Shirley Miller Erbsmehl Music Scholarship (alumna '58)
 David Evans Voice Performance Scholarship
 Frazeur Percussion Scholarship
 Friends Forever – Class of 1958 Scholarship
 Friends of Music Fund*
 Dr. Homer Garretson and Dr. Louis Richardson String Scholarship
 Corinne D. Gast Memorial Scholarship (alumna '44)
 Granger Percussion Educational Discretionary Fund
 Granger Percussion Graduate Award (alumnus '66)
 Lois V. and Herbert W. Harp Scholarship
 Dr. Robert Hesse Violin Scholarship Endowment (alumnus '53)
 Hillman Memorial Music Association Endowment
 Hillman Opera Fund*
 Donald F. Iannuzzi Sr. Memorial Scholarship
 Mamie and Ira Jordan Minority Scholarship
 Robert Jordan Piano Scholarship and Distinguished Lectureship
 Kilduff Voice Scholarship

Harry A. King Scholarship
 Lenox-Denton Scholarship
 Matthew V. Lucas Scholarship
 Lundquist International Fellowship
 John A. Maier Scholarship
 Addie and Howard Marsh Memorial Music Composition Scholarship (alumnus '37)
 Elizabeth Marsh Memorial Scholarship
 Howard Marsh Memorial Scholarship
 Robert W. Marvel Fund
 Robert and Marilyn Maytum Music Scholarship
 Virginia Whipple Maytum Music Scholarship
 Harry Milgram-David Luteran Scholarship in Music Therapy
 Lauren Miller Memorial Scholarship
 Monroe-Poummit Big Band Award (alumni '34, '33)
 Vincent Morette Memorial Scholarship (alumnus '58)
 Delores J. Nelson Scholarship
 New York State Federation of Home Bureaus/Elizabeth Marsh Scholarship
 Oasis Guitar Jury Award
 Sid Olshein Memorial Scholarship
 Frank A. and Maureen Pagano Scholarship (alumna '66)
 Percussion Fund*
 Dr. W. Clarke Pfleeger '42 and Lucile Harness Pfleeger '42 Music Education Fund
 A.J. Pierce Scholarship
 Poummit Concert Master Award (alumnus '33)
 Poummit Faculty Recognition Award in Memory of Vivian Robe and Catherine Lane (alumnus '33)
 Sigurd M. Rascher Memorial Scholarship Endowment
 Franz Roehmann (alumnus '58) Music Composition Scholarship
 Juliet J. Rosch School of Music Endowment (alumna '30)
 Lawrence Schaffler Scholarship
 School of Music*
 School of Music Scholarship
 Dr. Richard Sheil Memorial Music Scholarship
 Greg Snow Music Technology Award
 SoonRan Foundation Endowment for Music Theory
 Claudette Sorel Piano Scholarship Endowment
 Isaac Stern String Scholarship
 Anthony S. Strychalski Memorial Scholarship
 Daniel and Laurie Tramuta Scholarship (alumni '78, '82, respectively)
 Albert E. and Lillian Uprichard Scholarship Endowment
 A.L. Van Keuren Music Scholarship
 Francella Pattysen Widmer Endowment
 Constance Willeford Award for Music Therapy
 George L. Wurtz String Bass Memorial Scholarship
 Margaret Shuler Wyckoff Scholarship (alumna '30)
 Jack Yellen Music Composition Scholarship
 Marie Kaufman Yochym Music Scholarship
 Bob and Betty Young Endowment

* *Department Funds*

Philosophy

Philosophy Department*

* *Department Funds*

Physics

Hack Arroe Memorial Scholarship
John J. Connelly Physics Scholarship
Dennis R. and Kathryn L. Costello Scholarship (alumnus '72)
Dr. Robert Maytum Scholarship
Dr. Subra Pendyala Fund
Physics Department Endowment
Physics Development Fund*
Physics Research Fund

* *Department Funds*

Politics and International Affairs

Erna G. and J. Murdoch Dawley Memorial Scholarship
Morgan Dowd Pre-Law Fund
Fredonia Alumni Lawyers Scholarship
Dr. James Hurtgen Endowment
Jon and Wilma Kraus Scholarship
Michael J. Livingston Memorial Scholarship (alumnus '89)
Robert and Marilyn Maytum Scholarship
Political Science Alumni Endowment
Politics and International Affairs Department Fund*
Politics and International Affairs Faculty Endowment
John R. Quatroche Jr. Endowed Scholarship in Political Science
Schiavone Family Endowment (alumnus '78)
J.R. Soukup Pi Sigma Alpha Scholarship

* *Department Funds*

Psychology

Donald John Lehr Endowment
Psychology Department Fund*
Psychology Endowment
Elizabeth Scarborough Psychology Scholarship Fund

* *Department Funds*

Science

James D. Burdick Memorial Fund
David H. Carnahan Student/Faculty Research Endowment
Lake Shore Savings Science Education Outreach Endowment
Making a Difference Endowment for Scholarship and Research in Environmental Leadership
Dr. Robert Maytum Scholarship
Lawrence A. Patrie Science Scholarship
Science Equipment Endowment Fund
Sons of Karen West

Sociocultural and Justice Sciences

Social Work Fund*
Sociology Department Fund*

* *Department Funds*

Sociology

Sociology Department Fund*

* *Department Funds*

Sport Management and Exercise Science

Health, Wellness and Recreation Fund*

* *Department Funds*

Theatre and Dance

1929 Graduate's Award - Classical Ballet
Alice Bartlett Memorial Award
The Harry John Brown and Paul W. Mockovak Scholarship in Performing Arts (alumnus '77)
Carnahan Jackson Dance Scholarship
Jack L. Cogdill Scholarship
Keith Cronin Memorial Scholarship
Culver-Wollaston Family Scholarship
Robert L. Gloor Endowment for Theatre and Dance (alumnus '96)
Walter Gloor Scholarship
Trent Illig Memorial Scholarship (alumnus '96)
Tim Douglas Jensen Class of 1990 Scholarship Fund
Robert W. Marvel Fund
Gertrude Prushaw Maytum Scholarship
Midtown Realty Musical Theatre Endowment
John S. Mintun Scholarship
Myers and Murphy Endowment for Dance
New York State Federation of Home Bureaus/Sally Bulger Scholarship
Playground Drama Day Camp
Carol Prevet Dance Scholarship
Mary and Steve Rees Rising Junior Award for Technical Production
Paul F. and Mary Joyce Schaefer Scholarship
Michael Shook Tools for Success Award (alumnus '89)
Theatre and Dance Department Fund*
Bea Ullman Scholarship
Dr. Georgiana von Tornow Endowment
Bruce K. Walford Scholarship (alumnus '76)

* *Department Funds*

Veterans

Courage and Honor Scholarship Fund
Smith-Viggiani Veterans Scholarship

Visual and Performing Arts

Marion Fellowship for the Visual and Performing Arts (alumna '79)
Robert W. Marvel Fund

Florence and Cynthia Norton Scholarship Endowment
Fund for the Arts

Visual Arts and New Media

Art Gallery Fund
Alford Bjurlin Art Scholarship
George Booth Visual Arts Scholarship
Colonel David Correll Imaging Scholarship
Crafts Alliance Award for Excellence in Art
Fredonia Potter's Co-op Scholarship
Graphic Arts Account*
Thomas E. Malinoski Endowment for the Visual Arts
Marano/Gnirke Scholarship
Cathy and Jesse Marion Art Gallery Endowment
(alumna '79)
Robert W. Marvel Fund
Media Arts Fund*
Carl J. Nordell Art Gallery Endowment
Carl J. Nordell Memorial Scholarship Endowment
Dr. Daniel D. Reiff Art History Scholarship
Visual Arts Department Fund*
Rodney W. Welling Memorial Scholarship
Wendel Scholarship

* *Department Funds*

Women's and Gender Studies

Jeanette McVicker Scholarship for Women's Studies
Women's History/Studies Fund*

* *Department Funds*

World Languages and Cultures

Myron T. Dana and Dana McKinsty Wheelock
Scholarship
Thomas Goetz-Robert Rie Scholarship for Excellence
in the Modern Languages
Modern Languages and Literatures*

* *Department Funds*

Other Scholarships and Awards

Scholarships and awards listed below are awarded to incoming students and continuing students who demonstrate outstanding academic aptitude, financial need and/or personal qualifications, and who have been recommended by the University Scholarship Committee. Separate applications are not always required. In some cases qualified students are automatically considered for selected scholarships and awards based on pre-established criteria.

Alumax Scholarship
Alumni Scholarships
American Association of University Women (AAUW)
Scholarship
Graham E. Andrus Memorial Scholarship
Hope Antz Memorial Scholarship

Dallas K. and Elizabeth W. Beal Award
Jessica Mary Beal Scholarship
Beaver Club Scholarship
Dr. Paul G. Blanchet Students with Disabilities
Scholarship (alumna '88)
Borzilleri-Gugino Scholarship (alumni '14, '26, '28)
Dr. Roland C. Burton Scholarship
Ruth Tice Callahan Award
Carnahan Jackson Scholarship
Mary B. and Joseph A. Caruso Memorial Scholarship
Brenda S. Chiappetta Memorial Endowment
Class of 1939 Scholarship
Class of 1942 and 1943 Scholarship
Class of 1950 Scholarship
Class of 1952 Scholarship
Class of 1964 Dr. Oscar E. Lanford Memorial Scholarship
Laura B. Cole Scholarship
Evelyn Lawson Coleman President's Scholarship (alumna '29)
Robert E. and Shirley P. Coon Recognition Award (alumni '50, '65)
Council for Women's Concerns/Marion Sonnenfeld
Scholarship
Patrick R. Damore Scholarship Fund
Midge Dean Memorial Scholarship
Deming Family International Scholarship
L. Michael Dimitri Scholarship
Theresa Dispenza Emergency Student Grant Endowment
Kelly Early Scholarship
Robert and Edith B. Eck Scholarship
Emeritus Scholarship
Empire State Minority Scholarship
Faculty/Staff Scholarships
Faculty Student Association Fredonia Scholarship Award
Faculty Student Association President's Scholarship
Len and Carole Faulk Graduate Scholarship
Fiat Lux (Let there be light)
William E. Finn, '83 and Rachel Martinez-Finn '82
Endowment Fund
Foundation Freshman Scholarships
Fredonia Rotary Scholarship
Malcolm J. French Memorial Scholarship
Maureen Fries Scholarship
Joseph T. Gallagher Memorial Scholarship
Steve and Parker Goldstein Endowment (alumnus '89)
Willie Mae Goodwine Scholarship
Zola Graf Scholarship
The Gregory Fund
Robert and Elinor Grennell Scholarship
Lena M. Harmon Scholarship
Velyne and Lynn A. Hawkins Scholarship
Fanny A. Hayward Award
Dennis and Jan Hefner Presidential Scholarship
David and Barbara Herman Keeper of the Dream
S.C.W. Hom Parent Scholarship
Harold Hopkins Memorial Scholarship
Manjiro Inoue Fund
International Student Assistance Fund

Franklin Nelson and Harriet Lyon Jewett Fund
 Marlene E. Jimerson Native American Scholarship
 (alumna '98)
 Mamie and Ira Jordan Minority Scholarship
 Keeper of the Dream
 George and Elane King Award
 Kourelis-Stavrides Award for Outdoor Interests (alumna
 '46)
 Raymond Lai Scholarship (alumnus '75)
 Lake Shore Savings Scholarship
 Charlotte Putnam Landers Scholarship
 Lanford Presidential Prize
 Horace O. Lanza Scholarship (alumnus 1899)
 Michael J. Livingston Memorial Scholarship (alumnus '89)
 Lundquist International Fellowship
 M & T Keeper of the Dream Scholarship
 Dorothy French Manley Scholarship
 David E. Manly Scholarship
 Maytum Family President's Scholarship
 Vivian R. McCullor Scholarship
 Jeanette Wheeler Mills Scholarship
 Thomas E. Morrissey Scholarship
 Stephen Morse Memorial Fund (alumnus '92)
 Nabta Scholarship
 Charles M. Notaro Family Scholarship (alumnus '68)
 Jenny Crecraft Olsen Award
 Anthony Patti Memorial Scholarship
 Patton/Kirkland Memorial Fund
 Xylia Peterson Memorial Fund (alumna '85)
 Morris and Marian Poummit Scholarship (alumnus '33)
 Robert R. Rie Fund
 Barbara Rose Memorial Scholarship
 Patricia M. Rushboldt Credit Union Scholarship
 Betty Norr Saveth Scholarship
 Lawrence M. Silvio Memorial Scholarship
 Kurt and Sibylla Sonnenfeld Scholarship
 Steele Family Scholarships
 Thomas Stocky Memorial Scholarship
 John R. Symans Memorial Endowment
 David M. Tiffany and Margaret M. Tiffany Family
 Scholarship Endowment
 Clifton C. Turner, '8 Endowment for Student Academic
 Excellence
 Undergraduate Alumni Council
 Valvo-Ringler-Bozzella Scholarship
 Wal-Mart Scholarship
 Waring Family Work Ethic Scholarship (alumnus '80)
 Wilma E. Watson Memorial Scholarship (alumna '19)
 Welch's/National Scholarship
 Wendel Scholarship
 William and Mary J. Whipple Keeper of the Dream
 Louise E. Wilder Scholarship
 Yvonne Wilensky Scholarship
 Theresa Dubnicki and Lawrence Williams Scholarship
 Winch Endowment Fund
 Woods and Earl Memorial Fund (alumna '21)

Special Funds

The following funds are held by the Fredonia College Foundation and used for the enhancement of university programs:

25 Year Anniversary Gifts
 50 Year Anniversary Gifts
 Alumni House Fund
 Jurgen P. Banse-Fay Production Management Internship
 Award (alumnus '88)
 Dallas K. Beal Community Access Fund
 Campus and Community Children's Center Endowment
 Carnahan Jackson Fund for the Humanities
 Grant Cooper Endowment
 Counseling Center Fund
 Gail and Ted DeDee Endowment Fund
 DFT Communications Technology Endowment Fund
 Amy Elizabeth Everett Memorial Award
 European Union Institute Fund
 Excelco Developments, Inc. and Newbrook Machine
 Corporation Scholarship
 Fredonia Veterans Scholarship
 Dr. John A. and Joan L. Glenzer Endowment (alumnus '57)
 William T. and Charlotte Hagan Young Scholar/Artist
 Award
 Hahn Family Fredonia Marxonia Fund
 Health Services Administration
 Dennis and Jan Hefner Academic Enhancement
 Endowment
 E. Louise Hoag Opera Fund
 Holocaust Genocide Fund
 Franklin Nelson and Harriet Lyon Jewett Fund
 Robert Jordan Piano Scholarship
 Leadership Program
 Olga Cielnicky Leone Fund (alumna '47)
 Sara Jane Lippincott Fund (alumna '44)
 Lodge Fund
 Ann James Manly Scholarship
 Maytum Distinguished Lecture Endowment
 Multicultural Affairs Fund
 Native American Consortium Fund
 Phyllis W. and Lawrence A. Patrie Endowment for the
 Sciences
 Poummit Secretarial Award in Memory of Janet Marks
 (alumnus '33)
 President's Award for Excellence
 Public Safety Programs Fund
 Recruitment Initiative Scholarship
 Residence Life Fund
 Rockefeller Arts Center Fund
 Rockefeller Arts Center Endowment Fund
 Juliet J. Rosch School of Music Endowment (alumna '30)
 Sean Ryan Memorial Fund
 Barbara Saletta Meritorious Service Award
 John Saulitis Humanities Fund
 Roger C. Seager Presidential Scholarship
 Senior Challenge Endowments

Leslie J. and Ethel H. Shaw Community Fund
 Marybeth Smith Endowment (alumna '52)
 Calista Lewis Steele Fund (alumna 1827)
 John L. Stroub Scholarship Fund
 Student Affairs Fund
 T.J. Summers Scholarship
 Turkish Student Fund
 V-Day Campaign
 Pearl B. Vallance Arts Center Fund
 WCVF Public Radio Fund
 Williams Visiting Professorship
 Winch Endowment Fund
 W.N.Y. School Press Association Fund
 Bob and Betty Young Emergency Grant Endowment
 Henry C. Youngerman Center Equipment Fund

Unrestricted Endowments

For priority needs determined by the Fredonia President or Fredonia College Foundation Board of Directors:

Dorothy L. Anderson Memorial Endowment
 Gertrude Maytum Garland Endowment
 Walter Gotowka Family Endowment (alumni '81, '80, respectively)
 Kathryn Hakes Endowment
 Arthur R. Johnson Endowment (alumnus '56)
 Rick and Michele Johnson Family Endowment (alumna '73)
 Mintun Family Fund
 Al Newman Fund
 William Rees and Eileen Ort Rees Endowment
 Title III Endowment
 George and Barbara Luke Weaver Fund (alumna '44)

Undergraduate Financial Aid

The primary objective of financial aid is to ensure that all eligible financial aid applicants benefit from federal, state, institutional and private financial assistance for higher education related expenses. Students are encouraged to go online at Fredonia's financial aid website at <http://home.fredonia.edu/finaid> for current information.

How Do I Apply for Financial Aid?

How do I apply for Federal Financial Aid?

The Department of Education's Federal Student Aid (FSA) programs are the largest source of student aid in the U.S. Last year, undergraduate and graduate students received more than \$100 billion in financial aid. You should file the FAFSA as soon after January 1 as possible. Follow these seven steps outlined below:

Step 1: Apply for an FSA ID and password. An FSA ID and password lets you apply, "sign" your online FAFSA, make corrections to your application information and more – all online. Go to <https://fsaid.ed.gov/npas/index.htm> to apply!

Step 2: Collect the documents including income tax returns, W-2 forms, and other records of income to apply. A complete list of what you need may be found at www.fafsa.gov.

Step 3: Complete the Free Application for Federal Student Aid (FAFSA) as early as possible, preferably in January, in order to meet school and state aid deadlines. Apply online at www.fafsa.gov. SUNY Fredonia's school code is 002844. If you are a New York State resident, please complete and submit the TAP application at www.tapweb.org.

Step 4: We strongly encourage families to file their initial FAFSA by January 31 using estimated income information. Once tax information is submitted to the IRS, families should wait two weeks and then access their online FAFSA to import Federal tax return data via the FAFSA-IRS Data Retrieval process.

Step 5: Due to recently enacted federal Prior-Prior Year legislation, please know that the 2017-2018 FAFSA will be available on October 1, 2016 to complete. Beginning with the 2017-2018 application process, students and parents will be reporting Prior-Prior income within their on-line FAFSA application. This new legislation will enable the majority of families to transfer their prior-prior year federal tax return data via the IRS within their initial FAFSA application.

Step 6: If you are selected for verification, the Financial Aid Office will ask you to submit tax return transcripts (if applicable) and any other necessary documents. Be sure to hand in this information in a timely manner as your Federal financial aid will be on hold until verification is completed. Make sure the Financial Aid Office has the information needed to process your financial aid.

Step 7: Contact the Financial Aid Office at (716) 673-3253 with any questions. Review your award letter and make sure you accept/decline any Federal Loans and/or Federal Work Study that you have been offered in a timely manner. Be sure to submit any requested materials as soon as possible.

How Do I Apply for the New York State Tuition Assistance Program (TAP)?

It is also recommended that you apply for TAP online at www.tapweb.org. As mentioned above, you should start the application process with the online Free Application for Federal Student Aid (FAFSA) at www.fafsa.gov. The New York State Higher Education Services Corporation (HESC) will use the FAFSA data as part of your online TAP application. After completing your FAFSA, there will be a link to the online TAP application on your FAFSA Confirmation Page.

To apply for TAP online, you need a HESC PIN (Personal Identification Number). Use the HESC PIN to "sign" your TAP application, keep track of your application information, or make changes. Once you have the HESC

PIN, complete your TAP application online and insert SUNY Fredonia's TAP School Code (0915 undergraduate). Information from your FAFSA and your family's calculated New York State net taxable income are pre-filled on your online TAP application. You will be able to check the status of your TAP application online at any time.

Please be alert to HESC e-mails and respond to any requests or instructions. If you received TAP the year before and your application information is unchanged, you may only have to file a FAFSA to get TAP. The TAP application deadline is May 1 of academic year for which aid is sought.

Early application is strongly encouraged for both federal and state financial aid. Since funds are limited, early applications are given first consideration.

When Will I Hear About My Financial Aid?

1. For the 2016-2017 aid year, both new and returning students will receive an initial Financial Aid Award Letter in mid-March that will list all federal, state, and institutional aid that the applicant is eligible to receive.
2. If you have been awarded a Federal Work Study position, a Federal Perkins Loan, the TEACH Grant, and/or a Federal Subsidized/Unsubsidized Stafford Loan, you must go to <http://www.fredonia.edu> and log in to YOUR CONNECTION to accept, decline or accept partial amounts of these awards. Federal Work Study and Perkins Loan must be accepted by August 1 or the award will be cancelled and offered to another student. Refer to your award letter wrapper or the *Financial Literacy Guide* for instructions.
3. To move federal awards to an authorized status for billing purposes, applicants may be required to go through the federally mandated verification process. If requested, federal tax returns and W-2 forms for the student and parents, as well as a verification worksheet, must be submitted. This information is needed in order to verify the accuracy of the data reported on the original FAFSA application (see below).
4. Throughout the summer the Financial Aid Office processes student aid paper work with the intention of making aid authorized for credit on the university bill by mid-July. Students must submit paperwork on a timely (as early as possible) basis in order to ensure that this occurs.

How is Aid Awarded?

Applicants for aid are considered based on all of the following criteria:

1. Funds available to the university from governmental, institutional and private sources.

2. Financial eligibility as determined by the U.S. Department of Education's FAFSA processing.
3. Date of receipt of FAFSA results from the Federal Central Processor.

Verification

Federal Verification of FAFSA Information

Many financial aid applicants will be required to verify the information that is reported on the FAFSA/Renewal FAFSA completed each year. Financial data, such as income, child support paid, and non-financial data, such as family size and dependency status, will be verified. If you are selected for Verification by the Federal government, you will have to submit the following to the Office of Financial Aid:

- Federal Verification worksheet
- Parent/Student tax filer income information either by the IRS Data Retrieval Process, IRS Federal Tax Transcript, or if you did not file, a signed statement saying so
- Parent/Student W-2(s), if no tax return was filed
- Proof of Food Stamps – Supplemental Nutrition Assistance Program (SNAP) (if applicable)
- 1099-R was received for the Parent(s)/Student's Pension/IRA distribution, if applicable
- Other Untaxed Income Worksheet, if applicable
- Amended Federal Tax Return, if applicable
- High School Completion Status - Certain applicants will be required to verify their high school completion status- high school diploma, recognized equivalent of a high school diploma, or home school, if requested
- Identity/Statement of Educational Purpose - Certain applicants will be required to verify their identity and resubmit a Statement of Educational Purpose, as was originally provided as part of the FAFSA submission, if requested

To request an IRS Federal Tax Transcript, go to www.irs.gov and use Form 4506-T, or quickly request a transcript by using the "Tools" section on the website and then clicking on "Get Transcript For My Tax Records," or call 1-800-908-9946.

FAFSA applicants who are selected for Verification must complete this process in order to move their Federal financial aid towards their direct charges. The FAFSA Verification process takes a minimum of four to six weeks, so it is highly recommended that students file their FAFSA early and turn in all requested Verification paperwork as soon as possible.

Updating FAFSA Through The Mandated IRS Data Retrieval Process

All FAFSA on the web applicants, and the parents of dependent applicants, who indicate that they have filed their Federal tax returns prior to completing their FAFSA and who are otherwise eligible will be directed to use the FAFSA-IRS Data Retrieval process to complete their FAFSA more easily and accurately. Applicants who choose not to use this process, or who retrieve IRS data but subsequently change it on their FAFSA, will be informed that they will be subject to being selected for the FAFSA

Verification process and will be required to support their reported FAFSA data with information obtained directly from the IRS. We strongly encourage families to file their initial FAFSA by January 31 using estimated income information. Once tax information is submitted to the IRS, families should wait three weeks and then access their online FAFSA to import Federal tax return data via the FAFSA-IRS Data Retrieval process.

Good Academic Standing and Receipt of Undergraduate Financial Aid

Requirements

State and federal regulations require that all financial aid recipients maintain program pursuit and make satisfactory academic progress toward completion of degree program requirements. The Financial Aid Office at Fredonia evaluates student aid academic progress according to state requirements for TAP, SUNYTC, SUSTA, APTS, and PTAP at the completion of each semester and according to federal requirements for SEOG, PELL, TEACH, Work Study, Perkins, Stafford and Parent loans at the completion of the academic year. All three criteria in the charts below must be met in order to retain financial aid for the following semester. If a student withdraws from a course, it may affect his/her aid for the next semester.

New York State Good Academic Standing Chart for Undergraduate Students who first received TAP in 2010-11 and thereafter (TAP, SUNYTC, SUSTA, APTS, PTAP)

receiving this TAP payment you must meet all 3 criteria below	1	2	3	4	5	6	7	8	9*	10*
Receive passing/failing grade for this percent of credit hours attempted during last semester	0	50% ft=6 pt=3	50% ft=6 pt=3	75% ft=9 pt=6	75% ft=9 pt=6	100% ft=12 pt=6	100% ft=12 pt=6	100% ft=12 pt=6	100% ft=12 pt=6	100% ft=12 pt=6
Must have accrued at least this many total credits	0	6	15	27	39	51	66	81	96	111
Maintain at least this Grade Point Average	0	1.5	1.8	1.8	2.0	2.0	2.0	2.0	2.0	2.0

ft = full-time pt = part-time

* Only students in approved five-year programs (EOP, Medical Technology and Public Accountancy) are eligible for 10 semesters of undergraduate TAP. All other students are limited to eight semesters of undergraduate TAP.

Repeated Courses. Courses in which the student has already received a passing grade cannot be included in meeting full-time study requirements for state-sponsored financial aid. Repeated courses may be counted toward full-time study requirements if a student repeats a failed course, if a student repeats the course for additional credit, if a student has received a grade that is passing at the institution but is unacceptable in a particular curriculum, or when a student repeats a previously withdrawn course.

New York State Good Academic Standing Chart for EOP Undergraduate Students and Students Whose First TAP Payment was 2006-07 through 2009-10 (TAP, SUNYTC, SUSTA, APTS, PTAP)

Before receiving this TAP payment you must meet all 3 criteria below	1	2	3	4	5	6	7	8	9*	10*
Receive passing/failing grade for this percent of credit hours attempted during last semester	0	50% ft=6 pt=3	50% ft=6 pt=3	75% ft=9 pt=6	75% ft=9 pt=6	100% ft=12 pt=6	100% ft=12 pt=6	100% ft=12 pt=6	100% ft=12 pt=6	100% ft=12 pt=6
Must have accrued at least this many total credits	0	3	9	21	33	45	60	75	90	105

Maintain at least this Grade Point Average	0	1.10	1.20	1.30	2.00	2.00	2.00	2.00	2.00	2.00
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ft = full-time pt = part-time

* Only students in approved five-year programs (EOP, Medical Technology and Public Accountancy) are eligible for 10 semesters of undergraduate TAP. All other students are limited to eight semesters of undergraduate TAP.

Repeated Courses. Courses in which the student has already received a passing grade cannot be included in meeting full-time study requirements for state-sponsored financial aid. Repeated courses may be counted toward full-time study requirements if a student repeats a failed course, if a student repeats the course for additional credit, if a student has received a grade that is passing at the institution but is unacceptable in a particular curriculum, or when a student repeats a previously withdrawn course.

Notification procedure

The Financial Aid Office will notify the student within one month after the conclusion of the Fall semester if good academic standing requirements were not met while the student received State aid, and within one month after the Spring semester while the student received State aid. The letter will inform the student of loss of aid at Fredonia for the semester immediately following the one in which the program pursuit and satisfactory academic progress standards were not met and will also apprise the student of the waiver procedure to follow if the student feels financial aid should be reinstated.

Waiver procedure

A request to reinstate State aid for the next semester at Fredonia will be evaluated and granted only if exceptional circumstances (e.g., family illness or death, personal illness, personal emotional disturbances, changes in education objective) can be documented by the student. Waivers of the Good Academic Standing criteria and reinstatement of aid are not automatic. They are approved only if in the best interest of the student and only if unusual circumstances prevented the student from meeting the expected criteria. A waiver to reinstate State aid is available only once during undergraduate study (with the exception of "C" average waiver). The waiver request form is mailed with the notification of aid loss to the student by the Financial Aid Office. A student choosing to use the waiver process to reinstate aid the next semester at Fredonia should complete and submit the waiver form (with appropriate documentation) to the Office of Student Affairs for evaluation.

Good Academic Standing Chart for Federal Aid (PELL, Perkins, SEOG, TEACH, Work Study, Stafford, Parent Loan)

Before receiving Federal aid at this grade level, you must meet all 3 criteria below	Grade Level 1	Grade Level 2*	Grade Level 3	Grade Level 4	Grade Level 5	Grade Level 6
Receive passing/failing grades for this percent of credit hours attempted during the last two semesters	0 ft=0 pt=0	50% ft=12 pt=6	75% ft=18 pt=9	100% ft=24 pt=12	100% ft=24 pt=12	
Must have accrued this many total credits	0	12	30	54	78	102
Maintain at least this cumulative Grade Point Average	0	1.00	2.00	2.00	2.00	2.00

ft = full-time pt = part-time

Receipt of federal aid is limited to 12 semesters (for students enrolled full-time), according to Federal Regulation 34CFR PART 668.16.

Students should be aware that course repeats do not count as a completion in determining Good Academic Standing.

Part-time students enrolled beyond 12 semesters (up to 24 semesters maximum) must continue to complete 100 percent of hours attempted and maintain a 2.0 GPA.

As a rule, students should always check with the Financial Aid office when considering a withdrawal from courses or the university.

Federal Satisfactory Academic Progress (SAP)

Final regulations published in the Federal Register on October 29, 2010 (668.16 and 668.34) by the U.S. Department of Education require institutions that participate in the student financial aid programs under Title IV of the Higher Education Act of 1965, as amended to (the HEA), to implement new guidelines, effective July 1, 2011; tied to the annual Satisfactory Academic Progress (SAP) review for federal student aid. Fredonia conducts a review of Satisfactory Academic Progress tied to

the receipt of federal student aid on an annual basis, at the completion of the Spring semester. If a student fails to achieve satisfactory academic progress at that time, the institution may not award and disburse federal Title IV program funds to the student.

Incompletes and WD's – effective 7/1/11, GPA and pace of completion are affected by course incompletes and withdrawals. Transfer courses must count as both attempted and completed hours when measuring quantitative progress.

Financial Aid Probation – this will be a new status assigned to a student who fails to meet the Satisfactory Academic Progress review at the completion of the Spring semester, who has appealed that determination via the institutional Waiver process, and has subsequently had eligibility for federal aid reinstated. This status will be assigned for a single consecutive payment period and the student will receive Title IV funding while in this status. At the end of that payment period, the student must meet the institution's SAP standards or meet the requirements of the "academic plan" that may have previously been developed by the institution to qualify for further federal aid.

The institutional **SAP Waiver Policy** and **Use of Academic Plans** is based on the following set of procedures:

- A student will be notified within four weeks at the conclusion of the Spring semester if he/she fails to meet federal Satisfactory Academic Progress requirements.
- If the student chooses to appeal the loss of federal student aid for the subsequent semester, he/she must submit a letter and include supporting documentation with the Waiver Application that supports the reason for failing to meet federal Satisfactory Academic Progress requirements along with an academic plan for reestablishing eligibility.
- The basis on which a student may file an appeal are the death of an immediate family member, student illness, illness of a family member, and/or other personal and emotional difficulties.
- The Satisfactory Academic Progress (SAP) Waiver Committee will review the documentation and either approve or deny the Federal Waiver request and will subsequently notify the student via written and electronic means.
- If the federal aid waiver is approved, the student is placed in a **Financial Aid Probation** status for the next semester.
- Once in a Financial Aid Probation status, a determination will be made as to whether or not a student could meet the required SAP standards after the subsequent payment period and if not, the Dean/Department Chair will develop an "academic plan" in collaboration with the student to ensure that the student meets Federal SAP standards by a specific point in time. The "academic plan" then becomes the students mandate to meeting federal Satisfactory Academic Progress requirements in place of the standard federal SAP Chart.

2016-2017 University Costs

	N.Y.S. Resident	Out-of-State Resident
Tuition	\$ 6,470	\$ 16,320
Fees	\$ 1,619	\$ 1,619
Room	\$ 7,600	\$ 7,600
Food	\$ 5,130	\$ 5,130
Totals	\$20,819	\$30,669

Although every effort is made to keep university costs as low as possible, the costs can change during the year. The above figures are estimates and are subject to change but were accurate at the time of printing. Students should plan on other indirect expenses (books, transportation, and personal costs) which may range from \$2,000 to \$2,500 for an academic year.

Graduate Financial Aid

Financial aid information can be obtained by visiting the offices website at <http://www.fredonia.edu/finaid>. Application is made for federal aid by completing a Free Application for Federal Student Aid (FAFSA - use Code 002844) at <http://www.fafsa.gov>.

Enrollment Status : It is important to know how your enrollment status is evaluated in terms of financial aid eligibility. Note the bulleted items below:

- Graduate students must be enrolled 12 credit hours to be considered full-time for financial aid and billing purposes.

- For graduate assistants: 6 credit hours per semester is the minimum amount of credit hours required to be considered full-time for the receipt of federal aid with the exception of the federal TEACH Grant. The federal TEACH Grant award is based on actual enrolled credit hours per semester and is adjusted accordingly.
- For Department of Homeland Security (DHS) purposes: 9 credit hours is the minimum amount of credit hours in order to satisfy Department of Homeland Security immigration requirements.

You should notify the Financial Aid Office in writing if you will be enrolled less than full-time so that your aid can be adjusted. Also, as a rule, students should always check with the Financial Aid office when considering a withdrawal from courses or the university.

Good Academic Standing Requirements and Receipt of Graduate Financial Aid

Requirements

Federal regulations require that all financial aid recipients maintain program pursuit and make satisfactory academic progress toward completion of degree program requirements (referred to as Good Academic Standing). The Financial Aid Office evaluates student aid recipient progress according to federal requirements for TEACH Grant, Stafford and Graduate PLUS loans at the completion of the academic year. Please refer to the chart below.

Good Academic Standing Chart for Graduate Financial Aid

Before receiving Federal aid prior to this semester, you must meet all the three criteria below	3rd	5th	7th
Percentage of attempted hours that must be completed with a passing or failing grade	65%	85%	85%
Student must have accrued at least this many credits	12	24	48
With a minimum grade point average of	2.50	2.75	3.00

Notification Procedure: Compliance with guidelines for receipt of federal financial aid (see chart above) is evaluated for all graduate students on a yearly basis at the end of the Spring semester. The Financial Aid Office will notify students who become ineligible for financial aid within one month after the Spring semester if they have not met the eligibility requirements. The notification letter will inform the student of loss of aid at Fredonia for the subsequent semester and it will also outline the waiver procedure that must be followed if the student chooses to appeal the decision.

Waiver Procedure: Reinstatement of graduate federal financial aid may be approved only when unusual circumstances prevented the student from meeting the expected criteria (see chart above) and there is sufficient documentation supporting the request for reinstatement. A request to reinstate federal graduate financial aid for the next semester is initiated via the Waiver Application Form sent to you by the Financial Aid Office and will be evaluated based on the student's documentation of the unusual circumstances that led to the cancellation of such aid. A student choosing to use the waiver process to request reinstatement of financial aid must complete and submit the Waiver Application Form (with appropriate documentation) to the Associate Provost for Graduate Studies, 803 Maytum Hall, for evaluation by the committee.

Graduate Opportunity Tuition Waiver

The Graduate Opportunity Waiver Program provides a full waiver of tuition to former EOP, SEEK, or HEOP students who are accepted or enrolled as full-time students in a graduate degree program. To apply, students should submit proof that they were enrolled as undergraduates through one of the special admission programs named. Contact any EOP or HEOP office for information.

Veteran's Administration Educational Benefits

Those veterans or dependents who are, or feel they are, eligible for federal financial assistance through the Veterans Administration should contact the Coordinator, Office of Veterans Affairs, 151 Nixon Hall, (716) 673-3423, or email veteran.affairs@fredonia.edu. Students are urged to begin their VA paperwork before the beginning of the school term in order to hasten processing. To further facilitate the start of benefits, the veteran, or the children, spouses, and/or survivors of veterans whose deaths or permanent total disabilities were service-connected, should present pertinent data, such as the service number, Social Security number, dates of service, discharging papers, and any other VA claim information.

Vocational and Educational Services for Individuals with Disabilities (VESID)

The State of New York, through the Division of Vocational Rehabilitation, provides financial assistance for those students who qualify under prescribed conditions. For additional information contact the nearest Rehabilitation Office.

Assistantships/Fellowships

Assistantships: Graduate, research, and teaching assistantships are available to highly qualified graduate students in many academic departments. Graduate assistants normally carry a 6 to 9 credit hour course load and perform duties in laboratories, lecture halls, and classrooms. The stipends for fully-funded assistantships generally begin at \$6,500 plus any negotiated increases for the academic year in addition to waiver of tuition in accordance with the policies and procedures established by the SUNY Board of Trustees.

Applicants for academic assistantships should indicate their interest on the graduate application form.

Graduate Diversity Fellowship Program

To be eligible, applicants must:

- be a U.S. citizen or have permanent resident status, and
- demonstrate how they will contribute to the diversity of the student body in the program for which they are applying, including having overcome a disadvantage or other impediment to success in higher education. Economic disadvantage, although not a requirement, may be the basis for eligibility under this category.

Membership in a racial/ethnic group that is under-represented in the graduate or professional program involved may serve as a plus factor in making awards, but may not form the sole basis of such an award and every student applicant shall be evaluated on his or her own merits. For details, students should contact the Office of Graduate Studies, (716) 673-3808 or email graduate.studies@fredonia.edu.

Types of Aid

Student Financial Aid Summary Chart

Student Aid Program	Type of Aid	Program Details	Annual Award Limits	How to Apply
Federal PELL Grant	Grant: does not have to be repaid.	Available almost exclusively to undergraduates; all eligible students will receive the Federal PELL Grant amount they qualify for.	\$598 to \$5,815	Complete the FAFSA. Expected Family Contribution (EFC) must be \$5,234 or below.
Federal Supplemental Educational Opportunity Grant (FSEOG)	Grant: does not have to be repaid.	For undergraduates with exceptional financial need; priority is given to Federal PELL Grant recipients; funds depend on availability at school.	\$100 to \$4,000	Complete the FAFSA. Early application is critical.
Federal TEACH Grant		For undergraduate and graduate students, who are in an eligible major, and meet the academic criteria. There is a service obligation tied to the receipt of this grant. If the service requirement is not met, the grant turns into an unsubsidized loan. More information can be found online at http://home.fredonia.edu/finaid .	\$466 - \$3,728 for TEACH grants disbursed prior to Oct. 1, 2016; After Oct. 1, 2016, the amount will be adjusted.	Complete the FAFSA. Must be in eligible major and meet the academic criteria.

Tuition Assistance Program (TAP)	Grant: does not have to be repaid.	Awards are based on New York State net taxable income and tuition charges. Students can receive TAP for eight semesters.	\$500 to \$5,000	Complete the FAFSA and TAP application. Student must be full-time, taking coursework applicable to their program of study.
SUNY Tuition Credit (SUNYTC)	Tuition credit	Award based on student's New York State TAP award as determined by NYSHESC.	\$90 to \$1,495	Complete the FAFSA and TAP application.
Aid for Part-Time Study (APTS)	Grant: does not have to be repaid.	For undergraduate students who satisfy eligibility criteria.	\$1,242 to \$2,000	Complete the FAFSA and the SUNY Fredonia APTS application.
Part-Time TAP (PTAP)	Grant: does not have to be repaid.	Must meet income guidelines as set by NYS, be enrolled between 6-11.5 hours and have earned 12 credits in each of the two consecutive semesters.	Dollar amount dependent on TAP award and credit hours enrolled.	Complete the FAFSA and the TAP application.
Federal Work Study	Money is earned while attending school; does not have to be repaid.	For undergraduate students; jobs can be on campus or off campus; students are paid at least NYS minimum wage.		Complete the FAFSA. Early application is critical.
Federal Perkins Loan	Loan: must be repaid Interest Rate: fixed 5%.	Payment is owed to the school that made the loan.	\$5,000 yearly maximum for undergraduate students.	Complete the FAFSA. Students must have unmet need.
Subsidized Direct Stafford Loan	Loan: must be repaid Interest Rate: fixed 3.76% for undergraduate students only.	Subsidized: No interest is accrued while borrower is in school and during grace and deferment periods; you must be at least a half-time student.	Freshman: \$3,500, Sophomore: \$4,500, Junior/Senior : \$5,500.	Complete the FAFSA. Students must have unmet need.
Unsubsidized Direct Stafford Loan	Loan: must be repaid Interest Rate: fixed 3.76% for undergraduate students; fixed 5.31% for graduate students.	Unsubsidized: Borrower is responsible for interest during the life of the loan; you must be at least a half-time student; financial need is not a requirement.	Freshman: \$5,500, Sophomore: \$6,500, Junior/Senior : \$7,500, Graduate: \$20,500 (includes any subsidized amounts for the same period).	Complete the FAFSA.

Direct PLUS Loan	Loan: must be repaid Interest Rate: fixed 6.31%.	Available to parents of dependent undergraduate students who are enrolled at least half-time.	Maximum amount is cost of attendance minus any other financial aid the student receives.	Go to http://home.fredonia.edu/finaid/federal-direct-plus-loan-program . Apply online.
Grad PLUS Loan	Loan: Must be repaid Interest rate: fixed 6.31%.	Available to graduate students who are enrolled at least half-time.	Maximum amount is cost of attendance minus any other financial aid the student receives.	Go to http://home.fredonia.edu/finaid/federal-direct-graduate-plus-loan . Apply online.
Alternative Loan	Loan: must be repaid. Interest Rate: based on Prime or LIBOR and a credit check performed by the lender. The interest rates for these private loans may be significantly higher than the interest rates associated with federal loans.	Borrowers will be evaluated on credit history, debt to income ratio, and work history. A student can be approved when applying alone but will typically require a co-borrower.	Maximum amount is cost of attendance minus any other financial aid the student receives.	Go to http://home.fredonia.edu/finaid/alternative-loans . Apply online. Filing a FAFSA is not required to receive Alternative Loan funds. However, you must contact the Financial Aid Office if you wish to waive your right to federal aid.
Parent Alternative Loan	Loan: must be repaid. Interest Rate: based on Prime or LIBOR, a credit check performed by the lender, and the repayment term.	Borrowers will be evaluated on credit history, debt to income ratio, and work history.	If loan requires school certification, the maximum amount is the cost of attendance minus any other financial aid the student receives.	Go to http://home.fredonia.edu/finaid/alternative-loans for more information. Apply online through the lender. Filing a FAFSA is not required to receive Alternative Loan funds. However, you must contact the Financial Aid Office if you wish to waive your right to federal aid.
Scholarships		Refer to Scholarship section.		

Other Sources of Aid

New York State has a variety of military scholarship available. For more information, please visit http://www.hesc.com/content.nsf/SFC/Military_Corner.

Veterans Administration Educational Benefits

Those veterans or dependents who are eligible for federal financial assistance through the Veterans Administration should contact the Fredonia Veterans Affairs Office which is located at 151 Nixon Hall at (716) 673-3423 or email veteran.affairs@fredonia.edu. Students are urged to begin their VA paperwork before the beginning of the school term in order to expedite processing. The Veterans Affairs office is staffed by the coordinator and two work studies who provide routine certification of enrollments. The staff also monitors student progress, and is available for information and referral for problems that might arise. Policy among various administrative offices, as it relates to VA recipients, is also coordinated through the Veterans Affairs office. The coordinator is in liaison with the Regional Office in Buffalo, N.Y., for those situations that might need special attention.

State Aid to Native Americans

Application Procedures: Application forms can be obtained from the Native American Education Unit, New York State Education Department, Room 462 EBA, Albany, NY 12234 or call (518) 474-0537. Required application materials must be submitted to the above address before July 15 for the fall semester, Dec. 31 for the spring semester, and May 20 for the summer semester.

Selection of Recipients and Allocation of Awards: The applicant must be a New York State resident, and be on an official New York State tribal roll, or be the child of an enrolled member of a New York State tribe.

Responsibilities of Recipients: Students are required to:

1. submit their grades at the end of each semester for which funding is received, indicating satisfactory progress toward degree or certificate requirements
2. notify the Native American Education Unit, in writing, of any change in student status, change in program, or institutional enrollment.

Funding Procedure: Eligible students may receive grant awards of up to \$2,000 per year for four years of full-time study (up to five years for approved five year programs). Part-time students will be funded on a pro-rated basis.

United States Department of Interior - Bureau of Indian Education (BIE)

Application Procedures: Application forms are available from the Education Office of the tribe in which you are affiliated or possess membership, and the Bureau of Indian

Education. An application is required for each year of study. An official needs analysis (obtained from your university financial aid office) is also required. This analysis is provided after the student completes the Free Application for Federal Student Aid (FAFSA). Each first-time applicant must obtain tribal enrollment certification from the bureau agency which records enrollment for the tribe.

Selection of Recipients and Allocation of Awards: The applicant must:

1. be a member of, or at least one-quarter degree Indian blood descendent of a member of an American Indian tribe which is eligible for the special programs and services provided by the United States through the Bureau of Indian Education
2. be accepted for admission to a nationally accredited institution of higher learning which provides a course of study conferring an associate or bachelor's degree
3. demonstrate financial need

Responsibilities of Recipients: For subsequent grants, the applicant must make satisfactory progress towards a degree and demonstrate financial need. Depending on the availability of funds, grants may also be made to graduate students and summer session students. Eligible married students may also receive living expenses for dependents.

For additional information about any aspect of expenses or financial aid, please refer to the *SUNY Fredonia Financial Literacy Guide*.

STUDENT RIGHTS AND RESPONSIBILITIES

Regulations Governing Student Conduct and Community Standards of Behavior

Pursuant to the Resolution of the Board of Trustees of the State University of New York, dated May 11, 1967, and Section 356 of the State Education Law, and after consultation with the President, representatives of the faculty, and students, the Council of the State University of New York at Fredonia established and promulgates the following regulations covering the conduct and behavior of students. The following rules and regulations were amended in December 2004 and were agreed upon by the President of the University, the College Council, the Student Affairs Committee, and the University Senate.

Attendance at Fredonia is a privilege afforded the student by the State of New York and not a legal right. The determination of a student's fitness to be admitted to the University and to continue as a student has been entrusted by the Board of Trustees of the State University to the President and their staff. The term "student" or "students" include all persons taking or auditing classes at Fredonia, both full-time and part-time, pursuing undergraduate, graduate, or professional studies; matriculated in any University program. Persons who are not officially enrolled for a particular term, but who have a continuing student relationship with the University are considered "students."

General Policy

Students seeking knowledge and understanding also need freedom to inquire, to exchange ideas through discussion, publication and public presentations. These opportunities are basic to education in and for a democratic society. To ensure these freedoms, the University requires a community free from violence, threats, and intimidation; protective of free inquiry; respectful of the rights of others; open to change; supportive of democratic and lawful procedures; and dedicated to the rational and orderly approach to the resolution of human problems. In exercising freedoms and in discharging the rights and obligations of citizenship, students must also recognize their responsibilities to other individuals, to the University, to the state and the nation, and to society in general. Orderly and dignified expression and conduct are expected.

In protection of these freedoms the University must establish certain standards of personal and group conduct. The University may apply sanctions or take other appropriate action when the conduct of individuals or groups on or off campus directly or significantly interferes with the freedom to teach and learn, the safety and health of persons in the community, the maintenance or protection of property, the provision of living

accommodations and other services, and the sponsoring of non-classroom activities such as lectures, concerts, athletic events, and social functions.

Counseling, guidance, and rehabilitation are the preferred means for resolving behavior problems. Although disciplinary proceedings play a secondary role in resolving such problems, violation of the Standards of Behavior listed below may result in privilege restriction, suspension, or expulsion/dismissal.

In the legitimate interest of the University in protecting property and the safety and welfare of specific individuals or the general public, the University President or their designee may temporarily suspend an individual, change a student's residence hall location, or remove a student from the residence halls pending a decision by the Director of Judicial Affairs, the judicial board, or the administrative board.

Statement of Jurisdiction

The Standards of Behavior and University Policies apply to all undergraduate students, graduate students, and student organizations of Fredonia. The Standards of Behavior primarily prohibits misconduct on Fredonia property, but may address off-campus conduct when the behavior or the continued presence of the individual, in the University's sole judgment, impairs, obstructs, or interferes with the mission, processes, or functions of Fredonia. Students should be aware that Fredonia reserves the right to review and take disciplinary actions based on conduct occurring off-campus and/or between academic periods.

A student's actions may violate civil or criminal laws as well as being deemed a violation of the University Standards of Behavior or University Policies. In such situations, that student may be held accountable by both civil authorities and face University sanction. The University may at its sole discretion, elect to pursue disciplinary action against a student even if criminal charges involving the same incident are pending, have been dismissed, or were reduced.

Students that elect to Study Abroad through the International Education Center will assume dual status as a Fredonia student and as a student of the host institution. Fredonia's Rights and Responsibilities are applicable while the student is studying abroad.

Students who witness serious violations of Fredonia policy, procedures, or Rights and Responsibilities that are potentially harmful to the safety and well-being of others may be charged with a violation or violations if they fail to remove themselves from such situations and/or report the incident to proper authorities.

Specific Standards of Behavior (Code of Conduct)

Listed below are the Specific Standards of Behavior (Code of Conduct). The Code of Conduct is broken into four sections: Personal Identification and Representation; Interference with the Health, Safety, or Rights of Other Persons; Care of University or Personal Property; and Demonstrations by Groups or Individuals. Alleged violation of any of the following may result in charges being filed against a student or organization.

1. Personal Identification and Representation

Failure to act in accordance with these standards must be treated as a major failure to accept responsibility as a student and make one subject to separation from the community. Prohibited are:

- (a) Furnishing false or incomplete information to University offices, officials, or judicial boards.
- (b) Failing to appear before a University official or judicial board when directed to appear.
- (c) Making, forging, printing, reproducing, copying, or altering any record, document, writing, or identification used or maintained by the University that results in injury, defrauding, or misrepresentation.
- (d) Refusing to identify one's self when directed by an authorized University official. Students are expected to carry their FREDCard at all times.
- (e) Transferring one's own FREDCard to another person for the purpose of that other individual obtaining University services or privileges.
- (f) Attempting to obtain or obtaining a University privilege or service to which the student is not entitled.
- (g) Providing erroneous information concerning a change in status concerning financial refunds or financial independence from parents or legal guardian.
- (h) Failing to provide accurate information regarding one's local address, residency, or contact information.

2. Interference with the Health, Safety, or Rights of Other Persons

All members of the University community share the responsibility for protecting and maintaining community health, safety, and the rights of other persons. Students are required to obey the statutes and laws of the Nation and the State, as well as the ordinances and laws of the village of Fredonia, city of Dunkirk, and the towns of Pomfret and Dunkirk. Conviction of a violation of such laws, statutes, or ordinances may be grounds for suspension or

expulsion/dismissal. The following conduct is prohibited:

- (a) Failing to comply with reasonable directions of University or town officials (this includes, but is not limited to, faculty, staff, Residence Director, Resident Assistant, security, safety, fire officials, or police officers carrying out properly assigned responsibilities).
- (b) Failing to comply with the final decision of a judicial board or administrative action.
- (c) Misusing safety equipment including but not limited to tampering with fire equipment, fire alarms, exit lights, refusal to obey a fire alarm, initiating a false fire alarm, submitting a bomb threat, activating emergency phones, sprinkler systems, or propping doors open.
- (d)
 - 1) Fighting and threats to, physical abuse of, harassment, assault, or any other action which threatens to or does endanger the health, safety, or welfare of a fellow student and/or member of the University community.
 - 2) Engages in or threatens to engage in behavior which poses imminent danger of causing substantial harm to one's self or others.
 - 3) Obstructing or disrupting the teaching, administrative, or public service functions of the University.
 - 4) Obstructing or disrupting disciplinary proceedings or authorized University activities.
- (e)
 - 1) Engaging in any action or situation which endangers or causes substantial harm to the mental or physical health of a member of the University or local community.
 - 2) Creating a situation that results in severe or pervasive harassment of a member of the University or local community. This includes bullying and cyber-bullying.
 - 3) Engaging in any form of hazing, which endangers the mental or physical health or involves the forced consumption of alcohol or drugs for the purpose of initiation or affiliation with any club, team, or organization. This is more particularly described in the University Policy on Hazing.
- (f) Participation in any form of non-consensual sexual intimacy and unwanted physical sexual conduct. This includes sexual violence, sexual harassment, and sexual discrimination and is more particularly described in the University Policy on Sexual Assault.

- (g) Possessing firearms, explosives (including firecrackers), weapons, BB guns, paintball guns, potato guns, blow guns, knives (4 inches or longer or switchblade), bayonets, nunchucks, brass knuckles, and toy guns that look like real guns.
- (h) Illegally using, possessing, selling, or distributing narcotics, stimulants, depressants, hallucinogens, marijuana or its derivatives, or drug paraphernalia. This is more particularly described in the University Policy on Drugs and Alcohol and the Residence Life Policy and Procedures.
- (i) Illegally using alcohol, possessing alcohol, selling or distributing alcohol; distributing alcohol to minors. This is more particularly described in the University Policy on Drugs and Alcohol.
- (j) Sponsoring or hosting a house party that violates state or local laws, ordinances, or jeopardizes the health and safety of students or others.
- (k) Use of speakers or other sound amplifying equipment without approval as to the time and place from the Office of Student Affairs, Campus Life, and/or Residence Life.
- (l)
 - (1) Posting of posters, handbills, or notices without permission of the appropriate University official. The Office of Campus Life must approve all postings.
 - (2) Solicitation or vending of any kind is not permitted on campus or in residence halls, unless permission is given by the Office of Residence Life and/or the Office of Campus Life.
- (m) Fredonia is a tobacco-free campus. Smoking is not permitted. This includes, but is not limited to; cigarettes, cigars, pipes, hookahs, e-cigarettes, etc.
- (n) Ignoring reasonable standards of appropriate behavior, including disorderly conduct.
- (o) Engaging in cheating, plagiarism, or collusion on any examination or on assigned work. This is more particularly described in the University Policy on Academic Integrity.
- (p) Refusing to accept financial obligations incurred as a student enrolled at the University. The University is empowered to refuse to register, graduate, or release records of any student who is delinquent in their obligations to the University.
- (q) Viewing, possessing, or distributing child pornography.
- (r) Counterfeiting or violating copyright laws.

(s) Illegal or inappropriate use of Fredonia's network or computers. This is more particularly described in the Computer and Network Usage Policy.

(t) Engaging in unlawful gambling activities under conditions that are contrary to the provisions of state law or any applicable University policy.

3. Care of University and Personal Property

Maintaining and preserving University grounds, academic buildings, resident and dining facilities, and other associated structures is an obligation of all members of the University community. Similarly, maintaining and preserving personal property is also an obligation. Prohibited are:

- (a)
 - 1) Theft, unauthorized possession of, property belonging to the University, a member of the University community, a campus guest, or community member.
 - 2) Vandalism, destruction of, damage to, or inappropriate use of property belonging to the University, a member of the University community, a campus guest, or community member.
- (b) Destruction, mutilation, and defacement of or tampering with books, magazines, library materials or equipment, or computer services or equipment.
- (c) Unauthorized occupancy of or trespassing on University property or facilities, or that of a community member.

4. Demonstrations by Groups or Individuals

The campus must be open to a free exchange of ideas and individuals and groups have protected Constitutional rights; therefore, all members of the community are encouraged to conduct dialogues with mutual respect and courtesy.

Prohibited are:

- (a) Denying to other students, officials, employees, or invited guests of the University lawful freedom of movement on the campus, lawful use of the property or facilities of the University, or the right of lawful entrance to and exit from any of the University's facilities.
- (b) Impeding the staff or faculty of the University in the performance of their duties, or impeding any student of the University in the pursuit of their legitimate educational or social activities, through the use of restraint, coercion, or intimidation, or when force and violence are presented or threatened.

- (c) Engaging in any intentional overt activity resulting in the obstruction to, disruption of, or interference with any of the legitimate missions, processes, procedures, or functions of the University.
- (d) Refusing to vacate a building, street, sidewalk, driveway, or other facility of the University when directed to do so by an authorized official.
- (e) Making unnecessary noise or causing noise to be made with objects and instruments, which disturb University functions or community living.

University Policies

Listed below are policies the university has adopted to ensure the health, safety and well-being of the university community.

Bias Crimes Prevention

The State University of New York at Fredonia Police shall protect all members of the Fredonia community by preventing and prosecuting bias or hate crimes that occur within the campus jurisdiction.

Hate crimes, also called bias crimes or bias-related crimes, are criminal activity motivated by the perpetrator's bias or attitude against an individual victim or group based on perceived or actual personal characteristics, such as their age, religion, ethnicity, gender, sexual orientation, or disability.

Penalties for bias-related crimes are very serious and range from fines to imprisonment for lengthy periods, depending on the nature of the underlying criminal offense, the use of violence or previous convictions of the offender. Perpetrators who are students will also be subject to campus disciplinary procedures where sanctions including expulsion/dismissal are possible.

In addition to preventing and prosecuting hate/bias crimes, University Police also assist in addressing bias-related activities that do not rise to the level of a crime. These activities, referred to as bias incidents and defined by the University as objectively perceptible acts of bigotry, harassment, or intimidation directed at a member or group within the Fredonia community based on national origin, ethnicity, race, age, religion, gender, sexual orientation, disability, veteran status, color, creed, or marital status, may be addressed through the State University's Discrimination Complaint Procedure or the campus Code of Conduct. Bias incidents can be reported to University Police, the Office of Student Affairs, or the Office of Diversity, Equity, and Inclusion.

Students are encouraged to contact the Chief Diversity Officer to request consultation and counseling regarding a crime or incident, to report a crime or incident, to file a Charge of Discrimination form, or to share concerns about issues regarding the University. Other offices students may

wish to contact are: Student Affairs; the Center for Multicultural Affairs; University Police; the Counseling Center; Residence Life; and Judicial Affairs.

If a student wishes to file an informal or formal complaint with the Chief Diversity Officer/Title IX Coordinator, they must do so within 90 calendar days following the alleged discriminatory act or 90 calendar days after a final grade is received, for the semester during which the discriminatory acts occurred, if that date is later. If a complainant elects to have the matter dealt with in an informal manner, the Chief Diversity Officer/Title IX Coordinator will attempt to reasonably resolve the problem to the mutual satisfaction of the parties. If a formal complaint is filed by the student, the Chief Diversity Officer/ Title IX Coordinator refers the complaint to a three-person panel (comprised of Faculty, Staff, and/or Students), which reviews all relevant information. The Chairperson of the panel submits a summary of its findings and the panel's recommendation(s) for further action to the President. The President then issues a written statement indicating what action they propose to take. Although neither informal nor formal complaints may be made anonymously, Fredonia ensures the privacy of all parties involved.

A student who participates in dispute resolution has the right to do so without fear of retaliation. Retaliation against a student or a witness who has filed a discrimination complaint will result in appropriate sanctions or other disciplinary action as covered by applicable University policies.

If you are a victim of, or witness to, a hate/bias crime on campus, report it to University Police by calling 673-3333 in an emergency, using a Blue Light or other campus emergency telephones, or stopping by the University Police Office located on the 2nd floor in Gregory Hall. University Police will investigate and follow the appropriate adjudication procedures.

Victims of bias crime or bias incidents are urged to contact the following offices for assistance:

University Police (716) 673-3333

Office of Student Affairs/Judicial Affairs (716) 673-3271

Office of Diversity, Equity and Inclusion/Affirmative Action (716) 673-3358

Counseling Center (716) 673-3424

Center for Multicultural Affairs (716) 673-3398

For general information on Fredonia security procedures, see the University Police website at <http://students.fredonia.edu/upd> or call (716) 673-3333 or email University.Police@fredonia.edu.

More information about bias-related and bias crimes, including up-to-date statistics on bias crimes, is available from the Chief of University Police at (716) 673-3333 or

the University Police website at <http://students.fredonia.edu/upd>.

Crime Statistics

A copy of the State University of New York at Fredonia campus crime statistics as reported annually to the U.S. Department of Education will be provided upon request by the Personal Safety and Campus Security Committee. Persons should direct all such requests to the Office of University Police at (716) 673-3333. Information can also be obtained from the U.S. Department of Education website at <http://ope.ed.gov/security/> and the State University of New York at Fredonia University Police website at <http://students.fredonia.edu/upd>.

Personal Safety and Campus Security Committee

Pursuant to the N.Y.S. Education Law Article 129-A, section 6431, the Personal Safety and Campus Security Committee reviews current campus security policies and procedures and makes recommendations for their improvement. The committee specifically reviews current policies for:

1. Educating the campus community, including security personnel and those persons who advise or supervise students, about sexual assault.
2. Educating the campus community about personal safety and crime prevention.
3. Reporting sexual assaults and dealing with victims during investigations.
4. Referring complaints to appropriate authorities.
5. Counseling victims.
6. Responding to inquiries from persons concerned about campus safety.

The committee consists of a minimum of six members, at least half of whom shall be female. The committee consists of two students appointed by the Student Association, two faculty members appointed by the University Senate, and two individuals appointed by the University President.

The committee reports, in writing, to the University President or chief administrative officer on its findings and recommendations at least once each academic year, and such reports shall be available upon request.

For more information regarding the Personal Safety and Campus Security Committee, persons should contact the Chief of University Police at (716) 673-3333 or email university.police@fredonia.edu or the Office of Student Affairs at (716) 673-3271 or email student.affairs@fredonia.edu.

Permanent Transcript Notation (Hazing, Sexual Violence, and Other Serious Violations)

Students that are found responsible and suspended or expelled/dismissed for serious violations of the Students Rights and Responsibilities may receive a permanent notation on their academic transcript. This includes but is not restricted to sexual assault, hazing, and conduct which lead to the death or serious physical injury to another person. Students found responsible for such violations may not receive credit for the semester in which they are suspended or expelled/dismissed. Also, the student will remain liable for all tuition and fees for that semester.

Investigation of Violent Felony Offenses/Missing Students

Chapter 22 of the Laws of 1999 of the State of New York establishes certain requirements for investigation of violent felonies and reporting of missing students on college/university campuses in New York State.

1. "Missing Student" means any student of the university subject to the provisions of Section 355(17) of the New York State Education Law, who resides in a facility owned or operated by the university and who is reported to the university as missing from his or her residence.
2. "Violent Felony Offense" means a violent felony offense as defined in Section 70.02(1) of the Penal Law of the State of New York.

Response and Investigation:

1. *Missing Student:* When a report of a missing student is received by the university or the municipal police department, the receiving department will conduct a preliminary investigation in order to verify the complaint and to determine the circumstances which exist relating to the reported missing student. If the student's absence is verified, the incident will be reported and shared between departments. Both departments will continue the investigation to locate the missing student. If, after further investigation, the missing student is not located, both departments will determine the most efficient manner of continuing the investigation. In any event, information relating to any report of a missing student shall be shared by both parties no later than twelve (12) hours from the time of the initial report. If the missing student is located or returns to the university at any time after the matter has been reported, each party shall notify the other immediately.
2. *Violent Felony Offenses:* When any report of an on-campus violent felony offense is received by the university or when a report of a violent offense involving a university student is received by the municipal police department, the recipient shall notify the other police department as soon as possible. The

police departments will carry out appropriate investigative procedures, will determine the most efficient manner of continuing the investigation and shall provide mutual assistance when requested.

Policy on Hazing and Initiation or Affiliation with any Organization

The purpose of this policy is to specifically clarify those behaviors and activities which constitute violations of University regulations and New York State laws pertaining to hazing, and to provide guidance to student organizations in designing new member programs and activities, which serve to protect the human dignity and safety of all persons which will be permitted. This policy applies to all members of a student organization including alumni members. No organization may engage in any form of hazing. A student found responsible for hazing may receive a permanent transcript notation on his or her transcript. This is more particularly described in the *Permanent Transcript Notation Policy*.

Hazing is defined as engaging in any action or creating a situation intentionally or unintentionally designed to produce mental or physical discomfort, harassment, fatigue, intoxication or excessive ridicule in the course of another person's initiation into or affiliation with any organization. Such activities and situations may constitute hazing but are not limited to the following:

1. Disfiguration to include branding or self-mutilation
2. Paddling in any form
3. Creation of excessive fatigue
4. Physical and psychological shocks
5. Activities such as quests, treasure hunts, drinking games, scavenger hunts, road trips, etc. which are conducted in an illegal, demeaning, or dangerous manner
6. Public wearing of apparel which is conspicuous and not normally in good taste
7. Engaging in public stunts and buffoonery
8. Morally degrading or humiliating games and activities
9. Any activities which interfere with class attendance, class preparation or scholastic activities or activities which are disruptive to any university department or office or classroom
10. Verbal abuse which leads to public embarrassment or humiliation
11. Implication that an act of hazing could be pre-initiatory
12. Engaging in or encouraging excessive or illegal drinking or drug use
13. Any other activities that are not consistent with fraternal law, ritual or policy, or the policies and regulations of Fredonia

Fredonia reserves the right to revoke recognition of any student organization or club that is found to have violated these rules. Appropriate review of alleged violations may include review by the Vice President for Student Affairs and the Director of Judicial Affairs. Member organizations of Inter-Greek Council and Panhellenic Council may also be reviewed by their respective Judicial Boards. Revocation of recognition may not preclude the imposition of the University Judicial Board; but when considered by the Vice President for Student Affairs to be serious in nature, could result in immediate suspension of organizational recognition until such time as the allegations have been appropriately adjudicated.

Students are prohibited from pledging, joining, or accepting membership with a fraternity, sorority, or student organization which has been dismissed or expelled.

Given the University's concern regarding the physical and/or mental health risk that expelled student organizations pose, individual students who join expelled student organizations can be charged with this regulation and receive a sanction that would expel/dismiss them from the University. Students who choose to rush, pledge, and/or join an expelled organization can be charged through the Code of Conduct and be expelled/dismissed from the University.

Policy on Sexual Assault

The Fredonia campus will not tolerate sexual assault in any form, including acquaintance rape. Where there is reasonable cause to believe that the University regulations prohibiting sexual assault have been violated, the campus will pursue strong disciplinary action through its own channels. This discipline includes the possibility of suspension or expulsion/dismissal from the University.

A student charged with an act of sexual violence can be prosecuted under New York State criminal statutes and disciplined under the campus code of student conduct. Even if the criminal justice authorities choose not to prosecute, the campus can pursue disciplinary action. A student may be charged under Section 2(f) of the Standards of Behavior.

In addressing cases of sexual assault, the State University of New York at Fredonia works to ensure fairness and to provide support for all persons involved. Students who have questions about the procedures and protections provided in these cases are encouraged to contact the Office of Student Affairs and/or University Police. Students are also encouraged to take advantage of the Student Counseling Center and Student Health Center for further assistance.

Definition of Consent

Fredonia recognizes the following definition of consent: Affirmative consent is a clear, unambiguous, knowing, informed, and voluntary agreement between all participants to engage in sexual activity. Consent is active, not passive. Silence or lack of resistance cannot be interpreted as consent. Seeking and having consent accepted is the responsibility of the person(s) initiating each specific sexual act regardless of whether the person initiating the act is under the influence of drugs and/or alcohol. Consent to any sexual act or prior consensual sexual activity between or with any party does not constitute consent to any other sexual act. The definition of consent does not vary based upon a participant's sex, sexual orientation, gender identity or gender expression. Consent may be initially given but withdrawn at any time. When consent is withdrawn or cannot be given, sexual activity must stop. Consent cannot be given when a person is incapacitated. Incapacitation occurs when an individual lacks the ability to fully, knowingly choose to participate in sexual activity. Incapacitation includes impairment due to drugs or alcohol (whether such use is voluntary or involuntary), the lack of consciousness or being asleep, being involuntarily restrained, if any of the parties are under the age of 17, or if an individual otherwise cannot consent. Consent cannot be given when it is the result of any coercion, intimidation, force, or threat of harm.

Policy for Alcohol and/or Drug Use Amnesty in Sexual Violence Cases

The health and safety of every student at the State University of New York and its State-operated and community colleges is of utmost importance. Fredonia recognizes that students who have been drinking and/or using drugs (whether such use is voluntary or involuntary) at the time a sexual violence incident occurs may be hesitant to report such incidents due to fear of potential consequences for their own conduct. Fredonia strongly encourages students to report incidents of sexual violence to campus officials. A bystander reporting in good faith or a victim/survivor reporting sexual violence to Fredonia officials or law enforcement will not be subject to campus conduct action for violations of alcohol and/or drug use policies occurring at or near the time of the sexual violence.

Campus Climate Assessment Policy

Climate assessments afford institutions the opportunity to better understand their campus and to make informed decisions when it comes to providing a safe educational environment. Beginning in the 2015-2016 academic year, each State University of New York State-operated and community college will conduct a uniform climate survey that analyzes prevalence and attitudes regarding sexual harassment, including sexual violence, and other related crimes. The survey will address at least the following:

- Student and employee knowledge about:

- The Title IX Coordinator's role;
- Campus policies and procedures addressing sexual assault;
- How and where to report sexual violence as a victim/survivor or witness;
- The availability of resources on and off-campus, such as counseling, health, academic assistance;
- The prevalence of victimization and perpetration of sexual assault, domestic violence, dating violence, and stalking on and off-campus during a set time period (for example, the last two years);
- Bystander attitudes and behavior; and
- Whether victims/survivors reported to the University and/or police, and reasons why they did or did not report.

Beginning in the spring semester of 2015, the Chancellor or designee convened a group of scholars and practitioners to review methods of assessing campus climate, specific questions asked in past surveys, relevant data on responses and response rates, issues and problems encountered in survey implementation, and lessons learned from past surveys. The Chancellor or designee will gather this data and seek to develop a standardized survey, with the advice of relevant members of the SUNY community and knowledgeable outside entities, that uses established measurement tools, to be implemented every two years by all SUNY State-operated and community colleges beginning in the 2015-2016 academic year. This policy may be changed by the Chancellor or designee should federal and/or State legislation require a different process or duplicate efforts to assess campus climate via survey.

Sexual Violence Victim/Survivor Bill of Rights

The State University of New York and Fredonia are committed to providing options, support and assistance to victims/survivors of sexual assault, domestic violence, dating violence, and/or stalking to ensure that they can continue to participate in University-wide and campus programs, activities, and employment. All victims/survivors of these crimes and violations, regardless of race, color, national origin, religion, creed, age, disability, sex, gender identity or expression, sexual orientation, familial status, pregnancy, predisposing genetic characteristics, military status, domestic violence victim status, or criminal conviction, have the following rights, regardless of whether the crime or violation occurs on campus, off-campus, or while studying abroad:

The right to:

- Have disclosures of sexual violence treated seriously.
- Make a decision about whether or not to disclose a crime or incident and participate in the conduct or criminal justice process free from outside pressures from University officials.

- Be treated with dignity and to receive from University officials courteous, fair, and respectful health care and counseling services.
- Be free from any suggestion that the victim/survivor is at fault when these crimes and violations are committed, or should have acted in a different manner to avoid such a crime.
- Describe the incident to as few individuals as practicable and not to be required to unnecessarily repeat a description of the incident.
- Be free from retaliation by the University, the accused, and/or their friends, family and acquaintances.
- Exercise civil rights and practice of religion without interference by the investigative, criminal justice, or conduct process of the University.

Options in Brief:

Victims/survivors have many options that can be pursued simultaneously, including one or more of the following:

- Advocacy and Counseling
- CEASE, Counseling Center, LoGrasso Hall, (716) 673-3424
 - Campus, Education, Awareness, Support, and Effect (CEASE) is the violence prevention – victim services program at Fredonia. CEASE provides advocacy and referrals for Fredonia students that are survivors of sexual and interpersonal violence. We can answer questions, offer emotional support, and provide referrals for legal, medical, judicial, and counseling options.
- Counseling Center, LoGrasso Hall, (716) 673-3424
 - The Counseling Center can provide mental health services for survivors of sexual violence; services are free and confidential. For after-hours assistance from the Counseling Center, please contact University Police and ask for the counselor on-call.
- The Anew Center of Jamestown (The Salvation Army), 1-800-252-8748
 - Provides a 24/7 helpline for survivors of sexual assault and relationship violence. The helpline can answer questions, provide referrals or send a victim advocate to meet with you.
- Medical Treatment and Evidence Collection
- Brooks Memorial Hospital can provide medical treatment to survivors of sexual assault. They can offer treatment for injuries, STD/STI testing and treatment, the morning after pill, and basic evidence collection (also known as 'rape kits'). Advocates from The Anew Center can be contacted to provide advocacy services. Survivors who have a sexual assault kit completed do not have to file a police report or press criminal charges.
- Contact Information: 529 Central Avenue – Dunkirk, (716) 366-1111
- The Health Center can provide treatment for injuries, the morning after pill, and referrals to outside providers for additional services. The Health Center does not provide evidence collection services (also known as 'rape kits'). They can provide you with transportation to Brooks Hospital to have evidence collected.
- Contact Information: LoGrasso Hall, (716) 673-3131
- Chautauqua County Health Department - Reproductive Health Services Clinic can provide free and confidential STD/HIV testing and treatment and the morning after pill.
- Contact Information: 319 Central Avenue – Dunkirk, (716) 363-3660
- FRED ASSIST - Sexual health clinic that offers services to all Fredonia students. Services include: pap smears, testing for chlamydia and gonorrhea (urine test for males & females), emergency contraception (at clinics only), and hormonal contraception. Please see FRED ASSIST for a complete price list for services. Clinical services are provided by a medical staff and student volunteers staff office hours to answer questions regarding sexual health and make appointments for the clinic. Services are confidential.
- Contact Information: LoGrasso Hall (rear of building), (716) 673-3396
- To confidentially or anonymously disclose a crime or violation, who by law can maintain confidentiality and can assist in obtaining services (more information on confidential report is available in the Options for Confidentially Disclosing Sexual Violence Policy <http://students.fredonia.edu/sexualassault/>)
- Anonymously online: <http://students.fredonia.edu/upd/updsilent>
- Confidential: Counseling Center, LoGrasso Hall, (716) 673-3424;
- Make a report to:
 - An employee with the authority to address complaints, including the Title IX Coordinator, Director of Judicial Affairs, or a Human Resources employee;
 - University Police;
 - Local law enforcement; and/or
 - Family Court or Civil Court.

Copies of this Bill of Rights shall be distributed annually to students, made available on every University's website, and posted in each campus residence hall, dining hall, and student union or campus center and shall include links or information to access the Sexual Violence Response Policy below and the Options for Confidentially Disclosing Sexual Violence.

Sexual Violence Response Policy

In accordance with the Victim/Survivor Bill of Rights, victims/survivors shall have the right to pursue more than one of the options below at the same time, or to choose not to participate in any of the options below:

I- Reporting:

- To report confidentially the incident to one of the following University officials, who by law may maintain confidentiality, and can assist in obtaining services (more information on confidential report is available in the Options for Confidentially Disclosing Sexual Violence Policy www.fredonia.edu/sexualassault)
 - Anonymously online: <http://students.fredonia.edu/upd/updsilent>
 - Counseling Center, LoGrasso Hall, (716) 673-3424;
- To disclose confidentially the incident and obtain services from the New York State, New York City or county hotlines: <http://www.opdv.ny.gov/help/dvhotlines.html>. Additional disclosure and assistance options are catalogued by the Office for the Prevention of Domestic Violence and presented in several languages: <http://www.opdv.ny.gov/help/index.html> (or by calling 1-800-942-6906), and assistance can also be obtained through:
 - SurvJustice: <http://survjustice.org/our-services/civil-rights-complaints/>;
 - Legal Momentum: <https://www.legalmomentum.org/>;
 - NYSCASA: <http://nyscasa.org/>;
 - NYSCADV: <http://www.nyscadv.org/>;
 - Pandora's Project: <http://www.pandys.org/lgbtsurvivors.html>;
 - GLBTQ Domestic Violence Project: <http://www.glbtqdv.org/>; and
 - RAINN: <https://www.rainn.org/get-help>.
 - Safe Horizons: <http://www.safehorizon.org/>. (note that these hotlines are for crisis intervention, resources, and referrals, and are not reporting mechanisms, meaning that disclosure on a call to a hotline does not provide any information to the

campus. Victims/survivors are encouraged to additionally contact a campus confidential or private resource so that the campus can take appropriate action in these cases).

- To report the incident to one of the following University officials who can offer privacy and can assist in obtaining resources (note that an official who can offer privacy may still be required by law and University policy to inform one or more University officials about the incident, including but not limited to the Title IX Coordinator):
 - Title IX Coordinator;
 - University Police;
 - Student Affairs;
 - Judicial Affairs;
 - Residence Life
- To file a criminal complaint with University Police and/or with local law enforcement:
 - University Police, 2nd Floor of Gregory Hall, (716) 673-3333
 - Fredonia Police Department, 9 Church St., Fredonia, NY, (716) 679-1531
- To file a report of sexual assault, domestic violence, dating violence, and/or stalking, and/or talk to the Title IX Coordinator for information and assistance. Reports will be investigated in accordance with University policy. If a victim/survivor wishes to keep their identity private, they may call the Title IX Coordinator anonymously to discuss the situation and available options:
 - Title IX Coordinator, 143 Fenton Hall, (716) 673-3358
- When the accused is an employee, a victim/survivor may also report the incident to the Office of Human Resources or may request that one of the above referenced confidential or private employees assist in reporting to Human Resources. Disciplinary proceedings will be conducted in accordance with applicable collective bargaining agreements. When the accused is an employee of an affiliated entity or vendor of the University, University officials will, at the request of the victim/survivor, assist in reporting to the appropriate office of the vendor or affiliated entity and, if the response of the vendor or affiliated entity is not sufficient, assist in obtaining a *persona non grata* letter, subject to legal requirements and University policy.
 - Human Resources Office, 511 Maytum Hall, (716) 673-3434

- You may withdraw your complaint or involvement from the University process at any time.

II- Resources:

- To obtain effective intervention services
 - Counseling Center, LoGrasso Hall, (716) 673-3424
 - Student Health Center, LoGrasso Hall, (716) 673-3131. Sexual contact can transmit Sexually Transmitted Infections (STI) and may result in pregnancy. Testing for STIs and emergency contraception is available [provide contact information for one or multiple on or off-campus locations where students can obtain tests for STIs and describe whether such testing is free or at a cost].
 - Fred ASSIST, LoGrasso Hall, (716) 673-3396

Within 96 hours of an assault, you can get a Sexual Assault Forensic Examination (commonly referred to as a rape kit) at a hospital. While there should be no charge for a rape kit, there may be a charge for medical or counseling services off-campus and, in some cases, insurance may be billed for services. You are encouraged to let hospital personnel know if you do not want your insurance policyholder to be notified about your access to these services. The New York State Office of Victim Services may be able to assist in compensating victims/survivors for health care and counseling services, including emergency funds. More information may be found here: http://www.ovs.ny.gov/files/ovs_rights_of_cv_booklet.pdf, or by calling 1-800-247-8035. Options are explained here: <http://www.ovs.ny.gov/helpforcrimevictims.html>.

III- Protection and Accommodations:

- When the accused is a student, to have the University issue a “No Contact Order,” meaning that continuing to contact the protected individual is a violation of University policy subject to additional conduct charges; if the accused and a protected person observe each other in a public place, it is the responsibility of the accused to leave the area immediately and without directly contacting the protected person.
- To have assistance from University Police or other University officials in obtaining an Order of Protection or, if outside of New York State, an equivalent protective or restraining order.
- To receive a copy of the Order of Protection or equivalent and have an opportunity to meet or speak with a University official who can explain the order and answer questions about it, including information from the Order about the accused’s responsibility to stay away from the protected person(s); that burden does not rest on the protected person(s).
- To an explanation of the consequences for violating these orders, including but not limited to arrest, additional conduct charges, and interim suspension.
- To have assistance from University Police in effecting an arrest when an individual violates an Order of Protection or, if outside of New York State, an equivalent protective or restraining order within the jurisdiction of University Police or, if outside of the jurisdiction or to call on and assist local law enforcement in effecting an arrest for violating such an order.
- When the accused is a student and presents a continuing threat to the health and safety of the community, to have the accused subject to interim suspension pending the outcome of a conduct process.
- When the accused is not a member of the University community, to have assistance from University Police or other University officials in obtaining a persona non grata letter, subject to legal requirements and University policy.
- To obtain reasonable and available interim measures and accommodations that effect a change in academic, housing, employment, transportation, or other applicable arrangements in order to ensure safety, prevent retaliation, and avoid an ongoing hostile environment. While victims/survivors may request accommodations through any of the offices referenced in this policy, the following office can serve as a point to assist with these measures:
 - Title IX Office, 143 Fenton Hall, (716) 673-3358 IV- Student Conduct Process:
- To file student conduct charges against the accused. Conduct proceedings are governed by the procedures set forth in the University Student Handbook as well as federal and New York State law, including the due process provisions of the United States and New York State Constitutions.
- Throughout conduct proceedings, the accused and the victim/survivor will have:
 - The same opportunity to have access to an advisor of their choice. Participation of the advisor in any proceeding is governed by federal law and the Student Code of Conduct;
 - The right to a prompt response to any complaint and to have their complaint investigated and adjudicated in an impartial and thorough manner by individuals who receive annual training in conducting investigations of sexual violence, the effects of trauma, and other issues related to sexual assault, domestic violence, dating violence, and stalking.

- The right to an investigation and process conducted in a manner that recognizes the legal and policy requirements of due process and is not conducted by individuals with a conflict of interest.
- The right to receive written or electronic notice of any meeting or hearing they are required to or are eligible to attend.
- The right to have a conduct process run concurrently with a criminal justice investigation and proceeding, except for temporary delays as requested by external municipal entities while law enforcement gathers evidence. Temporary delays should not last more than 10 days except when law enforcement specifically requests and justifies a longer delay.
- The right to review available evidence in the case file.
- The right to a range of options for providing testimony via alternative arrangements, including telephone/videoconferencing or testifying with a room partition.
- The right to exclude prior sexual history or past mental health history from admittance in University disciplinary stage that determines responsibility. Past sexual violence findings may be admissible in the disciplinary stage that determines sanction.
- The right to ask questions of the decision maker and via the decision maker indirectly request responses from other parties and any other witnesses present.
- The right to make an impact statement during the point of the proceeding where the decision maker is deliberating on appropriate sanctions.
- The right to simultaneous (among the parties) written or electronic notification of the outcome of a conduct proceeding, including the sanction(s).
- The right to know the sanction(s) that may be imposed on the accused based upon the outcome of the conduct proceeding and the reason for the actual sanction imposed. For students found responsible for sexual assault, the available sanctions are suspension with additional requirements and expulsion/dismissal.
 - Judicial Affairs, 604 Maytum Hall, (716) 673-3271
- The right to choose whether to disclose or discuss the outcome of a conduct hearing.

Options for Confidentially Disclosing Sexual Violence

The State University of New York and Fredonia want you to get the information and support you need regardless of whether you would like to move forward with a report of sexual violence to campus officials or to police. You may want to talk with someone about something you observed or experienced, even if you are not sure that the behavior constitutes sexual violence. A conversation where questions can be answered is far superior to keeping

something to yourself. Confidentiality varies, and this document is aimed at helping you understand how confidentiality applies to different resources that may be available to you.

Privileged and Confidential Resources:

Individuals who are confidential resources will not report crimes to law enforcement or University officials without your permission, except for extreme circumstances, such as a health and/or safety emergency. At Fredonia, this includes:

- Fredonia's Counseling Center: LoGrasso Hall, (716) 673-3424
- Fredonia's Health Center: LoGrasso Hall, (716) 673-3131
- Substance Abuse and Violence Prevention Coordinator: LoGrasso Hall, (716) 673-3424 Off-campus options to disclose sexual violence confidentially include (note that these outside options do not provide any information to the campus):
 - Off-campus counselors and advocates. Crisis services offices will generally maintain confidentiality unless you request disclosure and sign a consent or waiver form. More information on an agency's policies on confidentiality may be obtained directly from the agency.
 - Stacey Tanner, Director of Human Services: The Salvation Army Rape Crisis Services P.O. Box 368, Jamestown, NY 14702, (716) 664-6567 Office, 800-252-8748 Toll-Free Hot Line (stacey.tanner@use.salvationarmy.org)
 - The Anew Center: 1-800-252-8748
 - WCA Hospital: Center for Excellence, SAFE (Sexual Assault Forensic Examiner) Nurse, Emergency Department (716) 487-0141, <http://www.sthcs.org/safe.html>
 - Off-campus healthcare providers

Note that medical office and insurance billing practices may reveal information to the insurance policyholder, including medication and/or examinations paid for or administered. The New York State Office of Victim Services may be able to assist in compensating victims/survivors for health care and counseling services, including emergency compensation. More information may be found here:

http://www.ovs.ny.gov/files/ovs_rights_of_cv_booklet.pdf, or by calling 1-800-247-8035. Options are explained here: <http://www.ovs.ny.gov/helpforcrimevictims.html>.

Note that even individuals who can typically maintain confidentiality are subject to exceptions under the law, including when an individual is a threat to themselves or others and the mandatory reporting of child abuse.

Non-Professional Counselors and Advocates:

Non-professional counselors and advocates can also assist you without sharing information that could identify you. At Fredonia, this includes the CEASE program of the Counseling Center, LoGrasso Hall, (716) 673-3424. The CEASE Coordinator will report the nature, date, time, and general location of an incident to Fredonia's Title IX Coordinator, but will consult with you to ensure no personally identifying details are shared without your consent. These individuals are not considered confidential resources as discussed above.

Privacy versus Confidentiality:

Even Fredonia offices and employees who cannot guarantee confidentiality will maintain your privacy to the greatest extent possible. The information you provide to a non-confidential resource will be relayed only as necessary to investigate and/or seek a resolution and to notify the Title IX Coordinator or designee, who is responsible under the law for tracking patterns and spotting systemic issues. Fredonia will limit the disclosure as much as possible, even if the Title IX Coordinator determines that the request for confidentiality cannot be honored.

Requesting Confidentiality: How Fredonia Will Weigh the Request and Respond:

If you disclose an incident to a Fredonia employee who is responsible for responding to or reporting sexual violence or sexual harassment, but wish to maintain confidentiality or do not consent to the institution's request to initiate an investigation, the Title IX Coordinator must weigh your request against our obligation to provide a safe, non-discriminatory environment for all members of our community, including you.

We will assist you with academic, housing, transportation, employment, and other reasonable and available accommodations regardless of your reporting choices. While victims/survivors may request accommodations through several University offices, the following office can serve as a primary point of contact to assist with these measures: The Office of Student Affairs, 6th floor of Maytum Hall (716) 673-3271. We also may take proactive steps, such as training or awareness efforts, to combat sexual violence in a general way that does not identify you or the situation you disclosed. We may seek consent from you prior to conducting an investigation. You may decline to consent to an investigation, and that determination will be honored unless the Fredonia's failure to act may result in harm to you or other members of the Fredonia community. Honoring your request may limit our ability to meaningfully investigate and pursue conduct action against an accused individual. If we determine that an investigation is required, we will notify you and take immediate action as necessary to protect and assist you.

When you disclose an incident to someone who is responsible for responding to or reporting sexual violence or sexual harassment, but wish to maintain confidentiality,

Fredonia will consider many factors to determine whether to proceed despite that request. These factors include, but are not limited to:

- Whether the accused has a history of violent behavior or is a repeat offender;
- Whether the incident represents escalation, such as a situation that previously involved sustained stalking, the increased risk that the accused will commit additional acts of violence;
- Whether the accused used a weapon or force;
- Whether the victim/survivor is a minor; and
- Whether we possess other means to obtain evidence such as security footage, and whether the report reveals a pattern of perpetration at a given location or by a particular group.

Public Awareness/Advocacy Events:

If you disclose a situation through a public awareness event such as "Take Back the Night," candlelight vigils, protests, or other public event, the University is not obligated to begin an investigation. Fredonia may use the information you provide to inform the need for additional education and prevention efforts.

Anonymous Disclosure:

Incidents can be reported anonymously to University Police through the Silent Witness online form: <http://students.fredonia.edu/upd/updsilent>.

New York State Hotline for Sexual Assault and Domestic Violence: 1-800-942-6906

Institutional Crime Reporting

Reports of certain crimes occurring in certain geographic locations will be included in the University Clery Act Annual Security Report in an anonymized manner that neither identifies the specifics of the crime or the identity of the victim/survivor. Fredonia's Title IX Coordinator can be reached at (716) 673-3358.

Fredonia is obligated to issue timely warnings of Clery Act crimes occurring within relevant geography that represent a serious or continuing threat to students and employees (subject to exceptions when potentially compromising law enforcement efforts and when the warning itself could potentially identify the victim/survivor). A victim/survivor will never be identified in a timely warning.

The Family Educational Rights and Privacy Act allows institutions to share information with parents when (1) there is a health or safety emergency, or (2) when the student is a dependent on either parents' prior year federal income tax return. Generally, Fredonia will not share information about a report of sexual violence with parents without the permission of the victim/survivor.

Fredonia Non-Discrimination Statement

Pursuant to University policy, the University is committed to fostering a diverse community of outstanding faculty, staff, and students, as well as ensuring equal educational opportunity, employment, and access to services, programs, and activities, without regard to an individual's race, color, national origin, religion, creed, age, disability, sex, gender identity, sexual orientation, familial status, pregnancy, predisposing genetic characteristics, military status, domestic violence victim status, or criminal conviction. Employees, students, applicants or other members of the University community (including but not limited to vendors, visitors, and guests) may not be subjected to harassment that is prohibited by law, or treated adversely or retaliated against based upon a protected characteristic.

The University's policy is in accordance with federal and state laws and regulations prohibiting unlawful discrimination and harassment. These laws include the Americans with Disabilities Act (ADA), Section 504 of the Rehabilitation Act of 1973, Title IX of the Education Amendments of 1972, Title VII of the Civil Rights Act of 1964 as Amended by the Equal Employment Opportunity Act of 1972, and the New York State Human Rights Law. These laws prohibit discrimination and harassment, including sexual harassment and sexual violence.

Inquiries regarding the application of Title IX and other laws, regulations and policies prohibiting discrimination may be directed to Dr. Bill Boerner, Chief Diversity Officer at william.boerner@fredonia.edu. Inquiries may also be directed to the United States Department of Education's Office for Civil Rights, 32 Old Slip 26th Floor, New York, NY 10005-2500; Tel. (646) 428-3800; Email OCR.NewYork@ed.gov.

Alcohol and Drug Policy

The inappropriate use of alcohol and drugs can interfere with student development and seriously threaten the health and safety of the University community. Members of the University community will be held accountable for their behavior while under the influence of alcohol and/or drugs.

The Fredonia Alcohol Policy states that no one under 21 years of age may consume or possess alcoholic beverages. Hosts are responsible for all of their guests, including those who are under 21 years of age. Students who are over 21 may not consume alcohol in the presence of anyone under 21 other than their roommate. Individuals who are under the age of 21 may not be present where alcohol is being served or consumed other than as set forth by the aforementioned regulation. In such cases, all underage students present will be charged with an alcohol or drug policy violation. Refer to the Student Rights and Responsibilities section of the Student Handbook for the complete Alcohol and Drug Policy.

The Fredonia Drug Policy states that all students should be aware that "Pursuant to the order of the Chancellor of SUNY, the illegal use of narcotics and/or dangerous drugs on campus is expressly forbidden." Residence Life prohibits the possession of drug paraphernalia including, but not limited to, pipes, hookahs, bongs, rollers, spoofs, water pipes, smokeless cigarettes/e-cigarettes, etc. Any student known or suspected to be in the possession of, using or distributing drugs or drug-related paraphernalia is subject to disciplinary action and criminal action under campus regulations, as well as state and federal law.

These alcohol and drug related sanctioning guidelines focus on student development and early intervention for minor violations and first offenses, and on a more disciplinary approach for major violations and repeat or multiple offenses.

Drugs

The following are prohibited:

1. Use or possession of illegal drugs, controlled substances, or drug paraphernalia.
2. The sale or distribution of illegal drugs, controlled substances, or drug paraphernalia.

Alcohol

The following are prohibited:

1. Using or possessing alcohol (persons under 21 years of age).
2. Distributing or selling alcohol to minors, on or off campus.
3. Misstating or misrepresenting age through the presentation of false documents.
4. Distributing or selling alcohol without a license.

Students and guests who are of legal purchase age or older may possess alcoholic beverages in quantities for personal use only in their private rooms, subject to all regulations that may be established by the Office of Residence Life.

Typical Alcohol/Drug Sanction(s)

Listed below are possible sanction(s) for those who violate the drug and alcohol policy. The sanctions listed may be used alone, or in combination, and additional sanctions not listed here may also be applied.

- *First Offense:* The first alcohol- or drug-related violation would typically result in a Disciplinary Warning and a requirement to complete either the online Alcohol or Drug Education Course. The student will be charged a fee to cover the cost of these programs.

- *Second Offense:* The second alcohol- or drug-related violation would typically result in Disciplinary Probation and a referral to the Fredonia Cares program, an in-depth alcohol and drug prevention counseling program. The student will be charged a fee to offset some of the cost of this counseling program.
- *Third Offense:* The third offense would typically result in some sort of Disciplinary Suspension. The duration of the suspension would depend on the student's educational and disciplinary record.

If any of the above mentioned offenses are very minor, the Residence Hall Director or Director of Judicial Affairs would have the option to issue a lesser sanction. If any of these offenses are major violations of campus policy, the sanctions may be more severe. Major violations would typically stem from police involvement, criminal charges, hospitalization of participants, or involve the illegal sale or distribution of drugs or provision of alcohol to students who are underage.

Alcohol Education Course

Students are required to complete this online program as a sanction for a first time violation of University alcohol policies. This course is a science-based course and provides detailed information about alcohol and its effects on the body and mind. A fee will be charged to cover the cost of the program.

Drug Education Course

Students are required to complete this online program as a sanction for a first time violation of University drug policies. The course is a science-based course that provides detailed information about marijuana and its effect on the body and mind. A fee will be charged to cover the cost of the program.

Fredonia C.A.R.E.S.

Fredonia CARES [Choice|Acceptance|Responsibility|Experience|Success] is a campus initiative designed to address alcohol and other drug concerns on our campus. The program responds to the individual needs of students who have been charged with a violation of the Fredonia Alcohol and Drug Policy. Additionally, students who believe they might benefit from examining their substance use may take part in an appropriate workshop. Students will have a private and confidential consultation, participate in a researched-based workshop focusing on self-assessment to help better understand the risks and impacts substance use plays in one's life. The program respects individuals' values and personal choices regarding substance use. It also supports the idea that with new information, time to process it, and support for change, many people will benefit from considering behavior changes and exploring new beliefs. A fee is charged to cover the cost of this program.

Other Types of Sanctions

If a student is found responsible for misconduct on or off-campus, the following sanctions may be imposed singly or in combination. The sanction(s) imposed will be commensurate with the offending conduct, and may take into account the student's educational record and any previous conduct record.

Verbal Warning – A verbal reprimand which expresses University dissatisfaction with the student's conduct and which clarifies expected behavior in the future. Such a warning is noted in the student's conduct file.

Disciplinary Warning – A written reprimand which expresses University dissatisfaction with the student's conduct and which clarifies expected behavior in the future.

Disciplinary Probation – Written notification that any further violations within the probationary period shall result in more severe disciplinary action. The probationary period will be for a specific period of time and/or until the completion of any specified requirements or conditions that are part of the probation.

Disciplinary Suspension in Abeyance – The student remains enrolled. However, any violation of conduct regulations during the period of suspension in abeyance will, after determination of guilt, result in a minimum sanction of automatic suspension.

Disciplinary Suspension – A decision that removes the student from the University for a specific period of time, usually no more than two years. The suspension might be immediate or begin after the end of the semester. In either case, the student is eligible for consideration for readmission at the end of the specified period. Students that are suspended will not be eligible for a refund. This includes tuition and the cost of on-campus housing. Typically, the sanction also includes the student being barred from the campus for the period of suspension. This is more particularly described in the Administrative Policy 057.1 section 1. (B) 2.

Disciplinary Expulsion/Dismissal – A decision that removes the student permanently from the University. Normally, the penalty shall also include the student being barred from the premises of the University.

Other Sanctions – Other sanctions may include a variety of restrictions and educational related activities. These include but are not limited to:

- academic or residential network access suspension or restriction
- prohibition from engaging in any extra-curricular activity
- prohibition from running or holding an office in any student group or organization

- prohibition from participation in sports-related activities
- restricting students from serving on any university committees
- limiting student employment
- removal from on-campus housing
- restriction from specific buildings or residence halls
- changing student room or residence hall assignment
- restriction from campus
- placing holds on records
- service charges or restitution
- required counseling
- required chemical use evaluation
- required community service
- required class attendance
- required Internet research
- writing a paper
- required apology

Complaints

A complaint of misconduct is usually written by a complainant and includes specific allegations or charges of misconduct. The complaint will be discussed with the complainant and the accused during separate interviews. If there appears to be grounds for disciplinary action, it will be addressed through the appropriate procedures. If the complaint is found to be unwarranted or if there is not enough evidence to proceed, the complainant will be so advised. The complaint, relevant evidence and related charges are shared with the accused so that the accused can prepare a defense in the event of a conduct hearing. Faculty, staff, students and community members are encouraged to report incidents of misconduct. Police reports and residence hall incident reports are also used to report violations of University conduct standards.

Zero Tolerance Policy

As part of a Zero Tolerance Policy, Fredonia will take disciplinary action for every alcohol and drug related violation on campus. Fredonia will also take disciplinary action for violations reported off-campus, provided these violations have a connection to the campus. This would include violations that endanger students or may cause harm to the campus community.

Parental Notification Policy

In October 1998, Congress passed the Higher Education Amendment which permits post-secondary institutions to disclose to parents or legal guardians of students under 21,

without their consent, information regarding the student's violation of any federal, state, or local law, or any rule or policy of the institution governing the use or possession of alcohol or a controlled substance. The Office of Student Affairs normally informs parents or legal guardians of any alcohol or drug violation involving students under 21.

University Judicial System

The University Standards of Behavior and University Policies are intended to promote student development and ensure an atmosphere of learning necessary to the well being of all university community members on and off campus. Violation of University policy off campus may be subject to disciplinary action by the University judicial process. The Office of Student Affairs implements the standards and procedures of the Judicial Board.

Any member of the University community may bring a complaint (see Complaints section above) directly to the Office of Student Affairs. The complaint must be written and signed and dated. A review by the Office of Student Affairs will be initiated and if appropriate charges will be filed. Specific procedures will be followed if a case is referred to the Judicial Board.

If a student is charged with a violation of the rules and regulations, the following options exist: a student may choose an administrative hearing, a University judicial board hearing, or an administrative sanction hearing in which a student chooses to plead responsible to the charges and waives the right to a hearing. In such a case, the Office of Student Affairs will impose a sanction.

If a student, club, or organization fails to respond to the letter of charge(s) by the deadline by either pleading responsible or not responsible, Fredonia will assume a plea of not responsible. The case will be sent to an Administrative Hearing and the student, club, or organization will be notified of the hearing date and time at least one week in advance of the hearing. A hold will be placed on the student's record pending the outcome of the hearing. A student hold restricts a student from registering for classes, dropping or adding classes, and obtaining an official transcript. The club or organization in question will have all privileges suspended pending the outcome of the hearing.

Administrative Sanction Hearing

In an administrative sanction hearing, the Director of Judicial Affairs meets with the accused student to hear the case. This option is usually chosen if a student pleads responsible to the charges and accepts the appropriate sanction. This option requires that the student waive their right to another hearing and to the right to appeal the decision.

Administrative Hearing

The Administrative Hearing body consists of three University faculty/staff. The administrative hearing board hears the case, weighs the evidence and testimony of witnesses, determines responsibility or non-responsibility of the accused, and makes a sanction recommendation to the Vice President for Student Affairs. The accused student will be determined responsible or non-responsible by the preponderance of the evidence. Preponderance of evidence means evidence that would lead a reasonable person to conclude that it is more likely than not that the act in question did occur or that the fact or proposition is true.

Judicial Board Hearing

The University Judicial Board is comprised of a pool of at least 12 members. Approximately six students and six faculty/staff members are appointed for a term of one year. Members are endorsed by a subcommittee of the Student Affairs Committee and appointed by the University President. From the pool of members, the Judicial Board that would hear a case is typically comprised of at least five members. The Judicial Board hears the case, weighs the evidence and testimony of witnesses, determines responsibility or non-responsibility of the accused and makes a sanction recommendation to the Vice President for Student Affairs. The accused student will be determined responsible or not responsible by the preponderance of the evidence. Preponderance of evidence means evidence that would lead a reasonable person to conclude that it is more likely than not that the act in question did occur and/or that the accusations are true. To proceed with a hearing, a minimum of five Judicial Board members must be present. If less than five Judicial Board members are present, the accused student must agree in writing in order to proceed with the hearing.

Procedures for the University Judicial Board

Step 1: A charge for a violation may be placed against any student by any other student or by a member of the University community by giving written notice of the charge signed by the complainant to the Office of Student Affairs.

Step 2: The Office of Student Affairs shall give notice of the specific charge(s) against the student, in writing. The notice shall clearly indicate the offense with specific reference to the violated regulation and shall indicate the time and place of the initial meeting with the Director of Judicial Affairs. If the student/organization requests a hearing, a separate notice shall be presented to the accused at least five (5) days prior to the hearing. In extreme cases, the five-day notification period may be waived if deemed necessary by the Vice President for Student Affairs.

A student may waive their right to a hearing in writing. In such cases, the Director of Judicial Affairs will consider the evidence and make a sanction decision (See

Administrative Sanction Hearing). If the student does not waive their right to a hearing and does not appear for such a hearing, their case will be considered by the hearing body and a decision will be rendered in their absence.

Step 3: The Office of Student Affairs shall ensure that any student charged with violating University rules or regulations has, prior to appearing before the Judicial Board, been presented with a statement defining the composition and authority of the Judicial Board.

Step 4: The Judicial Board shall examine all relevant facts and circumstances presented at the hearing. A record of the hearing shall be kept to enable review and every reasonable attempt shall be made to keep the matter appropriately confidential. All hearings are tape recorded, however in the event of equipment failure a board member(s) will take notes to ensure accurate recording of the hearing. Fredonia will not be responsible for turning tape recorded records into written transcript form. Grounds for appeal will also not be considered due to equipment failure.

Step 5: At the hearing, the student shall have a full opportunity to explain the circumstances surrounding the incident and shall be able to present pertinent evidence and testimony of witnesses. In addition, the student shall have the opportunity to ask questions of any witnesses, respond to written statements submitted against them and to respond to questions. The Judicial Board shall also have the right to call witnesses and to review materials. The student shall have the right to be assisted by an advisor and or attorney of their choice. The advisor or attorney may not participate in the hearing.

Step 6: The student's judicial history will be withheld from the board members until a finding of responsibility has been made. If a student is found responsible for violating University policy, judicial history will be shared with the board members prior to sanction deliberation.

Step 7: The Judicial Board shall make their recommendation to the Vice President of Student Affairs, who will then notify the student in writing of the final decision. The student shall have the right to appeal. An appeal will be considered if there is significant new information or material relevant to the case that was not presented during the hearing, or for a claimed violation of the student's due process rights. An appeal must be filed in writing within five (5) days of the hearing decision letter date and sent to the University President.

Policy for Involuntary Leave for Medical/Psychological Reasons

Standards for Involuntary Leave

(a) Authority for the policy: "In the legitimate interest of the University in protecting property and the safety and welfare of specific individuals or the general public, the University President or their designee may temporarily

suspend an individual pending a decision by a university hearing board” (Student Rights and Responsibilities, University Catalog).

(b) Proscribed Behavior: Any student who:

1. Engages, or threatens to engage, in behavior which poses imminent danger of causing substantial harm to self and/or others, or
2. Engages, or threatens to engage, in behavior which would cause significant property damage, or directly and substantially impede the lawful activities of others, shall be subject to involuntary withdrawal in accordance with the procedures set forth below.

Procedure for Leave

(a) Upon preliminary investigation, the student may be required to leave the University for a designated period of time. If the student is required to leave it is expected that the student will seek a psychological and/or medical evaluation. This evaluation will be shared with the Office of Student Affairs and/or the Director of the Counseling Center and Director of the Health Center.

(b) In order to return and/or remain in school the student must be evaluated by the Director of the Counseling Center or their designee and/or the Director of the Health Center or their designee. After the meeting the student will need to meet with the Vice President for Student Affairs or their designee. The Vice President for Student Affairs or their designee, in consultation with the Counseling Center and/or Health Center or their designee(s), the Chief of Police or their designee and, if applicable, the Director of Residence Life or their designee, will decide if the student is cleared to return to school. If cleared to return to school, a contract may be developed which prescribes responsibilities of the student. These responsibilities may include: ongoing counseling, removal from or relocation within Residence Life, refraining from alcohol or drug use, etc. Failure to comply with this contract could result in immediate suspension from the University.

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Ex-Offenders Review Board

If a student has answered "yes" to question 19a or b on the SUNY Application for Admissions or has a pending charge of a felony or has been convicted of a felony, additional information will be needed in order to process the admission/reinstatement application.

It is the policy of the State University of New York at Fredonia to require supplemental information from applicants who have been convicted of a felony or who have been dismissed from other colleges due to disciplinary misconduct. This information will be reviewed by the Admissions Review Committee.

The Admissions Review Committee may deny admission to applicants based on an individual's prior conduct or conviction where the admission "would involve an unreasonable risk to property or to the safety or welfare of specific individuals or the general public" (Corrections Law, section 752). The committee may also recommend the applicant be admitted with or without special conditions relating to major selection, course scheduling, involvement in campus activities or campus housing.

Consensual Relationships (Faculty/Staff and Students)

The University does not encourage intimate consensual relationships between faculty/staff and students, and has a policy prohibiting intimate relationships between faculty and students in their classes, and faculty/staff and students they are directly supervising. The Faculty Handbook provides guidelines regarding this type of relationship and states the following:

"It is the sense of faculty through its University Senate that intimate consensual relationships between University personnel and students create the potential for abuses of authority and for both actual and apparent conflicts of interest."

Students should be aware that if they enter into this type of relationship with University personnel, there may be consequences that impact on their educational experience. This may mean a student thus involved would be unable to take a course from this person or in any way be subject to their supervision authority.

Students with concerns in this matter are encouraged to contact the Office of Student Affairs, Sixth Floor, Maytum Hall, (716) 673-3271 or the Office of Academic Affairs, Eighth Floor, Maytum Hall, (716) 673-3335.

Policy Statement on Religious Absences

The Education Law of New York says, in part:

1. No person shall be expelled from or be refused admission as a student to an institution of higher education for the reason that they are unable, because of their religious beliefs, to attend classes or to participate in any examination, study, or work requirement on a particular day or days.
2. Any student in an institution of higher education who is unable, because of their religious beliefs, to attend classes on a particular day or days shall, because of such absence on the particular day or days, be excused from any examination or any study or work requirements.
3. It shall be the responsibility of the faculty and of the administrative officials of each institution of higher education to make available to each student who is absent from school, because of their religious beliefs, an equivalent opportunity to make up any examination, study, or work requirements which they may have missed because of such absence on any day or days. No fees of any kind shall be charged by the institution for making available to the said student such equivalent opportunity.
4. If registration, classes, examinations, study or work requirements are held on Friday after four o'clock post meridian or on Saturday, similar or makeup classes, examinations, study, or work requirements shall be

made available on other days, where it is possible and practicable to do so. No special fees shall be charged to the student for these classes, registration, examinations, study, or work requirements held on other days.

5. In effectuating the provisions of this section, it shall be the duty of the faculty and of the administrative officials of each institution of higher education to exercise the fullest measure of good faith. No adverse or prejudicial effects shall result to any student because of their availing themselves of the provisions of this section.
6. Any student, who is aggrieved by the alleged failure of any faculty or administrative officials to comply in good faith with the provisions of this section, shall be entitled to maintain an action or proceeding in the Supreme Court of the county in which such institution of higher education is located for the enforcement of their rights under this section. It shall be the responsibility of the administrative officials of each institution of higher education to give written notice to students of their rights under this section, informing them that each student who is absent from school, because of their religious beliefs, must be given an equivalent opportunity to register for classes or make up any examination, study or work requirements for which they may have missed because of such absence on any particular day or days. No fees of any kind shall be charged by the institution for making available to such student such equivalent opportunity.
7. As used in this section the term "institution of higher education" shall mean any institution of higher education, recognized and approved by the Regents of the University of the State of New York, which provides a course of study leading to the granting of a post-secondary degree or diploma. Such term shall not include any institution which is operated, supervised or controlled by a church or by a religious or denominational organization whose educational programs are principally designed for the purpose of training ministers or other religious functionaries or for the purpose of propagating religious doctrines. As used in this section, the term "religious belief" shall mean beliefs associated with any corporation organized and operated exclusively for religious purposes, which is not disqualified for tax exemption under Section 501 of the United States Code.

Policies on Motor Vehicles

All members of the University community (students, faculty, and staff) who park cars or other motor vehicles on campus between the hours of 7 a.m. and 5 p.m. must register their vehicle each semester within seven days after classes begin.

When a new or borrowed vehicle is brought on campus, University Police (716-673-3333) must be notified

immediately in order to avoid unnecessary ticketing. Any vehicle obtained during the semester must be registered within 48 hours at the Office of Student Accounts.

Regulations Governing Motor Vehicle Use and Campus Parking Facilities is available online at

<http://students.fredonia.edu/upd/parkingregulations>.

Students, faculty, and staff shall comply with all traffic and parking regulations in all campus areas and shall comply with all published regulations or be subject to fines. Failure to comply can result in the loss of campus driving, parking and vehicle registration privileges.

Computer and Network Usage Policy

I. Introduction

Access to modern information technology is essential to the State University of New York's mission of providing the students, faculty and staff of Fredonia with educational services of the highest quality. The pursuit and achievement of the SUNY mission of education, research, and public service require that the privilege of using computing systems and software, internal and external data networks, as well as access to the World Wide Web, be made available to the SUNY community. The preservation of that privilege for the full community requires that each faculty and staff member, student, and other authorized user comply with institutional and external standards for appropriate use.

To assist and ensure such compliance, Fredonia establishes the following policy which supplements all applicable SUNY policies, including sexual harassment, patent and copyright, and student and employee disciplinary policies, as well as applicable federal and state laws.

II. Definitions

Authentication Credentials - Assigned User ID/Username and PIN/Password (changed by users) that, used in conjunction, authenticates users to privileged computing facilities and resources.

Computing Facilities - All software applications, mainframes, desktop and mobile computers, networks and computer peripherals licensed, owned or operated by the State University of New York at Fredonia.

Course List - Refers to special purpose list created (when requested) for communication between students enrolled in a specific course and section and the faculty member teaching the course.

Departmental (Majors) List - Refers to a list created (when requested) for a department to communicate with students in their major.

DSL - Digital Subscriber Line (DSL) is a form of high-speed Internet access competing with cable modems. DSL works over standard phone lines and supports data speeds of over 2 Mbps downstream (to the user) and slower speeds upstream (to the Internet).

e-Services - Fredonia terminology relating to electronic services such as e-mail, ANGEL Learning Management System, and electronic library resources.

Internet - All networks external to Fredonia.

Intranet - All networks internal to Fredonia.

List Conduct - Refers to the behavior of a list subscriber in the context of the list as reflected by the subscriber's postings.

List Content - Refers to the theme, topic, or purpose of the list as declared on the list application and/or the theme, topic, or purpose of list postings.

LISTSERV Manager - The Information Technology Services' designated manager of the LISERV service.

List Owner - Refers to a person (other than the LISERV manager) who has administrative rights to the list. This may or may not be the list sponsor.

List Sponsor - The LISERV list applicant (the person who submits the application as designated in item 2) who assumes overall responsibility for and ownership of the list.

Managed - Software and anti-virus upgrades being controlled by a server and "pushed" to the desktop.

Remote Access - Any access to Fredonia's administrative network through a non-Fredonia controlled network, device or medium.

Un-managed - A computing device that does not have anti-virus definitions or upgrades implemented automatically. The computer user installs all upgrades manually.

Users - Individuals who make use of Fredonia computing facilities. Most users are students, faculty and staff members of the State University of New York at Fredonia. Some users are non-campus personnel authorized by the campus to make use of computing facilities, including volunteers for local non-profit agencies, scholars visiting from other SUNY institutions, and the like.

VPN - Virtual Private Network, a way to extend the corporate/production (trusted) network using authentication and encryption.

III. Authorization and Use

A. Authorized Activities

Fredonia computer facilities are a resource for members of the campus community (faculty, staff, students and other affiliated individuals or organizations authorized by Fredonia), to be utilized for work consistent with the instructional, research, and administrative goals of the university as defined in the Fredonia "Missions and Goals" statement.

Use by non-affiliated institutions and organizations shall be in accordance with *SUNY Administrative Procedures Manual Policy 007-1: Use of Computer Equipment or Services by Non-affiliated Institutions and Organizations*. All who use Fredonia computer facilities have the responsibility to do so in an effective, efficient, ethical, and legal manner, as outlined below.

B. User Accounts

The university grants access to particular computer systems with the assignment of specific user accounts based on educational and business need for access. Every computer user account issued by Fredonia is the responsibility of the person in whose name it is issued.

University-recognized clubs and student organizations may be issued a user account. Faculty advisors shall designate a particular person or persons authorized to act on behalf of the club or organization. This person(s) is responsible for all activity on the account and will be subject to university disciplinary procedures for misuse. The following include, but are not limited to, examples of theft of services, and subject to penalties described in Section IV.

- (1) Acquiring a username in another person's name.
- (2) Using a username without the explicit permission of the owner and of Information Technology Services.
- (3) Allowing one's username to be used by another person without explicit permission from Information Technology Services.

C. Password Security

It is mandatory that user accounts be kept secure by using strong passwords, keeping passwords secret, and changing the passwords often. Users must set a password which will protect their account from unauthorized use, and which will not be guessed easily. Avoid selecting easily guessable passwords, for example, nicknames, birth dates, and telephone numbers. Users must report to Information Technology Services any use of a user account

without the explicit permissions of the owner and Information Technology Services.

D. User Privacy

Fredonia does not generally monitor or restrict material residing on state-owned or non-state owned electronic devices, whether or not such devices are connected to the campus networks. However, devices that are utilized in violation of Fredonia's policies are subject to investigation and disconnection without notice.

No user should view, copy, alter or destroy another's personal or state-owned electronic files without permission (unless authorized or required to do so by law or regulation). Fredonia computing and network resources are designed to protect user privacy; users shall not attempt to circumvent these protections.

Fredonia reserves the right to access all aspects of its computing and network resources, including individual usage to determine if a user is violating this policy or state or federal laws.

E. System Integrity and Denial of Service

Users shall respect the system integrity of campus computing facilities. For example, users shall not intentionally develop or use programs that infiltrate a computing system, or damage or alter the software components of a computing or network system.

F. Resource Accounting

Users shall not develop or use procedures to alter or avoid the accounting and monitoring of the use of computing facilities. For example, users may not utilize facilities anonymously or by means of an alias, and may not send messages, email, or print files that do not show the correct username of the user performing the operation.

G. Resource Usage

Office computer equipment is provided by the institution for academic and business use. All equipment is tagged with Fredonia asset tags and inventoried on a yearly basis. Any information stored, processed, or transmitted by this computer may be monitored, used, or disclosed by authorized personnel, including law enforcement.

Office and lab computing facilities must be used in a responsible and efficient manner. Users shall not develop or use procedures that obstruct authorized use by others. Users shall not interfere with computer setups which are intended to keep computer software current and legal, and shall not install personal software. Users shall not use applications that utilize an unusually high portion of

the network bandwidth. Users shall avoid wasting computing resources by excessive game playing or other trivial applications; by sending chain letters or other frivolous or excessive messages locally or over the network; or by printing excessive copies of documents, files, images or data. Campus printing must pertain to academic work, personal intellectual growth or administrative business.

H. Copyrights and Licenses

Users shall not violate the legal protection provided by copyrights and licenses held by Fredonia. Users shall not make copies of any licensed or copyrighted computer program found on any Fredonia computer or storage device without the written authorization of Information Technology Services. U.S. federal copyright law grants authors certain exclusive rights of reproduction, adaptation, distribution, performance, display, attribution, and integrity to their creations. Works of literature, photographs, music, software, film, and video works can all be copyrighted. Examples of probable violations of copyright laws include, but are not limited to: making unauthorized copies of any copyrighted material (such as commercial software, text, graphic images, audio, and video recordings); distributing copyrighted materials over computer networks or through other means; resale of data or programs, or the use of them for non-educational purposes or for financial gain; or public disclosure of information about programs (e.g., source code) without the owner's authorization.

I. Restricted Access Systems

Access to selected administrative computers and programs is restricted on a "need-to-know" basis conforming to SUNY policy guidelines. Unauthorized access or attempted access to these machines or data will constitute theft of services and will be subject to the penalties described in Section IV. Authorization for use of these systems is granted solely by Information Technology Services, on behalf of the institution, and reviewed by the campus Security Administrator.

J. Recreational Use

Recreational use of computing facilities, including computer games and social network communication, is allowed only when no other instructional, research, or administrative function requires the use of resources. Persons using a computer for recreational purposes are required to relinquish the computer immediately to someone needing it for academic or administrative purposes.

K. Termination of Access to Fredonia Computing Facilities

Intentional violation of policies contained in this document will result in immediate termination of access. Access will be terminated for:

- (1) Complete withdrawal by student from university courses
- (2) Current students, 90 days after graduation
- (3) Faculty/staff, 30 days after termination of employment

Emeritus faculty and staff retain eligibility for use of Fredonia computing facilities

IV. Limitations on Users' Rights

The issuance of a password or other means of access is to assure appropriate confidentiality of Fredonia files and information and does not guarantee privacy for personal or improper use of university equipment or facilities.

Fredonia provides reasonable security against intrusion and damage to files stored on the central facilities. Fredonia also provides some facilities for archiving and retrieving files specified by users and for recovering files after accidental loss of data. However, the university is not responsible for unauthorized access by other users or for loss due to power failure, fire, floods, etc. Fredonia makes no warranties with respect to Internet services, and it specifically assumes no responsibilities for the content of any advice or information received by a user through the use of Fredonia's computer network.

Users should be aware that Fredonia computer systems and networks may be subject to unauthorized access or tampering. In addition, computer records, including e-mail, are considered "records" which may be accessible to the public under the provisions of the New York State Freedom of Information Law.

V. Services

A. Academic/Administrative and Residential (ResNet) Network

1. Anti-virus Protection

Every computer connected to the campus network will be required to run current anti-virus protection software. Campus-provided "managed" anti-virus protection will be placed on the majority of campus-owned personal computers. The campus provides anti-virus protection software for students to utilize. ResNet students may utilize a "managed" or "un-managed" mode, as owners prefer and as operating systems allow. Non-ResNet student anti-virus protection is un-managed.

It will be the responsibility of "un-managed" clients wishing to use the campus network connectivity to keep anti-virus protection up-to-date. This "un-managed" client group would include:

- (a) Campus-owned Macintosh, Linux, and UNIX-based machines
- (b) Non-campus owned computers
- (c) Student-owned computers for those not wishing to utilize the managed anti-virus protection provided by the campus

In addition, outbound ResNet e-mail will be filtered through a server that will scan and detect viruses.

Information Technology Services and ResNet have the authority to disconnect computers from the network that have been detected as infected. The computer will remain disconnected until the user demonstrates the following: that the machine has been cleaned of viruses/worms, that an appropriate anti-virus product has been licensed for the machine through at least the end of the current academic year, and that the product has been installed and set up to automatically check for and install virus detection updates.

Second and subsequent infractions which result from a lack of an installed, licensed anti-virus product may result in additional penalties.

2. Desktop Upgrades

Every state-owned computer connected to the campus network will have Windows or Macintosh operating systems upgraded or patched by a managed service as applicable.

It will be the responsibility of the "un-managed" clients wishing to use the campus network connectivity to keep all operating systems up-to-date.

3. Network Use

Users shall not utilize the campus network to provide Internet access to any outside source, be it commercial or private.

All Resnet (residential) network users must sign off that they have read this Fredonia Computer and Network Usage Policy before they are permitted access to the network.

Actions detrimental or inappropriate when accessing the university and Internet resources include but are not limited to the following:

Network naming conventions: All student users must use the username assigned by the university

("abcd1234") for the computer name that will be displayed on the network. The description field is required to be left blank.

Shared connections: A network connection supplied by the university is solely for the use of the individual subscriber assigned to that connection. Connections may not be shared among multiple users. All network subscribers cannot use any mechanisms (either hardware or software) to provide network connectivity to non-subscribers. Users shall not utilize the campus network to provide Internet access to any outside source, be it commercial or private. Users are personally responsible for all use of their computers and network connections and will be held accountable for any violations that occur involving their computer or network connections.

Network infrastructure: All adds, moves, and changes of network infrastructure electronics including but not limited to products such as repeaters, hubs, concentrators, bridges, routers, and switches must be coordinated and installed by university personnel. This includes all cabling that is patched into these devices that provide connectivity. Users are prohibited from connecting any device such as a hub, router, switch, or wireless access point to the provided Ethernet jacks in the room to extend connectivity. For example, a user may not use a hub in their room or office to allow them to connect more than two devices to the network at a time.

Assigned IP address: Alterations of any kind to the assigned IP address or related settings, including using an unauthorized IP address, is prohibited. ResNet IP addresses are assigned dynamically and users are not permitted to configure static IP addresses, DNS addresses, etc.

File Sharing: Users are responsible for the security of the system. All student shared files must be password protected. If a user misconfigures the file sharing, others may be able to affect and alter the user's computer. Users are responsible for the content of files that they distribute. Current laws may permit users to be sued for libel, invasion of privacy, software piracy, pornography, and other such crimes. Fredonia is not responsible for any loss of data that may occur if users choose to activate file sharing.

Copyright: Distribution of copyrighted materials such as computer software and music is normally prohibited, except where a portion of copyrighted material may be part of the public domain. In accordance with the Digital Millennium Copyright Act (DMCA) and with HR4137 "An Act to amend and extend the Higher Education

Act of 1965 (HEOA), University policy forbids the copying, distribution, downloading, and uploading of copyrighted materials on any personal or College computer system or network. These materials include, but are not limited to, text (including e-mails and web information), graphics, art, photographs, music, film, and software. Violators of the Digital Millennium Copyright Act who have illegally shared copyrighted files are subject to civil penalties of between \$750 and \$150,000 per song. In the past, pre-litigation settlements offered by copyright owners have ranged from \$3,000 to \$4,000 and up." Additionally, a court may, in its discretion, grant the copyright owner reasonable attorney fees. 17 USC Section 506 lays out criminal penalties for intentional copyright infringement which can include fines and jail time. Refer to <http://www.fredonia.edu/its/DMCA.asp> for Fredonia DMCA procedures.

Monetary gain: Network access for monetary gain or for business activities of groups or organizations is prohibited. Re-sale of access or services is prohibited.

Domain registration: The registration of commercial host names to a Network IP address is prohibited.

Servers: Establishing a server or providing a service that over-utilizes the shared bandwidth is prohibited. FTP, Web servers, e-mail servers, and Peer-to-peer are examples of server programs.

Port Scanning: Scanning for computers on any network using port scanners or network probing software, including packet sniffers, is prohibited.

The university networks are monitored and violators of Fredonia policy will be denied service and referred to the proper authority, as noted in Section V of this policy.

4. Wireless Network

The wireless network is not meant as a replacement for the wired network and is not to be used as a primary network connection. The wireless network is meant to extend the wired network for simple uses in areas where wired network access is unavailable. Users are expected to avoid using applications that will use large amounts of network bandwidth. These include servers and file-sharing applications. Users should be aware that Fredonia does not utilize 802.11b/g/n encryption standards on the campus wireless network (i.e. WEP, WPA, WPA2).

There are other electronic devices that use the same 2.4GHz frequency as the Fredonia wireless network. Devices include 2.4GHz cordless

phones, microwave ovens, X10 wireless cameras, Bluetooth devices and other wireless LAN equipment. Devices using this technology can cause intermittent failure and loss of service.

The following policies are in addition to the Fredonia campus network usage policies. Actions detrimental or inappropriate when accessing the university and Internet resources include but are not limited to those listed below.

Users may not extend or modify the network in any way. This includes adding access points and installing bridges, switches, hubs, or repeaters. The university reserves the right to remove or disable any unauthorized access points.

Users will be responsible for all costs associated with purchase, installation, operation, and support of wireless adapters in client computers.

Any attempt to break into or gain unauthorized access to any computers or systems from a wireless connection is prohibited.

Running any unauthorized data packet collection programs on the wireless network is prohibited. Such practices are a violation of privacy and constitute theft of user data.

The institution has the right to limit bandwidth on a per connection basis on the wireless network, as necessary, to ensure network reliability and fair sharing of network resources for all wireless users.

Any effort to circumvent the security systems designed to prevent unauthorized access to any Fredonia wireless network may result in the suspension of all access and an appearance before the appropriate disciplinary board.

For more information regarding the campus wireless network including recommended computing habits and wireless coverage on campus, please visit the following website: <http://home.fredonia.edu/its/wireless>.

B. Electronic Mail

1. University Use of Electronic Mail

Electronic mail (email) is a mechanism for official communication for Fredonia. The university expects that such communications will be received and read in a timely fashion.

2. Official University E-Mail Accounts

An official university e-mail account is one in which the address ends with "fredonia.edu." All

students, faculty and staff are assigned an e-mail address and account. The e-mail address is directory information. As with other directory information, in compliance with federal Family Educational Rights and Privacy Act (FERPA) regulations, any student may request that his or her official e-mail address be restricted in its access.

3. Expectations for Use of Email

Students, faculty, and staff have the responsibility to use this e-mail in an efficient, effective, respectful, ethical and lawful manner. Students, faculty, and staff are expected to check their e-mail on a frequent and consistent basis in order to stay current with university-related communications. Unit heads that have exempted employees from the requirement of having an official e-mail account must make arrangements for alternative methods of access to official communications. Students have the responsibility to recognize that certain communications may be time-critical. "I didn't check my e-mail," error in forwarding mail, or e-mail returned to the university with "Mailbox Full" or "User Unknown," are not acceptable excuses for missing official university communications via e-mail.

4. Redirecting of E-mail

If a student, faculty or staff member wishes to redirect e-mail from their official @fredonia.edu address to another email address (e.g., @aol.com, @hotmail.com), they may do so, but at their own initiative and risk. The university will not be responsible for the handling of e-mail by non-SUNY providers. Redirecting email does not absolve students, faculty, or staff from the responsibilities associated with official communication sent to their @fredonia.edu account.

5. Authentication for Confidential Information

It is a violation of university policies, including the Student Code of Conduct, for any user of official e-mail addresses to impersonate a university office, faculty/staff member, or student. To minimize this risk, some confidential information may be made available only through "Your Connection" which is password protected. In these cases, students will receive email correspondence directing them to "Your Connection," where they can access the confidential information by supplying their Fredonia ID and PIN. The confidential information will not be available in the email message.

6. Privacy

Users should exercise extreme caution in using email to communicate confidential or sensitive matters, and should not assume that e-mail is private and confidential. It is especially important that users are careful to send messages only to the intended recipient(s). Particular care should be taken when using the "reply" command during email correspondence.

7. Educational and Administrative Uses of Email

Faculty will determine how electronic forms of communication (e.g., e-mail, discussion boards, etc.) will be used in their classes, and will specify their requirements in the course syllabus. The official e-mail policy ensures that all students will be able to comply with email based course requirements specified by faculty. Faculty can therefore make the assumption that students' official @fredonia.edu accounts are being accessed and faculty can use email for their classes accordingly.

Administrative offices will determine how email communications will be used for administrative purposes.

8. University Announcements

Approval and transmission of email containing essential university announcements to students, faculty and staff must be obtained from the appropriate authority. Only the offices of vice presidents or the University President can authorize the sending of broadcast messages to a wide audience of students, faculty and staff. Mass mailing communications to external fredonia.edu audiences must be accomplished utilizing an appropriately identified third-party service to mitigate the placement of fredonia.edu email servers on spam blacklists.

9. Ownership/Administration

The State University of New York at Fredonia owns all email accounts run on its system. Under certain circumstances it may be necessary for the Information Technology Services staff or other appropriate university officials to access email files to maintain the system, and to investigate security or abuse incidents or violations of other institutional policies. Such access will be on an as-needed basis and any email accessed will be disclosed only to those individuals with a need to know or as required by law. While incidental non-business personal use of email is acceptable, conducting business for profit using university resources is forbidden. Quota, maximum message size,

message retention settings, time-out settings, maintenance times, and other email guidelines will be set as appropriate for the anticipated volume and platform scaling. The need to revise settings will be monitored with recommended changes as appropriate. (See e-mail guidelines at <http://www.fredonia.edu/helpdesk/email>.)

10. Termination

Email accounts are provided to students, faculty and staff as a component of electronic services while enrolled or employed. See Section III K. of this policy. In certain cases, employee email accounts may be continued for a longer period or forwarded for appropriate business conclusions.

11. Violations/Abuses

Violation or abuse of the policy may result in restriction of access to Fredonia's email system and/or other appropriate disciplinary action.

C. LISTSERVS

1. Establishing a LISTSERV List

List content must reasonably reflect the responsibilities, field of expertise, research, or study of the list sponsor as it relates to his/her function at the university.

List sponsors and owners are expected to abide by all computing resource usage policies put forth by Fredonia.

2. List Sponsorship/Ownership

Only permanent faculty/staff of the university may sponsor a list.

List owners are responsible for adequately communicating to the list membership (usually in the form of a charter/welcome message sent to all new subscribers) the guidelines for list posting. Owners should also ensure that their subscribers are aware of certain important list configuration settings (e.g., who can post, who can subscribe, etc.)

List owners are responsible for ensuring appropriate membership, as related to university functions.

List owners are responsible for updating the subscriber list and removing or suspending invalid or problematic addresses.

Institutional lists (i.e., announcements, news, Proftalk) will be maintained by the Information Technology Services LISTSERV manager.

3. List Content and Copyright

List subscribers, owners and all others with list posting privileges are expected to observe all applicable copyright restrictions when posting any material that is not their own. The use of a mailing list to distribute any material (including binary files) in violation of copyright or licensing is strictly prohibited.

4. List Expiration and Renewal

All lists, except for class lists, expire on a yearly basis at the end of each spring semester (the week after the end of final exams). Class lists expire at the end of each semester (the week after the end of final exams). Lists that are less than three (3) months old at the time of expiration will not expire until the end of the following semester or academic year, whichever applies.

All list owners will be notified by e-mail at least four weeks prior to the expiration date. In order to renew a list, the list owner must reply to the notification stating his/her intent to renew the list.

If after two expiration notices the list owner has not declared intent to renew, the list will be deleted.

5. List Removal and Deletion

A list may be deleted at any time by the LISTSERV manager at the request of the list sponsor.

Information Technology Services reserves the right to delete lists that: (1) are misused; (2) do not comply with established policy; (3) pose a threat to system security or integrity. In such cases, the LISTSERV manager will attempt to notify the list sponsor and/or primary owner prior to the deletion of the list.

6. Information Technology Services' Rights

Information Technology Services provides LISTSERV mailing lists as a service to the university community. As such, Information Technology Services reserves the right to make alterations in the service at any time for the sake of the common good of all users.

The LISTSERV manager reserves the right to make changes to any list's configuration without notice in the following cases (not exhaustive): (1) to correct errors; (2) to make preferred changes or improvements; (3) where the list owner has been negligent or lax in conducting required list maintenance.

The LISTSERV manager reserves the right to restrict or deny any user's access to or privileges on LISTSERV with due cause. The LISTSERV software may automatically and selectively deny service to users based on bounced or excessive e-mail or other detected problems.

D. The University Website

1. The University Website and Use of the Web Servers

The Fredonia website, which begins at the home page <http://www.fredonia.edu>, is a volume of documents on several servers created by diverse authors which, as linked, represents the university as an official publication.

All departmental or student group web pages are part of the official university website, and are screened, monitored, coordinated, supervised, and controlled by the university webmaster, who retains the right to edit the pages.

All official university web pages must be designed to meet standards of technology or content set by the university webmaster or any overriding authority such as SUNY or New York State.

All authorized users of the web servers (for official or personal pages) will be restricted to 7 megabytes of hard drive space per folder, and all space is to be dedicated to web page use only. The university may allow authorized individuals more than 7 megabytes of space if a legitimate academic need is described to the webmaster. No personal file storage or other file activity is permitted on the web servers.

When notified that they are exceeding the 7-megabyte limit, authorized users must delete a necessary amount of material in a time period specified by the webmaster or risk deletion of all files.

Except that access is gained by request, web server and website user responsibilities and access policies are the same as those under section III, IV and VI of this document.

All personal and official web pages will be free of content articulated in sections I and II of this document, in addition to pornography, hate speech, and non-university sponsored e-commerce.

Any official or personal web pages that employ technological features beyond HTML, Java, JavaScript, client-side VBScript and CSS must be submitted for review and approval to the university webmaster.

Web pages using applications such as ASP must be submitted for review and approval by the university webmaster.

World-wide write access is prohibited on any personal or official page.

When a violation of these policies occurs, Fredonia reserves the right to remove any and all contents

in any files or folders on the web server without advance notice or consultation, and to revoke server permissions to any authorized user.

Incidences of violations found by the webmaster may be reported to appropriate university authorities.

All university-based groups (including student groups) who select external web developers will be responsible for overseeing and maintaining quality control procedures and meeting the standards of technology and content set by the university webmaster or any overriding authority such as SUNY or New York State. External developers, with no current, formal or direct affiliation with the university, will not be authorized to possess individual accounts on the university's web servers. All departments or student groups who choose to have an external developer work on their web pages must contact the Help Desk prior to commencing work.

All web pages, images or files that are located on the university web servers must be maintained and updated to reflect current and accurate content. In no instances should the web servers be utilized for storage or archiving purposes. Files that are no longer active or current must be removed from the university web servers periodically, upon the request of the university webmaster, or risk removal as deemed appropriate by the webmaster. The webmaster will periodically remind the campus community to purge its web server directories of all inappropriate or out-of-date files.

Web publishers are responsible for the content of the pages they publish on the university web server and are expected to abide by the highest standards of quality and responsibility. Content must be relevant to the university. Web authors and publishers are required to comply with all Fredonia university policies, as well as all local, state, and federal laws concerning appropriate use of computers and the Internet. Departmental web pages must conform to the design standards set forth by the university. See Guidelines for Developing and Publishing New Web Pages at: <http://www.fredonia.edu/pr/web/guidelines.asp>.

The purpose of the web page is to provide information to students and colleagues and must contain the following as a minimum:

All TITLE tags located within HTML files must use the following format to foster consistency, clear page identification, and increase rankings in search engines:

TITLE FORMAT: Page Title – Departmental Name, Fredonia

Example: <TITLE>Electronic Journals, Daniel A. Reed Library, Fredonia</TITLE>

All web pages must include the university name "State University of New York at Fredonia," or "Fredonia." *Rationale:* This will help identify the location if the user has entered the website without going through the home page.

All pages must include a link back to the Fredonia home page (<http://www.fredonia.edu>).

In no instances should file names include spaces. Hyphens (-), underscores (_), alpha and numbers 0-9 are permissible.

Correct Examples: FileName.HTML,
File_Name.HTML

Incorrect Example: File Name.HTML

All web pages must meet the minimum web accessibility requirements as set forth under Section 508 of the Rehabilitation Act, and mandated by the *New York State Office for Technology Policy* 99-3. The policy requires that all New York State agencies' websites provide universal accessibility to persons with disabilities.

All pages must include the following Meta tags for searching and identification purposes. If assistance is required, the following code example should be used (copy and paste the code below) and all underlined information replaced with keyword and a description that are specific to the web page being created.

<HEAD>

<META NAME="keywords" CONTENT=

"Include important keywords from your web page here (i.e., SUNY, public, higher education, Fredonia, America's Best Colleges, Blue Devils, music, liberal arts, Chautauqua County)"><META NAME="description" CONTENT="Include a brief description of your web page here (i.e., Fredonia is a four-year comprehensive, public, liberal arts university in the Northern U.S., known for bachelor's degree programs in music and education, and named one of America's Best Colleges)">

</HEAD>

The university will host websites for non-university, non-profit organizations as long as their function is relevant to the overall university mission, and as long as there is an active member of the Fredonia campus community (faculty or staff holding a current appointment) who will serve as the *sponsor* for

that website. *Sponsors* will be issued a special group account that may be used by the web developer, and *sponsors* will be responsible for maintaining and monitoring the organization's web pages. All new websites or web pages must be submitted by the *sponsor* for review and approval to the university webmaster prior to uploading to the university servers. *Sponsors* must also notify the university webmaster any time the content on any of the pages has been modified. These non-campus hosted websites must comply with all the policies that are required of official university web pages. The university webmaster reserves the right to edit content and revoke server permissions to any authorized user who does not abide by the policies set forth by Fredonia.

2. Personal Web Pages

Users may create their own homepages. Faculty and students will have FTP (File Transfer Protocol) access to a personal directory on the university server where they can maintain their own homepage files. Under no circumstances should personal space and/or files be shared with other users. In designing a personal homepage, persons should keep in mind that homepages may not be used for personal profit, nor to violate copyright, pornography or any other state or federal laws. The university reserves the right to monitor all work on the server and remove any personal homepage or files it determines have violated any of the policies. In addition, failure to comply with computing policies could, in some cases, lead to disciplinary action or criminal prosecution.

3. Blog and Forum Standards on Fredonia's Website

Fredonia Website Services provides server space and forum and web log or blog services in support of scholarly, academic, extra-curricular and professional communications conducted by members of the university community who have network accounts. Standards for posting behavior:

Content should be free of vulgar, racist, sexist, homophobic, or otherwise objectionable matter, including personal attacks against named individuals.

Posts should stay on-topic and be faithful to the theme or purpose of the blog or forum.

The following statement must appear on all blog and forum pages: "The views and opinions expressed in this page are strictly those of the page author(s). The contents of this page have not been reviewed or approved by Fredonia."

Fredonia reserves the right to require blog and forum administrators to use university-approved templates for all hosted pages.

When blog and forum content violates university website policy or local, state or federal law, Fredonia reserves the right to remove such content or the blog or forum itself. Fredonia also reserves the right to do the same at its sole discretion when it is indeed appropriate to do so.

E. ANGEL Learning Management System

ANGEL policy will address items not already covered by another policy or regulation.

Access defaults should mirror Banner data accessibility rules:

Faculty can see profile data (address, phone number) for students in their classes.

Students can see profile for faculty.

Directory information will be available to authenticated users.

Students who request confidentiality of directory information via the Registrar will be granted confidentiality in ANGEL and indicated as confidential to faculty.

Banner data determines ANGEL course enrollments with a nightly add/drop. Accounts and Roster entries are added nightly. Drops and withdrawals are marked as "disabled" in the ANGEL course roster. There will be no self-enrollment for students in courses. Faculty may allow access to others at their discretion. Courses are searchable and accessible to students upon creation.

Undergraduate students are not authorized to access the ANGEL Gradebook. This item is currently under review and will be audited until a final decision is made.

Students will be allowed the role of Group Leader and will be able to request a group be made for online collaboration from any Fredonia employee who agrees to sponsor their online group. Student Group Leaders can add members to the group if they know the Fredonia e-mail address of the potential member. They will not be able to list ANGEL accounts or educational records. They will only see directory information.

Librarians will have access to courses for those who request reserve materials. Reserve readings will be published to ANGEL courses regardless of whether the instructor uses ANGEL for the class. Permission is granted to library staff by the instructor via the reserve request form.

Campus members may submit public items (news, events, forums, polls, surveys) to the ANGEL Administrator to post in Public Areas of ANGEL. Items will be selected based on their academic nature and relevance to a general student audience. Policy for increased access to public components is being developed.

Fredonia ID photos will be added to ANGEL to allow instructors to view photos of students enrolled in their classes.

Campus members may request guest ANGEL accounts by e-mailing the ANGEL Administrator. This item is being reviewed by the Electronic Services Group.

At this time, there are no plans to delete ANGEL accounts. When students graduate, their accounts will be disabled and categorized as ALUMNI. These accounts may be activated as part of the Eportfolio implementation. Employees who leave and students who don't return will also be disabled and categorized as EX.

Groups will automatically be created for Departments and Advisors based on Banner data.

Data purge policies are under development.

F. Virtual Private Network

Fredonia Information Technology Services provides a Virtual Private Network (VPN) primarily for Information Technology Services staff to remotely and securely monitor and administer systems as necessary. The following standards are designed to minimize the potential exposure to Fredonia from damages, which may result from unauthorized use of Fredonia resources. Damages include the loss of sensitive or university confidential data, intellectual property, damage to public image, damage to critical Fredonia internal systems, etc.

Limited VPN use is provided for employee administrative access to confidential databases when remote work-related business is absolutely necessary, and when the employee has Cabinet-level approval for such access. Employees with VPN privileges understand and agree to the following:

It is their responsibility to select, coordinate installation of, and pay associated fees for high-speed connectivity (DSL) through an Internet Service Provider (ISP).

It is their responsibility to ensure that unauthorized users are not allowed access to Fredonia internal networks via their VPN.

VPN use is controlled using password authentication.

VPN gateways will be set up and managed by Fredonia ITS, and only ITS-approved VPN clients may be used.

By using VPN technology with personal equipment, users understand that their machines are a de facto extension of Fredonia's network, and as such are subject to the same rules and regulations that apply to Fredonia-owned equipment, i.e., their machines must be configured to comply with all Fredonia Security Policies, including the latest operation system security patches and anti-virus software definitions.

Desktop support and connectivity issues related to VPN access are provided by Information Technology Services on state-owned equipment only.

VI. Unauthorized Use

Violation of these regulations is unethical and may constitute a criminal offense.

Offenses will be dealt with according to any or all of the following: applicable federal laws, Chapters 156 and 165.15 of the New York State Penal Law; the Fredonia *Student Rights and Responsibilities*; other laws, regulations, and policies of the campus, the State University of New York, the State of New York and the United States of America. Offenses may result in the suspension or permanent closing of usernames, campus disciplinary action, legal action and/or other action.

When Information Technology Services or the Residential Network (ResNet) Office becomes aware of a possible violation, the university will initiate an investigation in conjunction with the campus Security Administrator and/or relevant campus offices including the Office of Student Affairs, Human Resources Office, and University Police. Users are expected to cooperate fully in such investigations when requested.

In order to prevent further unauthorized activity during the course of such an investigation, Information Technology Services may suspend authorization for use of all computing facilities for the user(s) involved in the violation. ResNet reserves the right to temporarily suspend a user's Internet connection pending the outcome of any required Administrative Sanction Hearing.

The following include, but are not limited to, examples of unauthorized use:

A. Academic Dishonesty

Practicing any form of dishonesty through use of computing facilities (for example, cheating, plagiarism, or fraud) is prohibited.

B. Harassment

Using computers or networks to harass, abuse or intimidate another person is prohibited. Users shall not develop or use programs that harass other users. Users shall be sensitive to the public nature of shared facilities, and take care not to display on screens in such locations images, sounds or messages that could create an atmosphere of discomfort or harassment for others.

C. Obscenity

Obscene language in electronic mail, messages, process names, file names, file data, and other publicly visible forms is prohibited.

D. Child Pornography

Federal Child Pornography Law makes it illegal to create, possess, or distribute graphic depiction of minors engaged in sexual activity, including computer graphics. Computers storing such information can be seized as evidence.

E. Pornography

Pornography in electronic mail, file data, web sites, and other publicly visible forms, is prohibited.

Revised policy approved by the authority of the President's Cabinet March 2010. s/Computer and Network Usage Policy March 2010.doc

Sexual Discrimination and Sexual Harassment

Sexual Harassment Policy

As an educational institution, the State University of New York at Fredonia is committed to maintaining a campus environment where all members of the academic community are able to work and pursue collegial study in an atmosphere of mutual respect, civility and trust. Any violation of this trust damages the institution's educational mission by undermining the freedoms of inquiry and expression. We must make it unmistakably clear to every member of the faculty and academic staff, to every employee and every student that sexual harassment and discrimination will not be tolerated here on this campus.

As a form of discrimination, sexual harassment is a violation of both federal and New York State laws, including Title VII of the Civil Rights Act of 1964, Title IX of the Education Amendments of 1972, and New York Human Rights Act of 1982.

Scope:

This policy applies to all students, administrators, faculty, staff and guests of Fredonia.

All members of the community are encouraged to report any incidents of sexual discrimination or harassment of

which they become aware that compromises the well-being of an individual or the campus community.

Defining Sexual Harassment:

*Sexual Harassment in the **Employment** Setting is defined as:*

Unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature when any of the following occurs:

1. Submission to such conduct is made a term or condition of an individual's continued employment, promotion or other condition of employment.
2. Submission to or rejection of such conduct is used as a basis for employment decisions affecting an employee or job applicant.
3. Such conduct is intended to interfere with an individual's work performance, or creates an intimidating, hostile, or offensive work environment.

*Sexual Harassment in the **Educational** setting is defined as:*

Unwelcome conduct of a sexual nature. Sexual harassment can include unwelcome sexual advances, requests for sexual favors, and other verbal, nonverbal, or physical conduct of a sexual nature. Sexual harassment of a student denies or limits, on the basis of gender, the student's ability to participate in or to receive benefits, services, or opportunities in the educational institution's program.

Reporting and Addressing Complaints:

Sexual discrimination, including sexual harassment should be promptly reported to the Title IX Coordinator at the Office of Diversity, Equity, and Inclusion, 143 Fenton Hall, (716) 673-3358. Any such information provided shall, to the extent possible, be handled in a manner to maintain the privacy of the reporting party(ies). Fredonia students and employees can choose to participate in a SUNY-wide grievance procedure to initiate investigation and potential resolution of a complaint. Detailed information regarding the process, including the complaint form is available on the discrimination complaint procedure website. Use of the internal grievance procedure does not deprive a complainant of the right to file with outside enforcement agencies, such as the New York State Division of Human Rights, the Equal Employment Opportunity Commission, the Office for Civil Rights of the United State Department of Education, and/or the Office of Federal Contract Compliance of the United States Department of Labor.

Harassment shall be found where, in aggregate, the incidents are sufficiently pervasive, or persistent, or severe that a reasonable person, of similar background would be adversely affected to a degree that interferes with their ability to participate in or to realize the intended benefits of an institutional activity, employment, or resource. Should disciplinary action be implemented, or campus judiciary

proceedings invoked, it shall be done consistent with the terms and conditions of the governing collective bargaining agreement or campus judicial policy.

An employee or student who participates in the discrimination complaint process, or reports an incident of discrimination due to harassment, has the right to do so without fear of retaliation. If retaliation were to occur, appropriate sanctions or disciplinary action consistent with the terms and conditions of the governing collective bargaining agreement or campus judicial policy shall be followed.

Support Services:

Office of Diversity, Equity, and Inclusion – (716) 673-3358 (includes Title IX Coordinator)
University Police – (716) 673-3333
Student Affairs – (716) 673-3271
Judicial Affairs – (716) 673-3271
Counseling Center – (716) 673-3424
Human Resources – (716) 673-3434

Rules and Regulations for Maintenance of Public Order on Campus

The materials below consist of regulations of the State University of New York Board of Trustees. However, it is not the Official Compilation of the Codes, Rules, and Regulations of the State of New York. Readers are advised to refer to the Official Compilation (8 NYCRR Part 535 et seq) in case of questions.

Part 535

1. *Statement of Purpose.* The following rules are adopted in compliance with Section 6450 of the Education Law and shall be filed with the Commissioner of Education and the Board of Regents on or before July 20, 1969, as required by that section. Said rules shall be subject to amendment or revision and any amendments or revisions thereof shall be filed with the Commissioner of Education and Board of Regents within 10 days after adoption. Nothing herein is intended, nor shall it be construed, to limit or restrict the freedom of speech or peaceful assembly. Free inquiry and free expression are indispensable to the objectives of a higher educational institution. Similarly, experience has demonstrated that the traditional autonomy of the educational institution (and the accompanying institutional responsibility for the maintenance of order) is best suited to achieve these objectives. These rules shall not be construed to prevent or limit communication between and among faculty, students, and administration, or to relieve the institution of its special responsibility for self-regulation in the preservation of public order. Their purpose is not to prevent or restrain controversy and dissent but to prevent abuse of the rights of others and to maintain that public order appropriate to a college or university campus without which there can be no

intellectual freedom and they shall be interpreted and applied to that end.

2. *Application of Rules.* These rules shall apply to all state-operated institutions of the State University except as provided in Part 550 as applicable to the State University Maritime College. These rules may be supplemented by additional rules for the maintenance of public order heretofore or hereafter adopted for any individual institution, approved and adopted by the State University trustees and filed with the Commissioner of Education and Board of Regents, but only to the extent that such additional rules are not inconsistent herewith. The rules hereby adopted shall govern the conduct of students, faculty, and other staff, licensees, invitees, and all other persons, whether or not their presence is authorized, upon the campus of any institution to which such rules are applicable and also upon or with respect to any other premises or property, under the control of such institution, used in its teaching, research, administrative, service, cultural, recreational, athletic, and other programs and activities; provided however, that charges against any student for violation of these rules upon the premises of any such institution other than the one at which they are in attendance shall be heard and determined at the institution in which they are enrolled as a student.

3. *Prohibited conduct.* No person, either singly or in concert with others, shall:

- (a) willfully cause physical injury to any other person, nor threaten to do so for the purpose of compelling or inducing such other person to refrain from any act which they have a lawful right to do or to do any act which they have a lawful right not to do;
- (b) physically restrain or detain any other person, nor remove such person from any place where they are authorized to remain;
- (c) willfully damage or destroy property of the institution or under its jurisdiction, nor remove or use such property without authorization;
- (d) without permission, expressed or implied, enter into any private office of an administrative officer, member of the faculty or staff member;
- (e) enter upon and remain in any building or facility for any purpose other than its authorized uses or in such manner as to obstruct its authorized use by others;
- (f) without authorization, remain in any building or facility after it is normally closed;
- (g) refuse to leave any building or facility after being required to do so by an authorized administrative officer;
- (h) obstruct the free movement of persons and vehicles in any place to which these rules apply;
- (i) deliberately disrupt or prevent the peaceful and orderly conduct of classes, lectures, and meetings or deliberately interfere with the freedom of any person to express their views, including invited speakers;

- (j) knowingly have in their possession upon any premises to which these rules apply, any rifle, shotgun, pistol, revolver, or other firearm or weapon without the written authorization of the chief administrative officer; whether or not a license to possess the same has been issued to such person;

- (k) willfully incite others to commit any of the acts herein prohibited with specific intent to procure them to do so; or
- (l) take any action, create, or participate in the creation of, any situation which recklessly or intentionally endangers mental or physical health or which involves the forced consumption of liquor or drugs for the purpose of initiation into or affiliation with any organization.

4. *Freedom of Speech and Assembly:* Picketing and Demonstrations.

- (a) No student, faculty, or other staff member or authorized visitor shall be subject to any limitation or penalty solely for the expression of their views nor for having assembled with others for such purpose. Peaceful picketing and other orderly demonstrations in public areas of ground and building will not be interfered with. Those involved in picketing and demonstrations may not, however, engage in specific conduct in violation of the provisions of the preceding section.

- (b) In order to afford maximum protection to the participants and to the institutional community, each state-operated institution of the State University shall promptly adopt and promulgate, and thereafter continue in effect as revised from time to time, procedures appropriate to such institution for the giving of reasonable advance notice to such institution of any planned assembly, picketing, or demonstration upon the grounds of such institution, its proposed locale and intended purpose; provided, however, that the giving of such notice shall not be made a condition precedent to any such assembly, picketing, or demonstration and provided, further, that this provision shall not supersede nor preclude the procedures in effect at such institution for obtaining permission to use the facilities thereof.

5. *Penalties.* A person who shall violate any of the provisions of these rules (or of the rules of any individual institution) shall:

- (a) If they are a licensee or invitee, have authorization to remain upon the campus or other property withdrawn and shall be directed to leave the premises. In the event of their failure to do so they shall be subject to ejection.
- (b) If they are a trespasser or visitor without specific license or invitation, be subject to ejection.
- (c) If they are a student, be subject to expulsion or such lesser disciplinary action as the facts of the case may warrant, including suspension, probation, loss of privileges, reprimand, or warning.
- (d) If they are a faculty member having a term or continuing appointment, be guilty of misconduct and be

subject to dismissal or termination of their employment or such lesser disciplinary action as the facts may warrant including suspension without pay or censure.

(e) If they are a staff member in the classified service of the civil service, described in Section 75 of the Civil Service Law, be guilty of misconduct, and be subject to the penalties prescribed in said section.

(f) If they are a staff member other than one described in subdivisions (d) and (e) of this section, be subject to dismissal, suspension without pay, or censure.

6. Procedure.

(a) The chief administrative officer or their designee shall inform any licensee or invitee who shall violate any provisions of these rules (or of the rules of any individual institution supplementing or implementing these rules) that their license or invitation is withdrawn and shall direct them to leave the campus or other property of the institution. In the event of their failure or refusal to do so such officer shall cause their ejection from such campus or property.

(b) In the case of any other violator, who is neither a student nor faculty or other staff member, the chief administrative officer or their designee shall inform them that they are not authorized to remain on the campus or other property of the institution and direct them to leave such premises. In the event of their failure or refusal to do so such officer shall cause their ejection from such campus or property. Nothing in this subdivision shall be construed to authorize the presence of any such person at any time prior to such violation nor to affect their liability to prosecution for trespass or loitering as prescribed in the Penal Law.

(c) In the case of a student, charges for violation of any of these rules (or of the rules of any individual institution supplementing or implementing these rules) shall be presented and shall be heard and determined in the manner hereinafter provided in Section 535.9 of this Part.

(d) In the case of a faculty member having a continuing or term appointment, charges of misconduct in violation of these rules (or of the rules of any individual institution supplementing or implementing these rules) shall be made, heard and determined in accordance with Title D of Part 338 of the policies of the Board of Trustees.

(e) In the case of any staff member who holds a position in the classified civil service, described in Section 75 of the Civil Service Law, charges of misconduct in violation of these rules (or of the rules of any individual institution supplementing or implementing these rules) shall be made, heard and determined as prescribed in that section.

(f) Any other faculty or staff member who shall violate any provision of these rules (or of the rules of any individual institution supplementing or implementing these rules) shall be dismissed, suspended, or censured by the appointing authority prescribed in the policies of the Board of Trustees.

7. Enforcement Program.

(a) The chief administrative officer shall be responsible for the enforcement of these rules (or of the rules of any individual institution supplementing or implementing these rules) and shall designate the other administrative officers who are authorized to take action in accordance with such rules when required or appropriate to carry them into effect.

(b) It is not intended by any provision herein to curtail the right of students, faculty, or staff to be heard upon any matter affecting them in their relations with the institution. In the case of any apparent violation of these rules (or of the rules of any individual institution supplementing or implementing these rules) by such persons, which, in the judgment of the chief administrative officer or their designee, does not pose any immediate threat of injury to person or property, such officer may make reasonable effort to learn the cause of the conduct in question and to persuade those engaged therein to desist and to resort to permissible methods for the resolution of any issues which may be presented. In doing so such officer shall warn such persons of the consequences of persistence in the prohibited conduct, including their ejection from any premises of the institution where their continued presence and conduct is in violation of these rules (or of the rules of any individual institution supplementing or implementing these rules).

(c) In any case where violation of these rules (or of the rules of any individual institution supplementing or implementing these rules) does not cease after such warning and in other cases of willful violation of such rules, the chief administrative officer or their designee shall cause the ejection of the violator from any premises which they occupy in such violation and shall initiate disciplinary action as hereinbefore provided.

(d) The chief administrative officer or their designee may apply to the public authorities for any aid which they deem necessary in causing the ejection of any violator of these rules (or of the rules of any individual institution supplementing or implementing these rules) and they may request the State University counsel to apply to any court of appropriate jurisdiction for an injunction to restrain the violation or threatened violation of such rules.

8. *Communication* . In matters of the sort to which these rules are addressed, full and prompt communication among all components of the institutional community, faculty, students, and administration, is highly desirable. To the extent that time and circumstances permit, such communication should precede the exercise of the authority, discretion, and responsibilities granted and imposed in these rules. To these ends each state-operated institution of the State University shall employ such procedures and means, formal and informal, as will promote such communication.

9. Notice, Hearing and Determination of Charges Against Students.*

(a) The term chief administrative officer, as used in these rules, shall be deemed to mean and include any person authorized to exercise the powers of that office during a vacancy therein or during the absence or disability of the incumbent and for purposes of this section shall also include any designee appointed by said officer.

(b) Whenever a complaint is made to the chief administrative officer of any state-operated institution of the university of a violation by a student or students of the rules prescribed in this Part (or of any rules adopted by an individual institution supplementing or implementing such rules) or whenever they have knowledge that such a violation may have occurred, they shall cause an investigation to be made and the statements of the complainants, if any, and of other persons having knowledge of the facts reduced to writing. If they are satisfied from such investigation and statements that there is reasonable ground to believe that there has been such a violation, they shall prepare or cause to be prepared charges against the student or students alleged to have committed such violation which shall state the provision prescribing the offense and shall specify the ultimate facts alleged to constitute such offense.

(c) Such charges shall be in writing and shall be served on the student or students named therein by delivering the same to theirs or them personally, if possible, or, if not, by mailing a copy of such charges by registered mail to such student or students at their or their usual place or places of abode while attending college and also to the students or their home address or addresses, if different.

(d) The notice of charges so served shall fix a date for hearing thereon not less than 10 nor more than 15 days from the date of service which shall be the date of mailing where necessary to effect service by mail. Failure to appear in response to the charges on the date fixed for hearing, unless there has been a continuance for good cause shown, shall be deemed to be an admission of the facts stated in such charges and shall warrant such action as may then be appropriate thereon. Before taking such action the hearing committee, hereinafter referred to, shall give notice to any student, who has failed to appear, in the manner prescribed in subdivision (c), of its proposed findings and recommendations to be submitted to the chief administrative officer and shall so submit such findings and recommendations 10 days thereafter unless the student has meanwhile shown good cause for his/her failure to appear, in which case a date for hearing shall be fixed.

(e) Upon demand at any time before or at the hearing, the student charged or their representative, duly designated, shall be furnished a copy of the statements taken by the chief administrative officer in relation to such charges and with the names of any other witnesses who will be produced at the hearing in support of the charges; provided, however, that this shall not preclude the testimony of witnesses who were unknown at the time of such demand.

(f) The chief administrative officer may, upon the service of charges, suspend the student named therein, from all or any part of the institution's premises or facilities, pending the hearing and determination thereof, whenever, in their judgment, the continued presence of such student would constitute a clear danger to them self or to the safety of persons or property on the premises of the institution or would pose an immediate threat of disruptive interference with the normal conduct of the institution's activities and functions; provided, however, that the chief administrative officer shall grant an immediate hearing on request of any student so suspended with respect to the basis for such suspension.

(g) There shall be constituted at each state-operated institution a hearing committee to hear charges against students of violation of the rules for maintenance of public order prescribed by or referred to in this Part. Such committee shall consist of three members of the administrative staff and three members of the faculty, designated by the chief administrative officer, and three students who shall be designated by the members named by the chief administrative officer. Each such member shall serve until a successor or replacement has been designated. No member of the committee shall serve in any case where they are a witness or have been directly involved in the events upon which the charges are based. In order to provide for cases where there may be such a disqualification and for cases of absence or disability, the chief administrative officer shall designate an alternate member of the administrative staff and an alternate member of the faculty, and their principal designees shall designate an alternate student member, to serve in such cases. Any five members of the committee may conduct hearings and make findings and recommendations as hereinafter provided. At any institution where the chief administrative officer determines that the number of hearings which will be required to be held is, or may be, so great that they cannot otherwise be disposed of with reasonable speed, the individual may determine that the hearing committee shall consist of six members of the administrative staff and six members of the faculty to be designated by the chief administrative officer and of six students who shall be designated by the members so designated by the chief administrative officer. In such

event the chief administrative officer shall designate one of such members as chairperson who may divide the membership of the committee into three divisions each to consist of two members of the administrative staff, two faculty members, and two students and may assign charges among such divisions for hearing. Any four members of each such division may conduct hearings and make recommendations as hereinafter provided.

(h) The hearing committee shall not be bound by the technical rules of evidence but may hear or receive any testimony or evidence which is relevant and material to the issues presented by the charges and which will contribute to a full and fair consideration thereof and determination thereon. A student against whom the charges are made may appear by and with representatives of their choice. The student may confront and examine witnesses against them and may produce witnesses and documentary evidence on their own behalf. They may be present at the hearing: the student charged and their representatives and witnesses; other witnesses; representatives of the institutional administration; and, unless the student shall request a closed hearing, such other members of the institutional community or other persons, or both, as may be admitted by the hearing committee. A transcript of the proceedings shall be made.

(i) Within 20 days after the close of a hearing the hearing committee shall submit a report of its findings of fact and recommendations for disposition of the charges to the chief administrative officer, together with a transcript of the proceedings, and shall at the same time transmit a copy of its report to the student concerned or their representative. Within 10 days thereafter the chief administrative officer shall make their determination thereon. Final authority to dismiss the charges or to determine the guilt of those against whom they are made and to expel, suspend, or otherwise discipline them shall be vested in the chief administrative officer. If the student shall reject the findings of the hearing committee in whole or in part, the student shall make new findings which must be based on substantial evidence in the record and shall include them in the notice of their final determination which shall be served upon the student or students with respect to whom it is made.

**Applies to charges for violation of the rules prescribed by or referred to in this Part heretofore served which have not been finally determined within 60 days after the adoption hereof, which charges shall be referred to the committee constituted pursuant to said Section 535.9 for determination in accordance therewith, and said section shall apply to all charges for violation of such rules hereafter made, whether for violations heretofore or hereafter committed.*

10. Rules for Organizations.

(a) *Organizations.* Organizations which operate upon the campus of any state-operated institution or upon the property of any state-operated institution used for educational purposes shall be prohibited from authorizing the conduct described in subdivision (l) of section 535.3 of this Part.

(b) *Procedure.* The chief administrative officer at each state-operated institution shall be responsible for the enforcement of this section, and, as used herein, the term chief administrative officer shall include any designee appointed by said officer.

(1) Whenever the chief administrative officer has determined on the basis of a complaint or personal knowledge that there is reasonable ground to believe that there has been a violation of this section by any organization, the chief administrative officer shall prepare or cause to be prepared written charges against the organization which shall state the provision proscribing the conduct and shall specify the ultimate facts alleged to constitute such violation.

(2) Such written charges shall be served upon the principal officer of the organization by registered or certified mail, return receipt requested, to the organization's current address and shall be accompanied by a notice that the organization may respond in writing to the charges within 10 days of receipt of said notice. The notice of the charge so served shall include a statement that the failure to submit a response within 10 days shall be deemed to be an admission of the facts stated in such charges and shall warrant the imposition of the penalty described in subdivision (c) of this section. The response shall be submitted to the chief administrative officer and shall constitute the formal denial or affirmation of the ultimate facts alleged in the charge. The chief administrative officer may allow an extension of the 10-day response period.

(3) Upon written request, by an authorized representative of the organization, the chief administrative officer shall provide the representative organization an opportunity for a hearing. A hearing panel designated by the chief administrative officer shall hear or receive any testimony or evidence which is relevant and material to the issues presented by the charge and which will contribute to a full and fair consideration thereof and determination thereon. The organization's representative may confront and examine witnesses against it and may produce witnesses and documentary evidence on its behalf. The hearing panel shall submit written findings of fact and recommendations for disposition of the charge to the chief administrative officer within 20 days after the close of the hearing.

(4) Final authority to dismiss the charges or to make a final determination shall be vested in the chief administrative officer. Notice of the decision shall be in writing; shall include the reasons supporting such decision; and shall be served on the principal officer of the organization by mail in the manner described in paragraph (2) of this subdivision within a reasonable time after such decision is made.

(c) *Penalties.* Any organization which authorizes the prohibited conduct described in subdivision (l) of Section 535.3 of this Part shall be subject to the rescission of permission to operate upon the campus or upon the property of the state-operated institution used for educational purposes. The penalty provided in this subdivision shall be in addition to any penalty which may be imposed pursuant to the Penal Law and any other provision of law or to any penalty to which an individual may be subject pursuant to this Part.

(d) *Bylaws.* Section 6450

(1) of the Education Law requires that the provisions of this Part which prohibit reckless or intentional endangerment to health or forced consumption of liquor or drugs for the purpose of initiation into or affiliation with any organization shall be deemed to be part of the bylaws of all organizations which operate upon the campus of any state-operated institution used for educational purposes. The statute further requires that each such organization shall review these bylaws annually with individuals affiliated with the organization.

(e) *Distribution.* Copies of the provision of this Part which prohibit reckless or intentional endangerment to health or forced consumption of liquor or drugs for the purpose of initiation into or affiliation with any organization shall be given to all students enrolled in each state-operated institution.

Family Educational Rights and Privacy Act of 1974

The Family Educational Rights and Privacy Act of 1974 (FERPA), as amended, sets forth requirements designed to protect the privacy of parents and students. The statute governs the access to records maintained by educational institutions, and the release of such records.

The Family Educational Rights and Privacy Act permits current or former students to inspect and review their education records. Students are also accorded a right to a hearing in order to question the contents of their education records. Written consent from students may be required before personally identifiable information about them will be released from their education records, as provided by law.

Specifically, institutions are permitted to release directory information on students unless the students have notified the institution to withhold this information. Directory information is "public" information, which may be released without the student's consent to persons making inquiry. Personally identifiable information designated as directory information includes: the student's name; local address and local telephone number; cell phone number; University-assigned e-mail address; student's home address and home telephone number; parent's name, address and telephone number; class schedule; date and place of birth; major field of study; class standing; participation in officially recognized sports and activities; weight and height (athletes); electronic images (photographs); dates of attendance at University; degrees and awards received; and the most recent previous educational institution attended.

Inquiries or complaints may be filed with the Family Policy Compliance Office, U.S. Department of Education, 400 Maryland Ave. SW, Washington, D.C. 20202-5901.

Copies of the State University of New York at Fredonia compliance policy and the Family Educational Rights and Privacy Act are available at the Office of Student Affairs.

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David H. Carnahan	Mayville, N.Y.	Honorary Members	
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Joseph Falcone, '74	Silver Creek, N.Y.	Gileen W. French	Dunkirk, N.Y.
Jeffrey L. Fancher, '82	Fredonia, N.Y.	Richard A. Gilman, Ph.D.	Fredonia, N.Y.
Carla Giambrone, '92	Rochester, N.Y.	Amos Goodwine Jr., '72	North East, Pa.
Greg Gibbs, Ph.D., '71, Alumni Representative (ex-officio)	Hamburg, N.Y.	Stan Lundine, J.D.	Ashville, N.Y.
Walter J. Gotowka, '81	Dunkirk, N.Y.	Jean M. Malinoski, '68, '81	Forestville, N.Y.
Karl Holz, '73	Windermere, Fla.	Douglas H. Manly	Fredonia, N.Y.
Virginia S. Horvath, Ph.D. (ex-officio)	Fredonia, N.Y.	Robert A. Maytum	Dunkirk, N.Y.
Jeffery W. Kelly, Ph.D., '82	LaJolla, Calif.	James H. Mintun Jr.	Fredonia, N.Y.
Cathy Marion, '79	Houston, Texas	J. Brien Murphy, Ed.D., '53, '56	Fredonia, N.Y.
Rachel Martinez-Finn, '82	Cleveland Heights, Ohio	Edward C. Steele	Hobe Sound, Fla.
Kurt W. Maytum	Fredonia, N.Y.	Kenneth W. Strickler	Jamestown, N.Y.
Judy Metzger	Fredonia, N.Y.	Jeffrey J. Wallace Sr., Ph.D.	Fairlawn, Ohio
Charles Notaro, '68	Fredonia, N.Y.	Henry K. (Mike) Williams IV	Fredonia, N.Y.
Charlotte Passero, Student Member	Rochester, N.Y.	Nancy L. Yocum, CPA, '90	Hobe Sound, Fla.
Michael Patrick, '82	Edgewater, Md.		
John Quatroche, Ph.D., '63	Terre Haute, Ind.	Fredonia Alumni Association Board of Directors	
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Susan O. Schall, Ph.D., '81	Front Royal, Va.	Patrick Newell, '08, <i>Vice President</i>	Fredonia, N.Y.
Michael Schiavone, J.D., '78	Clarence, N.Y.	Christopher P. Reybrouck, '08, <i>Secretary</i>	Buffalo, N.Y.
		Tammy Wilson Prior, '00, '03, <i>Treasurer</i>	Lake View, N.Y.
		Ida Boyd, '85	Fayetteville, N.C.
		Shellonnee Baker Chinn, '87	Buffalo, N.Y.

Robert Egan, '00	Kenmore, N.Y.
Heath Forster, '95 '10	Fredonia, N.Y.
Virginia S. Horvath, Ph.D., <i>President, Fredonia</i>	Fredonia, N.Y.
Carl Lam, '01	Hamburg, N.Y.
Darrin Paschke, '92	Fredonia, N.Y.
Thomas Priester, Ed.D., '01	Lancaster, N.Y.
Robert J. Smith, '71	Hamburg, N.Y.
Dawn Spicer-Dake, '88	Fredonia, N.Y.
Stash C. Stanley, '71	Charlottesville, Va.
Christine Starks, '91, '95	Fredonia, N.Y.
James Sturm, '88	Lake View, N.Y.
Karen Williams, '82	Mayville, N.Y.
Betty Catania Gossett, '76, <i>Interim Vice President for University Advancement, Fredonia</i>	Fredonia, N.Y.
Patricia A. Feraldi, '77, <i>Director of Alumni Affairs .</i>	Buffalo, N.Y.
Joanne Pagano Bohn, <i>Secretary to the Board</i>	Fredonia, N.Y.

Fredonia Campus Administration

VIRGINIA SHAEFER HORVATH, *President*
Kent State University, Ph.D.

WILLIAM A. BOERNER, *Chief Diversity Officer*
Johnson and Wales University, Ed.D.

DENISE M. SZALKOWSKI, *Assistant to the President*
Empire State College, B.S.
President's Award for Excellence 2012

Admissions

CORY M. BEZEK, *Director*
Vanderbilt University, M.Ed.

ELIZABETH A. CURTIN-O'BRIEN, *Associate Director*
State University of New York at Fredonia, M.S.
President's Award for Excellence, 1998

AARON MARSHALL, *Assistant Director*
Pennsylvania State University, M.A.

DAVID J. STEINER, *Assistant Director*
Gannon University, M.S.

KIMBERLIE BALL, *Assistant Director*
Buffalo State, State University of New York, M.S.

JESSICA GATTO, *Assistant Director*
Canisius College, M.A.

ERICA ARLEQUIN, *Assistant Director*
Alfred University, M.A.

KATHERINE SMITH, *Admissions Counselor*
University of North Carolina at Greensboro, M.M.

BRANDON WILLIAMSON, *Admissions Counselor*
State University of New York at Fredonia, B.A.

Athletics and Recreation

GREGORY D. PRECHTL, *Athletics Director*
State University of New York at Fredonia, M.A.
*The State University Chancellor's Award for Excellence in
Professional Service*
President's Award for Excellence, 2006

ERIN ABBATE, *Assistant Athletic Trainer Certified*
Azusa Pacific University, M.S.

ERIK BARKLEY, *Athletic Trainer Certified*
Southeast Missouri State University, M.S.

GEOFF BRAUN, *Volleyball Coach*
State University of New York College at Cortland, B.S.

CHRISTOPHER CASE, *Women's Soccer Coach*
State University of New York at Fredonia, B.S.

ANTHONY CICCARELLO, *Softball Coach*
University of Phoenix, M.A.

PATRICK J. GONDEK, *Men's Soccer Coach*
State University of New York College at Cortland, M.S.

LINDA HILL-MCDONALD, *Women's Basketball Coach*
Westchester University, M.S.

JEFFREY S. MEREDITH, *Hockey Coach*
The Ohio State University, M.A.
President's Award for Excellence, 2014

MATT PALISIN, *Men's Baseball Coach*
Penn State Erie, The Behrend College, B.S.

KATALIN PARENT, *Assistant Trainer Certified*
California University of Pennsylvania, M.S.

KATIE PUCCI-SCHAEFER, *Cheerleading Coach*
State University of New York at Fredonia, M.S. Ed.

JEROME REILLY, *Sports Information Director*
St. Bonaventure University, B.A.

PHILIP SEYMOUR, *Men's Basketball Coach*
University of Richmond, M.S.

AMY SIMON, *Women's Lacrosse Coach*
State University of New York at Fredonia, M.S.

MEGAN VALENTINE, *Associate Athletic Director*
Bowling Green State University, M.Ed.

ARTHUR A. WANG, *Men's and Women's Swim Coach*
State University of New York College at Cortland, M.Ed.

THOMAS A. WILSON, *Men's and Women's Cross-Country and Track Coach*
State University of New York at Fredonia, B.A.

Career Development

TRACY COLLINGWOOD, *Director*
University at Buffalo, State University of New York,
Ed.M.
President's Award for Excellence, 2014

CHRISTOPHER LaGROW, *Associate Director*
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Buffalo State, State University of New York, M.S.

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Counseling Center

TRACY STENGER, *Director of Student Counseling Services/Co-Director of Student Health & Wellness Center*
University at Buffalo, State University of New York, Ph.D.

JEFF JANICKI, *Professional Counselor*
Gannon University, M.S.

JULIE BEZEK, *Substance Abuse and Violence Prevention Coordinator*
Bowling Green State University, M.A.

KIMBERLY GRIEWISCH, *Counselor*
St. Bonaventure University, M.S.Ed.

Disability (Academic) Support for Students

(see Learning Center)

Educational Development Program

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Buffalo State, State University of New York, M.S.

RACHEL SKEMER, *Counselor*
Buffalo State, State University of New York, M.S.

DANIEL M. SMITH, *Counselor*
State University of New York at Fredonia, M.S.

Engagement and Economic Development

KEVIN P. KEARNS, *Vice President for Engagement and Economic Development*
University of Kansas, Ph.D.

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University at Albany, State University of New York, M.P.A.

CHERYL JOHN, *Director, Native American SUNY: Western Consortium*
Buffalo State College, M.S.

Faculty Student Association

DARIN R. A. SCHULZ, *Executive Director*
Buffalo State, State University of New York, M.A.

MATTHEW SNYDER, *Associate Executive Director and Controller*
State University of New York at Oswego, B.S.

MICHELLE KOWALSKI, *Director of Human Resources*
Canisius College, B.S.

ERIC JOHNSON, *Director of Information Technology*
Jamestown Community College, A.A.S.

TERRI HELWIG, *Human Resources Manager and Executive Assistant*
State University of New York at Fredonia, B.S.

KATIE THIES, *Special Programs Manager*
St. Bonaventure University, B.B.A.

RONALD WASIK, *Director of Support Services*
State University of New York at Fredonia, B.S.

CHRISTOPHER ZENNS, *Director of Retail Operations*
State University of New York at Fredonia, B.A.

Field Experiences

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Adelphi University, M.A.

JAIMEE GUSTAFSON, *Early Field Representative*
State University of New York at Fredonia, M.S.

DEBRA KARPSINSKE-KEYSER, *Assistant Director*
Mercyhurst University M.S. S.Ed.

DIANE SERCU, *Early Field Representative*
State University of New York at Fredonia, M.S.

Finance and Administration

KEVIN R. SEITZ, *Interim Vice President for Finance and Administration*

University at Buffalo, State University of New York,
M.B.A.

CHARLES NOTARO, *Interim Associate Vice President
for Finance and Administration*
Canisius College, M.B.A.

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State University of New York at Fredonia, B.A.

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LYNN BOWERS, *Director of Student Accounts*
State University of New York at Fredonia, B.S.

KEVIN CLOOS, *Director of Facilities Services*
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*The State University Chancellor's Award for Excellence in
Professional Service*

RACHAEL COON, *Financial Analyst*
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SUSAN CORTES, *Director of University Payroll Services*
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MICHAEL DALEY, *Director of Human Resources*
University of New Haven, M.B.A.

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University at Buffalo, State University of New York, M.S.

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ELISA GALUPPO, *Assistant Director of Student Accounts*
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M.ARCH.
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State University of New York at Fredonia, M.S.

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State University of New York at Fredonia, B.A.

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SANDRA NOBLE, *Director of University Accounting*
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SOTERIS TZITZIS, *Director of University Services*
Erie Community College, A.S.

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Buffalo State, State University of New York, M.S.

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Buffalo State, State University of New York, M.S.

SARAH A. CYBART, *Financial Aid Counselor*
Buffalo State, State University of New York, M.S.

MARK A. ZAFFALON, *Financial Aid Counselor*
Buffalo State, State University of New York, M.S.

Graduate Studies

JUDITH M. HOROWITZ, *Associate Provost for Graduate
Studies, Sponsored Research, and Faculty Development*
University at Buffalo, State University of New York, Ph.D.

WENDY DUNST, *Interim Instructional Support Associate*

LAUREN KICAK, *Graduate Admissions Assistant*
State University of New York at Fredonia, M.S.

Health Center

DEBORAH DIBBLE, NP, *Director of Health Center/
Co-Director of Student Health and Wellness Services*
Syracuse University, M.S.

EMILY GRIFFITH, FNP-C, *Nurse Practitioner*
Gannon University, M.S.

TERI SEIBERT, RNC, *Registered Nurse II*
University at Buffalo, The State University of New York,
B.S.N.

SHERRY SMALL, RN, *Registered Nurse I*
The College at Brockport, B.S.N.

CAROL CALARCO, RN, *Registered Nurse I*
Jamestown Community College, A.A.S.

GAYLE MURPHY, RN, *Registered Nurse I*
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JANE FISCHER, *Fred A.S.S.I.S.T. Administrator*
Goddard College, M.A.

Information Technology Services

STEPHEN J. RIEKS, *Associate Vice President for
Information Technology/Chief Information Officer*
Martin J. Whitman School of Management, Syracuse
University, M.B.A.

JANET MAYER, *Manager of IT Policies & the IT Project
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Ohio University, M.A.
San Diego State University, Instructional Technology
Certificate

Enterprise Data Services

KEVIN LANE, *Manager of Enterprise Data Services*
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RICHARD P. BARTKOWIAK, *Database Administrator*
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GARY VANDE VELDE, *System Support Specialist*

Enterprise Information Services

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CHRISTOPHER TAVERNA, *Applications
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LERN Certified Faculty Developer
Microsoft Certified IT Professional - Enterprise Service
Technician
Microsoft Certified Systems Engineer

Microsoft Certified Systems Administrator: Messaging
Microsoft Certified Desktop Support Technician
CompTIA A+ Certified Service Technician

Enterprise Infrastructure Services

FREDERICK D. ULLMAN, *Director of Enterprise
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SCOTT GRIEN, *Systems Administrator*
Alfred State, SUNY College of Technology, A.A.S.

IDALIA TORRES, *Systems Administration*
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Enterprise Reporting and Development

MICHAEL GERHOLDT, *Manager of Enterprise
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DIANE HOWARD, *Database Consultant*
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ITS Service Center

T. JOHN MCCUNE, *Director of Technology Support
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TYLOR CARDONE, *ITS Service Center Coordinator*
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Microsoft Certified Professional

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ALEXANDER MOON, *Service Center Support
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NICHOLAS NOWAKOWSKI, *Service Center Support
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DAVID TORRES, *Service Center Support Professional*
Microsoft Certified Professional
Apple Certified Support Professional
ComTIA Network+CompTIA Server+
CompTIA Linux+
CompTIA iNet+

Network Design and Development

JOSEPH BAXTER, *Manager of Network Design & Development*

State University of New York at Fredonia, B.S.
Cisco Certified Networking Professional Routing,
Switching & Security (CCNP)
Certified Ethical Hacker (CEH)
President's Award for Excellence, 2013

JOSEPH J. NOCEK, *Network Support Specialist*
State University of New York College of Environmental
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Cisco Certified Networking Associate (CCNA)

Residential Technology and Security Systems

BENJAMIN D. HARTUNG, *Information Security Officer*

State University of New York Institute of Technology at
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Certified Information Systems Security Professional
(CISSP)
Project Management Professional (PMP)

MARK MACKEY, *Interim ResNet Coordinator*
State University of New York at Fredonia, B.S.

Technology Support Services

T. JOHN MCCUNE, *Director of Technology Support Services*
Nova Southeastern University, Ed.S.

DOUG JOHNSON, *Multimedia Specialist*
Jamestown Community College, A.A.S.

DENISE MAZE, *Media Center Coordinator*
Jamestown Community College, A.A.S.

CHARLOTTE MORSE, *Graphic Designer*
Rochester Institute of Technology, B.F.A.
President's Award for Excellence, 2010

GREG SNOW, *Audio and Electronics Engineer*
CompTIA A+
Chancellor's Award for Excellence in Professional Service, 2013

ANDREA WASIURA, *Web Administrator/Production Coordinator*
State University of New York at Fredonia, B.S.

Institutional Research, Planning, and Assessment

XIAO YING ZHANG, *Director*
Mississippi State University, Ph.D.

International Education Office

NAOMI BALDWIN, *Director*
University of Missouri-Kansas City, Ph.D.

ERIN WILLIS, *Assistant Director, Study Abroad and Exchange Programs*
Canisius College, M.S.

Learning Center

LIZA N. SMITH, *Director and 3-1-3 Program Director*
Buffalo State, State University of New York, M.S.

ADAM HINO, *Coordinator, Disability Support Services for Students (Academic)*
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KIMBERLY MEAD-COLEGROVE, *Director of Full Opportunity Program and Learning Center Counselor*
Michigan State, M.A.

JENNIFER RUHLAND, *Learning Center Counselor*
Canisius College, M.S.

Lifelong Learning and Special Programs

ERIC SKOWRONSKI, *Director*
Syracuse University, M.B.A.

Michael C. Rockefeller Arts Center

JEFFERSON WESTWOOD, *Director*
Michigan State University, M.A.
The State University Chancellor's Award for Excellence in Professional Service
President's Award for Excellence, 1995
College Council Award for Community Engagement, 2015

PATRICK L. ROCHELEAU, *Assistant Director*
New York University, M.F.A.

ERIC C. HADLEY, *Operations Manager/Technical Director*
State University of New York at Fredonia, B.F.A.
President's Award for Excellence, 2016

ALISON BARRY, *Manager of Ticketing and Customer Service*
Houghton College, B.S.

DOUGLAS OSBORNE-COY, *Marketing and Public Relations Assistant*
University of Pittsburgh, B.A.

Multicultural Affairs

JELLEMA STEWART, *Director of Multicultural Affairs*
Buffalo State, State University of New York, M.S.

Online Learning

LISA MELOHUSKY, *Director*
Connecticut State University, M.S.

Professional Development Center

DAWN ECKENRODE, *Director*
University of Texas, Austin, M.L.S.

SANDRA A. LEWIS, *Project Manager*
Marquette University, M.S.

Registrar

SCOTT D. SAUNDERS, *Registrar*
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KRISTIN A. DOBMEIER, *Assistant Registrar*
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AMY LECLAIR, *Coordinator of Academic Advising & Liberal Arts*
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HELEN LEYSATH, *Transfer Coordinator*
Buffalo State, State University of New York, M.S.

Residence Life

KATHY ANN FORSTER, *Director*
Buffalo State, State University of New York, M.S.

KEVIN HAHN, *Associate Director of Residence Life*
University of Rochester, M.A.T.

DANIEL GOODWIN, *Assistant Director of Residence Life/Townhouse Coordinator*
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TYLOR CARDONE, *ResNet Coordinator*
State University of New York at Fredonia, B.A.
Microsoft Certified Solutions Associate: Windows 8 (MCSA)
CompTIA A+ Certified Professional

Sponsored Programs

PAUL J. BENSON, *Grants Development Specialist*
University of Illinois at Urbana-Champaign, Ph.D.

HEIDI MOLDENHAUER, *Senior Grants and Contracts Manager*
St. Bonaventure University, M.B.A.

Student Accounts

ANGELICA ASTRY, *Revenue Accountant*
University of Phoenix, M.B.A.

LYNN BOWERS, *Director of Student Accounts*

State University of New York at Fredonia, B.S.

ELISA GALUPPO, *Assistant Director of Student Accounts*
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Student Affairs

CEDRIC HOWARD, *Vice President for Student Affairs*
University of Memphis, Ph.D.

DANIEL M. TRAMUTA, *Associate Vice President for Enrollment Services*
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MONICA J. WHITE, *Associate Vice President for Student Affairs*
Buffalo State, State University of New York, M.S.

ERIN MROCZKA, *Director of First Year Initiatives and Transition Programs*
Buffalo State, State University of New York, M.S.

LISA M. NEWELL, *Director of Judicial Affairs*
Buffalo State, State University of New York, M.S.

Student Services for the College of Education

NICOLE HOHENSTEIN, *Coordinator*
State University of New York at Fredonia, M.A.

University Advancement

BETTY CATANIA GOSSETT, *Interim Vice President for University Advancement*
State University of New York at Fredonia, B.A.

ROGER CODA, *Senior Staff Assistant - Writer/Photographer*
Grove City College, B.A.

WILLIAM CUNNINGHAM, *Foundation Controller; Interim Assistant Executive Director*
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LORI DEEMER, *Graphic Designer/Photographer*
University of Texas at Austin, B.F.A.

DAMIAN A. DODD, *Graphic Designer*
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ERIN EHMAN, *Communications Designer*
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JEFFREY WOODARD, *Director of Marketing and Communications*
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LISA G. EIKENBURG, *APR, Associate Director of Marketing and Communications*
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President's Award for Excellence, 2004

PATRICIA A. FERALDI, *Director of Alumni Affairs*
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HEATHER McKEEVER, *Development Associate*
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JUNE MILLER-SPANN, *Development Associate*
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TIMOTHY L. MURPHY, *Director of Development*
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JONATHAN H. WOOLSON, *Web Content Manager*
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University Police

ANN McCARRON BURNS, *Chief*
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SCOTT MARTIN, *Lieutenant*
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State University of New York at Fredonia, B.A.

BRIAN STUDLEY, *Lieutenant*
Erie Community College, A.A.

CLIFTON B. WHEELER, *Lieutenant*
The SUNY Chancellor's Award in Excellence for Classified Service

DEREK BRAUN, *Patrolman*
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ANDREW HUSUL, *Patrolman*

RICKY LAURITO, *Patrolman*

TAD K. MACKEY, *Patrolman*
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GLEN PARKER, *Patrolman*
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AARON PARKHURST, *Patrolman*
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Veterans Affairs

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Williams Center/Campus Life

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The State University Chancellor's Award for Excellence in Professional Service

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Indiana University, Ph.D.

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The State University of New York (SUNY), was founded at Potsdam, N.Y., in 1816. Years later, the Morrill Act of 1862 led to the creation of four Ivy League land-grant SUNY colleges, which now currently exist at Cornell University. SUNY was officially established in February 1948 when New York became the 48th state, of the then 48 states, to create a state university system. SUNY initially represented a consolidation of 29 unaffiliated institutions, including 11 teachers colleges. All of these colleges, with their unique histories and backgrounds, united for a common goal: To serve New York State. Since 1948, SUNY has grown to include 64 individual colleges and universities that were either formerly independent institutions or directly founded by the State University of New York.

Today, the State University of New York's 64 geographically dispersed campuses bring educational opportunity within commuting distance of virtually all New Yorkers and comprise the nation's largest comprehensive system of public higher education. Its 64 campuses are divided into four categories, based on educational mission, types of academic opportunities available, and degrees offered. These institutions offer programs as varied as ceramics engineering, philosophy, fashion design, optometry, maritime studies, law, medical education; music, theatre and dance, and everything in between. SUNY offers students a wide variety of educational options including short-term vocational/technical courses; certificate, associate, and baccalaureate degree programs, graduate degrees and post-doctoral studies. It provides access to almost every field of academic or professional study within the system with more than 7,500 degree and certificate programs.

SUNY attracts the best and brightest scholars, scientists, artists and professionals, and boasts nationally and internationally recognized faculty in all major disciplines. Faculty are regular recipients of prestigious awards and honors. The highly-regarded doctoral degree granting universities are home to top research programs and attract experts in a variety of fields. Students study in campus classrooms and laboratories or work from a distance through Open SUNY, which provides educational opportunities through courses and degree and certificate programs. SUNY employs 88,000 faculty and staff and counts more than 3 million alumni, residing in New York State and throughout the world.

The State University of New York is committed to serving as the state's strongest economic and quality-of-life driver and providing quality education at an affordable price to New Yorkers and students from across the country and the world.

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 College of Optometry
 Cornell University:
 N.Y.S. College of Agriculture and Life Sciences
 N.Y.S. College of Human Ecology
 N.Y.S. College of Veterinary Medicine
 N.Y.S. School of Industrial and Labor Relations
 College of Environmental Science and Forestry
 Downstate Medical Center
 Upstate Medical University

University Colleges

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 Buffalo State
 Cortland
 Empire State College
 Fredonia
 Geneseo
 New Paltz
 Old Westbury
 Oneonta
 Oswego
 Plattsburgh
 Potsdam
 Purchase

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 Cobleskill
 Canton
 Delhi
 Farmingdale State
 Maritime College
 Morrisville State College
 SUNY Polytechnic Institute

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 Broome
 Cayuga
 Clinton
 Columbia-Greene
 Corning
 Dutchess
 Erie
 Fashion Institute of Technology
 Finger Lakes
 Fulton-Montgomery
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 Westchester

NEW YORK STATE EDUCATION DEPARTMENT COMPLAINT NOTICE

Persons should note that the State University at Fredonia administers internal procedures to receive, investigate and resolve student complaints concerning requirements established in this catalog. Informal and formal means by which students can seek redress of grievances are identified through this document. Students are assured of a reasonable and appropriate time frame for investigating and resolving a formal complaint, that final determination of each formal complaint will be made by a person or persons not directly involved in the alleged problem, and that assurances that no adverse action will be taken against a student filing a complaint and that notice to students about the state consumer complaint process has been made.

Informal and formal complaints should be initiated in the appropriate departments. In the absence of a timely response or resolution, a student should contact one of the following offices:

- Office of the Provost and Vice President for Academic Affairs, 801 Maytum Hall, (716) 673-3335
- Office of the Vice President for Student Affairs, 607 Maytum Hall, (716) 673-3271
- Office of the Vice President for Administration, 501 Maytum Hall, (716) 673-3109
- Office of Human Resources, 507 Maytum Hall, (716) 673-3434

In addition, in New York State, a complaint may be filed by any person with reason to believe that an institution has acted contrary to its published standards or that conditions at the institution appear to jeopardize the quality of the institution's instructional programs or the general welfare of its students. Any person who believes he or she has been aggrieved by an institution may file a written complaint with the Office of College and University Evaluation.

How to File a Complaint

1. The person should first try to resolve the complaint directly with the institution by following the internal complaint procedures provided by the institution. An institution of higher education is required to publish its internal complaint procedure in a primary information document such as the catalog or student handbook. (The department suggests that the complainant keep copies of all correspondence with the institution.)
2. If a person is unable to resolve the complaint with the institution or believes that the institution has not properly addressed the concerns, he or she may send a letter to the Office of College and University Evaluation.

Persons should not send a complaint to the Office of College and University Evaluation until he/she has read all

the information below. This will assure that he/she is sending the complaint to the appropriate agency/office.

The Office of College and University Evaluation handles only those complaints that concern educational programs or practices of degree-granting institutions subject to the Regulations of the Commissioner of Education, with the exceptions noted on the next page:

- The office does not handle anonymous complaints
- Complaints concerning programs in fields leading to professional licensure (e.g., nursing) should be directed to:

Office of the Professions
Professional Education Program Review
Education Building, 2 West
Albany, NY 12234

- A complaint against a college in the State University system should be sent to:
State University of New York
Central Administration
State University Plaza
Albany, NY 12246
- A complaint against a college in the City University system should be sent to:
The City University of New York
Central Administration
535 East 80th St.
New York, NY 10021
- A complaint involving discrimination against enrolled students on the part of an institution or faculty, or involving sexual harassment, should be filed with the U.S. Office for Civil Rights, 75 Park Place, New York, NY 10007. Complaints about two-year colleges concerning sexual harassment/discrimination based on race, ethnicity, gender and disabilities may also be reported to the Office of Equity and Access, VATEA Program, 10th Floor, Education Building Addition, Hawk Street, Albany, NY 12234
- A complaint of consumer fraud on the part of the institution should be directed to the Office of the New York State Attorney General, Justice Building, Empire State Plaza, Albany, NY 12223.
- The Office of College and University Evaluation does not intervene in matters concerning an individual's grades or examination results, as these are the prerogative of the college's faculty.
- The Office of College and University Evaluation does not handle complaints concerning actions that occurred more than five years ago.

- The Office of College and University Evaluation does not intervene in matters that are or have been in litigation.
- For a complaint about state student financial aid matters, persons should contact the Higher Education Services Corporation Center at 1-888-NYS-HESC.

Complainants should be aware that the Office of College and University Evaluation does not conduct a judicial investigation and has no legal authority to require a college or university to comply with a complainant's request.

If a complaint does not fall into one of the exceptions noted above, persons should contact the Office of College and University Evaluation at <http://www.highered.nysed.gov/ocue/home.html>.

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