

University Catalog 2012 - 2013

Office of Admissions

Fenner House

SUNY Fredonia

Fredonia, NY 14063

Telephone: (716) 673-3251

(800) 252-1212

FAX: (716) 673-3249

E-mail: admissions@fredonia.edu

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

State University of New York at Fredonia

For Graduate Admissions contact
the Office of Graduate Studies at (716) 673-3808

or apply online at
<http://www.fredonia.edu/gradstudies/>

All previous catalogs can be found at
<http://www.fredonia.edu/catalog/previous.asp>

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, SUNY Fredonia is recognized for 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. Our 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.

Student academic success, a hallmark at SUNY Fredonia for the past 186 years, led to the adoption of our campus motto: "Where Success is a Tradition." Students routinely receive personal assistance from faculty and staff in exploring majors, developing a course of study, and identifying career choices. Another significant component of your education is the opportunity to participate in extracurricular and volunteer activities. Intramural and intercollegiate sports teams, internships, student government and residence life, music and theatrical productions, guest speakers and visiting artists, and over 120 student clubs and organizations offer outlets for your interests, creativity, and energy.

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



Virginia S. Horvath, Ph.D.
President

Table of Contents

Introduction.....	4
Academic Programs and Area Specializations	10
All Programs.....	13
Graduate Studies and Student Services	174
Course Descriptions	188
Additional Academic Information	383
General Education	387
Honors.....	389
Lifelong Learning and Special Programs	391
Academic and Student Support Services.....	392
Student Life on Campus.....	398
Faculty Student Association.....	400
Fredonia Organizations and Activities	402
Admissions and Financial Aid	410
Academic Policies.....	434
Student Rights and Responsibilities	447
Personnel	478
Faculty.....	487
SUNY History and General Statement.....	497
SUNY List of Units.....	497
New York State Education Department Complaint Notice	499
Index.....	501

Introduction

SUNY 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

SUNY 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. SUNY 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.

Come to Fredonia. Where Success is a Tradition.

History of the State University of New York at Fredonia

SUNY 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 249-acre campus of SUNY Fredonia 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 the SUNY Fredonia 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. Cranston Marche and Erie Dining Center are the main dining facilities, supplemented by the Williams Center food services including the new Centre Pointe Lounge and cafes in selected buildings. The University Commons combines Cranston Marche 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 SUNY Fredonia Ticket Office. Dods Hall, one of two athletic facilities, contains classrooms, gymnasias, the 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 new soccer/lacrosse stadium opened in 2007, and a new fitness center will open in 2013.

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. A 46,000-square-foot addition to the arts center is in the design stage.

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 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 18 million volumes that comprise the holdings of the SUNY libraries. Over 50,000 periodical titles are available online along with extensive collections of microforms and DVDs. The Music Library houses more than 22,000 sound recordings and over 25,000 musical scores and performance parts. Archives and Special Collections contain extensive holdings, including the university archives, local history materials, records of the Holland Land Company, books and manuscripts of the noted Austrian author Stefan Zweig, the Sigurd Rascher Saxophone Collection, and the archives of the West Valley Nuclear Coalition. Online resources and reference help is available 24x7. Reed Library is also the home of the Carnahan-Jackson Center for Learning and Scholarship, the Learning Center, the Office of Disability Support Services for Students, Academic Advising and the Professional Development Center. With seating for 500-plus in many different areas, there is always a place to study in Reed Library. Located at the perimeter of Reed Library is the Office of the Registrar.

Maytum Hall is the home of administrative and business offices as well as Academic Affairs, Student Affairs, Financial Aid, Student Accounts, and Administrative Information Technology (AIT). For a portion of the 2012-2013 academic year, all offices in Maytum will continue to be relocated as a renovation of the building is completed. Academic Affairs, and Academic Information Technology (AIT) administration, programming and data communication are located in Reed Library; Student Affairs in Gregory Hall, and Financial Aid and Student Accounts/Cashier in Thompson Hall.

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, Graduate Studies and Research; and Institutional Research, Planning and Assessment. Jewett Hall and Houghton Hall are the natural and physical sciences buildings containing classrooms and laboratories, and

offices for the departments of Biology, Chemistry and Biochemistry, Geosciences and Physics. Groundbreaking for a new \$60 million Science Center, which will connect to Houghton Hall, was held in September 2011. Thompson Hall was opened in the summer of 1973. In addition to the social science departments, the College of Education, the School of Business, 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 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 Public Relations. Alumni House 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 SUNY 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** SUNY 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.

SUNY Fredonia Mission Statement

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

To offer programs at the baccalaureate and master's degree levels – within and across the disciplines that comprise the liberal arts and sciences and in professional and applied fields – consistent with the university's existing strengths, its participation in the SUNY system, and the contemporary and future needs of a changing society; and to affirm the centrality, in this enterprise, of a general education in the arts, humanities, and sciences.

To encourage teaching and learning in formal and informal settings on and off campus, as well as through field experiences, student support programs, services and activities, and advising and counseling.

To promote involvement in the scholarly and creative enterprise by recognizing and supporting a broad range of intellectual activity; basic research and artistic creation; understanding, synthesis, and interpretation of existing knowledge and art; sponsored projects; and research that seeks to improve methods of teaching and learning. The university values and supports scholarly activity that directly involves students in the creative process and recognizes that the patterns of knowledge at the frontiers of research increasingly cross disciplinary boundaries.

To contribute to the intellectual, social, and emotional development of students by preserving the quality of campus life beyond the classroom and laboratory, by insuring a rich variety of experiences within a congenial residential atmosphere and an engaging physical environment, and by encouraging a supportive sense of community.

To develop and support service to individuals and organizations beyond the campus by opening the university's extensive educational, recreational, and

cultural facilities to the community; by providing opportunities to attend lectures, athletic, and cultural events, by operating programs and clinics in association with specialized instructional programs, and by encouraging faculty and staff to contribute their expertise to the variety of community-based endeavors for which it may be of value.

To commit the university to education that provides an awareness of global interdependence and cultural diversity through its curricular and co-curricular activities. Through active recruitment of students, faculty, and staff from under-represented populations and the inclusion of this diversity in its programs, the university seeks to provide its students with the academic and personal richness afforded by exposure to such pluralistic perspectives.

To draw upon and contribute to the academic resources of the State University of New York and, in the context of excellence, to further SUNY's mission of providing accessible higher education to the diverse citizenry of New York State which the university serves.

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.

SUNY 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. (730) 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.

SUNY Fredonia Ideals

SUNY 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.

SUNY 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

SUNY 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 Director of Affirmative Action, 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.

University Calendar 2012-2013

Fall 2012

Aug. 26 (Sun.)	Registration
Aug. 27 (M)	First Day of Classes
Sept. 3 (M)	Labor Day - No Classes
Oct. 11-12 (Th, F)	Fall Break
Nov. 19-23 (M-F)	Thanksgiving Break
Dec. 17-21 (M-F)	Final Exams

Spring 2013

Jan. 27 (Sun.)	Registration
Jan. 28 (M)	First Day of Classes
March 25-29 (M-F)	Spring Break
April 1 (M)	Travel Day - No Classes
May 13-17 (M-F)	Final Exams
May 18 (Sat.)	Commencement

Academic Calendar

Fall 2012

Aug. 26 (Sun.)	Registration
Aug. 27 (M)	First Day of Classes
Aug. 27-28 (M,T)	Schedule Changes via Internet

Aug. 31 (F)	Final day to DROP courses*
Sept. 3 (M)	No Classes - Labor Day
Sept. 5 (W)	Final day to ADD courses*
Sept. 7 (F)	Final day to elect PASS/FAIL*
Sept. 11 (T)	Final day to apply for December Graduation
Oct. 11-12 (Th, F)	No classes - Fall Break
Oct. 24 (W)	Mid-term grades due from faculty
Oct. 26 (F)	Graduate registration for Spring 2013 begins
Oct./Nov. 29-2 (M-F)	Undergraduate Advisement for Spring 2013
Nov. 2 (F)	Final day to WITHDRAW from courses*
Nov. 2 (F)	Final day for first-semester Freshmen to DROP courses*
Nov. 5 (M)	Undergraduate registration for Spring 2013 begins
Nov. 19-23 (M-F)	No Classes - Thanksgiving Break
Nov. 28 (M)	Last day to withdraw from the University
Dec. 14 (F)	Last day of classes
Dec. 17-21 (M-F)	Final Exams
Dec. 27 (W)	Final grades due from faculty

Spring 2013

Jan. 27 (Sun.)	Registration
Jan. 28 (M)	First Day of Classes
Jan. 28-29 (M,T)	Schedule Changes via Internet
Feb. 1 (F)	Final day to DROP courses*
Feb. 5 (T)	Final day to ADD courses*
Feb. 8 (F)	Final day to elect PASS/FAIL*
Feb. 12 (T)	Final day to apply for May Graduation
Mar. 20 (W)	Mid-term grades due from faculty
Mar. 22 (F)	Graduate registration for Fall 2013 begins
Mar. 25-29 (M-F)	No classes - Spring Break
Apr. 1 (M)	No Classes - Travel Day
Apr. 2-8 (T-M)	Undergraduate Advisement for Fall 2013
Apr. 8 (M)	Final day to WITHDRAW from courses*

Apr. 8 (M)	Final day for first-semester Freshmen to DROP courses*
April 9 (T)	Undergraduate registration for Fall 2013 begins
Apr. 29 (M)	Last day to withdraw from the University
May 10 (F)	Last day of classes
May 13-17 (M-F)	Final Exams
May 18 (Sat.)	Commencement
May 22 (W)	Final grades due from faculty

*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.

Policy and program information in this catalog

Policy and program information in the University Catalog is accurate as of July 1, 2012. However, some information is subject to change per federal, state or SUNY guidelines. Updated information may be obtained from the Office of Admissions and/or the Office of Graduate Studies and Research, State University of New York at Fredonia, Fredonia, NY 14063.

Academic Programs and Area Specializations

Undergraduate Academic Programs and Area Specializations

- Accounting
- Acting (see page 164)
- Adolescence Education (see page 57)
 - Biology (see page 19)
 - Chemistry (see page 29)
 - Earth Science (see page 86)
 - English (see page 79)
 - French (see page 122)
 - Mathematics (see page 116)
 - Music (see page 126)
 - Physics (see page 139)
 - Social Studies (see page 89)
 - Spanish (see page 122)
- African American Studies (see page 103)
- American Indian Studies (see page 104)
- American Studies (see page 98)
- Art (see page 169)
 - Art History (see page 170)
 - Animation and Illustration (see page 171)
 - Ceramics (see page 171)
 - Drawing and Painting (see page 171)
 - Graphic Design (see page 171)
 - Media Arts (see page 171)
 - Photography (see page 171)
 - Sculpture (see page 171)
- Arts Administration (see page 99)
- Biology (see page 18)
 - Adolescence Education (see page 19)
 - Biochemistry (see page 16)
 - Environmental Sciences (see page 30)
 - Medical Technology (see page 119)
 - Molecular Genetics (see page 123)
 - Pre-Dental (see page 148)
 - Pre-Medicine (see page 148)
 - Pre-Optometry (see page 148)
 - Pre-Veterinary (see page 148)
- Business (see page 22)
 - Accounting
 - Business Administration (see page 23)
 - Economics (see page 48)
 - Finance (see page 24)
 - Management (see page 25)
 - Marketing (see page 25)
 - Music Industry (see page 26)
 - Public Accountancy (see page 24) (150 credit hour program)
- Chemistry (see page 29)
 - Adolescence Education (see page 29)
 - Biochemistry (see page 16)
 - Environmental Science (see page 30)
 - Geochemistry (see page 85)
 - Pre-Medicine (see page 148)
- Communication (see page 33)
 - Audio/Radio Production
 - Communication Studies
 - Journalism
 - Media Management
 - Public Relations
 - Video Production
- Communication Disorders and Sciences (see page 37)
- Computer Science (see page 42)
 - *Advanced Computing
 - *Software Development
 - *General Track
- Computer Information Systems (see page 43)
 - *Systems Development
 - *Systems Management
- Criminal Justice (see page 46)
- Dance (see page 165)
- Dance Studio Administration (see page 104)
- Earth Science Adolescence Education (see page 86)
- Economics (see page 48)
 - Economic Studies (see page 49)
- Education (see page 50)
 - Adolescence Education (see page 57)
 - Biology (see page 19)
 - Chemistry (see page 29)
 - Earth Science (see page 86)
 - English (see page 79)
 - French (see page 122)
 - Mathematics (see page 116)
 - Music (see page 126)
 - Physics (see page 139)
 - Social Studies (see page 89)
 - Spanish (see page 122)
 - Childhood Education (see page 61)
 - Childhood Inclusive Education (see page 61)
 - Early Childhood Education
 - Early Childhood-Childhood Education (see page 63)
 - Middle Childhood Spec. - Math. (see page 117)
 - Middle School Extensions (see page 55)
- Engineering (Cooperative) (see page 76)
 - Programs with:
 - Case Western Reserve University
 - Clarkson University
 - Columbia University
 - Cornell University
 - Louisiana Technological University
 - New York State College of Ceramics at Alfred
 - Ohio State University
 - Penn State Erie
 - Rensselaer Polytechnic University
 - Rochester Institute of Technology
 - SUNY Binghamton
 - SUNY Buffalo
 - Syracuse University
 - Tri-State University
- English (see page 79)
 - Adolescence Education (see page 79)
 - Writing (see page 80)
- Environmental Science (see page 30)
- Exercise Science (see page 159)
- Film Studies (see page 105)

- Forensics (see page 83)
 French (see page 121)
 Adolescence Education (see page 122)
 Geographic Information Systems (see page 105)
 Geosciences (see page 84)
 Adolescence Education (see page 86)
 Earth Science (see page 86)
 Environmental Science (see page 30)
 Geochemistry (see page 85)
 Geographic Information Systems (see page 105)
 Geology (see page 84)
 Geophysics (see page 85)
 History (see page 88)
 Social Studies Adolescence Education (see page 89)
 Industrial Management (see page 90)
 Interdisciplinary Studies (see page 93)
 African American Studies (see page 103)
 American Indian Studies (see page 104)
 American Studies (see page 98)
 Arts Administration (see page 99)
 Environmental Science (see page 30)
 Exercise Science (see page 159)
 Film Studies
 Geographic Information Systems (see page 105)
 International Studies (see page 144)
 *Advanced Industrial Societies
 *Cultural Studies of the Americas
 *Developing Nations
 *European Cultural Studies
 *International Political Economy
 *Peace and Conflict
 Italian Studies (see page 106)
 Latino Studies (see page 107)
 Leadership Studies (see page 107)
 Multi-ethnic Studies (see page 108)
 Museum Studies (see page 109)
 Pre-Law Advisement (see page 148)
 Public Health (see page 110)
 Religious Studies (see page 111)
 Russian, East-European & Eurasian Studies (see page 111)
 Sport & Exercise Science
 Sport & Exercise Psychology (see page 100)
 Statistics (see page 118)
 Web Programming (see page 45)
 Women's Studies (see page 173)
 International Studies (see page 144)
 Leadership Studies (see page 107)
 Mathematical Sciences (see page 115)
 Adolescence Education (see page 116)
 Applied Mathematics (see page 116)
 *Finance/Economics
 *Mathematics/Physics
 *Statistics/Operations Research
 Mathematics (see page 115)
 Middle Childhood Education (see page 117)
 Media Arts (see page 169)
 Visual Arts & New Media B.A. (see page 171)
 Media Arts B.F.A. (see page 171)
 Medical Technology (see page 119)
 Modern Languages (see page 121)
 French (see page 121)
 Spanish (see page 121)
 Molecular Genetics (see page 123)
 Music (see page 125)
 Composition (see page 128)
 Jazz Studies (see page 131)
 Musical Theatre (see page 130)
 Music Education (see page 126)
 *General Choral
 *Instrumental
 Music Therapy (see page 129)
 Performance (see page 128)
 Sound Recording Technology (see page 156)
 Music Industry (see page 26)
 Philosophy (see page 138)
 Physics (see page 139)
 Adolescence Education (see page 139)
 Engineering (see page 76)
 Geophysics (see page 141)
 Mathematics/Physics (see page 141)
 Political Science (see page 144)
 *American Politics
 *Law and Politics
 *Political Theory
 *World Politics
 Pre-Dental (see page 148)
 Pre-Law (see page 148)
 Pre-Medicine (see page 148)
 Pre-Optometry (see page 148)
 Pre-Veterinary (see page 148)
 Psychology (see page 150)
 Public Accountancy (150 credit hour program)
 Public Health (see page 110)
 Religious Studies (see page 111)
 Russian, East-European & Eurasian Studies (see page 111)
 Social Studies Adolescence Education (see page 89)
 Social Work (see page 153)
 Sociology (see page 156)
 Anthropology (see page 156)
 Criminal Justice (see page 46)
 Social Work (see page 153)
 Sound Recording Technology (see page 156)
 Spanish (see page 121)
 Adolescence Education (see page 122)
 Sport & Exercise Psychology (see page 100)
 Sport Management & Exercise Science (see page 158)
 Sport Administration (see page 112)
 Sport Management (see page 158)
 Statistics (see page 118)
 Theatre (see page 161)
 Acting (see page 164)
 Dance (see page 165)
 Musical Theatre (see page 130)
 Theatrical Production and Design (see page 166)
 Visual Arts and New Media (see page 169)
 Web Programming (see page 45)
 Women's Studies (see page 101)
 Writing (see page 80)
 * indicates area specialization

Graduate Academic Programs

Biology (see page 21)
 Chemistry (see page 32)
 Communication Disorders and Sciences (see page 39)
 Education (see page 65)
 English (see page 81)
 Interdisciplinary Studies (see page 97)
 Mathematical Sciences (see page 118)
 Music (see page 134)
 Music Therapy (see page 135)
 Science Education (see page 152)

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 SUNY Fredonia:

Accounting (see page 27)
 African American Studies (see page 103)
 American Indian Studies (see page 104)
 American Studies (see page 98)
 Anthropology (see page 156)
 Applied Mathematics (see page 118)
 Art History (see page 172)
 Athletic Coaching (see page 158)
 Biology (see page 20)
 Business Administration (see page 27)
 Chemistry (see page 31)
 Communication (see page 36)
 Communication Disorders & Sciences (see page 38)
 Computer Information Systems (see page 44)
 Computer Science (see page 44)
 Criminal Justice (see page 46)
 Dance (see page 167)
 Dance Studio Administration (see page 104)
 Earth Science (see page 87)
 Economics (see page 48)
 English (see page 80)
 Film Studies
 French (see page 123)
 Geographic Information Systems
 Geosciences (see page 84)
 History (see page 90)
 Industrial-Organizational Psychology (see page 151)
 International Studies (see page 147)
 Jazz (see Music)
 Latino Studies (see page 107)
 Leadership Studies (see page 107)
 Mathematics (see page 118)
 Multi-ethnic Studies (see page 108)
 Museum Studies (see page 109)
 Music (see Music)
 Philosophy (see page 138)
 Physics (see page 142)
 Political Science (see page 144)
 Psychology (see page 151)
 Public Health (see page 110)
 Religious Studies (see page 111)

Russian, East-European & Eurasian Studies (see page 111)
 School and Counseling Psychology (see page 151)
 Sociology (see page 156)
 Spanish (see page 123)
 Sport and Exercise Science (see page 158)
 Sport Administration (see page 112)
 Statistics (see page 118)
 Theatre Arts (see page 167)
 Visual Arts/New Media (see page 173)
 Web Programming (see page 45)
 Women's Studies (see Interdisciplinary Studies Minors)
 Writing (see page 80)

Academic Organization of the Campus

Below is a listing of the Deans, Associate and Assistant Provosts, and Associate Deans all reporting to the Provost and Vice President for Academic Affairs. All of the 79 Undergraduate programs, 16 Graduate degree programs, and 7 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
 Dr. Kevin Kearns, Interim Provost and Vice President for Academic Affairs
 119 Reed Library
 (716) 673-3335
kevin.kearns@fredonia.edu

Dr. Adrienne McCormick, Interim Assistant Provost for Special Initiatives
 135 Reed Library
 (716) 673-4708
adrienne.mccormick@fredonia.edu

College of Arts and Sciences
 Dr. John Kijinski, Dean
 111 Reed Library
 (716) 673-3174
john.kijinski@fredonia.edu

School of Business
 Dr. Russell Boisjoly, Dean
 E336 Thompson Hall
 (716) 673-4813
business.school@fredonia.edu

College of Education
 Dr. Christine Givner, Dean
 126 Reed Library

(716) 673-3311
education.college@fredonia.edu

Graduate Studies
Dr. Kevin Kearns, Interim Provost and Vice President for
Academic Affairs
2142 Fenton Hall
(716) 673-3808
graduate.studies@fredonia.edu

Interdisciplinary Studies
Dr. Roger Byrne, Associate Dean College of Arts &
Sciences
111 Reed Library
(716) 673-3173
interdisciplinary.studies@fredonia.edu

General Education (CCC)
Dr. Melinda Karnes, Associate Provost for Curriculum &
Academic Support
126 Reed Library
(716) 673-3717
CCC.Office@fredonia.edu

Associate Deans

Dr. Roger Byrne, Associate Dean
College of Arts and Sciences
111 Reed Library
roger.byrne@fredonia.edu

Dr. Jamar Pickreign, Associate Dean
College of Education
E250 Thompson Hall
jamar.pickreign@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.

All Programs

Listed below are SUNY Fredonia's registered degree programs as of July 15, 2012. 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	0502	B.S.
Applied Mathematics (see page 116)	1703	B.S.
Biochemistry (see page 16)	0414	B.S.
Biology (see page 18)	0401	B.S.
Business Administration (see page 22):	0506	B.S.
Business Admin.:	0506	B.S.
Finance (see page 22)		
Business Admin.:	0506	B.S.
Management (see page 25)		
Business Admin.:	0506	B.S.
Marketing (see page 25)		
Cooperative M.B.A. (see page 27)	0506	
Chemistry (see page 30)	1905	B.S.
Childhood Education 1-6, 7-9 Extension (see page 61)	0802	B.S.Ed.
Childhood Inclusive Education 1-6, 7-9 Extension (see page 61)	0808	B.S. Ed.
Communication:		
Communication:		
Audio/Radio Production (see page 33)	0603	B.S.
Communication:		
Communication Studies (see page 33)	0601	B.S.
Communication:	0602	B.A.
Journalism (see page 33)		
Communication: Media Management (see page 33)	0699	B.S.

Communication: Public Relations (see page 33)	0604	B.S.	Musical Theatre (see page 164)	1004	B.F.A.
Communication: Video Production (see page 33)	0605	B.S.	Philosophy (see page 138)	1509	B.A.
Communication Disorders and Sciences (see page 37)	1220	B.S.	Physics (see page 139)	1902	B.S.
Computer Science (see page 42)	0701	B.S.	Political Science (see page 144)	2207	B.A.
Computer Information Systems (see page 43)	0702	B.S.	Psychology (see page 150)	2001	B.A./B.S.
Cooperative Engineering (see page 76)			Public Accountancy	0502	B.S.
Criminal Justice (see page 46)	2105	B.A.	Social Work (see page 153)	2104	B.S.
Dance (see page 165)	1008	B.F.A.	Sociology (see page 156)	2208	B.A.
Early Childhood Education (Birth-2)	0823	B.S.Ed.	Sound Recording Technology (see page 156)	1099	B.S.
Early Childhood-Childhood Education (see page 63)	0802	B.S.Ed.	Spanish (see page 121)	1105	B.A.
Earth Science (see page 86)	1917	B.A.	Sport Management (see page 158)	0599	B.S.
Economics (see page 48)	2204	B.A.	Teacher Certification Areas in Adolescence Education:		
English (see page 79)	1501	B.A.	Biology (see page 19)	0401.01	B.S.
French (see page 121)	1102	B.A.	Chemistry (see page 29)	1905.01	B.S.
Geochemistry (see page 85)	1915	B.S.	Earth Science (see page 86)	1917.01	B.S.
Geology (see page 84)	1914	B.S.	English (see page 79)	1501.01	B.A.
Geophysics (see page 85)	1916	B.S.	French (see page 122)	1102.01	B.A.
History (see page 88)	2205	B.A.	Mathematics (see page 116)	1701.01	B.S.
Industrial Management (see page 90)	0599	B.S.	Mathematics Middle Childhood 5-9 (see page 117)	0804.03	B.S.
Interdisciplinary Studies	4901	B.A./B.S.	Physics (see page 139)	1902.01	B.S.
Mathematics (see page 115)	1701	B.S.	Social Studies (see page 89)	2201.01	B.A.
Mathematics-Physics (see page 141)	1799	B.S.	Spanish (see page 122)	1105.01	B.A.
Medical Technology (see page 119)	1223	B.S.	Theatre Arts:		
Middle Childhood Specialist- Mathematics (see page 117)	0804	B.S.	Theatre Arts (see page 163)	1007	B.A.
Molecular Genetics (see page 123)	0499	B.S.	Acting (see page 164)	1007	B.F.A.
Music:			Theatrical Production and Design (see page 166)	1007	B.F.A.
Music-Applied (see page 126)	1004	B.A.	Visual Arts and New Media:		
Music: Composition (see page 128)	1004	Mus.B.	Visual Arts and New Media (see page 171)	1002	B.A.
Music: Performance (see page 128)	1004	Mus.B.	Animation and Illustration (see page 171)	1009	B.F.A.
Music Education (see page 126)	0832	Mus.B.	Ceramics (see page 171)	1009	B.F.A.
Music Therapy (see page 129)	1099	B.S.	Drawing and Painting (see page 171)	1002	B.F.A.
			Graphic Design (see page 171)	1009	B.F.A.

Media Arts (see page 171)	1099	B.F.A.
Photography (see page 171)	1011	B.F.A.
Sculpture (see page 171)	1002	B.F.A.
Visual Arts: Art History (see page 170)	1003	B.A.

Graduate Programs	HEGIS Code	Degree
Adolescence Science Education http://www.fredonia.edu/gradstudies/mat.asp	0834	M.A.T.
Bilingual Ed ITI (see page 74)	0899.60	Adv.Cert.
Biology	0401	M.S.
Chemistry (see page 32)	1905	M.S.
Curriculum & Instruction in Inclusive Education	0829	M.S.Ed.
English (see page 81)	1501	M.A.
Interdisciplinary Studies (see page 97)	4901	M.A./M.S.
Literacy Education (B-Grade 6) (see page 69)	0830	M.S. Ed.
Literacy Education (Grades 5-12) (see page 70)	0830	M.S. Ed.
Mathematics 7-12 (see page 118)	1701.01	M.S. Ed
Music Education K-12 (see page 134)	0832	M.M.
Music Performance (see page 135)	1004	M.M.
Music Theory-Composition (see page 136)	1004.10	M.M.
Music Therapy (see page 135)	1099	M.M.
School Building Leadership (see page 75)	0828	Adv.Cert.
School District Leadership (see page 75)	0827	Adv.Cert.
School District Leadership (Non-Cert) (see page 75)	0827	Adv.Cert
Speech Language Pathology (see page 39)	1220	M.S.
TESOL (see page 71)	1508	M.S.Ed.
TESOL	1508	Adv.Cert.
TESOL ITI (see page 73)	0899.60	Adv.Cert.
TESOL Special Education: ITI (see page 73)	0899.60	Adv.Cert.

Deactivated Programs*	HEGIS Code	Degree
Accounting	0502	M.S.

Adolescence Social Studies	2201.01	M.S.Ed.
Anthropology	2202	B.A.
Biology 7-12	0401.01	B.S., M.S.Ed.
Business Administration: Management	0506	B.S.
Information Systems		
Chemistry 7-12	1905.01	M.S.Ed.
Elementary Education N-6	08002	M.S.Ed.
English 7-12	1501.01	M.S.Ed.
German	1103	B.A.
Health Services Admin.	1202	B.S.
Interdisciplinary Studies:	4901	B.A.
Legal Studies		
Mathematics	1701	M.A.
Media Arts	1099	B.A.
Music History and Literature	1006	B.A.
Music Theory	1004.10	B.A.
School Administrator and Supervisor	0828	Adv.Cert
Speech & Hearing Handicapped	0815	M.S.Ed.

*Deactivated programs are defined as programs that SUNY 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.

Accounting

The Accounting major is housed in the School of Business. SUNY Fredonia offers two Accounting programs: 120-credit hour Bachelor of Science in Accounting and the 150-credit hour Bachelor of Science in Public Accountancy (see page 24) that qualifies graduates for CPA licensure in New York State.

Acting

See Theatre and Dance (see page 161)

American Studies

The Bachelor of Arts in Interdisciplinary Studies - American Studies is one of the degree programs in the Interdisciplinary Studies program group. Please see the Interdisciplinary Studies Major Program section of the catalog for information on this major.

The American Studies minor program is also included in the Interdisciplinary Studies section of the catalog

Arts Administration

The Bachelor of Arts in Interdisciplinary Studies - Arts Administration is one of the degree programs in the Interdisciplinary Studies program group. Please see the Interdisciplinary Studies Major Program section of the catalog for information on this major.

Art

See Visual Arts and New Media (see page 169)

Biochemistry

Office: 204 Houghton Hall
(716) 673-3287

Matthew A. Fountain, Coordinator

Email: biochemistry.program@fredonia.edu

Website: <http://www.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- BIOL 132	Principles of Biology I & Lab
BIOL 133- BIOL 134	Principles of Biology II & Lab
CHEM 115/ CHEM 125	General Chemistry Lecture I & General Chemistry I Lab
CHEM 116/ CHEM 126	General Chemistry Lecture II & General Chemistry II Lab
BIOL 237- BIOL 238	Genetics & Lab
CHEM 215/ CHEM 225	Organic Chemistry Lecture I & Organic Chemistry I Lab
CHEM 216/ CHEM 226 or CHEM 230	Organic Chemistry Lecture II & Organic Chemistry Lab II or Honors Organic Lab
BIOL 333- BIOL 334	Biochemistry & Lab
CHEM 317/ CHEM 327	Analytical Chemistry, Quantitative Analysis & Analytical Chemistry I Lab
BIOL 397/ CHEM 397	Biochemistry Seminar I
BIOL 436	Molecular Biology
CHEM 465/ BIOL 465	Advanced Experimental Biochemistry
CHEM 475/ BIOL 475	Advanced Biochemistry
CHEM 497/ BIOL 497	Biochemistry Seminar II (Capstone experience)

Track I - Chemical Emphasis (32 credit hours)

MATH 122- MATH 123	University Calculus I & II
PHYS 230/ PHYS 232	University Physics I & Lab
PHYS 231/ PHYS 233	University Physics II & Lab
CHEM 315/ CHEM 325	Introduction to Physical Chemistry & Lab
CHEM 316/ CHEM 326	Advanced Physical Chemistry & Lab

6 credits of approved upper-level electives in Biology or Chemistry

Track II - Biological Emphasis (29-34 credit hours)

MATH 122- MATH 123	University Calculus I & II
PHYS 121/ PHYS 123	College Physics I & Lab

and PHYS 122/ PHYS 124	College Physics II & Lab
or	
PHYS 230/ PHYS 232 and PHYS 231/ PHYS 233	University Physics I & Lab University Physics II & Lab
BIOL 336- BIOL 337	Mammalian Physiology & Lab
CHEM 315	Physical Chemistry I

9 credits of approved upper-level electives in Biology or Chemistry. Three credit hours must be Chemistry electives.

Approved Chemistry Electives

CHEM 318/ CHEM 328	Analytical Chemistry II, Instrumental Analysis & Lab
CHEM 395	Introduction to Research
CHEM 391/ CHEM 491	Independent Lab Research
CHEM 407	Organometallics
CHEM 412	Advanced Organic Chemistry
CHEM 417	Polymer Chemistry
CHEM 462	Inorganic Chemistry
CHEM 473	Environmental Aquatic Chemistry
CHEM 481	Special Topics in Chemistry*

**must be approved by coordinator*

Approved Biology Electives

BIOL 336	Mammalian Physiology
BIOL 338	Microbiology
BIOL 419	Genes and Genomes
BIOL 435	Developmental Biology
BIOL 440	Undergraduate Research
BIOL 443	Plant Physiology
BIOL 450- 451	Modern Concepts in Biology (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.

Biology

(See also Medical Technology (see page 119), Molecular Genetics (see page 123), and Pre-Medicine (see page 148))

Office: 112 Jewett Hall
(716) 673-3282

Patricia Smith Astry, *Chairperson*

Email: biology.department@fredonia.edu

Website: <http://www.fredonia.edu/departments/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 Program 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, Molecular Genetics, Medical Technology, and Biology Adolescence Education, as well as Master of Science degree programs to students who have already obtained a B.S. in Biology. The department also participates in the Biochemistry, Cooperative Engineering, and the Environmental Sciences 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.

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 53 to 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 Bachelor of Science degree

Requirements for the Bachelor of Science Degree in Biology

Core Program (37 credit hours)

BIOL 131-	Principles of Biology I & Lab
BIOL 132	
BIOL 133-	Principles of Biology II & Lab
BIOL 134	
BIOL 237-	Genetics & Lab
BIOL 238	
BIOL 243-	Biodiversity & Lab
BIOL 244	
BIOL 330-	General Ecology & Lab
BIOL 331	
BIOL 333-	Biochemistry & Lab
BIOL 334	
BIOL 431	Senior Seminar

Twelve additional credit hours of biology electives at the 300 to 400 level

Required supporting course work (27 credit hours)

CHEM 115/	General Chemistry I & Lab
-----------	---------------------------

CHEM 125
and
CHEM 116/
CHEM 126 General Chemistry II & Lab

CHEM 215/
CHEM 225
and
CHEM 216/
CHEM 226 Organic Chemistry I & Lab
Organic Chemistry II & Lab

STAT 250 Statistics for Scientists

PHYS 121/
PHYS 123
and
PHYS 122/
PHYS 124 College Physics I & Lab
College Physics II & Lab

Or

PHYS 230/
PHYS 232
and
PHYS 231/
PHYS 233 University Physics I & Lab
University Physics II & Lab

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

Capstone Experience: Senior Seminar

Biology Adolescence Education Bachelor of Science degree

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- Principles of Biology I & Lab
BIOL 132
BIOL 133- Principles of Biology II & Lab
BIOL 134
BIOL 237- Genetics & Lab
BIOL 238
BIOL 243- Biodiversity & Lab
BIOL 244
BIOL 330- General Ecology & Lab
BIOL 331
BIOL 333- Biochemistry & Lab
BIOL 334
BIOL 421 Biological Conservation
BIOL 431 Senior Seminar

Nine additional credit hours of biology electives at the 300 to 400 level

Required supporting course work (27 credit hours)

CHEM 115/
CHEM 125 General Chemistry I & Lab
CHEM 116/
CHEM 126 General Chemistry II & Lab
CHEM 215/
CHEM 225 Organic Chemistry I & Lab
CHEM 216/
CHEM 226 Organic Chemistry II & Lab
STAT 250 Statistics for Scientists
PHYS 121/
College Physics I & Lab

PHYS 123
and
PHYS 122/
PHYS 124 College Physics II & Lab

or

PHYS 230/
PHYS 232 University Physics I & Lab
and
PHYS 231/
PHYS 233 University Physics II & Lab

Required education course work (39 credit hours)

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

Students should refer to the Education (see page 50) 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 local equivalent). Requirement is fulfilled.
- Scores of 65 percent - 84 percent on High School N.Y.S. Regents Exam (or local equivalent): 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 SUNY Fredonia proficiency exam.
- Scores below 65 percent on High School N.Y.S. Regents Exam (or local equivalent) or if student did not take a N.Y.S. Regents or local Exam: Student needs to take an Elementary I level course and an Elementary II level course of the same language or equivalent.

- Note: The General Education foreign language requirement differs from the certification requirement, and must be met before degree conferral.

Medical Technology Bachelor of Science degree

For information on this program, see Medical Technology/Biomedical Technology (see page 119).

Molecular Genetics Bachelor of Science degree

For information on this program, see Molecular Genetics (see page 123).

Biology Minor**Requirements for the Minor in Biology**

A total of 22 credit hours of biology including Principles of Biology I and II with labs (BIOL) 131,132, 133 and 134; either Biodiversity and General Ecology with labs (BIOL) 243, 244, 330, 331 or Genetics and Biochemistry with labs (BIOL) 237, 238, 333, 334 plus 6 credit hours of biology courses at the 300 or 400 level (not including BIOL 440).

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.

Biology Graduate Program

Office: 203 Jewett Hall
(716) 673-3282

Patricia Smith Astry, Chairperson

Karry Kazial, Graduate Coordinator

Email: biology.department@fredonia.edu

Website:

<http://www.fredonia.edu/department/biology/grad.asp>

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 Master of Science degree

Departmental Requirements for Admission to the Program without Deficiencies:

An undergraduate major in the Life Sciences with requisite evidence of training and motivation necessary to succeed in graduate study. Supporting science background to include physics, math, and organic chemistry.

The Graduate Record Exam (GRE) is strongly recommended; applicants should have GRE scores forwarded to SUNY Fredonia.

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 thesis advisor and graduate committee. The Department of Biology strongly recommends broad training in biology. Specific courses chosen will depend on the student's background and interests, but a student should design a program combining molecular, organismal, and population biology courses.

A. Thesis Option

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

Seminar (three semesters)

Thesis Research

Appropriate course work as advised (at least 21 credit hours)

Written Thesis

Final Comprehensive Examination

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

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

Business

Office: E336B Thompson Hall
(716) 673-4813

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

Email: business.school@fredonia.edu

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

The School of Business includes the Department of Business Administration and the Department of Economics. It offers undergraduate degrees in Accounting, Business Administration, Music Industry, and Economics. The Mission of the School of Business contains three elements:

- The first and foremost element is to provide “accessible” educational opportunities to Western New York, and to do so by engaging faculty who are dedicated to developing, improving and delivering an effective curriculum in business and economics. The curriculum concerns the traditional business subjects of accounting, economics, finance, management and marketing, and also the cross-disciplinary subjects of music business and information systems. In addition, the education includes strong components in ethics, global-cultural awareness, technology and leadership.
- The second element is to engage faculty who maintain currency in their subject areas through discipline specific, professional and instructional research. In addition, the business and economics faculty collaborates with the more capable students in conducting research that leads to success in student competitions and publication.
- The third element is to engage faculty who provide service to the university, to academic and professional organizations, and toward the development of its region.

In pursuit of its educational mission, the School of Business declares the following assessable educational goals:

- Through its core courses, students develop the communication skills, the problem solving skills, the knowledge and recognition of business ethics, and the knowledge of international institutions and cultures necessary for professional business careers.
- Through major and core course work, students develop the knowledge necessary for career success, for professional certifications where applicable, and for success in graduate education.
- Through student clubs and internships, students learn career potentials, and develop leadership skills.

The School of Business is currently a candidate for accreditation with the Association to Advance Collegiate Schools of Business (AACSB International). The Accounting and Business Administration programs at SUNY Fredonia are candidates for accreditation by the International Assembly for Collegiate Business Education. The Department of Business Administration presently has a number of formal and informal agreements with several

universities that allow students to matriculate into accelerated B.S./M.B.A. programs.

Business Administration

Office: E336 Thompson Hall
(716) 673-3505

Dr. Mojtaba Seyedian, Chairperson

Email: 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, Business Administration, and Music Industry. 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 domestic and international leadership roles in business management. While the programs offered are career-oriented, the department realizes that successful contemporary 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 department offers six separate Bachelor of Science degree programs:

- B.S. Accounting (120-Hour Program)
- B.S. Public Accountancy (150-Hour CPA Program)
- B.S. Business Administration – Finance
- B.S. Business Administration – Management
- B.S. Business Administration – Marketing
- B.S. Business Administration - Music Industry

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, artist management, and personnel administration.

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; Students in Free Enterprise; the Accounting Society; and the Music Industry Club. 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 Students in Free Enterprise Team competes in regional and 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 Music Industry Club is involved in activities such as artist promotion, live performances, conference attendance and special campus and community events with a music industry focus. 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. Out of the 120 credits needed for a B.S. degree, interested students are allowed up to 24 credits of internship. The department offers a number of internship opportunities with various local and regional firms and organizations such as SUNY Fredonia Technology Incubator, Key Bank, Buffalo Sabres, Paychex, Inc., Smith Barney, and Cliffstar Corporation.

Honors and Awards

Students who excel in their studies are eligible for recognition through membership in the campus chapters of Delta Mu Delta (a national honor society in business administration) and the Financial Management Association National Honor Society. 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 CPA's 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 SIFE 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 Tracy Bennett Accounting Scholarship to an outstanding junior majoring in accounting;
- the Morris and Marian Poumitt Scholarship, given to an outstanding student; and
- the Gary M. Tripp Memorial Scholarship to a junior finance major with outstanding scholastics.

Accounting Bachelor of Science degree

Requirements for the Bachelor of Science Degree in Accounting (69 credit hours)

A. General Course Requirements (45 credit hours):

Supporting Courses (9 credit hours)

MATH 120 Survey of Calculus I

CSIT 104 Introduction to Microcomputer Software

Or

CSIT 151 Introduction to Information Systems

CSIT 251 Information Systems Structures

Lower Level Business Core Courses (15 credit hours)

ECON 200 Fundamentals of Statistics for Business Administration and Economics

ACCT 201 Principles of Financial Accounting

ACCT 202 Principles of Managerial Accounting

ECON 201 Principles of Macroeconomics

ECON 202 Principles of Microeconomics

Upper Level Business Core Courses (21 credit hours)

BUAD 300 Statistical Analysis

ACCT 311 Business Law I

BUAD 320 Managerial Finance

BUAD 323 Organizational Behavior

BUAD 327 Production and Operations Management I

BUAD 328 Marketing Foundations

BUAD 499 Strategic Management

B. Major Course Requirements (24 credit hours)

ACCT 250 Accounting Processes

ACCT 301 Intermediate Accounting I

ACCT 302 Intermediate Accounting II

ACCT 303 Cost Management

ACCT 304 Taxation I

ACCT 305 Taxation II

ACCT 405 Auditing

ACCT 407 Accounting Information Systems

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

D. Accounting majors must complete all courses in the Lower Level Business Core, the Upper Level Business Core, and the Major Requirements with a minimum grade of C-.

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

F. Accounting majors must complete an internship (ACCT 480) or a service learning course (INDS 199, 299, 399, or 499) that is tied to a course in Accounting or Business Administration.

Public Accountancy (Accounting 150-Hour Program)

Beginning in 2009, in order to qualify for CPA licensure in New York State, students must complete 150 credit hours of courses. After completing 120-credit-hour B.S. in Accounting program the following courses will prepare and enable the student to take the CPA exam:

PHIL 218 Introduction to Ethics

ACCT 312 Business Law II

ACCT 401 Advanced Accounting

ACCT 440 Accounting Theory

ACCT 455 Advanced Auditing

Plus 15 credit hours of 200/300/400-level

ACCT/BUAD/ECON-prefixed courses and/or 300/400-level non-ACCT/BUAD/ECON-prefixed courses by advisement.

Business Administration: Finance Bachelor of Science degree

Requirements for the Bachelor of Science Degree in Business Administration - Finance (60 credit hours)

A. General Course Requirements (45 credit hours):

Supporting Courses (9 credit hours)

MATH 120 Survey of Calculus I

CSIT 104 Introduction to Microcomputer Software

or

CSIT 151 Introduction to Information Systems

CSIT 251 Information Systems Structures

Lower Level Business Core Courses (15 credit hours)

ECON 200 Fundamentals of Statistics for Business Administration and Economics

ACCT 201 Principles of Financial Accounting

ACCT 202 Principles of Managerial Accounting

ECON 201 Principles of Macroeconomics

ECON 202 Principles of Microeconomics

Upper Level Business Core Courses (21 credit hours)

BUAD 300 Statistical Analysis

BUAD 310 Legal Environment of Business

or

ACCT 311 Business Law I

BUAD 320 Managerial Finance

BUAD 323 Organizational Behavior

BUAD 327	Production and Operations Management I
BUAD 328	Marketing Foundations
BUAD 499	Strategic Management

B. Major Course Requirements for Finance Concentration (15 credit hours)

BUAD 372	Financial Investments
BUAD 417	Corporate Finance I
BUAD 418	Corporate Finance II

Plus 6 credit hours from the following:

BUAD 315	Principles of Business Finance
ECON 315	Money/Banking/Monetary Economics
BUAD 374	Small Business Finance
BUAD 416	Portfolio Management
BUAD 472	International Finance
BUAD 480	Internship

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 all courses in the Lower Level Business Core, the Upper Level Business Core, and the Major Requirements with a minimum grade of C-.

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

F. All Business Administration majors must complete an internship (BUAD 480) or a service learning course (INDS 199, 299, 399, or 499) that is tied to a course in Business Administration.

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.

Business Administration: Management Bachelor of Science degree

Requirements for the Bachelor of Science Degree in Business Administration - Management (60 credit hours)

A. General Course Requirements (45 credit hours):

Supporting Courses (9 credit hours)

MATH 120	Survey of Calculus I
----------	----------------------

CSIT 104	Introduction to Microcomputer Software
Or	
CSIT 151	Introduction to Information Systems

CSIT 251	Information Systems Structures
----------	--------------------------------

Lower Level Business Core Courses (15 credit hours)

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

ECON 201	Principles of Macroeconomics
ECON 202	Principles of Microeconomics

Upper Level Business Core Courses (21 credit hours)

BUAD 300	Statistical Analysis
----------	----------------------

BUAD 310	Legal Environment of Business
or	
ACCT 311	Business Law I

BUAD 320	Managerial Finance
BUAD 323	Organizational Behavior
BUAD 327	Production and Operations Management I
BUAD 328	Marketing Foundations
BUAD 499	Strategic Management

B. Major Course Requirements for Management Concentration (15 credit hours)

BUAD 330	Human Resource Management
BUAD 427	Production and Operations Management II

Plus 9 credit hours from the following:

BUAD 321	Management and Organizational Behavior
BUAD 350	Special Topics
ECON 350	Managerial Economics
BUAD 372	Financial Investments
BUAD 374	Small Business Finance
BUAD 417	Corporate Finance I
BUAD 440	Advanced Human Resource Management
BUAD 450	Senior Seminar
BUAD 480	Internship

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 all courses in the Lower Level Business Core, the Upper Level Business Core, and the Major Requirements with a minimum grade of C-

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

F. All Business Administration majors must complete an internship (BUAD 480) or a service learning course (INDS 199, 299, 399, or 499) that is tied to a course in Business Administration.

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.

Business Administration: Marketing Bachelor of Science degree

Requirements for the Bachelor of Science Degree in Business Administration - Marketing (60 credit hours)

A. General Course Requirements (45 credit hours):

Supporting Courses (9 credit hours)

MATH 120	Survey of Calculus I
----------	----------------------

CSIT 104	Introduction to Microcomputer Software
Or	
CSIT 151	Introduction to Information Systems
CSIT 251	Information Systems Structures

Lower Level Business Core Courses (15 credit hours)	
ECON 200	Fundamentals of Statistics for Business Administration and Economics
ACCT 201	Principles of Financial Accounting
ACCT 202	Principles of Managerial Accounting
ECON 201	Principles of Macroeconomics
ECON 202	Principles of Microeconomics

Upper Level Business Core Courses (21 credit hours)	
BUAD 300	Statistical Analysis

BUAD 310	Legal Environment of Business
Or	
ACCT 311	Business Law I

BUAD 320	Managerial Finance
BUAD 323	Organizational Behavior
BUAD 327	Production and Operations Management I
BUAD 328	Marketing Foundations
BUAD 499	Strategic Management

B. Major Course Requirements for Marketing Concentration (15 credit hours)

BUAD 340	Marketing Research
BUAD 342	Consumer Behavior
BUAD 445	Integrated Marketing Communications
BUAD 446	Sales Management

Plus 3 credit hours from the following:

BUAD 325	Principles of Marketing
BUAD 411	Marketing Management
BUAD 427	Production and Operations Management II
BUAD 480	Internship

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 all courses in the Lower Level Business Core, the Upper Level Business Core, and the Major Requirements with a minimum grade of C-.

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

F. All Business Administration majors must complete an internship (BUAD 480) or a service learning course (INDS 199, 299, 399, or 499) that is tied to a course in Business Administration.

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.

Business Administration: (Music Industry Concentration) Bachelor of Science degree

Office: W305 Thompson Hall
(716) 673-4605

Armand Petri, Advisor

Email: music.business@fredonia.edu

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

The Music Industry curriculum serves students interested in a wide range of educational objectives and vocational fields through an interdisciplinary program emphasizing a balance of music, business, and relative elective subjects.

Requirements for the Bachelor of Science Degree in Business Administration - Music Industry

A. General Course Requirements (39 credit hours):

Supporting Courses (12 credit hours)

COMM 102	Mass Media and Society
CSIT 107	Web Programming

CSIT 104	Introduction to Microcomputer Software
or	
CSIT 151	Introduction to Information Systems
CSIT 251	Information Systems Structures

Lower Level Business Core Courses (15 credit hours)

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

Upper Level Business Core Courses (12 credit hours)

BUAD 300	Statistical Analysis
BUAD 320	Managerial Finance
BUAD 323	Organizational Behavior
BUAD 328	Marketing Foundations

B. Major Course Requirements:

MUS 021-048	Special Ensemble (2 semesters)
MUS 101	Beginning Music Theory I
MUS 104	Applied Music Class for Non-Music Majors (2 semesters)
MUS 115	Music Appreciation
MUSB 201	The Business of Music
MUSB 301	Music Copyrights
MUSB 320	Music Contracts
MUSB 420	Student Record Label
MUSB 425	Music Marketing and Promotion

Plus two courses from the following:

MUS 265	History of Jazz
MUS 270	History of American Popular Music, 1900-1963
MUS 333	Musics of the World
MUS 457	Seminar in Popular Music

Plus 3 credit hours from the following:

AADM 400	Arts Administration Practicum
MUSB 465	Music Business Internship

Plus 1-2 credit hours from the following:

SRT 105	Recording Techniques for Music
or	

MUS 471 Special Topics: Digital Recording Software

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 all courses in the Lower Level Business Core, the Upper Level Business Core, and the Major Requirements with a minimum grade of C-.

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

F. All Business Administration majors must complete an internship (BUAD 480) or a service learning course (INDS 199, 299, 399, or 499) that is tied to a course in Business Administration.

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.

Certificate in Entrepreneurial Studies

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

BUAD 350 Selected Topics: Entrepreneurship

BUAD 350 Selected Topics: Business Consulting

BUAD 374 Small Business Finance

Business Administration Minor

Requirements for the Minor in Business Administration

The department offers a minor in Business Administration that requires 24 credit hours of courses as indicated below:

BUAD 200/	Fundamentals of Statistics for Business and
ECON 200	Economics
ACCT 201	Principles of Financial Accounting
ACCT 202	Principles of Managerial Accounting
ECON 201	Principles of Macroeconomics
ECON 202	Principles of Microeconomics
BUAD 320	Managerial Finance
BUAD 323	Organizational Behavior
BUAD 328	Marketing Foundations

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.

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:

ACCT 201	Principles of Financial Accounting
----------	------------------------------------

ACCT 202	Principles of Managerial Accounting
ACCT 250	Accounting Processes
ACCT 301	Intermediate Accounting I
ACCT 302	Intermediate Accounting II
ACCT 303	Cost Management

Accelerated Master of Business Administration Degree

The department has several formal agreements with 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 plus 1 arrangements with Clarkson University, Rochester Institute of Technology, St. Bonaventure University, Niagara University, Canisius College, and Alfred University. Students who are interested in any of these accelerated programs should see their academic advisor in their junior year.

Economics

The Department of Economics is housed within the School of Business. For program information, students should consult the Economics (see page 48) section of the catalog.

Chemistry and Biochemistry

Office: 216 Houghton Hall
(716) 673-3281

Thomas S. Janik, *Chairperson*

Email: chemistry.department@fredonia.edu

Website: <http://www.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. Paid internships with local industries are also available. 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 and the Department of Biology jointly administer a major in Biochemistry. The department maintains a graduate program leading to a M.S. degree. A five-year program is available to outstanding students which is a combined B.S./M.S. program.

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 the Cooperative Engineering program, please consult the

Cooperative Engineering (see page 76) 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 (see page 84) section 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 (see page 50) 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% or higher on New York State Regents Exam. Requirement is fulfilled.
- Scores of 65% - 84% on High School NYS Regents 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 SUNY Fredonia proficiency exam.
- Scores below 65% on High School NYS Regents Exam or if student did not take a NYS Regents Exam: Student needs to take an Elementary I level course and an Elementary II level course of the same language or equivalent.

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 Arts and Sciences, and the 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 Environmental Science program in 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 (see page 152) (MAT).

Chemistry/Biochemistry(Chemistry Track) Honors Program

This program provides talented majors unique laboratory courses in addition to 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 degree

Requirements for the Bachelor of Science Degree in Chemistry

Core Program (36 credit hours in chemistry; 16 credit hours in related disciplines)

CHEM 115- CHEM 116 CHEM 125	General Chemistry I & II General Chemistry I Lab
CHEM 126 Or CHEM 130	General Chemistry II Lab Honors General Chemistry Lab
CHEM 215/ CHEM 225	Organic Chemistry I & Lab
CHEM 216- And CHEM 226 Or CHEM 230	Organic Chemistry II Lecture Organic Chemistry II Lab Advanced Organic Lab
CHEM 315 CHEM 316 CHEM 317- CHEM 318 CHEM 325- CHEM 326 CHEM 327	Introduction to Physical Chemistry Advanced Physical Chemistry Analytical Chemistry I & II Physical Chemistry I & II Labs Analytical Chemistry I Lab
CHEM 328 CHEM 395 CHEM 495- CHEM 496 CHEM 4XX	Analytical Chemistry II Lab Introduction to Research Seminar: Advances in Chemistry (Capstone experience) Advanced lecture elective (400 level)
PHYS 230/ PHYS 232 PHYS 231/ PHYS 233 MATH 122- MATH 123	University Physics I & Lab University Physics II & Lab University Calculus I & II

Additional Requirements - Track I (Standard Major)

Independent Laboratory Research
(CHEM) 391, 392, 491, 492 or Advanced Lecture course
Advanced Lecture Elective (400 level)

Additional Requirements - Track II (A.C.S. Approved Major)

BIOL 333/CHEM 333 Biochemistry
CHEM 462 Inorganic Chemistry
CHEM 472 or CHEM 465 lab
Independent Laboratory Research
(CHEM) 391, 392, 491, 492
Advanced Lecture Elective (400 level)

Interdisciplinary Studies: Environmental Science Bachelor of Science degree

(Interdisciplinary Studies major housed in the Department of Chemistry and Biochemistry)

Office: 220 Houghton Hall
(716) 673-3292

Sherri A. Mason, Coordinator

Email: environmental.science@fredonia.edu

Website:

<http://www.fredonia.edu/departments/chemistry/environmental/>

Human population growth and economic development require large quantities of natural resources, often resulting in environmental degradation. As a result, there is an increasing demand for scientists with a background in environmental science to address the environmental challenges faced in this century. The major in Environmental Science integrates the principles of the natural sciences to study human resource utilization and evaluate the options to mitigate impacts to natural ecosystems and resources. In the major, an assessment approach is taken in the study of topics such as species diversity, point and non-point source pollution, fate and transport of hazardous substances, geological resources, hydrological patterns, etc. In the process, students study scientific phenomena and are trained in applications to field and laboratory work, data analysis and modeling.

Many of the courses in the major have field components where students collect environmental samples, analyze them, and produce comprehensive interpretations of the data. Students draw on the strengths of SUNY Fredonia's programs in biology, chemistry, geosciences, geographic information systems, and environmental science courses specifically designed for this major. As seniors, students demonstrate their ability to conduct independent work in the environmental sciences through an internship with local conservation departments, industries and municipalities, or through research with a Fredonia faculty member.

Possible careers after completion of this major include: graduate school, environmental consulting, resource management, conservation scientist, aquatic and fishery research/management, wildlife management, conservation officer, environmental and community planning, etc.

Requirements for the Bachelor of Science in Interdisciplinary Studies Major in Environmental Science

A: Core Requirements:

1. Environmental Science (10 credit hours)

ESCI 310	Methods in Environmental Analysis
ESCI 410	Environmental Assessment
ESCI 440	Environmental Science Seminar
ESCI 490	Environmental Science Practicum

2. Mathematics (9-11 credit hours)

MATH 122- MATH 123 or MATH 120- MATH 121	University Calculus I & II (recommended) Survey of Calculus I & II
--	---

STAT 250 Statistics for Scientists

3. Biology (16 credit hours)

BIOL 131- Principles of Biology I & Lab

BIOL 132

BIOL 133- Principles of Biology II & Lab

BIOL 134

BIOL 243- Biodiversity & Lab

BIOL 244

BIOL 330- Ecology & Lab

BIOL 331

4. Geosciences (12 credit hours)

GEO 165/ Geology I & Lab

GEO 169

GEO 330 Geomorphology

GEO 450 Hydrogeology

5. Geographic Information Systems (6 credit hours)

GIS 201 Geographic Information Systems I

GIS 301 Geographic Information Systems II

Or

GEO 311 Global Climate

6. Chemistry (15 credit hours)

CHEM 115/ General Chemistry I & Lab

CHEM 125

CHEM 116/ General Chemistry II & Lab

CHEM 126

CHEM 215/ Organic Chemistry I & Lab

CHEM 225

CHEM 317 Analytical Chemistry I

Or

CHEM 473 Environmental Aquatic Chemistry

Or

CHEM 474 Environmental Atmospheric Chemistry

7. Physics (4-5 credit hours)

PHYS 121/ College Physics I & Lab

PHYS 123

Or

PHYS 230/ University Physics I & Lab

PHYS 232

8. Economics (6 credit hours)

ECON 202 Microeconomics

ECON 380 Enviro Economics

9. History (3 credit hours)

HIST 310 World Environmental History

Prerequisite: (HIST) 102 or 116 or 135 (CCC)

Or

HIST 352 Environmental History of North America

Prerequisite: (HIST) 105 or 106 or 133 (CCC)

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 compatible areas, such as Biology, Geographic Information Systems, Geology, Chemistry, Public Health, etc. Other course options include:

BIOL 421 Biological Conservation

BIOL 424 Aquatic Biology

BIOL 427 Fisheries Science

BIOL 333 Biochemistry

BIOL 450 Plant Taxonomy

BIOL 457 Biostatistics

CHEM 170 Scientific Revolutions

CHEM 216 Organic Chemistry II

CHEM 317 Analytical Chemistry I

CHEM 318 Analytical Chemistry II

CHEM 327 Analytical Chemistry I Lab

CHEM 473 Environmental Aquatic Chemistry

CHEM 474 Environmental Atmospheric Chemistry

CSIT 105 Visual BASIC I

CSIT 106 Science Programming using C/C++

GEO 160 Oceanography

GEO 175 Thirsty Planet

GEO 311 Global Climate

GEO 359 Vanishing Earth Resources

GEO 370 Structural Geology

GEO 400 Stratigraphy

GEO 411 Mineralogy

GIS 301 Geographic Information Systems II

GIS 350 Remote Sensing/Image Processing

GIS 401 Special Topics in GIS

POLI 387 Environmental Policy

Chemistry Minor

Requirements for the Minor in Chemistry

A minimum of 24 credit hours in chemistry is required including (CHEM)115, 116, 125 and 126 or 130, and 16 additional hours at the 200 level or above. Of these additional hours: (1) at least 2 hours must be in laboratory courses; (2) at least 6 hours must be from 300 or 400 level courses; and (3) (CHEM) 154, 170, 300, 302, 305, 371, and 372 cannot be counted.

Chemistry Graduate Program

Office: 207 Houghton Hall

(716) 673-3281

Thomas S. Janik, *Chairperson*

Holly J. Lawson, *Graduate Coordinator*

Email: chemistry.department@fredonia.edu

Website: <http://www.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 (see page 187).

Communication

Office: 326 McEwen Hall

(716) 673-3410

Kathleen McDonough, Chairperson

Email: communication.department@fredonia.edu

Website:

<http://www.fredonia.edu/department/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 minor in Communication.

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 WDVJ 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 Arthur R. Maytum Scholarship, the Dan Berggren Excellence in Audio/Radio Scholarship and the Arlie Muller Parks Scholarship.

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.
- Communication Studies – Bachelor of Science - B.S.
- Journalism – Bachelor of Arts - B.A.
- Media Management – Bachelor of Science - B.S.
- Public Relations – Bachelor of Science - B.S.
- Video Production – Bachelor of Science - B.S.

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, 499).

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 take at least 15 additional credit hours in the second major (i.e., credit hours not used in the first major). 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. Students who have dual majors with both majors inside the Department of Communication are still required to have a minor outside the department or to meet the criteria for the study abroad option.

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 who have spent at least one semester studying in a university outside of or other than their home country shall be given credit for the study abroad and would only need to supplement this with the related Fredonia course work described earlier as it applies to study abroad.

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.

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

Communication Core: 7 credit hours (included in all programs)

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

A. Communication: Audio Production Bachelor of Science degree: 41 credit hours (including core requirements) 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.

Audio Production Major courses: (34 credit hours - at least 12 credit hours at Fredonia)

Group A - Major Core - 25 credit hours

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

and one of the following:

COMM 200	Electronic Media Writing
----------	--------------------------

Or

COMM 361	Script Writing for Video, Film and Radio
----------	--

and one of the following 4 credit courses as Capstone course:

COMM 395	Radio News
----------	------------

COMM 451	Audio Documentaries/Soundscapes
COMM 456	Radio Programming and Production
COMM 466	Sound Design

Group B - Major Electives - 9 credit hours - choose three of the following:
Any three of the 1 credit hour computer courses

118	
COMM 130	Foundations of Journalism
COMM 221	Interpersonal Communication
COMM 222	Principles of Public Relations
COMM 244	Introduction to Social Media
COMM 302	Rhetoric and Criticism
COMM 312	Multimedia Integrations
COMM 313	Political Communication
COMM 350	Telecommunication Technology
COMM 375	Mass Media Theory
COMM 385	International Media
COMM 386	International Films
COMM 400	Telecommunications Management

B. Communication: Communication Studies Bachelor of Science degree: 40 credit hours (including core requirements)

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.

Communication Studies Major courses: (33 credit hours - at least 12 at Fredonia)

Group A - Major Core - 18 credit hours:

COMM 102	Mass Media and Society
or	
COMM 155	Rhetoric of Vision and Sound

COMM 221	Interpersonal Communication
COMM 295	Communication Research and Survey Methods
COMM 302	Rhetoric and Criticism
COMM 430	Communication Theory
COMM 465	Intercultural Communication

Group B - Major Electives - 15 credit hours - choose five from the following:

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

C. Communication: Journalism Bachelor of Arts degree: 41 credit hours (including core requirements)

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.

Journalism Major courses: (34 credit hours - at least 17 at Fredonia)

Group A - Major Core - 19 credit hours

COMM 130	Foundations in Journalism
COMM 230	News Gathering
COMM 231	Storytelling: Words, Images, Sound
COMM 232	Critical Analysis
COMM 420	Communication Law and Ethics
COMM 440	Journalism Convergence Capstone (4 cr.)

Group B - 6 credit hours – one of the following two-course sequences:

COMM 358	Television News
----------	-----------------

COMM 395	Radio News
----------	------------

Or

COMM 346	Print/Digital Editing and Design
----------	----------------------------------

COMM 347	Print/Digital Narrative
----------	-------------------------

Group C - 9 credit hours – one course from each of the following three categories:

C1 Communication Experiential Training – minimum 3 credit hours

Short-term study abroad

COMM 470	FRS/WNYF/Leader Practicum
COMM 480	Internship

C2 Theory Courses

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

C3 Skills Courses

COMM 110-119	3 mini courses
--------------	----------------

COMM 244	Introduction to Social Media
COMM 251	Audio Production I
COMM 255	Studio Production
COMM 312	Multimedia Integration
COMM 367	Opinions in Journalism
COMM 459	Special Topics in Media Prod. – if applicable

Outside Courses – 18 credit hours – at least 3 credit hours in each of the following categories. Up to 12 credit hours may be used to satisfy College Core Curriculum requirements.

Global Studies

HIST 101	World History I
HIST 102	World History II
HIST 135	World Cultures
HIST 261	Islamic Civilization
HIST 264	East Asian Civilizations
HIST 273	Africa From the 1800s
HIST 283	Latin America: Revolution and Reform
HIST 311	Europe in the Modern World

Science and the Environment

CHEM 107	Chemistry for Consumers
GEO 175	The Thirsty Planet
GEO 180	Weather and Climate
ESCI 105	Global Environmental Issues
HIST 310	World Environmental History
ESCI 410	Environmental Assessment
BIOL 115	Environmental Biology
PHYS 205	Science and Civilization
HIST 352	Environmental History of North America
SOC 215	Introduction to Public Health

Economics/Statistics

POLI,PSY,ECON,SOC,STAT 200	Statistics
ECON 201	Principles of Macroeconomics
STAT 150	Statistical Ideas

Culture

AMST 210	American Popular/Mass Cultures
HIST 339	20th Century American Culture
POLI 371	Civil Rights and Liberties
INDS 105	Introduction to American Indian Studies
SOC 316	Minority Groups
ENGL 296	American Identities
ANTH 300	Sex and Gender
HIST 359	Ethnicity/Race
HIST 225/INDS 225	Introduction to Latin History/Culture
HIST 353	U.S. Consumer Culture
HIST 343	Civil Rights Movement
PSY 255	Psychology of Women
SOC 335	Sociology of Sport

Government and Legislature

POLI 120	American Politics
POLI 150	U.S. and World Affairs
PHIL 228	American Philosophy
POLI 276	Law and Society

Arts, Education, and Philosophies

ENGL 206	Survey of American Literature
ENGL 207	Drama and Film
ARTH 345	Media Criticism
THEA 114	Introduction to Performing Arts
ARTH 102	Art in Culture 1400-present
MUS 270	History of American Pop Music
EDU 215	Education in American Society
PHIL 105	Philosophical Ideas
PHIL 115	Philosophical Inquiry

D. Communication: Media Management Bachelor of Science

degree: 40 credit hours (including core requirements)

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.

Media Management Major courses: (33 credit hours - at least 12 at Fredonia)

Group A - Major Core - 21 credit hours - choose seven from among the following:

COMM 110-119	Any three of the 1 credit hour computer courses
COMM 102	Mass Media and Society
COMM 222	Principles of Public Relations
COMM 295	Communication Research and Survey Methods
COMM 350	Telecommunication Technology
COMM 385	International Media
COMM 400	Telecommunications Management
COMM 460	Organizational Communication

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

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

E. Communication: Public Relations Bachelor of Science

degree - 40 credit hours (including core requirements):

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.

Public Relations Major courses: (33 credit hours - at least 12 at Fredonia)

Group A - Major Core - 21 credit hours

COMM 102	Mass Media and Society
COMM 222	Principles of Public Relations
COMM 295	Communication Research and Survey Methods
COMM 302	Rhetoric and Criticism
COMM 322	Public Relations Writing
COMM 344	Public Relations Case Analysis
COMM 422	Public Relations Management (Capstone experience)

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

COMM 110-119	Computer mini courses (1 cr. each)
COMM 130	Foundations of Journalism
COMM 155	Rhetoric of Vision and Sound
COMM 221	Interpersonal Communication
COMM 235	Introduction to Business Communication
COMM 244	Introduction to Social Media
COMM 251	Audio Production I
COMM 255	Studio Production
COMM 301	Group Communication
COMM 312	Multimedia Integrations
COMM 313	Political Communication
COMM 350	Telecommunication Technology
COMM 375	Mass Media Theory
COMM 379	Persuasion
COMM 385	International Media
COMM 420	Communication Law and Ethics
COMM 424	International Public Relations
COMM 430	Communication Theory
COMM 444	Senior Seminar (1 cr.)
COMM 460	Organizational Communication
COMM 465	Intercultural Communication

F. Communication: Video Production Bachelor of Science degree - 45 credit hours (including core requirements)

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, postproduction 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.

Video Production Major courses: (38 credit hours - at least 18 credits and capstone classes must be taken at Fredonia):

Group A - Major Core - 21 credit hours

COMM 102	Mass Media and Society
COMM 155	Rhetoric of Vision and Sound
COMM 251	Audio Production I
COMM 255	Studio Production
COMM 354	Video Field Production
COMM 366	Post Production
COMM 420	Communication Law and Ethics

Group B - 14 credit hours

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

COMM 309	Film Analysis
COMM 361	Scriptwriting
COMM 454	Fiction I (4 credit hours)

COMM 464	Fiction II (4 credit hours) (Capstone experience)
or	
COMM 200	Electronic Media Writing

COMM 308	Documentary History and Criticism
COMM 452	Documentary I (4 credit hours)
COMM 462	Documentary II (4 credit hours) (Capstone experience)

Group C - Electives (3 credit hours)

ARTS 155	Introduction to Photography
COMM 312	Multimedia Integration
COMM 358	TV News
COMM 466	Sound Design
COMM 368	Lighting and Camera
THEA 130	Acting for Non-majors

Communication Minor

Requirements for the Minor in Communication

A minor in Communication requires 18 credit hours including COMM 101 and a minimum of 9 credit hours at the 300 level or above. A minimum of 9 credit hours 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.

Communication Disorders and Sciences

Office: W123 Thompson Hall

(716) 673-3202

Kim Tillery, Chairperson

Email: communicationdisorders.sciences@fredonia.edu

Website:

<http://www.fredonia.edu/departments/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 Year (CFY) 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 SUNY Fredonia, the M.S. in Speech-Language Pathology 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

Transfer students must have 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.

Communication Disorders and Sciences Bachelor of Science degree

Requirements for the Bachelor of Science in Communication Disorders and Sciences:

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

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.

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:

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

Minor in Communication Disorders and Sciences

Requirements for a Minor in Communication Disorders and Sciences

Eighteen credit hours including:

CDS 250	Speech and Language Development
CDS 268	Phonetics
CDS 280	Speech-Language Pathology I
CDS 310	Speech and Hearing Mechanism

Plus 6 credit hours selected from:

CDS 310	Speech and Hearing Mechanism
CDS 322	Hearing Problems and Tests
CDS 323	Phonological and Language Disorders
CDS 418	Speech-Language Pathology II

Communication Disorders and Sciences Graduate Program

Office: W123 Thompson Hall
(716) 673-3202

Kim L. Tillery, *Chairperson and Graduate Advisor*

Email: communicationdisorders.sciences@fredonia.edu

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 clinic practicum requirements for the Certificate for Clinical Competency in Speech-Language Pathology (CCC-SLP).

The master's education program in Speech-Language Pathology at SUNY Fredonia is accredited by the Council on Academic Accreditation (CAA) in Audiology and Speech-Language Pathology of the American Speech-Language-Hearing Association (ASHA).

Application Deadline

The deadline for application is February 15 for admission in the following fall semester.

The CDS department does not accept non-matriculated students into the master's program.

Requirements for Admission to the Program without Deficiencies:

- A bachelor's degree from an accredited program whereby an applicant has completed a minimum of 15 credit hours in courses related to the normal development of speech-language-hearing and/or the sciences related to the use of speech, language and hearing; 9 credit hours in speech-language pathology; and 6 credit hours in audiology.
- A minimum of 3.0 GPA is preferred.
- GRE exam
- Submission of a completed application, including all required documentation to the Office of Graduate Studies by February 15.
- Complete SUNY Fredonia's graduate study application requirements.

Mission of the Department of Communication Disorders and Sciences

The Mission of the Department of Communication Disorders and Sciences is to prepare students to become competent professionals in the field by developing a foundation of knowledge and a repertoire of effective clinical skills, demonstrating a positive attitude for

learning, participating in a cooperative relationship with faculty and fellow students, and demonstrating ethical and professional behavior in the academic and clinical environment. The graduate program teaches the professional knowledge and skills through the departments Master of Science in Speech-Language Pathology degree program. Students are exposed to the knowledge and skills required for professional development including curricula covering basic human communication, speech sciences and technology, professional issues, research methods, speech-language and hearing disorders, theoretical and applied approaches to assessment, intervention, and educational pedagogy.

Research opportunities augment the instructional programs by ensuring that faculty, staff, and students are aware of the contribution they all make to the production of knowledge within the field of speech studies. The Department of Communication Disorders and Sciences actively supports students in research, scholarship, creative processes, clinical practice, and service to the community. In order to achieve these goals, the program provides supervised diagnostic and outpatient services to communicatively disordered clientele at the Henry C. Youngerman Center for Communication Disorders on the SUNY Fredonia campus. The Speech-Language Pathology master's degree is built around two equally necessary sectors: the academic program and the clinical program.

The Communication Disorders and Sciences department consistently fulfills SUNY Fredonia research challenges, holds to the standards of excellence in teaching set forth by the State University of New York, and provides an invaluable public service to the university and its surrounding community. The program remains committed to enhancing academic experiences for graduate students through ongoing self-study, outcomes assessment, and attention to cultural diversity in the curricula.

Program Goals:

- Recall knowledge and demonstrate comprehension of basic human communication and swallowing processes, including biological, neurological, acoustic, psychological, developmental, linguistic, and cultural aspects.
- Recall knowledge and demonstrate comprehension of the nature of speech, language, hearing, and communication disorders/differences and swallowing disorders, including their etiologies, characteristics, anatomical/physiological, acoustic, psychological, developmental, and linguistic and cultural correlates.

- Recall information and demonstrate comprehension of the principles and methods of prevention, assessment, and intervention for people with communication and swallowing disorders, including consideration of their anatomical/physiological, acoustic, psychological, developmental, and linguistic and cultural correlates of the disorders.
- 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.
- 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; modifying plans, strategies, materials, and instruments when needed; reporting; and identifying and referring when appropriate.
- Integrate current developments in methodology and technology into clinical practice.
- Read and become familiar with current research and critical reports and relate findings to the improvement of clinical practice.
- Demonstrate knowledge of ASHA's code of ethics, professional standards, scope of practice, and preferred practice patterns.
- 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

One choice of the following is required:

- | | |
|---------|--|
| CDS 619 | Comprehensive Exam |
| CDS 629 | Directed Studies in Research Methodology-
Thesis Research |

Other required courses for all graduate students (exceptions by permission of chairperson):

- | | |
|---------|--|
| CDS 551 | Neuroscience for Communication Disorders |
| CDS 555 | Dysphagia |
| CDS 598 | Voice Disorders |
| CDS 500 | Child Language Disorders |
| CDS 530 | Augmentative and Alternative Communication |
| CDS 582 | Fluency Disorders |
| CDS 589 | Professional Issues |
| CDS 606 | Research Design in Communication Disorders |

- | | |
|---------|-------------------------------|
| | and Sciences |
| CDS 608 | Neurogenic Language Disorders |
| CDS 611 | Motor Speech Disorders |

Electives as advised

Minimum Total Academic Course Credit Hours: 41

Clinical experiences (Capstone experiences):

- | | |
|---------|--|
| CDS 502 | Clinical Practice, Communication Disorders |
| CDS 605 | Advanced Clinical Methods and Practice |
| CDS 632 | Graduate Student Teaching |

Total Clinic Course Credit Hours: 21

Total Minimum Credit Hours for Program Completion: 62

Notes:

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.

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

Literacy, 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; and CDS 632 Graduate Student Teaching.

Computer and Information Sciences

Office: 2154 Fenton Hall

(716) 673-4820

Reneta Barneva, *Chairperson*

Email: csit@fredonia.edu

Website: <http://www.fredonia.edu/departments/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 (CS) with three study options: Advanced Computing, Software Development, and a General Track. The other degree is in Computer Information Systems (CIS) with two study options: Systems Development and Systems Management. A minor in Computer Science, a minor in Computer Information Systems, and a minor in Web Programming 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, software for computer systems and applications, and GIS. 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. Most 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, 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 laboratory (CS Lab) and has class scheduling rights to another laboratory in Fenton 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, 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. The other 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 benchmarking, 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. Three minor programs in Computer Science, Computer Information Systems, and Web Programming are also offered. A dual-diploma, joint degree program in Computer Information Systems with EGE University and Izmir University of Economics, Izmir, Turkey are available as well. The department also participates in the Cooperative Engineering program (see page 76). 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 Science Bachelor of Science degree

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 (CS Core) (27 credit hours)

CSIT 121	Computer Science I
CSIT 221	Computer Science II
CSIT 224	Problem Solving Using Objects
CSIT 231	Systems Programming
CSIT 241	Discrete Mathematics for Computer Science I
CSIT 311	Assembly Language and Computer Organization
CSIT 321	Paradigms of Programming Languages
CSIT 341	Data Structures
CSIT 425	Software Engineering

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
MATH 123	University Calculus II
CSIT 242	Discrete Mathematics for Computer Science II
CSIT 431	Introduction to Operating Systems
CSIT 441	Analysis and Design of Algorithms

Four additional computer science courses must be taken from at least 3 different areas. At least three courses must be at the 400 level:

1. Computer Architecture and Systems Software options

CSIT 411	Programming for Embedded Microcontrollers
CSIT 413	Computer Architecture
CSIT 435	Data Communication and Networks II

2. Database and Information Systems options

CSIT 455	Relational and Object Databases
CSIT 456	Information and Decision Support Systems

3. Theoretical Foundations options

CSIT 433	Compiler Construction
CSIT 443	Theory of Computation

4. Languages and Applications options

CSIT 461	Introduction to AI and Knowledge Engineering
CSIT 462	Computer Graphics
CSIT 463	Introduction to Digital Image Processing and Computer Vision

Courses from the following list may be taken as electives; they do not count in any of the above areas: CSIT 490 Seminar on Selected Topics, CSIT 496 Special Topics, CSIT 497 Thesis, CSIT 499 Senior Project, CSIT 300 Internship, CSIT 291 Special Topics, CSIT 390 Directed Study, CSIT 201 Computer Security and Ethics, CSIT 400 Directed Independent Study.

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 credits must be in Mathematics/Statistics (in addition to CSIT 241, CSIT 242, MATH 122, and MATH 123) and must come from the following list, by advisement:

MATH 223	University Calculus III
MATH 231	Linear Algebra
MATH 325	Numerical Analysis
MATH 335	Number Theory
MATH 337	Combinatorics
MATH 341	Geometry
STAT 250	Statistics for Scientists
STAT 350	Probability and Statistics

At least 7 credits must be in Biology, Chemistry, Geosciences, or Physics, and at least one of these 7 credits 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.

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 SS Track requires the CS Core, plus:

MATH 120 Survey of Calculus I

Or

MATH 122 University Calculus I

MATH 121 Survey of Calculus II

Or

MATH 123 University Calculus II

CSIT 201 Computer Security and Ethics

CSIT 242 Discrete Mathematics for Computer Science II

CSIT 455 Relational and Object Databases

Four additional computer science courses must be taken from at least 3 different areas. At least three courses must be at the 400 level:

1. Computer Architecture and Systems Software

CSIT 411 Programming for Embedded Microcontrollers

CSIT 413 Computer Architecture

CSIT 431 Introduction to Operating Systems

CSIT 435 Data Communication and Networks II

CSIT 437 Advanced Operating Systems

2. Database and Information Systems

CSIT 456 Information and Decision Support Systems

CSIT 473 Data Warehousing and Mining

3. Theoretical Foundations

CSIT 433 Compiler Construction

CSIT 441 Design and Analysis of Algorithms

CSIT 443 Theory of Computation

4. Languages and Applications

CSIT 330 Mobile Programming

CSIT 461 Introduction to AI and Knowledge Engineering

CSIT 462 Computer Graphics

CSIT 463 Introduction to Digital Image Processing and Computer Vision

Courses from the following list may be taken as CS electives; they do not count in any of the above areas: CSIT 490 Seminar on Selected Topics, CSIT 496 Special Topics, CSIT 497 Thesis, CSIT 499 Senior Project, CSIT 300 Internship, CSIT 291 Special Topics, CSIT 390 Directed Study, CSIT 400 Directed Independent Study.

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

Or

MATH 122 University Calculus I

MATH 121 Survey of Calculus II

Or

MATH 123 University Calculus II

Seven additional electives must be taken from at least 3 different areas. At least three courses must be at the 400 level:

1. Computer Architecture and Systems Software

CSIT 411 Programming for Embedded Microcontrollers

CSIT 413 Computer Architecture

CSIT 431 Introduction to Operating Systems

CSIT 435 Data Communication and Networks II

CSIT 437 Advanced Operating Systems

2. Database and Information Systems

CSIT 455 Relational and Object Databases

CSIT 456 Information and Decision Support Systems

CSIT 473 Data Warehousing and Mining

3. Theoretical Foundations

CSIT 242 Discrete Mathematics for Computer Science II

CSIT 433 Compiler Construction

CSIT 441 Design and Analysis of Algorithms

CSIT 443 Theory of Computation

4. Languages and Applications

CSIT 330 Mobile Programming

CSIT 461 Introduction to AI and Knowledge Engineering

CSIT 462 Computer Graphics

CSIT 463 Introduction to Digital Image Processing and Computer Vision

Courses from the following list may be taken as CS electives; they do not count in any of the above areas: CSIT 490 Seminar on Selected Topics, CSIT 496 Special Topics, CSIT 497 Thesis, CSIT 499 Senior Project, CSIT 300 Internship, CSIT 291 Special Topics, CSIT 201 Computer Security and Ethics, CSIT 390 Directed Study, CSIT 400 Directed Independent Study.

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).

Computer Information Systems Bachelor of Science degree

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 - Design
 CSIT 151 Introduction to Information Systems

CSIT 105 Visual BASIC I
 Or
 CSIT 121 Computer Science I

CSIT 205 Visual BASIC II
 Or
 CSIT 221 Computer Science II

CSIT 207 Web Programming II - Programming
 CSIT 251 Information Systems Structures
 CSIT 312 Computer Systems Structures
 CSIT 351 Business Systems Development

Business and Mathematics Core (24 credit hours)

MATH 108 Prize-Winning Mathematics
 Or
 MATH 120 Survey of Calculus I

ACCT 201 Principles of Accounting I
 ECON 202 Principles of Microeconomics

STAT 200 Statistical Methods I
 Or
 ECON 200 Fundamentals of Statistics for Business Administration and Economics

Two courses chosen from:

CSIT 208 Computer Game Design and Implementation
 CSIT 241 Discrete Mathematics for Computer Science I
 CSIT 242 Discrete Mathematics for Computer Science II
 CSIT 330 Mobile Applications Development
 MATH 121 Survey of Calculus II
 ACCT 202 Principles of Accounting II

STAT 300 Statistical Methods II
 Or
 ECON 300 Statistical Analysis

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
 CSIT 341 Data Structures
 CSIT 425 Software Engineering
 CSIT 455 Relational and Object Databases
 CSIT 456 Introduction to Decision Support Systems
 CSIT 462 Computer Graphics
 CSIT 473 Data Warehousing and Mining

Systems Management Track:

Three courses chosen from:

CSIT 203 Multimedia Systems
 CSIT 335 Data Communications and Networks I
 CSIT 425 Software Engineering
 CSIT 471 Information Systems Management
 CSIT 473 Data Warehousing and Mining
 CSIT 475 Electronic Commerce

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
 CSIT 203 Multimedia Systems
 CSIT 241 Discrete Mathematics for Computer Science I
 CSIT 291 Special Topics

CSIT 300 Internship
 CSIT 335 Data Communications and Networks I
 CSIT 341 Data Structures
 CSIT 390 Directed Study
 CSIT 400 Directed Independent Study
 CSIT 425 Software Engineering
 CSIT 435 Data Communications and Networks II
 CSIT 455 Relational and Object Databases
 CSIT 456 Introduction to Decision Support Systems
 CSIT 461 Introduction to AI and Knowledge Engineering
 CSIT 462 Computer Graphics
 CSIT 463 Introduction to Digital Image Processing and Computer Vision
 CSIT 471 Information Systems Management
 CSIT 473 Data Warehousing and Mining
 CSIT 475 Electronic Commerce
 CSIT 490 *Seminar on Selected Topics
 CSIT 496 *Special Topics
 CSIT 497 *Thesis
 CSIT 499 Senior Project (Capstone experience)

**Only one course numbered 490 or above is allowed*

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).

Computer Science Minor**Requirements for the Minor in Computer Science**

MATH 120 Survey of Calculus I
 or
 MATH 122 University Calculus I

MATH 121 Survey of Calculus II
 or
 MATH 123 University Calculus II

CSIT 121 Computer Science I
 CSIT 221 Computer Science II
 CSIT 241 Discrete Mathematics for Computer Science I
 CSIT 311 Assembly Language and Computer Organization
 CSIT 341 Data Structures

Two additional courses selected from:

Computer Science (CSIT) 205, 225, 231, 321, 351, 413, 425, 431, 433, 435, 441, 443, 455, 456, 461, 462, 463, 490, 496, 497, 499* with at least one of these at the 300-400 level.

Total credit hours: 27-29

Computer Information Systems Minor**Requirements for the Minor in Computer Information Systems**

CSIT 107 Web Programming I
 CSIT 151 Introduction to Information Systems

CSIT 105 Visual BASIC I
 or
 CSIT 121 Computer Science I

CSIT 205 Visual BASIC II
 or
 CSIT 221 Computer Science II

CSIT 207 Web Development II - Programming
 CSIT 251 Information Systems Structures
 CSIT 351 Business Systems Development

MATH 108 Prize-Winning Mathematics

Or
MATH 120 Survey of Calculus I

ACCT 201 Principles of Accounting I

Or

ECON 202 Principles of Microeconomics

Two additional courses selected from (CSIT) 203, 225, 241, 312, 341, 335, 425, 435, 455, 456, 461, 462, 463, 471, 473 and 475 with at least one of these at the 300-400 level.

Total Hours Required: 33

Note: A minimum 15 credit hours counted toward the minor must be taken at Fredonia.

Web Programming minor

Office: 2154 Fenton Hall

(716) 673-4820

Reneta Barneva, Chairperson

Email: csit@fredonia.edu

Website: <http://www.fredonia.edu/departments/cis>

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

CSIT 107 Web Development I - Design

CSIT 205 Visual Basic II

CSIT 207 Web Development II - Programming

Electives:

(Two courses from the following)

CSIT 151 Introduction to Information Systems

CSIT 203 Introduction to Multimedia

CSIT 251 Information Systems Structures

CSIT 462 Computer Graphics

CSIT 463 Introduction to Digital Image Processing and Computer Vision

(One course from the following)

CSIT 425 Software Engineering

CSIT 455 Relational and Object Databases

CSIT 473 Data Warehousing and Mining

CSIT 475 Electronic Commerce

Total credit hours required: 21

Notes:

1. The courses CSIT 291 (Special Topics), CSIT 300 (Internship), CSIT 490 (Seminar on Selected Topics), CSIT 496 (Special Topics), CSIT 497 (Thesis), CSIT 499 (Senior Project) and other courses can be considered electives upon departmental 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).

Criminal Justice

Criminal Justice Bachelor of Arts degree

Office: W363 Thompson Hall
(716) 673-3205

Daniela Peterka-Benton, Program Director

Email: criminal.justice@fredonia.edu

Website: <http://www.fredonia.edu/departments/sociology/>

The Bachelor of Arts degree 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, U.S. Customs, 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 Degree in Criminal Justice

Completion of a minimum of 39 credit hours of course work comprised of 18 credit hours of core requirements, 6 credit hours of a statistics-research methods sequence, and 15 credit hours of elective credit.

Core Courses include (18 credit hours)

CRMJ 100 Introduction to Criminal Justice

POLI 276 Law and Society

Or

POLI 277 Introduction to Law

CRMJ 310 Law Enforcement Policy and Practice

CRMJ 320 Crime and Crime Theory

CRMJ 340 Introduction to Corrections

CRMJ 400 Senior Seminar (Capstone experience)

Statistics-Research Methods sequence: (6 credit hours)

SOC 200 Social Statistics

SOC 300 Research Methods

Or

PSY 200* Statistics

PSY 210* Research Methods

**Sequence should be taken by Psychology/Criminal Justice double majors only*

Electives: 15 credit hours from among the following courses

CRMJ 330	Criminal Law
CRMJ 331	Criminal Procedure
CRMJ 332	Homeland Security
CRMJ 333	Criminal Investigations
CRMJ 350	Special Topics
CRMJ 360	Criminal Justice Ethics
CRMJ 470	Criminal Justice Internship
PHIL 303	Crime and Punishment
PHIL 362	Philosophy of Law
POLI 311	Fundamentals of Public Administration
POLI 370	American Constitutional Law
POLI 371	Civil Rights and Liberties
POLI 383	Courts and Social Policy
PSY 245	Social Psychology
PSY 246	Personality
PSY 356	Abnormal Psychology
PSY 358	Psychology and the Law
SOC 303	Social Class and Inequality
SOC 310	Sociology of Deviant Behavior
SOC 311	Sociology of Addiction
SOC 316	Minority Groups
SOC 363	Victimology
SOC 364	Juvenile Delinquency
SOC 365	Family Violence

Policy on Transfer Credit into the Major

Transfer students will be required to complete a minimum of 21 (up to 39) 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.

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:

(12 mandatory credit hours)

The three core courses:

CRMJ 100	Introduction to Criminal Justice
CRMJ 310	Law Enforcement Policy and Practice
CRMJ 340	Introduction to Corrections

Plus one of the following:

CRMJ 331	Criminal Procedure
or	
POLI 277	Introduction to Law
or	
POLI 383	Courts and Social Policy

In addition, among the 21 credit hours, classes must come from at least two of the disciplines that provide courses to the major. Students may transfer up to 9 credit hours of appropriate course work towards completion of the minor.

Dance

This major is housed in the Department of Theatre and Dance. See the Dance Bachelor of Fine Arts (see page 165) section of the catalog for program information.

Earth Science

The Earth Science program is housed in the Department of Geosciences. For information on this program, please see the Earth Science Adolescent Education (see page 86) section of the catalog.

Economics

The Department of Economics is housed within the School of Business.

Office: E336 Thompson Hall
(716) 673-3509

Peter Reinelt, Chairperson

Email: economics.department@fredonia.edu

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

ECON 400	Econometrics
MATH 122	University Calculus I
MATH 123	University Calculus II
MATH 231	Linear Algebra

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

Economics Bachelor of Arts degree

Requirements for the Bachelor of Arts Degree in Economics (36-37 credit hours)

Supporting Course (3 or 4 credit hours)

*MATH 120	Survey of Calculus I
or	
MATH 122	University Calculus I

Lower Level Economics Core Courses (9 credit hours)

*ECON 200	Fundamentals of Statistics for Business and Economics
*ECON 201	Principles of Macroeconomics
*ECON 202	Principles of Microeconomics

Upper Level Economics Core Courses (12 credit hours)

*ECON 300	Statistical Analysis
ECON 305	Intermediate Microeconomic Theory
ECON 310	Intermediate Macroeconomic Theory
ECON 450	Senior Seminar (Capstone experience)

**these courses are also required for accounting and business degrees*

Elective Course requirements (12 credit hours)

Any four courses in Economics outside the core at or above the 300 level. 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

Economics Minor

Requirements for the Minor in Economics (24 to 25 hours)

Supporting Course (3-4 credit hours)

MATH 120	Survey of Calculus I
or	
MATH 122	University Calculus I

Lower Level Economics Core Courses (6 credit hours)

ECON 201 Principles of Macroeconomics
ECON 202 Principles of Microeconomics

Upper Level Economics Core Courses (6 credit hours)

ECON 305 Intermediate Microeconomic Theory

Or

ECON 350 Managerial Economics

ECON 310 Intermediate Macroeconomic Theory

Or

ECON 315 Money, Banking and Monetary Economics

Elective course requirements (9 credit hours):

Any three economics courses outside the core at 300 level or above.

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 and Finance

ECON 345 Comparative Economic Systems

ECON 335 Economic Development

ECON 395 Comparative Human Resources

and 9 credit hours in foreign area study and/or international/comparative study. A maximum of 6 credit hours of a foreign language may be counted for the International Economic Studies option.

Education

College of Education - Professional Education Unit

Office: 126 Reed Library
(716) 673-3311

Christine Givner, *Dean and Chief Certification Officer for SUNY Fredonia*

Email: christine.givner@fredonia.edu
Email: edu.college@fredonia.edu
Website: <http://www.fredonia.edu/coe>

Office: E250 Thompson Hall
(716) 673-4660

Jamar Pickreign, *Associate Dean and NCATE Coordinator*
Email: jamar.pickreign@fredonia.edu

Department of Curriculum and Instruction

Office: E268 Thompson Hall
(716) 673-3701

Mira T. Berkley, *Chairperson*
Email: ci@fredonia.edu

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

Department of Language, Learning and Leadership

Office: E262 Thompson Hall
(716) 673-3702

Anna M. Thibodeau, *Chairperson*
Email: ll@fredonia.edu

Website: <http://www.fredonia.edu/coe/lll.asp>

Office of Field Experiences

Office: W249 Thompson Hall
(716) 673-3443

Ann Marie Loughlin, *Director*

Email: field.experiences@fredonia.edu

Office: W261 Thompson Hall
(716) 673-3443

Debra Karpinske-Keyser, *Assistant Director of Field Experiences*

Email: debra.karpinske-keyser@fredonia.edu

Website:
http://www.fredonia.edu/coe/field_experiences_office.asp

Office of Student Services

Office: E259 Thompson Hall
(716) 673-4768

Nicole Hohenstein, *Coordinator*

Email: edu.college@fredonia.edu

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

This section of the catalog provides information about the **College of Education - Professional Education Unit** at SUNY 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 National Council for the Accreditation of Teacher Education (NCATE) standards. As such, any changes made by the New York State Board of Regents or the NCATE review board 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.

National Council for the Accreditation of Teacher Education (NCATE)

NCATE is a partnership of over 30 national professional organizations, representing over three million Americans, who have united to ensure high quality teacher preparation. NCATE ensures that subject matter content, and how to teach it, is the priority. NCATE standards expect the College of Education to base its programs on content and teaching standards set by professional associations in each content area. NCATE also expects candidates to gain a firm foundation in the liberal arts. NCATE endorsement adds credibility and national transportability to SUNY Fredonia certification programs. SUNY Fredonia is fully accredited by NCATE.

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, candidates have the opportunity to experience a cultural and educational exchange with either University of Plymouth in Plymouth, England, or Swansea Institute in Swansea, Wales. The five-week internship includes classroom experience in the United Kingdom, organized cultural excursions, and free travel time for individual development. Participants earn 3 hours of graduate course credit.

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 degree:* 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 (see page 61) section of the catalog. Guangyu Tan, program coordinator. Email: Guangyu.Tan@fredonia.edu.

Childhood Inclusive Education *Bachelor of Science in Education degree:* 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 (see

page 61) section 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 degree:* 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 of the catalog. Karen Lindeman, program coordinator. Email: Karen.Lindeman@fredonia.edu.

Early Childhood-Childhood Education *Bachelor of Science in Education degree:* 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 (see page 63) section of the catalog. Guangyu Tan or Karen Lindeman, program coordinator. Email: Guangyu.Tan@fredonia.edu or Karen.Lindeman@fredonia.edu.

Middle Childhood Specialist *Bachelor of Science degree:* 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 (see page 117) section 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 of the catalog for more information and details of the discipline requirements.

Music Education: The School of Music offers a Bachelor of Music degree in Music Education. Please see the Music Education (see page 126) section 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 (see page 79)
- To teach high school Earth Science, Earth Science Adolescence Education (see page 86)
- To teach high school Biology, Biology Adolescence Education (see page 19)
- To teach high school Mathematics, Mathematics Adolescence Education (see page 116)
- To teach high school Chemistry, Chemistry Adolescence Education (see page 29)
- To teach high school Social Studies, Social Studies Adolescence Education (see page 89)
- To teach high school French or Spanish, French Adolescence Education (see page 122) or Spanish Adolescence Education (see page 121)
- To teach high school physics, Physics Adolescence Education (see page 139)

Graduate Programs in Education: For information on graduate programs in Education, please see either the Education Graduate Program (see page 65) or the Graduate Teacher Education Certification (see page 187) section of the catalog; for graduate Music Education programs, please see the Music Graduate Program (see page 134) section; for Speech Language Pathology, please see the Communication Disorders & Sciences Graduate Program (see page 39) section of the catalog.

Teacher Certification Information and Education Advisement

Office of Student Services

Office: E259 Thompson Hall
(716) 673-4768

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 SUNY 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://www.fredonia.edu/coe/studentservices.asp>.

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 Support 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; 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://ohe32.nysed.gov/tcert/ospra/index.html>. Candidates for Initial teacher certification must successfully complete the New York State Teacher Certification Examinations: the Liberal Arts and Sciences Test (LAST), the Assessment of Teaching Skills - Written (ATSW), and the appropriate Content Area Specialty Test 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>.

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 local equivalent). Requirement is fulfilled.
- Scores of 65 percent - 84 percent on High School N.Y.S. Regents Exam (or local equivalent): 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 SUNY Fredonia proficiency exam.
- Scores below 65 percent on High School N.Y.S. Regents Exam (or local equivalent) or if student did not take a N.Y.S. Regents or local Exam: Student needs to take an Elementary I level course and an Elementary II level course of the same language or equivalent.
- Note: The General Education foreign language requirement differs from the certification requirement and must be satisfied for degree conferral.

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 SUNY 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.

Eligibility for Methods & Student Teaching

Office of Field Experiences

Office: W249 Thompson Hall
(716) 673-3443

Ann Marie Loughlin, Director

Email: annmarie.loughlin@fredonia.edu

Office: W261 Thompson Hall
(716) 673-3443

Crystal Elias, Coordinator of Early Field Experiences

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://www.fredonia.edu/coe/field_experiences_office.asp.

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 extra-curricular 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.

Fredonia/Hamburg Connection

Fredonia/Hamburg Teacher Education Center

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>.

Biology Concentration (33 credit hours)

BIOL 110	Human Biology
BIOL 131/ BIOL 132	Principles of Biology I & Lab
BIOL 133/ BIOL 134	Principles of Biology II & Lab
BIOL 243/ BIOL 244	Biodiversity & Lab

Plus 6 elective credit hours in Biology at the 300 and/or 400 level by advisement

SCI 301	Science for Elementary Educators I
SCI 302	Science for Elementary Educators (Lab)
SCI 303	Science for Elementary Educators II
SCI 325	Science Teaching Assistantship Labs

EDU 403	Teaching Science in the Elementary School
---------	---

Chemistry Concentration (34 credit hours)

CHEM 115/ CHEM 125	General Chemistry I & Lab
CHEM 116/ CHEM 126	General Chemistry II & Lab
CHEM 215/ CHEM 225	Organic Chemistry I & Lab
CHEM 216/ CHEM 226	Organic Chemistry II & Lab

Plus 6 elective credit hours in Chemistry at the 300 and/or 400 level by advisement

SCI 301	Science for Elementary Educators I
SCI 302	Science for Elementary Educators (Lab)
SCI 303	Science for Elementary Educators II
SCI 325	Science Teaching Assistantship
EDU 403	Teaching Science in the Elementary School

Earth Science Concentration (32-33 credit hours)

GEO 160	Oceanography
GEO 165	Geology I
GEO 169	General Geology (Lab)
GEO 210	Geology II
GEO 215	Minerals and Rocks
GEO 311	Global Climate

Plus 3-4 elective credit hours in Geology at the 300 and/or 400 level by advisement

SCI 301	Science for Elementary Educators I
SCI 302	Science for Elementary Educators (Lab)
SCI 303	Science for Elementary Educators II
SCI 325	Science Teaching Assistantship
EDU 403	Teaching Science in the Elementary School

English Concentration (30 credit hours)

ENED 357 Literacy, Language and Learning Theory
Plus one to three of the following will be required based on your major:

ENED 352	Teaching Writing in the Primary Grades
ENED 354	Literature for the Intermediate Grades
ENED 358	Teaching Writing in Intermediate Grades

Plus one of the following:

ENGL 205	Epic and Romance
ENGL 207	Drama and Film
ENGL 209	Novels and Tales
ENGL 211	World Poetry

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
FREN 216	Intermediate French II
FREN 308	Advanced French Phonetics & Diction
FREN 317	French Conversation
FREN 318	French Composition
FREN 319	Survey of French Literature I

One of the following:

- FREN 315 French Masterpieces I
FREN 316 French Masterpieces II

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
MAED 301 Mathematics for School Teachers I
MAED 302 Mathematics for School Teachers II
MAED 303 Mathematics for School Teachers III
MAED 310 Reading and Writing Mathematics
MAED 325 Technology Integration in Mathematics Education
EDU 402 Teaching Mathematics in the Elementary School

One of the following:

- MATH 110 Math in Action
MATH 117 Why Mathematics?

One of the following sequences:

- MATH 120/ Survey of Calculus I and II
MATH 121
MATH 122/ University Calculus I and II
MATH 123

One of the following:

- STAT 150 Statistical Ideas
STAT 200 Statistical Methods
STAT 350 Probability and Statistics

Music Concentration (34 credit hours)

- MUS 121 Aural Theory I
MUS 122 Aural Theory II
MUS 123 Music Theory I
MUS 124 Music Theory II
MUED 315 Music, Play and Self
MUS 450 Directed Studies (Musicianship I)
MUS 451 Directed Studies (Musicianship II)

Plus one of the following:

- MUS 263 Music History in Western Civilization I
MUS 264 Music in Western Civilization II

Plus one of the following:

- MUS 265 History of Jazz
MUS 267 African American Music
MUS 270 The History of American Popular Music 1900-1963

Plus any three of the following:

- MUS 118 Piano Class
MUS 217 Piano Class Intermediate
MUS 218 Piano Class Intermediate
MUS 317 Piano Class Advanced
MUS 318 Piano Class Advanced

Plus one of the following:

- MUED 210 Guitar
and
MUED 211 Guitar
Or
MUS 270 Social Instruments

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
PHYS 121/ College Physics I & Lab
PHYS 123
PHYS 122/ College Physics II & Lab
PHYS 124
PHYS 311 Acoustics I
PHYS 318 Basic Electronics

One of the following sequences:

- MATH 120/ Survey of Calculus I and II

- MATH 121
MATH 122/ University Calculus I and II
MATH 123
SCI 301 Science for Elementary Educators I
SCI 302 Science for Elementary Educators (Lab)
SCI 303 Science for Elementary Educators II
SCI 325 Science Teaching Assistantship
EDU 403 Teaching Science in the Elementary School

Social Studies Concentration (33 credit hours)

- HIST 105 United States History to 1877
HIST 106 United States History since 1877

Plus one of the following:

- POLI 120 American Politics
POLI 150 U.S. and World Affairs

Plus one of the following sequences:

- HIST 115 Western Civilization I
and
HIST 102 World History II
or
HIST 116 Western Civilization II
and
HIST 101 World History I

Plus one of the following:

- POLI 321 Political Parties and Interest Groups
POLI 323 Elections in America
POLI 324 President and Congress
POLI 356 U.S. Foreign Policy
POLI 370 American Constitutional Law
POLI 371 Civil Rights and Liberties

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 Elementary School

Spanish Concentration (30 credit hours)

- SPAN 215 Intermediate Spanish I
SPAN 216 Intermediate Spanish II
SPAN 313 Spanish Conversation
SPAN 314 Spanish Composition
SPAN 315 Introduction to Hispanic Literature

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
EDU 321 Teaching in the Middle School

B. Enhanced Concentrations for Childhood Education with Middle School Extension (select one):**Biology Middle School Extension for Childhood Education**

Biology core - 24 credit hours

BIOL 131/ Principles of Biology I

BIOL 132

BIOL 133/ Principles of Biology II

BIOL 134

BIOL 243/ Biodiversity & Lab

BIOL 244

BIOL 330/ General Ecology

BIOL 331

BIOL 236 Human Anatomy & Physiology

BIOL 237/ Genetics & Lab

BIOL 238

Also 1 additional credit (i.e. BIOL 105, 440, 450, 490)

Required Cognates - 25 credit hours

PHYS 121/ College Physics I & Lab

PHYS 123

PHYS 122/ College Physics II & Lab

PHYS 124

CHEM 115/ General Chemistry & Lab

CHEM 125

CHEM 116/ General Chemistry II & Lab

CHEM 126

GEO 165 Geology I

GEO 311 Global Climate

GEO 150 Moons & Planets

Chemistry Middle School Extension for Childhood Education

Chemistry core - 24 credit hours

CHEM 100 Chemistry Freshmen Seminar

CHEM 115/ General Chemistry & Lab

CHEM 125

CHEM 116/ General Chemistry II & Lab

CHEM 130 or

CHEM 126

CHEM 215 Organic I & Lab

CHEM 216/ Organic II & Lab

CHEM 230 or

CHEM 226

7 credit hours of Chemistry electives (must be at 300-400 level)

CHEM 302 Chemistry in Today's Society

CHEM 305 Laboratory Supervision in Chemistry

CHEM 391 Independent Laboratory Research

CHEM 317 Analytical Chemistry

CHEM 412 Advanced Organic Chemistry

CHEM 417 Polymer Chemistry

CHEM 473 Environmental Aquatic Chemistry

CHEM 481 Special Topics

Required Cognates - 23 credit hours

PHYS 121/ College Physics I & Lab

PHYS 123

PHYS 122/ College Physics II & Lab

PHYS 124

BIOL 131 Principles of Biology I

BIOL 133 Principles of Biology II

GEO 165 Geology I

GEO 311 Global Climate

GEO 150 Moons & Planets

Earth Science Middle School Extension

Earth Science core - 24 credit hours

GEO 150 Moons & Planets

GEO 160 Oceanography

GEO 165/ Geology I & Lab

GEO 169

GEO 311 Global Climate

GEO 330 Geomorphology

GEO 215 Minerals & Rocks

(3-7 credit hours of recommended electives)

GEO 210 Geology II

GEO 301 Cartography

GEO 359 Vanishing Earth Resources

GEO 370 Structural Geology & Lab

GEO 400 Stratigraphy & Lab

Required Cognates - 23 credit hours

PHYS 121/ College Physics I & Lab

PHYS 123

PHYS 122/ College Physics II & Lab

PHYS 124

BIOL 131 Principles of Biology I

BIOL 133 Principles of Biology II

CHEM 115/ General Chemistry & Lab

CHEM 125

CHEM 116/ General Chemistry II & Lab

CHEM 126

English Middle School Extension

(36 credit hours)

ENED 354 Literature for Intermediate Grades

ENED 355 Adolescent Literature

ENED 356 Teaching Writing in the Secondary School

ENED 357 Literacy, Language/Learning Theory

ENED 358 Teaching Writing in Intermediate Grades

ENED 359 Teaching Poetry in Elementary and Middle School

Plus one of the following:

ENGL 205 Epic and Romance

ENGL 207 Drama and Film

ENGL 209 Novels and Tales

ENGL 211 World Poetry

Plus 9 elective credit hours in English at the 200 level or above in National or World Literature by advisement

Plus 6 elective credit hours in English at the 300 and/or 400 level by advisement. Must have "literary period" in the Course Attribute or "Literature" in the Course Title.

French Middle School Extension

(36 credit hours)

FREN 215 Intermediate French I

FREN 216 Intermediate French II

FREN 308 Advanced French Phonetics & Diction

FREN 317 French Conversation

FREN 318 French Composition

FREN 319 Survey of French Literature I

Plus one of the following:

FREN 315 French Masterpieces I

FREN 316 French Plays & Prose

Plus 15 elective credit hours in French at the 300 and/or 400 level by advisement

Mathematics Middle School Extension

(41-43 credit hours)

MATH 210 Mathematical Structures and Proof

MATH 231 Linear Algebra

MATH 341 Geometry

MATH 381 History of Mathematics

MAED 301 Mathematics for School Teachers I

MAED 302 Mathematics for School Teachers II

MAED 303 Mathematics for School Teachers III

MAED 310 Reading and Writing Mathematics

EDU 402 Teaching Mathematics in Elementary School

One of the following sequences:

MATH 120/ Survey of Calculus I and II

MATH 121

MATH 122/ University Calculus I and II

MATH 123

One of the following:

STAT 150 Statistical Ideas
 STAT 200 Statistical Methods
 STAT 350 Probability and Statistics
 Plus 3 credit hours of MATH or STAT at the 300 or 400 level by advisement

Physics Middle School Extension

Physics core - 24 credit hours

PHYS 230/ University Physics I & Lab

PHYS 232

PHYS 231/ University Physics II & Lab

PHYS 233

PHYS 234 Modern Physics

PHYS 330 Thermodynamics

PHYS 340 - Optics & Lab

PHYS 341

Also 3 credit hours from the following:

PHYS 311

PHYS 321-

479

Required Cognates - 23 credit hours

BIOL 131 Principles of Biology I

BIOL 133 Principles of Biology II

CHEM 115/ General Chemistry & Lab

CHEM 125

CHEM 116/ General Chemistry II & Lab

CHEM 126

GEO 165 Geology

GEO 311 Global Climate

GEO 150 Moons & Planets

Social Studies Middle School Extension

(45 credit hours)

Note: A minimum grade of C+ is required for this extension.

HIST 105 United States History to 1877

HIST 106 United States History since 1877

POLI 120 American Politics

HIST 101 World History II

HIST 116 Western Civilization II

HIST 201 Doing History

SSED 204 World Regional Geography

Plus one of the following:

ECON 201 Macroeconomics

SSED 205 Economics for Social Studies Educators

Plus one of the following:

HIST 250 Introduction to Russia and Eastern Europe

HIST 261 Islamic Civilization

HIST 264 East Asian Civilizations

HIST 265 Premodern East Asia

HIST 266 Modern East Asia

HIST 268 History of South Asia

HIST 272 Africa to 1800

HIST 273 Africa From the 1800s

HIST 282 Pre-Columbian and Colonial Latin America

HIST 283 Revolution and Reform in Latin America

HIST 288 The Atlantic World

Plus one of the following:

POLI 321 Political Parties and Interest Groups

POLI 323 Elections in America

POLI 324 President and Congress

POLI 356 U.S. Foreign Policy

POLI 370 American Constitutional Law

POLI 371 Civil Rights and Liberties

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 the Elementary School

Spanish Middle School Extension

(36 credit hours)

SPAN 215 Intermediate Spanish I

SPAN 216 Intermediate Spanish II

SPAN 313 Spanish Conversation

SPAN 314 Spanish Composition

SPAN 315 Intro. Hispanic Literature

Plus 21 credit hours of Spanish at the 300 and/or 400 level by advisement

Overview of Adolescence Education Course Requirements

Listed below are the requirements for adolescence education programs to fulfill the College of Education certification requirements. Each adolescence education program is housed in the 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.

Biology, Chemistry, Earth Science, and Physics (39 credit hours)

The Adolescence Education - Biology program is housed within the Department of Biology. For more information, please contact the department:

Office: 112 Jewett Hall

(716) 673-3282

Patricia Astry, Chairperson

Email: biology.department@fredonia.edu

Website: <http://www.fredonia.edu/department/biology/>

The adolescence program in Chemistry is housed within the Department of Chemistry & Biochemistry. For more information, please contact the department:

Office: 216 Houghton Hall

(716) 673-3281

Thomas S. Janik, Chairperson

Email: chemistry.department@fredonia.edu

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

The Adolescence Education - Earth Science program is housed within the Department of Geosciences. For more information, please contact the department:

Office: 121 Houghton Hall

(716) 673-3303

Gordon Baird, Chairperson

Email: geosciences.department@fredonia.edu

Website: <http://www.fredonia.edu/department/geosciences/>

The adolescence program in Physics is housed within the Department of Physics. For more information, please contact the department:

Office: 121 Houghton Hall

(716) 673-3301

Michael Grady, Chairperson

Email: physics.department@fredonia.edu

Website: <http://www.fredonia.edu/department/physics/>

Note: (F) indicates Field Experiences

SCED 105	Nature and Science in Education (F)
EDU 224	Adolescent Development
EDU 250	Introduction to the Exceptional Child (F)
EDU 251	Practicum in Inclusive Education II
SCED 276	Literacy and Technology for Science and Mathematics
SCED 303	Assessment of Inquiry-Based Science
SCED 305	Cultural and Linguistic Diversity in the Classroom (F)
EDU 301	Safe Schools/Healthy Students: Child Abuse and Child Abduction
EDU 302	Safe Schools/Healthy Students: Alcohol, Tobacco and Other Drug Abuse
EDU 303	Safe Schools/Healthy Students: Safety Education/Fire & Arson/School Violence
EDU 349	Educational Psychology
SCED 419	Adolescence (Secondary) Methods (Fall Semester Only) (F)
EDU 430	Student Teaching in the Secondary School (Spring Semester Only)

English (84 credit hours)

This Adolescence Education - English program is housed within the Department of English. For information on this program, please consult the department:

Office: 278 Fenton Hall
(716) 673-3125

Ann Siegle Drege, Chairperson

Jeanette McVicker, Co-Chairperson

Email: english.department@fredonia.edu

Website: <http://www.fredonia.edu/department/english/>

Note: F= Field Experience

I. 9 credit hours from the following core courses:

ENGL 205	Epic and Romance
ENGL 207	Drama and Film
ENGL 209	Novels and Tales
ENGL 211	World Poetry

Plus 27 credit hours, as follows:

ENGL 350	Literary Landmarks: American
ENGL 350	Literary Landmarks: British
ENGL 373	English Grammar for Everyone
ENGL XXX	Literary period course
ENGL XXX	Major author course
ENGL 3XX	One 300-level writing course
ENGL XXX	One 200 or above elective
ENGL XXX	One 200 or above elective
ENGL XXX	One 300 or above elective
ENGL 401	Portfolio Completion

II. 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 (F)
ENED 103	Readings and Observations in English-Adolescence Education (F)

ENED 250	Literature and Technology
ENED 355	Adolescent Literature
ENED 356	Teaching Writing in the Secondary School
ENED 357	Literacy, Language, and Learning Theory
ENED 450	Seminar for Teachers of English (seniors only, Fall semester only)
ENED 451	Secondary School Methods - English (F)
ENED 452	Inquiries in Student Teaching
ENED 453	Student Teaching in the Secondary School – English Grades 7-12 (Spring semester only)

III. The following education and health courses (12 credit hours):

EDU 224	Adolescent Development
EDU 250	Introduction to the Exceptional Learner
EDU 251	Practicum in Inclusive Education II
EDU 301	Safe Schools/Healthy Students: Child Abuse and Child Abduction
EDU 302	Safe Schools/Healthy Students: Alcohol, Tobacco and Other Drug Abuse
EDU 303	Safe Schools/Healthy Students: Safety Education/Fire & Arson/School Violence
EDU 349	Educational Psychology

French, Spanish, and Social Studies (39 credit hours)

The Adolescence Education - French and Adolescence Education - Spanish programs are housed within the Department of Modern Languages and Literature. For more information, please contact the department:

Office: 2113 Fenton Hall
(716) 673-3380

Carmen S. Rivera, Chairperson

Email: modern.languages@fredonia.edu

Website:

<http://www.fredonia.edu/department/modernlanguages/>

The Adolescence Education - Social Studies program is housed within the Department of History. For more information, please contact the department:

Office: E332 Thompson Hall
(716) 673-3277

Mary Beth Sievens, Chairperson

Email: history.department@fredonia.edu

Website: <http://www.fredonia.edu/department/history/>

Note: (F) indicates Field Experiences

EDU 105	Introduction to Contemporary Education (F)
EDU 106	Practicum in Inclusive Education I
EDU 224	Adolescent Development
EDU 250	Introduction to the Exceptional Child (F)
EDU 251	Practicum in Inclusive Education II
EDU 276	Literacy and Technology in the Inclusive Classroom
EDU 301	Safe Schools/Healthy Students: Child Abuse and Child Abduction
EDU 302	Safe Schools/Healthy Students: Alcohol, Tobacco and Other Drug Abuse
EDU 303	Safe Schools/Healthy Students: Safety Education/Fire & Arson/School Violence
EDU 305	Cultural and Linguistic Diversity in the Classroom (F)
EDU 349	Educational Psychology
EDU 419	Adolescence (Secondary) Methods (Fall semester only) (F)
EDU 430	Student Teaching in the Secondary School (Spring semester only)

Students majoring in Spanish should pass (SPAN) 313, 314, 315 with a minimum of B- in each.

Mathematics (36 credit hours)

The Adolescence Education - Mathematics program is housed within the Department of Mathematical Sciences.

For more information, please contact the department:

Office: 223 Fenton Hall

(716) 673-3243

Joseph Straight, Chairperson

Keary Howard, Mathematics Education Coordinator

Email: mathematics.department@fredonia.edu

Website: <http://www.fredonia.edu/departments/math/>

Note: (F) indicates Field Experiences

MAED 105	Introduction to Contemporary Mathematics Education (F)
EDU 224	Adolescent Development
EDU 250	Introduction to the Exceptional Learner (F)
EDU 251	Practicum in Inclusive Education II
MAED 276	Literacy and Technology for Science and Mathematics
MAED 305	Diversity in the Teaching of Science and Mathematics (F)
EDU 301	Safe Schools/Healthy Students: Child Abuse and Child Abduction
EDU 302	Safe Schools/Healthy Students: Alcohol, Tobacco and Other Drug Abuse
EDU 303	Safe Schools/Healthy Students: Safety Education/Fire & Arson/School Violence
EDU 349	Educational Psychology
MAED 419	Secondary School (Grades 7-12) Methods in Mathematics Methods (Fall Semester Only) (F)
EDU 430	Student Teaching in the Secondary School (Spring Semester Only)

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 SUNY Fredonia service area, such as the Fredonia-Hamburg Teacher Education Center.

The college offers international programs for education majors. Through cooperative efforts with the Swansea Institute of Higher Education in Wales, and 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 SUNY Fredonia and these British institutions, students from England and Wales 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 and Education Grant Programs.

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 (ECE)
Childhood Education (CE)
Childhood Inclusive Education (CIE)
Early Childhood/Childhood Education (EC/CH)
Music Education K-12
Teaching English to Speakers of Other Languages (TESOL K-12).
Adolescence Education: 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 Deiulio 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

Childhood Education

Department of Curriculum and Instruction

Office: E268 Thompson Hall
(716) 673-3701

Mira T. Berkley, Chairperson

Email: ci@fredonia.edu

Website: <http://www.fredonia.edu/coe/ci.asp>

Childhood Education Bachelor of Science in Education degree

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

Program Requirements:

Note: (F) designates courses that have a field experience component.

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

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 local equivalent). Requirement is fulfilled.
- Scores of 65 percent - 84 percent on High School N.Y.S. Regents Exam (or local equivalent): 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 SUNY Fredonia proficiency exam.
- Scores below 65 percent on High School N.Y.S. Regents Exam (or local equivalent) or if student did not take a N.Y.S. Regents or local Exam: Student needs to take an Elementary I level course and an Elementary II level course of the same language or equivalent.

Plus 7 credit hours in Natural Science courses (from two different departments)

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

(Note: SCI courses are considered multi-disciplinary — all 7 credit hours can be taken in SCI)

Methods of Instruction:

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

Capstone Experience – Student Teaching:

EDU 416	Capstone Seminar: Advanced Study in Classroom Organization, Management and Instruction
EDU 420	Student Teaching Grades 1-3
EDU 422	Student Teaching Grades 4-6

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

Advisement forms may be downloaded at

<http://www.fredonia.edu/coe/undergradadvise.asp>

Childhood Inclusive Education Bachelor of Science in Education degree

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:

Note: (F) designates courses that have a field experience component.

EDU 105 -	Introduction to Contemporary Inclusive Education (F)
EDU 106	Practicum in Inclusive Education I
EDU 225	Child Development
EDU 250-	Introduction to the Exceptional Learner (F)
EDU 251	Practicum in Inclusive Education II
EDU 276	Literacy and Technology in Inclusive Educational Settings
EDU 305/	Cultural and Linguistic Diversity in the Classroom (F)
EDU 313	Practicum in Inclusive Education III
EDU 349	Educational Psychology
EDU 355	Assessment and Instruction of Students with Learning and Behavioral Disorders in Inclusive Educational Settings
EDU 301	Safe Schools/Healthy Students: Child Abuse and Child Abduction
EDU 302	Safe Schools/Healthy Students: Alcohol, Tobacco and Other Drug Abuse
EDU 303	Safe Schools/Healthy Students: Safety Education/Fire and Arson/School Violence
MAED 301	Math for School Teachers I
MAED 302	Math for School Teachers II

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 local equivalent). Requirement is fulfilled.
- Scores of 65 percent - 84 percent on High School N.Y.S. Regents Exam (or local equivalent): 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 SUNY Fredonia proficiency exam.
- Scores below 65 percent on High School N.Y.S. Regents Exam (or local equivalent) or if student did not take a N.Y.S. Regents or local Exam: Student needs to take an Elementary I level course and an Elementary II level course of the same language or equivalent.

Plus 7 credit hours in Natural Science courses (from two different departments)

(Note: SCI courses are considered multi-disciplinary — all 7 credit hours can be taken in SCI)

Plus an area of concentration: 30-37 credit hours.
Students should see Areas of Concentration.

Methods of Instruction:

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

Capstone Experience – Student Teaching:

EDU 416	Capstone Seminar - advanced Study in Classroom Organization, Management, and Instruction
EDU 440	Student Teaching in Inclusive Education (Grades 1-3)
EDU 441	Student Teaching in Inclusive Education (Grades 4-6)

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

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

Early Childhood Education

Department of Curriculum and Instruction

Office: E268 Thompson Hall
(716) 673-3701

Mira T. Berkley, *Chairperson*

Email: ci@fredonia.edu

Website: <http://www.fredonia.edu/coe/earlychildhood.asp>

Early Childhood Education Bachelor of Science in Education degree

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:

Note: (F) designates courses that have a field experience component.

EDU 105-	Introduction to Contemporary Inclusive Education (F)
EDU 106	Practicum in Inclusive Education I
EDU 214	Children's Literature
EDU 221	Introduction to Early Childhood Curriculum (F)
EDU 225	Child Development
EDU 250-	Introduction to the Exceptional Learner (F)
EDU 251	Practicum in Inclusive Education II
EDU 276	Literacy and Technology in Inclusive Educational Settings
EDU 305/	Cultural and Linguistic Diversity in the Classroom (F)
EDU 313	Practicum in Inclusive Education III
EDU 315	Early Childhood Curriculum Development
EDU 349	Educational Psychology
EDU 301	Safe Schools/Healthy Students: Child Abuse and Child Abduction
EDU 302	Safe Schools/Healthy Students: Alcohol, Tobacco and Other Drug Abuse
EDU 303	Safe Schools/Healthy Students: Safety Education/Fire and Arson/School Violence
MUED 315	Music, Play and Self
MAED 301	Math for School Teachers I
MAED 302	Math for School Teachers II

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 local equivalent). Requirement is fulfilled.
- Scores of 65 percent - 84 percent on High School N.Y.S. Regents Exam (or local equivalent): 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 SUNY Fredonia proficiency exam.
- Scores below 65 percent on High School N.Y.S. Regents Exam (or local equivalent) or if student did not take a N.Y.S. Regents or local Exam: Student needs to take an Elementary I level course and an Elementary II level course of the same language or equivalent.

Plus 7 credit hours in Natural Science courses (from two different departments)

(Note: SCI courses are considered multi-disciplinary — all 7 credit hours can be taken in SCI)

Plus an area of concentration 30-37 credit hours. Students should see Areas of Concentration.

Methods of Instruction:

EDU 402	Teaching Mathematics in Inclusive Educational Settings
EDU 405	Teaching Literacy in Inclusive Educational Settings
EDU 406	Literacy and Assessment in Inclusive Educational Settings
EDU 412	Integrated Methods for Early Childhood Education
EDU 432	Home-School Partnerships in a Diverse Society
Capstone Experience – Student Teaching	
EDU 416	Capstone Seminar - Advanced Study in Classroom Organization, Management, and Instruction
	Plus two of the following:
EDU 421	Student Teaching – Pre-K
EDU 423	Student Teaching - Kindergarten
EDU 425	Student Teaching - Grades 1 or 2

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

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

Early Childhood-Childhood Education Bachelor of Science in Education degree

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 (F)
EDU 106	Practicum in Inclusive Education I
EDU 214	Children's Literature
EDU 221	Introduction to Early Childhood Education Curriculum (F)
EDU 225	Child Development
EDU 250-	Introduction to the Exceptional Learner (F)
EDU 251	Practicum in Inclusive Education II
EDU 276	Literacy and Technology in Inclusive Educational Settings
EDU 305/	Cultural and Linguistic Diversity in the Classroom (F)
EDU 313	Practicum in Inclusive Education III
EDU 315	Early Childhood Curriculum Development
EDU 349	Educational Psychology
EDU 301	Safe Schools/Healthy Students: Child Abuse and Child Abduction
EDU 302	Safe Schools/Healthy Students: Alcohol, Tobacco and Other Drug Abuse
EDU 303	Safe Schools/Healthy Students: Safety Education/Fire and Arson/School Violence
MUED 315	Music, Play & Self
MAED 301	Math for School Teachers I
MAED 302	Math for School Teachers II

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 local equivalent). Requirement is fulfilled.
- Scores of 65 percent - 84 percent on High School N.Y.S. Regents Exam (or local equivalent): 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 SUNY Fredonia proficiency exam.
- Scores below 65 percent on High School N.Y.S. Regents Exam (or local equivalent) or if student did not take a N.Y.S. Regents or local Exam: Student needs to take an Elementary I level course and an Elementary II level course of the same language or equivalent.

Plus 7 credit hours in Natural Science courses (from two different departments)

(Note: SCI courses are considered multi-disciplinary — all 7 credit hours can be taken in SCI)

Plus an area of concentration 30-37 credit hours.
Students should see Areas of Concentration.

Methods of Instruction:

EDU 402	Teaching Mathematics in Inclusive Educational Settings
EDU 403	Teaching Science in Inclusive Educational Settings
EDU 404	Teaching Social Studies in Inclusive Educational Settings
EDU 405	Teaching Literacy in Inclusive Educational Settings
EDU 406	Literacy and Assessment in Inclusive Educational Settings
EDU 412	Integrated Methods for Early Childhood Education
EDU 432	Home/School Partnerships in a Diverse Society
EDU 416	Capstone Seminar - Advanced Study in Classroom Organization, Management and Instruction
EDU 435	Student Teaching in the Elementary School: Pre-K through Kindergarten
EDU 436	Student Teaching in the Elementary School: Grades 1-3
EDU 437	Student Teaching in the Elementary School: Grades 4-6

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

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

Education Graduate Programs

College of Education - Professional Education Unit

Office: 126 Reed Library
(716) 673-3311

Christine Givner, *Dean of the College of Education and Chief Certification Officer*

Email: christine.givner@fredonia.edu

Jamar Pickreign, *Associate Dean of the College of Education*

Email: jamar.pickreign@fredonia.edu

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

Department of Curriculum and Instruction

Office: E268 Thompson Hall
(716) 673-3701

Mira T. Berkley, *Chairperson*

Email: ci@fredonia.edu

Website: <http://www.fredonia.edu/coe/ci.asp>

Department of Language, Learning and Leadership

Office: E262 Thompson Hall
(716) 673-3702

Anna M. Thibodeau, *Chairperson*

Email: ll@fredonia.edu

Website: <http://www.fredonia.edu/coe/lll.asp>

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.

National Council for the Accreditation of Teacher Education (NCATE)

SUNY Fredonia is fully accredited by NCATE, a partnership of over 30 national professional organizations, representing over three million Americans who have united to ensure high quality teacher preparation. NCATE ensures that subject matter content, and how to teach it, is the priority. NCATE standards expect the College of Education to base its programs on content and teaching standards set by professional associations in each content area. NCATE endorsement adds both credibility and national transportability to SUNY 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 SUNY 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, 126 Reed Library, (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 SUNY 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, SUNY Fredonia will recommend candidates for the appropriate certification, also listed below. When the recommendation is for Permanent or Professional certification, the candidate will be recommended for Permanent/Professional certification in his/her area of provisional/initial certification.

Master's Degrees Offered	HEGIS CODES	Certification Recommended		
		Advanced Certificate School District Leadership (see page 75)	0827	Initial/
		Master of Science in Speech-Language Pathology (see page 39)	1220	Initial/Profes
		Master of Science in Education TESOL (see page 71)	1508	Initial/Profe
		Advanced Certificate TESOL		Initial/
		TESOL ITI (see page 73)		Initial/
		Master of Science in Education Biology 7-12 (Discontinued program)	0401	
Master of Arts in Teaching Adolescence Science Education http://www.fredonia.edu/gradstudies/mat.asp	0834	Initial/Professional		
		Master of Science in Education Adolescence Social Studies (Discontinued program)	2201.01	
Bilingual ITI (see page 74)	0899.60	Initial/Professional		
Master of Science in Education Curriculum and Instruction in Inclusive Education	0829	Professional	1501.01	
Master of Arts in English 7-12 (see page 81)	1501	Professional		
Master of Science in Education Literacy Education (Birth-6) (see page 69)	0830	Initial/Professional		
Master of Science in Education Literacy Education (5-12) (see page 70)	0830	Initial/Professional		
Master of Science in Education Mathematics 7- 12	1701.01	Professional		
Master of Music in Music Education K-12 (see page 134)	0832	Professional		
Advanced Certificate School Building Leadership (see page 75)	0828	Initial/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 National Council for the Accreditation of Teacher Education (NCATE) standards. As such, any changes made by the New York State Board of Regents or the NCATE Unit Accreditation Board 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 New Teacher Assessment and Support Consortium (INTASC) dispositions:

1. Contribution to a positive climate on campus and in the field;
2. Demonstrated mastery of written and spoken language for self-expression, as well as for learning purposes;
3. Thoughtful and responsive listener;
4. Commitment to reflection, assessment, and learning as an ongoing process;
5. Willingness to give and receive help;
6. Sensitivity to community and cultural norms of the college, school, and classroom;
7. Appreciation and value for human diversity and respect for others varied talents and perspectives;
8. Values the development of critical thinking, independent problem solving, and performance capabilities in him or herself and in pupils;

9. Demonstrated commitment to keeping abreast of new ideas and understandings in the field of education; and
10. Demonstrated level of responsibility appropriate for a professional.

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://ohe32.nysed.gov/tcert/ospra/index.html>

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 masters degree program or as an elective in programs with elective options (with advisors approval). As a result of reciprocal agreements between SUNY Fredonia and these British institutions, students from England and Wales 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 at Plymouth University in Exmouth, England, or Swansea Institute in Swansea, Wales.

Curriculum & Instruction in Inclusive Education: Master of Science in Education degree

Department of Curriculum and Instruction

Office: E270 Thompson Hall
(716) 673-3701

Mira T. Berkley, *Chairperson*, Department of Curriculum and Instruction

Robert Dahlgren, *Program Coordinator*

Email: ci@fredonia.edu

Website: <http://www.fredonia.edu/coe/ci.asp>

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 2.75 or above.
- Completed Graduate Application submitted to the Office of Graduate Studies, including two current (within six months) letters of recommendation, and official academic transcripts from all prior undergraduate and graduate institutions (except SUNY Fredonia).

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 (12 required credit hours)

- | | |
|---------|---|
| EDU 570 | Using Education Research to Improve Instruction (Should be completed within the first semester) |
| EDU 660 | Conducting Educational Research (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 |
| EDU 514 | Assessment & Instruction of Diverse Learners I |
| EDU 529 | Proactive Approaches to Classroom Management |
| EDU 530 | Assessment & Instruction of Diverse Learners II |

Linking Content & Pedagogy (12 required credit hours)

Choose 12 credits from the following:

Literacy/Language Arts

- | | |
|-----------------|--|
| EDU 506 | Introduction to Literacy Instruction |
| EDU 547 | Children's Literacies, Literature & Tech |
| EDU 536 | Adolescent Literacies, Literature & Tech |
| EDU 586 | Literacy in the Content Area |
| EDU 605 | Issues, Trends, and Research in Elementary Language Arts |
| ENGL 5XX or 6XX | By advisement |
| EDU 591 | Special topics by advisement* |

Social Studies

- | | |
|-----------------|---|
| EDU 635 | Curriculum Development in Social Studies Education |
| EDU 636 | Issues, Trends and Research in Social Studies Education |
| HIST 5XX or 6XX | By advisement |
| POLI 5XX or 6XX | By advisement |
| EDU 591 | Special topics by advisement* |

Mathematics/Science/Technology

- | | |
|-----------------|---|
| EDU 603 | Issues, Trends & Research in Elementary (Childhood) Science |
| EDU 640 | Issues, Trends & Research in Elementary (Childhood) Mathematics |
| EDU 642 | Activity Oriented Elementary Mathematics |
| EDU 643 | Mathematics Assessment in Support of All Learners |
| MAED 5XX or 6XX | By advisement |
| SCED 5XX or 6XX | By advisement |
| EDU 591 | Special topics by advisement* |

Interdisciplinary

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

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

Electives (3 credit hours)

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)
EDU 690 Masters Thesis/Project

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 (12 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 Education Research to Improve Instruction
(Should be completed within the first semester)
EDU 660 Conducting Educational Research (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
EDU 514 Assessment & Instruction of Diverse Learners I
EDU 529 Proactive Approaches to Classroom Management
EDU 530 Assessment & Instruction of Diverse Learners II

Linking Content & 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 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 Arts & Sciences.

Electives (3 credit hours)

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)
EDU 690 Masters Thesis/Project

Literacy: Birth-Grade 6 Master of Science in Education degree

Department of Language, Learning and Leadership

Office: W262 Thompson Hall

(716) 673-3702

Anna Thibodeau, Chairperson, Department of Language, Learning and Leadership

Clara Beier, Program Co-Coordinator

Jennifer Ro, Program Co-Coordinator

Email: Clara.Beier@fredonia.edu or
Jennifer.Ro@fredonia.edu
Email: LLL@fredonia.edu
Website: <http://www.fredonia.edu/coe/lll.asp>

The program leads to a recommendation for initial certification and a Master of Science in Education: Literacy Education Birth to Grade 6 degree, and results 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:

- 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.
- Undergraduate GPA of 2.75 or above.
- Completed Graduate Application submitted to the Office of Graduate Studies, including two current (within six months) letters of recommendation that address the applicant's academic and teaching abilities, and official academic transcripts from all prior undergraduate and graduate institutions (except SUNY Fredonia).
- Writing Sample: Submit a 2,000 word (maximum) paper that describes your approach to literacy instruction and your experiences with leadership. (Note: This is in addition to the graduate application Statement of Intent).
- Interview. After the application deadline, candidates with completed application materials will be contacted by Literacy faculty for an interview.

Note: SUNY 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 Grades 5-12 (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/related_masters.html

http://www.highered.nysed.gov/tcert/certificate/related_masters.html

Program Requirements

A minimum of 36 credit hours of graduate level courses, including the following:

Clinical Courses: Six (6) credit hours of Clinical courses must follow the sequence as indicated.

Majors in Literacy Education (Birth-Grade 6) will work with K-6 children.

Literacy Coach Portfolio: Contains documentation from Literacy Conference and EDU 586, EDU 613, EDU 652 and EDU 653.

Required courses:

EDU 506	Introduction to Literacy Instruction
EDU 547	Children's Literature and Technology
EDU 570	Using Education Research to Improve Instruction
EDU 579	Social Foundations of Literacy
EDU 583	Individualized Literacy Instruction
EDU 586	Literacy in the Content Areas
EDU 587	Psychological Foundations of Literacy
EDU 613	Remediation of Literacy Difficulties
EDU 651	Issues and Research in Literacy
EDU 652	Literacy Assessment
EDU 653	Diagnosis of Literacy Difficulties
EDU 659	Master's Thesis/Project in Literacy

Literacy: Grades 5-12 Master of Science in Education degree

Department of Language, Learning and Leadership

Office: W261 Thompson Hall

(716) 673-3702

Anna Thibodeau, Chairperson, Department of Language, Learning and Leadership

Clara Beier, Program Co-Coordinator

Jennifer Ro, Program Co-Coordinator

Email: Clara.Beier@fredonia.edu or

Jennifer.Ro@fredonia.edu

Email: LLL@fredonia.edu

Website: <http://www.fredonia.edu/coe/lll.asp>

The program leads to a recommendation for initial certification and a Master of Science in Education: Literacy Grades 5-12, and results 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 Program without Deficiencies:

- 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.
- Undergraduate GPA of 2.75 or above.
- Completed Graduate Application submitted to the Office of Graduate Studies, including two current (within six months) letters of recommendation, and official academic transcripts from all prior undergraduate and graduate institutions (except SUNY Fredonia).
- Writing Sample: Submit a 2,000 word (maximum) paper that describes your approach to literacy instruction and your experiences with leadership. (Note: This is in addition to the graduate application Statement of Intent).
- Interview. After the application deadline, candidates with completed application materials will be contacted by Literacy faculty for an interview.

Note: SUNY 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 Grades 5-12 (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>

<http://www.highered.nysed.gov/tcert/certificate/relatedmasters.html>

Program Requirements

A minimum of 36 credit hours (minimum four semesters) of graduate level courses, including the following:

Clinical Courses: Six (6) credit hours of Clinical courses, which are listed below, must follow the sequence as indicated. Majors in Literacy Education (Birth-Grade 6) will work with students in grades 5-12.

Literacy Coach Portfolio: Contains documentation from Literacy Conference and EDU 586, EDU 613, EDU 652 and EDU 653.

Cluster I (12 required credit hours)

EDU 570	Using Education Research to Improve Instruction
EDU 583	Individualized Literacy Instruction (Clinic #1)
EDU 587	Psychological Foundations of Literacy
EDU 652	Literacy Assessment

Cluster II (12 required credit hours)

EDU 506	Introduction to Literacy Instruction
EDU 579	Social Foundations of Literacy
EDU 653	Diagnosis of Literacy Difficulties
EDU 613	Remediation of Literacy Difficulties (Clinic #2)

Cluster III (9 required credit hours)

EDU 536	Adolescent Literacies, Literature and Technology
EDU 586	Literacy in the Content Areas
EDU 651	Issues in Research and Literacy

Capstone (occurs after the completion of 33 credit hours)

EDU 659	Masters Thesis/Project in Literacy
---------	------------------------------------

Teaching English to Speakers of Other Languages (TESOL)/Bilingual Education (BE)

Department of Language, Learning and Leadership

Office: E262 Thompson Hall

(716) 673-3702

Anna Thibodeau, Chairperson, Department of Language, Learning and Leadership

Kate Mahoney, Program Coordinator

Email:

Email: LLL@fredonia.edu

Website: <http://www.fredonia.edu/coe/lll.asp>

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 pre-k-12.

Each award option has different program options with different admission and completion requirements. See the description for each program.

There is also an award of Advanced Certificate in Bilingual Education that leads to a recommendation for a NYS Bilingual Extension

For **Program Options**, see TESOL Program Options (see page 71) section of the catalog.

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 (see page 71)

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 (see page 72)

For the Advanced Certificate (CAS)

Option 1 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 (see page 73)

Option 2 The Intensive Teacher Institute (ITI) Certificate of Advanced Study (CAS) in TESOL

The Intensive Teacher Institute (ITI) Program is a fast track to NYS certificates and extensions in areas of critical shortage as identified by the NYS Ed Department. Bilingual Education is a designated critical shortage area. The ITI Program is a joint collaborative program with the New York State Education Department (administered through BOCES) and SUNY Fredonia's College of Education. Appropriate for candidates interested in ESOL certification and "who are currently working in New York public schools. The ITI Program, which is housed at Eastern Suffolk BOCES, collaborates with school districts and institutions of higher education (IHEs) throughout the state" (<http://www2.esboces.org/BETAC/>) Two options at SUNY Fredonia include:

ITI:TESOL Program Admission and Completion Requirements (see page 73)

ITI: Special Education TESOL Program Admission and Completion Requirements (see page 73)

Option 3 The Intensive Teacher Institute (ITI) Certificate of Advanced Study (CAS) Bilingual Extension

The Intensive Teacher Institute (ITI) Program is a fast track to NYS certificates and extensions in areas of critical shortage as identified by the NYS Ed Department. Bilingual Education is a designated critical shortage area. The ITI Program is a joint collaborative program with the New York State Education Department (administered through BOCES) and SUNY Fredonia's College of Education. Appropriate for candidates interested in a bilingual extension and "who are currently working in New York public schools. The ITI Program, which is housed at Eastern Suffolk BOCES, collaborates with school districts and institutions of higher education (IHEs) throughout the state" (<http://www2.esboces.org/BETAC/>)

ITI: Bilingual Program Admission and Completion Requirements (see page 74)

TESOL Master of Science in Education degree (Option 1)

Total Credit Hours for Program Completion: 36

Requirements for Admission to the Program without Deficiencies

- Completion of a baccalaureate degree in an area of arts, science, or education.
- Undergraduate GPA of 2.75 or above.

- Current NYS Teaching Certificate
- Completed Graduate Application submitted to the Office of Graduate Studies, including two current (within six months) letters of recommendation, and official academic transcripts from all prior undergraduate and graduate institutions (except SUNY Fredonia).
- Language Proficiency Requirements
 - for Native Speakers of English:
 - A graduate-level 250-word essay in English on a topic of the writer's choice.
 - 12 post-secondary credit hours in a Language Other than English (LOTE), or an approved equivalency, in a single language.
 - A satisfactory intermediate-level 250-word 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 graduate-level 250-word essay in English on a topic of the writer's choice.
 - A graduate level 250-word essay in the candidate's native language.

Program Completion Requirements

EDU 570	Using Educational Research to Improve Instruction (must be completed within the first 9 credit hours of graduate study)
EDU 518	Second Language Acquisition & Development
EDU 519	Curriculum Theory for the Second Language Classroom-ESL I
EDU 538	Cultural Literature
Or	
EDU 563	Cultural Perspectives
EDU 540	Content Area ESL
EDU 564	Linguistic Considerations for ELL Students
EDU 565	Language & Learning: Psycho- & Sociolinguistic Considerations for ESL Educators
EDU 568	Foundations of Bilingual Education
EDU 569	Language Assessment and Evaluation of English Language Learners (ELLs)
EDU 671	Practicum and Seminar
EDU 660	Conducting Educational Research
EDU 690	Masters Thesis/Project

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

- Completion of a baccalaureate degree in an area of arts, science, or education.
- Undergraduate GPA of 2.75 or above
- Completed Graduate Application submitted to the Office of Graduate Studies, including two current

(within six months) letters of recommendation, and official academic transcripts from all prior undergraduate and graduate institutions (except SUNY Fredonia).

- Language Proficiency Requirements
 - for Native Speakers of English:
 - A graduate-level 250-word essay in English on a topic of the writer's choice.
 - 12 post-secondary credit hours in a Language Other than English (LOTE), or an approved equivalency, in a single language.
 - A satisfactory intermediate-level 250-word 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 graduate-level 250-word essay in English on a topic of the writer's choice.
 - A graduate level 250-word essay in the candidate's native language.

Program Completion Requirements

EDU 570	Using Educational Research to Improve Instruction (must be completed within the first 9 credit hours of graduate study)
EDU 518	Second Language Acquisition & Development
EDU 519	Curriculum Theory for the Second Language Classroom-ESL I
EDU 538	Cultural Literature
or	
EDU 563	Cultural Perspectives
EDU 540	Content Area ESL
EDU 564	Linguistic Considerations for ELL Students
EDU 565	Language & Learning: Psycho- & Sociolinguistic Considerations for ESL Educators
EDU 568	Foundations of Bilingual Education
EDU 569	Language Assessment and Evaluation of English Language Learners (ELLs)
EDU 671	Practicum and Seminar
EDU 660	Conducting Educational Research
EDU 690	Masters Thesis/Project

Additional Requirements

One of the following four courses

EDU 225	Child Development
EDU 224	Adolescent Development
EDU 501	Advanced Study: Child Psychology
EDU 502	Psychology of Adolescence
And	
EDU 250/251	Introduction to the Exceptional Learner/Practicum (or equivalent graduate course as approved by the Dean of the College of Education)
EDU 349	Educational Psychology (or equivalent graduate course as approved by the Dean of the College of Education)

EDU 301	Safe Schools/Healthy Students
EDU 302	
EDU 303	

Also:

Fingerprinting requirement

Completion of LAST and ATS-W and other 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 NCATE

Certificate of Advanced Study (CAS) in TESOL

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 Master's degree in an area of arts, science, or education.
- Current NYS Teaching Certificate
- Completed Graduate Application submitted to the Office of Graduate Studies, including two current (within six months) letters of recommendation, and official academic transcripts from all prior undergraduate and graduate institutions (except SUNY Fredonia).
- Language Proficiency Requirements
 - for Native Speakers of English:
 - A graduate-level 250-word essay in English on a topic of the writer's choice.
 - 12 post-secondary credit hours in a Language Other than English (LOTE), or an approved equivalency, in a single language.
 - A satisfactory intermediate-level 250-word 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 graduate-level 250-word essay in English on a topic of the writer's choice.
 - A graduate level 250-word essay in the candidate's native language.

Program Completion Requirements

EDU 518	Second Language Acquisition & Development
EDU 519	Curriculum Theory for the Second Language Classroom - ESL I
EDU 540	Content Area ESL
EDU 568	Foundations of Bilingual Education
EDU 569	Assessment and Evaluation for English Language Learners (ELLs)
EDU 671	Practicum and Seminar

Intensive Teacher Institute TESOL (ITI: TESOL) Certificate of Advanced Study (CAS)

Total Credit Hours for Program Completion: 15

Requirements for Admission to the Program without Deficiencies

- Completion of a Master's degree in an area of arts, science, or education.
- Current NYS Teaching Certificate
- Completed Graduate Application submitted to the Office of Graduate Studies, including two current (within six months) letters of recommendation, and official academic transcripts from all prior undergraduate and graduate institutions (except SUNY Fredonia).
- Language Proficiency Requirements
 - for Native Speakers of English:
 - A graduate-level 250-word essay in English on a topic of the writer's choice.
 - 12 post-secondary credit hours in a Language Other than English (LOTE), or an approved equivalency, in a single language.
 - A satisfactory intermediate-level 250-word 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 graduate-level 250-word essay in English on a topic of the writer's choice.
 - A graduate level 250-word essay in the candidate's native language.

Program Completion Requirements

EDU 518	Second Language Acquisition and Development
EDU 519	Curriculum Theory for the Second Language Classroom - ESL 1
EDU 540	Content Area ESL
EDU 568	Foundations of Bilingual Education
EDU 569	Language Assessment and Evaluation of English Language Learners (ELLs)

Intensive Teacher Institute Special Education TESOL (ITI: Special Education TESOL) Certificate of Advanced Study (CAS)

Total credit hours for program completion: 15

The New York State-required twelve (12) credit hours of Language other than English (LOTE) are in addition to the 15 credit hours listed below for program completion.

Requirements for Admission to the Program without Deficiencies

- Completion of a Master's degree in an area of arts, science, or education.
- Current NYS Teaching Certificate

- Completed Graduate Application submitted to the Office of Graduate Studies, including two current (within six months) letters of recommendation, and official academic transcripts from all prior undergraduate and graduate institutions (except SUNY Fredonia).
- Language Proficiency Requirements
 - for Native Speakers of English:
 - A graduate-level 250-word essay in English on a topic of the writer's choice.
 - 12 post-secondary credit hours in a Language Other than English (LOTE), or an approved equivalency, in a single language.
 - A satisfactory intermediate-level 250-word 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 graduate-level 250-word essay in English on a topic of the writer's choice.
 - A graduate level 250-word essay in the candidate's native language.

Program Completion Requirements:

EDU 518	Second Language Acquisition and Development
EDU 519	Curriculum Theory for the Second Language Classroom - ESL 1
EDU 540	Content Area ESL
EDU 568	Foundations of Bilingual Education
EDU 598	Special Education Considerations for Assessment of English Language Learners

Intensive Teacher Institute Bilingual Extension (ITI: Bilingual Extension) Certificate of Advanced Study (CAS)

Total Credit Hours for Program Completion: 15

The NYS required twelve (12) credit hours of Language other than English (LOTE) are in addition to the 15 credit hours listed below for program completion.

Qualified candidates who complete this 5-course program are eligible to take the NYSTCE Bilingual Education Assessment (BEA) and apply for the NYS Bilingual Extension. Tuition funding is available for qualified candidates through ITI.

The NYS bilingual educator has the knowledge and skills necessary to teach effectively in English and the target language of instruction in New York State public schools. The bilingual teacher understands the foundations of bilingual education, including the processes of first-and second language acquisition and learning, models/methodologies of bilingual education, and the legal requirements and professional expectations related to bilingual education. The bilingual teacher understands that language reflects a body of shared values and assumptions that constitute a distinctive culture. Finally,

the bilingual teacher is proficient in the target language and in English, using both languages to interpret a variety of spoken messages and written texts and to communicate effectively in speech and in writing.

Candidates interested in the Bilingual Extension-ITI Program must meet ALL of the following criteria:

- Already possess oral and written language proficiency in English and the target language of instruction.
- Have and provide evidence of a current, valid NYS certificate in an approved area. Certification in TESOL is not an approved area for the NYS Bilingual Extension.
- Be currently teaching in your area of certification, and have your administrator commit to appointing you to a full time position as a bilingual education teacher upon program completion.
- Meet both SUNY Fredonia Graduate Studies and ITI enrollment/admission criteria
- Be willing to serve as a bilingual education teacher for 2 years in the nominating district/school upon program completion.

Requirements for Admission to the Program without Deficiencies

- Current NYS Teaching Certificate
- Currently Employed as a Teacher in NYS (Letter from current supervisor indicating commitment to full-time appointment in bilingual education.)
- Completed Graduate Application submitted to the Office of Graduate Studies, including two current (within six months) letters of recommendation, and official academic transcripts from all prior undergraduate and graduate institutions (except SUNY Fredonia).
- Language Proficiency Requirements
 - for Native Speakers of English:
 - A graduate-level 250-word essay in English on a topic of the writer's choice.
 - 12 post-secondary credit hours in a Language Other than English (LOTE), or an approved equivalency, in a single language.
 - A satisfactory intermediate-level 250-word 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 graduate-level 250-word essay in English on a topic of the writer's choice.
 - A graduate level 250-word essay in the candidate's native language.

Program Completion Requirements:

EDU 518	Second Language Acquisition and Development
EDU 519	Curriculum Theory for the Second Language Classroom - ESL 1
EDU 540	Content Area ESL
EDU 568	Foundations of Bilingual Education

EDU 555 Biliteracy Instruction & Assessment
Methodologies

Note: To obtain a bilingual education extension to a teaching certificate, candidates are required to achieve a passing score on the NYSTCE Bilingual Education Assessment (BEA) in the target language of instruction.

School Building Leadership Certificate of Advanced Study

Department of Language, Learning and Leadership

Office: E236 Thompson Hall

(716) 673-3245

Anna Thibodeau, Chairperson, Department of Language, Learning and Leadership

Charles Stoddart, Program Coordinator

Email: Charles.Stoddart@fredonia.edu

Website: <http://www.fredonia.edu/coe/lll.asp>

The Certificate of Advanced Study in School Building Leadership is open to candidates who already possess teaching certification, a masters 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.
- Masters 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:

EDU 614	Principles of School Administration and Leadership
EDU 615	School Building Leader
EDU 616	Supervision I: Theory and Practice
EDU 617	Supervision II: Supervision to Improve Instruction
EDU 618	Internship I: Educational Leadership
EDU 619	Internship II: Educational Leadership
EDU 620	Public School Finance
EDU 624	Contemporary Problems in School Leadership
EDU 626	Public School Law

EDU 630 Creating Safe and Productive Schools

Candidates are also required to submit an internship portfolio providing evidence of the candidate's impact on students in a Pre-K-12 setting. 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.

School District Leadership Program Certificate of Advanced Study (C.A.S.)

Department of Language, Learning and Leadership

Office: E236 Thompson Hall

(716) 673-3245

Anna Thibodeau, Chairperson, Department of Language, Learning and Leadership

Charles Stoddart, Program Coordinator

Email: charles.stoddart@fredonia.edu

Website: <http://www.fredonia.edu/coe/lll.asp>

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 SUNY 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:

EDU 662	Policy Development, Politics and Ethical Practices
EDU 664	Governance, Media and Crisis Management

Engineering (Cooperative)

Office: 121 Houghton Hall
(716) 673-3302

Michael Grady, Director

Email: cooperative.engineering@fredonia.edu

Website:

<http://www.fredonia.edu/department/physics/engineer.asp>

The Cooperative Engineering program takes its name from the academic cooperative agreements between SUNY 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. SUNY Fredonia is currently affiliated in a Cooperative Engineering program with the following institutions:

Case Western Reserve University (1)
Clarkson University (2)
Columbia University (3)
Cornell University (4)
Louisiana Tech University (5)
New York State College of Ceramics at Alfred (6)
Ohio State University (7)
Penn State Erie (8)
Rensselaer Polytechnic Institute (9)
Rochester Institute of Technology (10)
State University of New York at Binghamton (11)
State University of New York at Buffalo (12)
Syracuse University (13)
Tri-State University (14)

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), (4), (12), (13)
Aerospace and Aviation (7)
Applied and Engineering Physics (4)
Applied Physics (3), (4)
Bioengineering (13)
Biological (4)
Biomedical (1), (3), (4), (5), (7), (9)
Biomedical Materials Eng. Science (6)
Ceramic (6), (7)

Chemical (1), (2), (3), (4), (5), (7), (9), (12), (13), (14)
Civil (1), (2), (3), (4), (5), (9), (12), (13), (14)
Civil and Environmental (7), (13)
Computer (1), (2), (3), (4), (8), (10), (13), (14)
Computer and Systems (9)
Earth and Atmospheric Sciences (4)
Electrical (1), (2), (3), (4), (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), (4), (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), (4), (6), (7)
Mechanical (1), (2), (3), (4), (5), (7), (8), (9), (10), (11), (12), (13), (14)
Metallurgical (3), (7)
Microelectronic (10)
Nuclear (9)
Operations Research (3), (4)
Operations Research and Industrial Engineering (4)
Polymer Science (1)
Software Engineering (2), (8), (10), (11)
Systems and Control Engineering (1), (7)
Theoretical and Applied Mechanics (4)
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 SUNY 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 SUNY 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/ CHEM 125	General Chemistry I & Lab
CHEM 116/ CHEM 126	General Chemistry II & Lab
MATH 122- MATH 123/ MATH 223	University Calculus I, II, & III
MATH 224	Differential Equations
PHYS 230/ PHYS 232	University Physics I & Lab
PHYS 231/ PHYS 233	University Physics II & Lab
PHYS 321- PHYS 322	Engineering Mechanics I & II*
PHYS 323- PHYS 324	Circuit Analysis I & II*
ENGL 100	English Composition

**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 SUNY 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 SUNY Fredonia student application is given special consideration. Admission is not, in general, guaranteed. However, for 3-2 students with GPA's exceeding 2.3, 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 Engineering Mechanics I and II (PHYS 321-PHYS 322), Circuit Analysis I and II (PHYS 323-PHYS 324), 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

Ann Siegle Drege, *Chairperson*

Email: english.department@fredonia.edu

Website: <http://www.fredonia.edu/departments/english/>

Office: 279 Fenton Hall
(716) 673-3125

Jeanette McVicker, *Co-Chairperson*

The Department of English offers a broad education in the literature of current and historical times and cultures, emphasizing critical reading and thoughtful writing. Traditional literary and historical analysis of fiction, poetry, and drama is basic to the discipline; however, that study may be extended in many ways. Options include film, cultural studies, language study, pedagogy, and creative writing. Graduates of the department are employed by journals, publishers, business firms, arts organizations, and schools; some also go on to graduate programs in English, education, American studies, journalism, law, and social work, and creative writing. Others choose to pursue the department's Master of Arts degree in English or Master of Science in (English) Education degree.

For the English major, the department offers a varied exposure to literature, criticism, film, written and multimedia texts through a core of required courses. Internships in English-related fields are also available.

For the English minor, the department offers courses that can easily be organized to complement any major or pre-professional study.

For the Writing minor, the department offers courses that could complement any major, including English, or pre-professional study.

Awards and Scholarships

The department awards scholarships and prizes recognizing both financial need and superior achievement:

Fall Awards

- Mary Louise White Book Award for Incoming Freshman
- Albert A. Dunn Book Grant Award

Spring Awards

- 1929 Graduate's 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
- Mary Louise White Fund
- 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 SUNY Fredonia beyond the usual requirement for English composition. They must also have a minimum of a 3.5 grade point average in English courses.

Department of English 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 Honors Coordinator.

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 Department of English at Fredonia requires majors in English to complete at Fredonia a minimum of 24 credit hours of courses applied to the major. Thus, students transferring to Fredonia should normally expect no more than 12 credit hours earned elsewhere to apply to the major in English. Additional hours earned in English may be used as general electives or may be applied, under prescribed conditions, to the College Core Curriculum. As a rule, the department will not accept credits earned at two-year colleges as equivalents for upper-level courses.

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 degree

Requirements for the Bachelor of Arts Degree in English

- The major in English requires a minimum of 39 credit hours of courses selected according to the outline given below. It also requires the completion of a reflective 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 Department of English chairperson or designee.
- No more than 6 credit hours earned in any combination of internships and independent studies may be counted toward the major.
- Majors in English 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, and do count as hours outside the major area toward the 66 credit hours.
- All students must earn a grade of C or higher in each of their required English courses.
- All students are required to complete a separate minor in another discipline, in writing, or in one of the interdisciplinary programs. Double majors and English Adolescence Education majors are exempt from the minor requirement. Students choosing to minor in writing would need more than 120 credit hours to reach 66 credit hours outside of English.

Program Outline:

24 credit hours from the following core courses:

ENGL 106 The English Major: An Introduction

Plus three of the following four courses (9 credit hours)

ENGL 205 Epic and Romance

ENGL 207 Drama and Film

ENGL 209 Novels and Tales

ENGL 211 World Poetry

Plus 12 credit hours, as follows:

ENGL 345 Critical Reading

ENGL 400 Senior Seminar (Capstone experience)

ENGL 401 Portfolio Completion (0 credit hours)

Literary Period Course*

Major Author Course*

15 credit hours of electives

*For lists of appropriate readings, please see the English Department website, <http://www.fredonia.edu/departments/english>.

Of the required 15 additional credit hours in Department of English courses, students are encouraged to take no more than 6 elective credit hours at the 200 level.

English Adolescence Education Bachelor of Arts degree

Requirements for the Bachelor of Arts degree in English Adolescence Education

Candidates in English Adolescence Education are required to earn at least a C+ in each required English course, and to maintain an overall GPA of 2.75. In

addition to the English courses listed below, English Adolescence Education majors must also take the following courses, achieving an average of 2.5: (EDU) 224, 250, 251, 301, 302, 303 and 349.

Candidates in Adolescence 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 local equivalent). Requirement is fulfilled.
- Scores of 65 percent - 84 percent on High School N.Y.S. Regents Exam (or local equivalent): 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 SUNY Fredonia proficiency exam.
- Scores below 65 percent on High School N.Y.S. Regents Exam (or local equivalent) or if student did not take a N.Y.S. Regents or local Exam: Student needs to take an Elementary I level course and an Elementary II level course of the same language or equivalent.

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 student teaching is contingent upon: (1) completion of all course work for the major before the student-teaching semester; (2) an overall minimum GPA of 2.75; and, (3) a satisfactory personal interview with English-Adolescence Education faculty. 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. Candidates who will be ineligible to student teach will not be permitted to enroll in ENED 450 and ENED 451.

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

ENGL 207 Drama and Film

ENGL 209 Novels and Tales

ENGL 211 World Poetry

Plus 27 credit hours, as follows:

ENGL 301 American Literary Landmarks

ENGL 302 British Literary Landmarks

ENGL 373 English Grammar for Everyone

ENGL 401 Portfolio Completion

Literary period course*

Major author course*

One 300-level writing course
Three English electives

*For lists of appropriate readings, please see the English Department website, <http://www.fredonia.edu/departments/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
ENED 103	Readings and Observations in English-Adolescence Education
ENED 250	Literacy and Technology
ENED 355	Adolescent Literature
ENED 356	Teaching Writing in the Secondary School
ENED 357	Literacy, Language, and Learning Theory
ENED 450	Seminar for Teachers of English (seniors only)
ENED 451	Secondary School Methods—English
ENED 452	Inquiries in Student Teaching
ENED 453	Student Teaching in the Secondary School—English Grades 7-12 (Capstone experience)

The following education courses (12 credit hours):

EDU 224	Adolescent Development
EDU 250	Introduction to the Exceptional Learner
EDU 251	Practicum in Inclusive Education II
EDU 301	Safe Schools/Healthy Students: Child Abuse and Child Abduction
EDU 302	Safe Schools/Healthy Students: Alcohol, Tobacco and Other Drug Abuse
EDU 303	Safe Schools/Healthy Students: Safety Education/Fire & Arson/School Violence
EDU 349	Educational Psychology

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 (see page 50) for certification information.

English Minor

Requirements for the Minor in English

The minor in English requires a minimum of 21 credit hours, no more than 9 credit hours at the 200 level and at least 12 credit hours in courses numbered 300 and above.

ENGL 100 may not be counted as part of the minor. A maximum of 9 credit hours may be transferred from other institutions toward the minor in English.

A maximum of 3 credit hours earned in internships and independent study may be counted toward the minor.

A maximum of 6 credit hours may be applied to the minor from the student's major program.

All students must earn a grade of C or higher in each of their required courses.

Writing Minor

Requirements for the Minor in Writing

The minor in writing requires a minimum of 22 credit hours.

I. Five core courses as follows (13 credit hours)

ENGL 160	Visiting Writers Program (two semesters at .5 credit hour)
ENGL 260	Introduction to Creative Writing
ENGL 361	Intermediate Fiction Writing
or	
ENGL 362	Intermediate Poetry Writing
ENGL 365	Form and Theory of Writing
ENGL 460	Advanced Poetry Writing
or	
ENGL 461	Advanced Fiction Writing

II. Three elective courses chosen from the following (9 credit hours)

ENGL 261	Literary Publishing
ENGL 361	Intermediate Fiction Writing
ENGL 362	Intermediate Poetry Writing
ENGL 366	Opinion in Journalism
ENGL 369	Argumentative Writing
ENGL 374	Writing and Social Change
ENGL 375	Writing for the Professions
ENGL 378	Advanced Writing I: The Essay
ENGL 399	Special Topics
ENGL 460	Advanced Poetry Writing
ENGL 461	Advanced Fiction Writing
ENGL 465	Internship
ENGL 490	Independent Study

Notes:

ENGL 160 must be taken twice. Students are required to register for ENGL 160 concurrently with the pertinent intermediate and advanced writing courses — ENGL 361 or 362, and ENGL 460 or 461.

A minimum of 15 credit hours counted toward the minor must be taken at SUNY Fredonia. Courses in the minor may only be taken once for credit, with the exception of ENGL 160 and ENGL 399.

All students must earn a grade of C or higher in each of their required courses.

ENGL 399 is a special topics course. Students may only count this in the minor when the topic is pertinent to writing.

Students may only cross-list 6 credit hours of courses for the ENGL major and writing minor.

English Graduate Programs

Office: 277 Fenton Hall

(716) 673-3125

Ann Siegle Drege, Chairperson

Jeanette McVicker, Graduate Coordinator

Susan Spangler, Advanced Program Coordinator for

English Education

Email: english.department@fredonia.edu

Website:

<http://www.fredonia.edu/departments/english/graduate.asp>

The Department of English 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.

M.A. English 7-12: 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.

M.A. English: The Department of English 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 Department of English conforms to university policy that identifies April 1 for admission in the fall semester; applicants will be admitted for fall-only semester start date beginning in 2011. 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 teaching assistantship should be sure to check the appropriate box on the graduate application form. Openings are typically announced in mid-February, with applications due by mid-March and interviews with the department's Graduate Committee scheduled for mid-April. When openings are available, matriculated students will be notified and invited to submit either a supplemental letter of recommendation that directly speaks to the student's qualifications for teaching, or a personal statement that reflects a sense of the candidate's qualifications and motivations for teaching a course in English composition. The statement should include discussions of any teaching experience, knowledge of composition theory and current pedagogical methods, and other relevant preparation, as well as how teaching composition relates to the applicant's professional goals.

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 ENGL 695. 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://www.fredonia.edu/COE/teachwaivers.asp>, in order for SUNY 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 (see page 187) section 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 and are enrolled in one other graduate English course.
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 and Research, 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 500, 502, ENGL/ENED 690, ENGL 691, ENED 692 and ENGL 695.

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 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 SUNY 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 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).

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.

Graduate Requirements for all Master's degree Programs in English

- Both programs require 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 691 Thesis Completion or ENED 692 Action Research Thesis Completion, students must have a cumulative GPA of 3.5 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 Graduate Seminar in Professional 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 ENGL 695 in their final semester.
- 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 chair.
- 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/ENED 690, ENGL 691, ENED 692, ENGL 695.

A. All students/candidates are required to take 18 hours distributed among the following (all courses are 3 credits each unless otherwise indicated):

ENGL 500	Introduction to Graduate Studies in English
ENGL 502	Directed Study (1.5 credit hours)
9 credit hours	One course from each "stream" category: Texts, Contexts, and Theories (see announced course offerings for topics (For certification candidates, ENED 554 and 665 may be included in these 9 credit hours) Note: Check Banner for course description.
ENGL/ENED 690	Advanced Research Seminar
ENGL 695	Graduate Seminar in Professional Studies (1.5 credit hours) Note: Check Banner for course description.

B-1. For candidates in the Master of Arts program in English: 18 hours of coursework outlined in part A (see above) plus 12 additional credit hours of electives chosen in combination from among the following:

	Additional course from at least two of the three streams; Up to one additional directed study; Up to 3 credits of internship;
ENGL 691	Thesis Completion (or other degree project completion)

B-2. For candidates in the Master of Arts in English 7-12 program for professional certification: 18 credit hours of core coursework outlined in part A (see above) plus 12 additional credit hours as follows:

ENED 554	Teaching Writing in Schools (required as one of the stream courses);
ENED 665	Studies in English Education (required as one of the stream courses); Additional courses from at least two of the three streams; Up to one additional directed study; Up to 3 credits of internship;
ENED 692	Action Research Thesis Completion (or other degree project completion)

Environmental Sciences

The Interdisciplinary Studies - Environmental Sciences program is housed in the Department of Chemistry and Biochemistry. For information on the program, please see the Environmental Sciences major in the Chemistry and Biochemistry (see page 29) section of the catalog.

Forensics

(Advising Only)

Office: 111 Reed Library

(716) 673-3173

Roger Byrne, Coordinator

Email: forensics@fredonia.edu

Although SUNY Fredonia does not have a degree program in Forensics, it does have advising to assist students in selecting the proper courses and programs for such a career. There are many different careers in Forensics. Some examples are Forensic Science, Forensic Toxicology, Criminalistics, Forensic Anthropology, and Computer Forensics. Preparation for these or other

careers depends on the setting in which a person wants to work and the professional level at which a person wants to work. For example, preparation to be a Forensic Scientist who aspires to have a supervisory role would be, at a minimum, a master's degree in Forensic Science. Optimal undergraduate preparation for such a master's program would be a major in Chemistry or Biochemistry and a minor in Criminal Justice. As another example, preparation to be a Forensic Anthropologist usually requires a Ph.D. in Anthropology, with an emphasis on the study of human osteology and anatomy. Optimal undergraduate preparation for such a Ph.D. program would be a major in Sociology, with a concentration in Anthropology, and a minor in Biology. Academic pathways to careers in Forensics should be discussed with the Forensics Coordinator as early as possible.

Geosciences

Office: 121 Houghton Hall

(716) 673-3303

Gordon Baird, Chairperson

Email: geosciences.department@fredonia.edu

Website: <http://www.fredonia.edu/departments/geosciences/>

The Department of Geosciences offers five degree programs.

The B.S. degree program in Geology 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, 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.S. degree program in Geophysics, a joint program with the Department of Physics, is intended primarily for students interested in pursuing a graduate program or employment in geophysics (or geology). Career opportunities exist within industries, engineering consulting firms, and the federal government dealing with subjects as diverse as energy, waste management, the environment, natural resources availability, weather forecasting, the prediction of climate change, earthquakes, volcanic eruptions, and planetary science. Academic institutions provide teaching and research opportunities.

The B.A. degree program in Earth Science 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 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, Geochemistry, and Geophysics 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, 250, 301, 302, 303, 349, 430 and Science Education (SCED) 105, 276, 303, 305, 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 and Geophysics Society.

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.

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.

Geology Bachelor of Science degree

Requirements for the Bachelor of Science Degree in Geology

Core Program (38-39 credit hours in geosciences; 25-29 credit hours in related disciplines):

GEO 165	Geology I
GEO 169	General Geology Lab
GEO 210	Geology II
GEO 370	Structural Geology
GEO 411	Mineralogy
GEO 421	Petrology
GEO 459	Seminar in Geosciences
GEO 461	Field Geology (Capstone experience)

Four 3XX/4XX GEO courses with labs, one of which may include a course in Geographic Information Systems.

MATH 120- MATH 121 Or MATH 122- MATH 123	Survey of Calculus I & II University Calculus I & II
--	---

CHEM 115/ CHEM 125 and CHEM 116/ CHEM 126	General Chemistry I & Lab General Chemistry II & Lab
---	---

PHYS 121/ PHYS 123 and PHYS 122/ PHYS 124 Or PHYS 230/ PHYS 232 and PHYS 231/ PHYS 233	College Physics I & Lab College Physics II & Lab University Physics I & Lab University Physics II & Lab
--	--

A course in Statistics at the 200 level or higher.

Writing intensive: any one of (GEO) 330, 335, or 400 plus three additional 300-level or 400-level GEO courses with labs; 4 credits of GIS coursework may be substituted for one of these.

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).

Geochemistry Bachelor of Science degree Requirements for the Bachelor of Science Degree in Geochemistry

Core Program (24 to 25 credit hours in geosciences; 30 to 32 credit hours in chemistry; 21 to 24 credit hours in related disciplines):

GEO 165	Geology I
GEO 169	General Geology Laboratory
GEO 411	Mineralogy
GEO 421	Petrology
GEO 431	Geochemistry

GEO 459 Or CHEM 495- CHEM 496	Seminar in Geosciences (Capstone experience) Seminar: Advances in Chemistry (Capstone experience)
--	--

Two GEO 3XX/4XX Geology courses with labs

CHEM 115/ CHEM 125 CHEM 116/ CHEM 126 CHEM 215/ CHEM 225 CHEM 216/ CHEM 226 CHEM 315/ CHEM 325 CHEM 317/ CHEM 327 CHEM 318/ CHEM 328 CHEM 395 PHYS 230/ PHYS 232 PHYS 231/ PHYS 233 MATH 122- MATH 123	General Chemistry I & Lab General Chemistry II & Lab Organic Chemistry I & Lab Organic Chemistry II & Lab Introduction to Physical Chemistry (Lecture and Lab) Analytical Chemistry I & Lab Analytical Chemistry II & Lab Introduction to Research (recommended) University Physics I & Lab University Physics II & Lab University Calculus I & II
--	--

A course in scientific writing, CHEM 395 Introduction to Research is recommended.

A course in statistics at the 200 level or higher, or a course in computer programming

Geophysics Bachelor of Science degree Requirements for the Bachelor of Science Degree in Geophysics

Core Program (22 to 24 credit hours in geosciences; 19 to 21 credit hours in physics; 26 credit hours in related disciplines):

GEO 165 GEO 169 GEO 215 GEO 335 GEO 370	Geology I General Geology Laboratory Minerals and Rocks Geophysics Structural Geology
---	---

GEO 459 or PHYS 400 GEO 461	Seminar in Geosciences (Capstone experience) Undergraduate Seminar Field Geology
--	--

An additional course in Geology or Geographic information Systems with lab; GEO 330 Geomorphology is strongly recommended.

CHEM 115/ CHEM 125 CHEM 116/ CHEM 126 MATH 122- MATH 123/ MATH 223 MATH 224 PHYS 230/ PHYS 232 PHYS 231/ PHYS 233	General Chemistry I & Lab General Chemistry II & Lab University Calculus I, II & III Differential Equations University Physics I & Lab University Physics II & Lab
--	---

PHYS 321 or PHYS 330 or PHYS 331 or PHYS 333	Engineering Mechanics I Thermodynamics Theoretical Mechanics Electricity and Magnetism
--	---

Two additional Physics electives chosen from courses numbered 321 through 479

A course in Statistics at the 200-level or higher
or
CSIT 121 Computer Science I

Earth Science Bachelor of Arts degree **Requirements for the Bachelor of Arts Degree in Earth Science**

Core Program (32 to 34 credit hours in geosciences; 25 to 29 credit hours in related disciplines):

GEO 165	Geology I
GEO 169	General Geology Laboratory
GEO 210	Geology II
GEO 215	Minerals and Rocks
GEO 370	Structural Geology
GEO 459	Seminar in Geosciences (Capstone experience)

Two of the following four courses:

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

An additional writing-intensive course, chosen from (GEO) 330, 335, or 400

One additional course with lab in Geology at the 300-level or 400-level

A course in Geographic Information Systems

CHEM 115/ CHEM 125	General Chemistry I & Lab
CHEM 116/ CHEM 126	General Chemistry II & Lab

MATH 120	Survey of Calculus I
Or	
MATH 122	University Calculus I

PHYS 230/ PHYS 232	University Physics I & Lab
And	
PHYS 231/ PHYS 233	University Physics II & Lab

Or

PHYS 121/ PHYS 123	College Physics I & Lab
And	
PHYS 122/ PHYS 124	College Physics II & Lab

An additional course in Mathematics

A course in Statistics at the 200-level or higher
or
a course in computer programming

Earth Science Adolescence Education Bachelor of Science degree

Requirements for the Bachelor of Science Degree in Earth Science Adolescence Education

Core Program (33 credit hours in geosciences; 42 credit hours in education; 25 to 29 credit hours in related disciplines):

GEO 150	Moons and Planets
GEO 160	Oceanography
GEO 165	Geology I

GEO 169	General Geology Laboratory
GEO 210	Geology II
GEO 215	Minerals and Rocks
GEO 311	Global Climate
GEO 330	Geomorphology
GEO 459	Seminar in Geosciences (Capstone Experience)

One additional writing-intensive course, chosen from GEO 335, 370, or 400

One additional course with lab in Geology at the 300-level or 400-level

SCED 105-	Nature of Science and Science Education
SCED 106	
EDU 224	Adolescent Development
EDU 250 -	Introduction to the Exceptional Learner
EDU 251	Practicum in Inclusive Education II
SCED 276	Literacy and Technology for Science and Mathematics
SCED 303	Assessment of Inquiry-Based Science
SCED 305/	Diversity in the Teaching of Science and
SCED 313	Mathematics
EDU 349	Educational Psychology
SCED 419	Adolescence Science Methods
EDU 430	Student Teaching in Secondary School
EDU 301	Safe Schools/Healthy Students: Child Abuse and Child Abduction
EDU 302	Safe Schools/Healthy Students: Alcohol, Tobacco and Other Drug Abuse
EDU 303	Safe Schools/Healthy Students: Safety Education/Fire & Arson/School Violence
CHEM 115/ CHEM 125	General Chemistry I & Lab
CHEM 116/ CHEM 126	General Chemistry II & Lab
PHYS 230/ PHYS 232	University Physics I & Lab
and	
PHYS 231/ PHYS 233	University Physics II & Lab

or

PHYS 121/ PHYS 123	College Physics I & Lab
and	
PHYS 122/ PHYS 124	College Physics II & Lab

Calculus sequence:

MATH 120-	Survey of Calculus I & II
MATH 121	
or	
MATH 122-	University Calculus I & II
MATH 123	

A course in Statistics at the 200 level or higher
or
a course in Computer Science.

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:

- Score of 85 percent or higher on New York State Regents Exam (or local equivalent). Requirement is fulfilled.

- Scores of 65 percent - 84 percent on High School N.Y.S. Regents Exam (or local equivalent): 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 SUNY Fredonia proficiency exam.
- Scores below 65 percent on High School N.Y.S. Regents Exam (or local equivalent) or if student did not take a N.Y.S. Regents or local Exam: Student needs to take an Elementary I level course and an Elementary II level course of the same language or equivalent.

For certification requirements, please refer to the Education (see page 50) section of the catalog.

Geological Sciences Minor

Requirements for the Minor in Geological Sciences

Twenty-three (23) credit hours in geosciences, including (GEO) 165, 169, 210, and four 4-credit hour courses, as advised, from the 200-300-400 levels.

Earth Science Minor

Requirements for the Earth Science Minor

Twenty-four (24) credit hours in Geosciences, including (GEO) 165, 169, 150, 160, 210, 215, 311, and one 4-credit hour course from the 300-400 levels.

Geographic Information Systems

The program is sponsored jointly by the departments of Geosciences and Political Science. Interested persons should refer to Geographic Information Systems for a description of the minor.

History

Office: E332A Thompson Hall
(716) 673-3277

Mary Beth Sievens, Chairperson

Email: history.department@fredonia.edu

Website: <http://www.fredonia.edu/departments/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, including law (law schools take a third of their candidates from history majors); government at all levels; editing and book publishing; journalism, communications and media; college and university teaching (with an advanced degree); and public history venues such as historic sites, museums, archives, and libraries. In addition, many jobs in business and industry are open to liberal arts graduates with training in 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; 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 Bachelor of Arts degree

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, 6 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 Freshman Seminar) and HIST 201 (Doing History). All students must complete a Capstone Seminar (HIST 495/499*). 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 (1 cr.); HIST 201 (3 cr.); HIST 495/HIST 499* (3 cr.): (7 credits)

*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

Concentrations:

9 additional credits in a major track and six additional credits in a minor track. Tracks 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.

Social Studies Adolescence Education Bachelor of Arts degree

Requirements for the Bachelor of Arts Degree 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 Education (recommended for freshmen)
EDU 106	Introduction to Contemporary Education-Field Experience
EDU 224	Adolescent Development (recommended for sophomores)
EDU 250	Introduction to the Exceptional Learner (recommended for sophomores)
EDU 251	Introduction to the Exceptional Learner-Field Experience
EDU 276	Literacy and Technology in Inclusive Educational Settings
EDU 301	Safe Schools/Healthy Students: Child Abuse and Child Abduction
EDU 302	Safe Schools/Healthy Students: Alcohol, Tobacco and Other Drug Abuse
EDU 303	Safe Schools/Healthy Students: Safety Education/Fire and Arson/School Violence
EDU 305	Cultural and Linguistic Diversity in the Classroom (recommended for juniors)
EDU 313	Cultural and Linguistic Diversity-Field Experience
EDU 349	Educational Psychology (recommended for juniors)
SSED 419	Secondary School (Adolescence) Methods—Social Studies (senior year/offered fall semester only)
EDU 430	Student Teaching in the Secondary School (senior year/generally offered Spring semester only) (Capstone experience)

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

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

HIST 101	World History I
HIST 102	World History II
HIST 105	U.S. History I
HIST 106	U.S. History II
HIST 115	Western Civilization II
Or	
HIST 116	Western Civilization II
POLI 120	American Politics

SOC 116	Introduction to Sociology
Or	
PSY 129	Introduction to Psychology
Or	
ANTH 115	Introduction to Anthropology

Group II: Methodologies (10 credit hours)

HIST 100	History Freshman Seminar
HIST 201	Doing History (normally taken during the sophomore year)

SSED 205	Economics for Educators
or	
ECON 201	Principles of Macroeconomics

SSED 204	World Regional Geography
or	
POLI 352	World Political Geography

Group III: Cultures and Civilizations (9 credit hours)

A. American Minorities

Any one of the following:

HIST 206	Introduction to African American Studies
HIST 359	Ethnicity and Race
HIST 333	African American History to 1877
HIST 334	African American History since 1877
HIST 336	African American/Black Women's History
HIST 343	Civil Rights Movement
HIST 345	Asian American History
HIST 356	American Indian History
HIST 357	Indians and Europeans in Early America
SOC 316	Minority Groups (prerequisite: SOC 116)

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).

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 local equivalent). Requirement is fulfilled.
- Scores of 65 percent - 84 percent on High School N.Y.S. Regents Exam (or local equivalent): 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 SUNY Fredonia proficiency exam.
- Scores below 65 percent on High School N.Y.S. Regents Exam (or local equivalent) or if student did not take a N.Y.S. Regents or local Exam: Student needs to take an Elementary I level course and an Elementary II level course of the same language or equivalent.

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 2.75. Social Studies Adolescence Education majors must maintain a 2.75 GPA in order to remain in the program. The grade point requirements for entering the professional year are: overall GPA of 2.75, in Professional Education courses 2.75, and in the Social Studies content component 2.75. 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 faculty and area social studies teachers. 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. EDU 430 requires 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 and EDU 430 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 Initial 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 the following New York State Teacher Certification Examinations: Liberal Arts and Sciences Test (LAST), Secondary Assessment of Teaching Skills – Written (ATS-W), and the Social Studies Content Specialty Test (CST). Students are strongly advised to pursue a second major in History or one of the other social science disciplines (economics, political science, 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.

For certification information, please consult the Education (see page 50) section of the catalog.

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 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-HIST 102, HIST 386 and three additional courses in global or non-Western history.

American Society and Culture: HIST 105-HIST 106, and four additional courses in American history.

North American Studies: HIST 105-HIST 106, and four additional courses on the history of Mexico, Canada, and the United States.

Middle East/Asian Studies: HIST 101-HIST 102, and four of the following courses: (HIST) 261, 264, 265, 266, 268, 361, 366, 367, 368.

European Studies: HIST 115-HIST 116, 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.

Industrial Management Bachelor of Science degree

Office: 121 Houghton Hall
(716) 673-3302

Michael Grady, Director

Email: industrial.management@fredonia.edu

Website:

<http://www.fredonia.edu/department/physics/indman.asp>

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 & Lab
PHYS 232
PHYS 231/ University Physics II & Lab
PHYS 233
PHYS 321- Engineering Mechanics I & II
PHYS 322

PHYS 323 Circuit Analysis I
Or
PHYS 325/ Electronics & Lab
PHYS 327

PHYS 324 Circuit Analysis II
Or
PHYS 326/ Digital Logic & Lab
PHYS 328

PHYS 330 Thermodynamics

Mathematics/Computer Science (24 credit hours)

MATH 122- University Calculus I, II & III
MATH 123/
MATH 223
MATH 224 Differential Equations
MATH 325 Numerical Analysis

CSIT 106 Scientific Programming Using C/C++
Or
CSIT 121 Computer Science I
CSIT 105 Visual BASIC I

Business/Economics (24 credit hours)

ACCT 201 Principles of Financial Accounting
ACCT 202 Principles of Managerial Accounting
ECON 201- Principles of Macroeconomics and Principles of
ECON 202 Microeconomics
BUAD 310 Legal Environment of Business
BUAD 320 Managerial Finance
BUAD 323 Organizational Behavior
BUAD 328 Marketing Foundations

Operations Research and Statistics (6 credit hours)

BUAD 327 Production and Operations Management I
Or
MATH 359 Probability Models in Operations Research
Or

MATH 375 Deterministic Models Operations Research

ECON 200 Fundamentals of Statistics for Business and Economics
or

STAT 350 Probability and Statistics
or
PSY 200 Statistics
or
SOC 200 Social Statistics

Communications (6 credit hours)

COMM 105 Public Speaking
ENGL 375 Writing for the Professions

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.

Interdisciplinary Studies

For information on undergraduate interdisciplinary programs:

Office: 111 Reed Library

(716) 673-3173

Roger Byrne, *Associate Dean, College of Arts & Sciences*

Email: interdisciplinary.studies@fredonia.edu

Website:

<http://www.fredonia.edu/departments/interdisciplinary/>

For information on graduate interdisciplinary programs:

Office: 2142 Fenton Hall

(716) 673-3808

Kevin Kearns, *Interim Provost and Vice President for Academic Affairs*

Email: graduate.studies@fredonia.edu

Website:

<http://www.fredonia.edu/gradstudies/prospective/degrees/interdisciplinary.asp>

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	Coordinators	
African American Studies [minor]	Dr. Jennifer Hildebrand , History E304 Thompson Hall	673-3274
American Indian Studies [minor]	Dr. Jennifer Hildebrand , History E304 Thompson Hall	673-3274
American Studies [major/minor]	Dr. Shannon McRae , English 257 Fenton Hall	673-3848
Arts Administration [major]	Mr. Jefferson Westwood , Director G-15 Rockefeller Arts Center	673-3217
Dance Studio Administration [minor]	Ms. Angelika Summerton , Theatre & Dance 147 Dods Hall	673-3355
Environmental Sciences [major] (housed in the Department of Chemistry)	Dr. Sherri Mason , Chemistry 220 Houghton Hall	673-3281
Exercise Science [major] (housed in the Department of Sport Management & Exercise Science)	Mr. Todd Backes , Sport Mgmt & Exer Sci 112 Dods Hall	673-4959
Film Studies [minor]	Mr. Phil Hastings , Visual Arts/New Media 315B McEwen Hall	673-4853
Geographic Information Systems [minor]	Dr. Ann Deakin , Geosciences 20 Houghton Hall	673-3884
International Studies [major/minor] (housed in the Department of Political Science)	Dr. Alex Caviedes , Political Science E388 Thompson Hall	673-4672
Italian Studies [minor]	Dr. Chiara De Santi , Modern Languages & Literature 2104 Fenton Hall	673-4496
Graduate Self-Design	Dr. Kevin Kearns , Interim Provost and Vice President, Academic Affairs 119 Reed Library	673-3335
Latino Studies [minor]	Dr. Jennifer Hildebrand , History E304 Thompson Hall	673-3274
Leadership Studies [minor]	Mr. Mark Suida , Campus Life Williams Center	673-3143
Legal Studies [minor]	Dr. Fred Larson , Business Administration E366 Thompson Hall	673-4849
Multiethnic Studies [minor]	Dr. Jennifer Hildebrand , History E304 Thompson Hall	673-3274
Museum Studies [minor]	Ms. Tina Hastings , Visual Arts/New Media 305 Rockefeller Arts Center	673-4897
Public Health [minor]	Dr. Linda Dorsten , Sociology W393 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
Sport and Exercise Psychology [major]	Dr. Bruce Klonsky , Psychology W339 Thompson Hall	673-3892
Sport Administration [minor]	Dr. Bruce Klonsky , Psychology W339 Thompson Hall	673-3892
Sport and Exercise Science [minor]	Dr. Bruce Klonsky , Psychology W339 Thompson Hall	673-3892
Statistics [minor]	Dr. Nancy Boynton , Mathematical Sciences 204 Fenton Hall	673-4709

Undergraduate Self-Design [major/minor]	Dr. Roger Byrne, Associate Dean, College of Arts & Sciences 111 Reed Library	673-3173
Web Programming [minor] (housed in the Department of Computer & Information Sciences)	Dr. Reneta Barneva, Computer & Information Sciences 2154 Fenton Hall	673-4750
Women’s Studies [major/minor]	Dr. Adrienne McCormick, English 278 Fenton Hall	673-3125

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 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.

Pre-Law Advisement

Office: 232 Fenton Hall
(716) 673-3852

David Kaplin, *Pre-Law Advisor*

Email: David.Kaplin@fredonia.edu

Office: E388 Thompson Hall

(716) 673-4672

Alex Caviedes, *Pre-Law Advisor*

Email: Alex.Caviedes@fredonia.edu

Website:

http://www.fredonia.edu/departments/interdisciplinary/pre-law_advisement.asp

Office: E366 Thompson Hall

(716) 673-4849

Fred Larson, *Pre-Law Advisor*

Email: legal.studies@fredonia.edu

Website:

<http://www.fredonia.edu/departments/interdisciplinary/>

For information on this program, please see the Pre-Law Advisement (see page 148) section of the catalog.

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 SUNY 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 bachelors 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 1 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, that 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 Associate Provost for Graduate Studies and Research 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 Associate Provost for Graduate Studies and Research 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 Associate Provost for Graduate Studies and Research.

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 Associate Provost for Graduate Studies and Research 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 the Associate Provost for Graduate Studies and Research.

Interdisciplinary Studies Major Programs

Interdisciplinary Studies: American Studies Bachelor of Arts degree

Office: 257 Fenton Hall

(716) 673-3848

Shannon McRae, Coordinator

Email: american.studies@fredonia.edu

Website:

<http://www.fredonia.edu/department/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
AMST 296	American Identities

HIST 105	United States History I
Or	
HIST 106	United States History II

Exploratory and preparatory courses (6 credit hours chosen from the following course list)

AMST 210	American Popular and Mass Cultures
AMST 215	Holidays and American Cultures
AMST 289	Comparative North America
AMST 338	Nineteenth Century American Culture
AMST 340	Twentieth Century American Culture
AMST 347	United States Immigration
AMST 399	Special Topics
COMM 102	Mass Media and Society
HIST 353	U.S. Consumer Culture
POLI 120	American Politics
POLI 150	U.S. and World Affairs

or other courses as advised.

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.

Capstone project or seminar (3 credit hours)

Students may choose either AMST 400, AMST 401, or AMST 402 to fulfill this option.

Total Credits in Major: 39

Concentrations for Interdisciplinary Studies - American Studies major

A. American Identities in the United States

AMST 347	United States Immigration
COMM 373	Gender and Communication
CRMJ 100	Introduction to Criminal Justice
EDU 215	Education in American Society
ENGL 240	Introduction to African American Literature and Culture
ENGL 242	American Indian Literature
ENGL 340	Black Women Writers
ENGL 342	African American Autobiography
ENGL 344	Contemporary Multiethnic American Literature
HIST 333	African American History to 1877
HIST 334	African American History Since 1877
HIST 335	American Women
HIST 344	African American Social Thought
HIST 345	Asian American History
HIST 351	Defining America
HIST 355	American Religious History
HIST 359	Ethnicity and Race
INDS 241	Introduction to Latino Literature and Culture
INDS 315	Italian American Experience
MUS 265	History of Jazz
MUS 267	African American Music
PHIL 228	American Philosophy
POLI 365	American Political Thought
PSY 255	Psychology of Women
SOC 306	Sex and Gender
SOC 316	Minority Groups

Or other courses as advised.

B. Cultures of the Americas

AMST 289	Comparative North America
ANTH 321	Anthropology of Indian America
ANTH 324	Anthropology of the Caribbean
COMM 386	International Films (by advisement)
FREN 310	The Literature/Culture of Quebec
HIST 282	Pre-Columbian and Colonial Latin America
HIST 283	Latin America: Revolution and Reform
HIST 288	The Atlantic World, 1500-1820
HIST 342	The American Century
HIST 352	Environmental History of North America
HIST 356	American Indian History
HIST 357	Indians and Europeans in Early America
HIST 378	Canada and the Canadians
HIST 380	Pre-Columbian/Colonial Mexico
HIST 381	Mexico in the Modern World
INDS 241	Introduction to Latino Literature and Culture
INDS 304	Latina Literature and Cultural Studies
LANG 327	Magic Realism in Latin American Literature
LANG 371	Canadian Writers
LANG 378	Canada Today
MUS 334	Music of Latin America
POLI 356	U.S. Foreign Policy
SPAN 325	Survey of Spanish-American Literature
SPAN 425	Spanish-American Fiction
WOST 203	Chicana Writers/Visual Artists

Or other courses as advised.

C. Democracy and Civic Engagement

HIST 343	Civil Rights Movement
PHIL 265	Social/Political Philosophy
POLI 120	American Politics
POLI 276	Law and Society
POLI 313	American Power Structures
POLI 323	Elections in America

POLI 324	President and Congress
POLI 371	Civil Rights and Liberties
PSY 358	Psychology and the Law
SOC 201	Social Problems
SOC 215	Introduction to Public Health
SOC 218	Introduction to Social Work
SOC 303	Social Class and Inequality

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
BIOL 330-	General Ecology & Lab
BIOL 331	
BIOL 421	Biological Conservation
CHEM 113	Chemistry and the Environment
CHEM 302	Chemistry in Today's Society
ECON 340	Urban and Regional Economics
ECON 380	Environmental/Natural Resource Economics
ENGL 333	Environmental Literature
ENGL 399	Literature of Place (special topic)
GEO 121	Landform Geography
GEO 145	Geology of New York State
GEO 359	Vanishing Earth Resources
HIST 330	Industrial America, 1890-1920
HIST 340	The Westward Movement
HIST 352	Environmental History of North America
POLI 240	Urbanization and Environmental Challenges
POLI 381	Urban Politics and Policy
POLI 387	Environmental Policy
PSY 373	Human Factors

Or other courses as advised.

E. Popular and Visual Cultures

ARTH 102	Art in Culture 1400 to the Present
ARTH 225	Modern Art 1900-1950
ARTH 229	Art/Reality - Nineteenth Century America
ARTH 329	Art Since 1945
COMM 102	Mass Media and Society
COMM 350	Telecommunication Technology
COMM 375	Mass Media Theory
ENGL 381	Narrative Film after 1940
ENGL 386	Women in Global Cinema
ENGL 399	American Directors (special topic)
HIST 353	U.S. Consumer Culture
HIST 376	Film and American Culture
MUS 262	American Music
MUS 265	History of Jazz
MUS 267	African American Music
MUS 270	History of American Popular Music, 1900-1963
POLI 326	Media and Politics
POLI 345	Film and Politics
WOST 203	Chicana Writers/Visual Artists

Or other courses as advised.

Interdisciplinary Studies: Arts Administration Bachelor of Arts degree

Office: G-15 Michael C. Rockefeller Arts Center
(716) 673-3217

Jefferson Westwood, Coordinator

Email: arts.administration@fredonia.edu

Website:

<http://www.fredonia.edu/departments/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 and performing arts centers. 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. In addition, to ensure an in-depth understanding of at least one arts discipline, each Arts Administration major is strongly encouraged to complete a minor in music, theater, art or dance.

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 degree in Interdisciplinary Studies - Arts Administration (42-54 credits)

Business and Accounting (15 credit hours)

CSIT 104	Introduction to Microcomputer Software
or	
CSIT 151	Introduction to Information Systems (preferred)

ACCT 201	Principles of Financial Accounting
BUAD 235	Introduction to Business Communication

BUAD 310	Legal Environment of Business
or	
ACCT 311	Business Law I
or	
POLI 277	Introduction to Law

BUAD 323	Organizational Behavior
----------	-------------------------

Communication/Psychology/Sociology (9 credit hours)

Choose one of the following three course sequences:
(the Communication sequence is recommended)

COMM 101	Fundamentals of Communication
COMM 221	Interpersonal Communication

COMM 301	Group Communication
or	
PSY 129	Introduction to Psychology

PSY 245	Social Psychology
---------	-------------------

PSY 355	Group Dynamics
or	
SOC 116	Introductory Sociology

SOC 204	Social Psychology
PSY 355	Group Dynamics

Journalism/Public Relations (9 credit hours)

Choose one of the following three-course sequences:

COMM 130	Foundations in Journalism
COMM 230	News Gathering
COMM 231	Storytelling: Words, Images, Sound
Or	
COMM 222	Principles of Public Relations

COMM 322	Public Relations Writing
COMM 344	Public Relations Case Analysis

Specialization (3 credit hours)

Choose one of the following three courses:

MUSB 301	Music Copyrights
MUSB 320	Music Contracts
THEA 460	Theatre Organization and Management

Arts Administration Capstone (6-18 credits)

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 (or ARTH 460 Gallery Practicum)
AADM 410	Ticket Office Practicum
AADM 490	Arts Administration Internship

Total Credits in Major: 42-54 (depending on number of credits for internship)

Interdisciplinary Studies: Environmental Sciences Bachelor of Science degree

(Interdisciplinary major housed in the Department of Chemistry and Biochemistry)

Office: 220 Houghton Hall
(716) 673-3292

Sherri A. Mason, Coordinator

Email: environmental.Sciences@fredonia.edu

Website:

<http://www.fredonia.edu/department/chemistry/environmental/>

The Bachelor of Science in Interdisciplinary Studies - Environmental Sciences is now housed in the Department of Chemistry and Biochemistry. Please see the Chemistry and Biochemistry section of the catalog for details on the Environmental Science (see page 30) major.

Interdisciplinary Studies: Exercise Science Bachelor of Science degree

(Interdisciplinary major housed in the Department of Sport Management and Exercise Science)

Office: 123 Dods Hall
(716) 673-3101

Todd Backes, Coordinator

Email: sport-exercise.studies@fredonia.edu

Website:

<http://www.fredonia.edu/department/sportmanagement/>

The Bachelor of Science in Interdisciplinary Studies - Exercise Science is housed in the Department of Sport Management & Exercise Science. Please see the Sport Management & Exercise Science (see page 159) section of the catalog for details.

Interdisciplinary Studies: Sport and Exercise Psychology Bachelor of Science degree

Office: W339 Thompson Hall
(716) 673-3892

Bruce Klonsky, Coordinator

Email: sport.psychology@fredonia.edu

Website:

<http://www.fredonia.edu/department/sportmanagement/>

The Association for Applied Sport Psychology (AASP) has established the following guidelines for competencies for sport psychology professionals: scientific and professional ethics and standards; knowledge of disciplines such as health and exercise psychology and performance enhancement; biomechanical and/or physiological bases of sport, historical, philosophical and motor behavior bases of sport; basic counseling skills; skills and techniques related to sport or exercise (e.g. coaching skills and techniques associated with sport participation), skills related to research design, statistics and psychological assessment; cognitive-affective bases of behavior (cognition, emotion, learning, motivation, motor development); social bases of behavior (cultural and ethnic bases, group processes, gender roles; organization and systems theory, social psychology and sociology of sport); and aspects of individual behavior including development, personality and individual differences.

Bachelor of Science in Interdisciplinary Studies - Exercise Science Track (35-36 credit hours)

PHED 200	Human Physiology I
PHED 203	Human Physiology II
SPMG 210	Introduction to Sport Management
PHED 301	Kinesiology
PSY 237	Sport Psychology
PSY 247	Health Psychology
SOC 335	Sport Sociology

Choose one (1) course from the following Research courses:

PSY 210	Research Methods
or	
PSY 317	Tests and Measurements

Choose one (1) course from the following Developmental courses:

EDU 225	Developmental Psychology
or	
PSY 289	Lifespan Human Development
or	
PSY 349	Child Psychology
or	
PSY 364	Cognitive Development
or	
PSY 365	Social Development

Choose 1 course from the following Group and Organizational Context courses:

PSY 347	Organizational Psychology
or	
PSY 355	Group Dynamics

Choose 1 course from the following Personality and Counseling courses:

PSY 246	Personality
or	
PSY 447	Introduction to Counseling

Choose three (3) credit hours from the following Applied Sport course options:

PSY 238 Performance Enhancement
Or
HLTH 302 Stress Management
Or
HLTH 303 Fitness and Nutrition
Or
PHED 321 Coaching Techniques
Or
HLTH 386 Wellness and Health Promotion

Choose one 3-credit hour Capstone course providing practical sport and exercise psychology experience:

PSY 479/ Internship
PHED 400/
HLTH 400
Or
PSY 489/ Independent Study
PHED 499/
HLTH 499

Students must also complete all prerequisite courses

Internship/Independent Study

Internships and independent study experiences are integral aspects of the Sport and Exercise Psychology Track. Students will be provided appropriate service experience in which they can develop personal skills within ethical guidelines, and increase their knowledge of sport and exercise psychology. Students must meet all transportation and living expenses while involved in the internship experience. Independent study will allow the student to explore research topics related to sport and exercise psychology in depth.

Interdisciplinary Studies: International Studies Bachelor of Science degree

(Interdisciplinary major housed in the Department of Political Science)

Office: E390 Thompson Hall
(716) 673-3887

Ivani Vassoler, Coordinator

Email: international.studies@fredonia.edu

Website: <http://www.fredonia.edu/departments/polisci/>

The Bachelor of Science in Interdisciplinary Studies - International Studies is now housed in the Department of Political Science. Please see the Political Science (see page 143) section of the catalog for details.

Interdisciplinary Studies: Self-Design Bachelor of Science or Bachelor of Arts degree

Office: 111 Reed Library
(716) 673-3173

Roger A. Byrne, Coordinator

Email: interdisciplinary.studies@fredonia.edu

Website:

<http://www.fredonia.edu/departments/interdisciplinarystudies>

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 Arts & Sciences, to assess the appropriateness of such a degree.

Interdisciplinary Studies: Women's Studies Bachelor of Arts degree

Office: 241 Fenton Hall
(716) 673-3861

Jeanette McVicker, Co-Coordinator

Email: womens.studies@fredonia.edu

Office: 2113 Fenton Hall
(716) 673-3380

Carmen Rivera, Co-Coordinator

Email: womens.studies@fredonia.edu

Women's Studies Program Office

Office: 171A Fenton Hall
(716) 673-3158

Email: womens.studies@fredonia.edu

Website:

<http://www.fredonia.edu/departments/interdisciplinary/>

Women's Studies is the recognition and examination of the social construction of gender and its grouping with class, race, age, ethnicity, nationality and sexual identity.

Students majoring in Women's Studies will: become more knowledgeable about the way gender informs our social, economic, political and cultural lives; widen their perspective on how gender intersects with national and global issues; develop an appreciation for the connection between education and social responsibility; and demonstrate knowledge of interdisciplinary feminist research methodologies.

The academic core of the Women's Studies program focuses on:

- an interdisciplinary approach to the concept of gender as a social construct;
- a critical and cultural analysis of female experiences through work in feminist theory;
- race, ethnicity, nationality, class, age and sexual identity as central categories of analysis;
- historical considerations;
- the production of feminist literature and visual culture.

Student Organizations and Activities

The Women's Student Union

(<http://www.fredonia.edu/womensstudies/>) provides opportunities for students to program special events, participate in relevant off-campus activities, and sponsor activities to raise awareness of women's and gender issues on campus and in the community.

Women's History Month, co-sponsored by WSU and Women's Studies, brings a diverse array of speakers and

performers to campus in March to celebrate women's contributions and discuss contemporary issues facing both women and men. An annual Women's Studies Fall Gathering showcases recent scholarship in women's studies by affiliate faculty.

An annual Undergraduate Conference on Women and Gender celebrates student research in women's studies and gender-related areas. Student winners present summaries of their work in a recognition ceremony and receive The Dean's Award for Excellence in Research on Gender. Other annual events include the Women Take Aim Film Series, participation in the V-Day Initiative, Take Back the Night, and Women, Rock and Soul, a fundraiser for the Women's Studies scholarship. The Jeanette McVicker Women's Studies Scholarship is awarded each year to a Women's Studies major or minor who demonstrates both academic excellence and involvement in feminist activism.

Requirements for the Bachelor of Arts in Interdisciplinary Studies - Women's Studies

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 director. Students declaring the major in Women's Studies may use past courses retroactively after consultation with the director. Three (3) credit hours of independent study can be counted in the major.

Required Courses: (21 credit hours)

WOST 201	Introduction to Women's Studies
WOST 255/ PSY 255	Psychology of Women
WOST 301/ ENGL 349/ PHIL 244	Feminist Theory
WOST 302/ ANTH 300/ SOC 306	Sex and Gender

A course on women writers and/or women visual artists (e.g., (WOST) 203/205/304/340)

WOST 335/ HIST 335	American Women
Or	
WOST 359/ HIST 359	Race and Ethnicity

WOST 400	Women's Studies Portfolio (taken concurrently with 401)
WOST 401	Feminist Practice (Capstone experience)

Elective Courses: 15 credit hours. At least one course from each of the following three lists. Within each category, students should take no more than one course from each departmental prefix (other than WOST). When a course is counted in the core, it cannot also be counted as an elective.

1) Gender and Culture:

ARTH 230	Black Art and Visual Culture
ENGL 242/ INDS 242	American Indian Literature
ENGL 296/ AMST 296	American Identities
ENGL 351	Language and Society

HIST 353	U.S. Consumer Culture
WOST 203	Chicana Writers and Visual Artists
WOST 205/ ARTH 205	Women in Art
WOST 304/ ENGL 304/ INDS 304	Latina Literary and Cultural Studies
WOST 314/ ENGL 314	Women Writers
WOST 335/ HIST 335	American Women
WOST 336/ HIST 336	African American Women's History
WOST 340/ ENGL 340	Black Women Writers
WOST 359/ HIST 359/ INDS 359	Ethnicity and Race
WOST 405/ LANG 405	French Women Writers
WOST 406/ LANG 406	Women in French Literature
WOST 377	Special Topics

2) Gender and Society:

SOC 201	Social Problems
SOC 303	Social Class and Inequality
SOC 365	Family Violence
ECON 312	Women in the Economy
POLI 349	Women in Politics (special topics course)
POLI 382	Social Welfare Policy
PSY 276	Human Sexuality
WOST 255/ PSY 255	Psychology of Women
WOST 345/ SOC 345	Women, Health, and Society
WOST 373/ COMM 373	Gender and Communication
WOST 377	Special Topics

3) Gender in a Transnational World:

ANTH 219	Cultural Anthropology
BIOL 360	AIDS and STDs
COMM 465	Intercultural Communication
ENGL 396	Non-Western Literature
HIST 399	Globalism (special topics course)
PSY 370	Cross-Cultural Psychology
SOC 321	Population and Society
SOC 361	Law and the World
WOST 386/ ENGL 386	Women and Film (this is now "Women in Global Cinema")
WOST 377	Special Topics
WOST 490	Independent Study (can be applied to one of the above categories, with director's approval)

Interdisciplinary Studies Minor Programs

For information on undergraduate interdisciplinary programs:

Office: 111 Reed Library
(716) 673-3173

Roger A. Byrne, Associate Dean for the College of Arts & Sciences

Email: interdisciplinary.studies@fredonia.edu

Website:

<http://www.fredonia.edu/departments/interdisciplinary/>

For information on graduate interdisciplinary programs:

Office: 2142 Fenton Hall
(716) 673-3808

Kevin Kearns, Interim Provost and Vice President for Academic Affairs

Email: graduate.studies@fredonia.edu

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

African American Studies minor

Office: E304 Thompson Hall
(716) 673-3274

Jennifer Hildebrand, Coordinator

Email: africanamerican.studies@fredonia.edu

Website:

<http://www.fredonia.edu/departments/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 the 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.

Required Courses for the Minor (21 credit hours)

Required Course: (3 credit hours)

AMST 202 Introduction to American Studies

Or

AMST 296 American Identities

Core Courses: (9 credit hours)

INDS 206 Introduction to African American Studies

HIST 333 African American History to 1877

Or

HIST 334 African American History since 1877

ENGL 240/ Introduction to African American Literature and
INDS 240 Culture

Electives: (6 credit hours – two courses; one in each of two disciplines; must not include a course that has been used for core course credit; other courses not listed may be included with approval of coordinator)

AMST 210 American Popular and Mass Cultures (with approval of the coordinator)

ANTH 322 Anthropology of Africa

ANTH 324	Anthropology of the Caribbean
COMM 359	Special Topics in Communication (with approval of coordinator)
COMM 451	Audio Documentaries/Soundscapes (with approval of coordinator)
COMM 452	Documentary I (with approval of coordinator)
COMM 465	Intercultural Communication (with approval of coordinator)
DANC 231	African Caribbean Dance
EDU 305/	Cultural and Linguistic Diversity in the Classroom
EDU 313	and Field Experience (with approval of coordinator)
ENGL 296	American Identities (with approval of coordinator)
ENGL 299/	Special Topics (with approval of coordinator)
ENGL 399/	
ENGL 499	
ENGL 334	Realism/Naturalism in American Literature (with approval of coordinator)
	Black Women Writers
ENGL 340/	
WOST 340	Harlem Renaissance
ENGL 341	African American Autobiography
ENGL 342	Contemporary Multiethnic American Literature (with approval of coordinator)
ENGL 344	
HIST 272	Africa to 1880
HIST 273	Africa From the 1800s
HIST 299/	Special Topics (with approval of coordinator)
HIST 399	
HIST 328	Civil War Era
HIST 333	African American History to 1877
HIST 334	African American History since 1877
HIST 336	African American Black Women's History
HIST 343	Civil Rights Movement
HIST 344	African American Social Thought
HIST 351	Defining America (with approval of coordinator)
HIST 372	Africa in the Nineteenth Century
HIST 387	Comparative Slave Societies
INDS 359/	Ethnicity and Race
HIST 359	
LANG 400	Special Topics (with approval of coordinator)
MUS 265	History of Jazz
MUS 267	African American Music
MUS 361	Jazz Improvisation (with approval of coordinator)
MUS 362	Jazz Theory (with approval of coordinator)
POLI 329	Topics in American Politics
POLI 334	African Politics
POLI 371	Civil Rights and Liberties
SOC 201	Social Problems (with approval of coordinator)
SOC 316	Minority Groups (with approval of coordinator)
WOST 377	Special Topics (with approval of coordinator)

Capstone Course: (3 credit hours)

INDS 402 Independent Study: African American Topics

or

INDS 491 African American Studies Internship

American Studies minor

Office: 257 Fenton Hall
(716) 673-3848

Shannon McRae, Coordinator

Email: american.studies@fredonia.edu

Website:

<http://www.fredonia.edu/departments/interdisciplinary/>

Requirements for the Interdisciplinary Studies minor in American Studies:

AMST 202 Introduction to American Studies

AMST 296 American Identities

An additional 12 credit hours from the following list:

AMST 210	American Popular and Mass Cultures
AMST 215	Holidays and American Culture
AMST 289	Comparative North America
AMST 338	Nineteenth Century American Culture
AMST 340	Twentieth Century American Culture
AMST 347	United States Immigration
AMST 399	Special Topics
COMM 102	Mass Media and Society
ENGL 206	Survey of American Literature
ENGL 344	Contemporary Multiethnic American Literature

HIST 105	United States History I
Or	
HIST 106	United States History II

HIST 353	American Consumer Culture
HIST 376	Film and American Culture
MUS 262	American Music
MUS 270	History of American Popular Music, 1900-1963
PHIL 228	American Philosophy
POLI 120	American Politics
POLI 150	U.S. and World Affairs
POLI 365	American Political Thought

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.

American Indian Studies minor

Office: E304 Thompson Hall
(716) 673-3274

Jennifer Hildebrand, Coordinator

Email: americanindian.studies@fredonia.edu

Website:

<http://www.fredonia.edu/departments/interdisciplinary/>

The American Indian Studies minor provides an interdisciplinary study of the anthropological, historical, cultural, educational and political developments that have formed present-day Native America. The program is designed for students with the desire to better understand American Indian and Alaskan Native cultures by studying pre-contact history via oral tradition, post-European contact via biography, and present day "Indian Country" through federal policies, films, and literature. American Indian ethnic identities and stereotypes, as formed by these media, will be studied to promote new ways of thinking about race and culture. The multi-disciplinary nature of the minor allows for participation from students of all backgrounds in developing a new view of American Indian cultures while helping to dispel the Pan-Indian stereotype endemic in the American education system.

Required Courses for the Minor in American Indian Studies (21 credit hours)

Students should select courses from the following categories, beginning with a choice of courses from the American Studies program. Students declaring a minor may use past courses retroactively after consultation with the coordinator. Minors must take one course in both Literature and History.

Core Courses (12 credit hours by advisement):

Required course:

AMST 202	Introduction to American Studies
or	

AMST 296	American Identities
----------	---------------------

INDS 105	Introduction to American Indian Studies
----------	---

ENGL 242/ INDS 242	American Indian Literature
-----------------------	----------------------------

Literature: ENGL 242/ INDS 242	American Indian Literature
--------------------------------------	----------------------------

History (One course from the following choices):

HIST 282	Pre-Columbian and Colonial Latin America
HIST 283	Latin America: Revolution and Reform
HIST 289	Comparative North America
HIST 325	Colonial America
HIST 356	American Indian History
HIST 357	Indians and Europeans in Early America
HIST 358	Twentieth Century American Indian Issues
HIST 380	Pre-Columbian/Colonial Mexico
HIST 381	Mexico in the Modern World

Electives: (6 credit hours)

ANTH 321	Anthropology of Indian America
ANTH 350	Prehistory of North America (Special Topics)
ARTS 291	American Indian Art Studio I
SOC 316	Minority Groups

Credited with approval from coordinator:

EDU 305/ EDU 313	Cultural and Linguistic Diversity in the Classroom and Field Experience
HIST 340	The Western Movement

Possible alternate electives include *American Indian Literature in Translation*, *American Indian Poetry*, and *American Indian in Film*.

Capstone Course: (3 credit hours)

INDS 404	American Indian Capstone
or	
INDS 492	American Indian Studies Internship

Courses offered as *Special Topics* can be credited toward the minor with approval from coordinator of the American Indian Studies minor.

Dance Studio Administration minor

Office: Dods Hall 147
(716) 673-3355

Email: Angelika.Summerton@fredonia.edu

Angelika Summerton, Coordinator

Website:

<http://www.fredonia.edu/departments/interdisciplinary/>

Students from several different disciplines have expressed an interest in opening their own dance studio. 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 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
POLI 277	Introduction to Law
COMM 111	Web Design
COMM 116	Desktop Publishing
COMM 118	Desktop Audio

CSIT 104	Introduction to Microcomputer Software
Or	
CSIT 151	Introduction to Computer Information Systems

ECON 202	Principles of Microeconomics
THEA 121	Introduction to Technical Theatre
DANC 370	Dance Studio Management

Film Studies minor

Office: 315B McEwen Hall

(716) 673-4853

Phil Hastings, Coordinator

Email: film.studies@fredonia.edu

Website:

<http://www.fredonia.edu/departments/interdisciplinary/>

Film is fundamentally a medium of expression and communication that may be used to examine and study human knowledge and exploration in a wide variety of fields. A film may have predominantly literary content or may be predominantly historical, political, or cultural. A film may be highly impressionistic and be primarily an abstract, aesthetic work. Film is more than a century old, and it is an increasingly popular form of entertainment and cultural influence in the world. It is also a medium capable of serious artistic expression and scholarly analysis. The departments of Communication, English, Modern Languages and Literatures, History, Political Science, and Visual Arts and New Media and the Women's Studies and Film Studies programs offer courses regularly that treat film as a communication medium, an artistic medium, an historical or political document, or a reflection of culture. In any given semester, as many as 200 students may be enrolled in courses in which film is the major vehicle for study.

The goals of the Film Studies minor are to develop a variety of approaches to understanding the role of film as a medium of expression and communication and the kinds of content with which a film might be concerned, to acquaint students with the development of film as a medium of expression and communication, and to acquaint students with landmarks in the history of film

and to recognize and challenge the grounds on which landmark status has been recognized.

Required courses for the minor (18 credit hours)

6 credit hours chosen from the following courses.

Choose one from

ARTH 276/ Film Form

FILM 220

or

COMM 155 Rhetoric of Vision and Sound

Note: Students should not take both classes. Only one will count toward the minor.

Choose one from

ARTH 376 Film and Special Effects

ENGL 280 Introduction to Film

ENGL 380 Narrative Film Silence to Sound

ENGL 381 Narrative Film After 1940

HIST 203 History through Films*

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

ARTH 345 Film Criticism

ARTH 359 New Media Writing

COMM 308 Documentary History and Criticism

COMM 309 Film Analysis

COMM 361 Script Writing for Video, Film and Radio

COMM 386 International Film

COMM 452 Documentary I

COMM 454 Video Drama

ENGL 207 Drama and Film

ENGL 386 Women and Film

ENGL 387 American Film

FILM 399 Special Topics (content varies)

FILM 401 Independent Study

HIST 363 Chinese Culture Through Films

HIST 376 Film and American Culture

LANG 385 German Film

POLI 345 Film and Global Politics

or

Any course from the core not taken to fulfill core requirements excluding ARTH 276/FILM 220 and COMM 155.

Notes:

No more than four (4) 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.

Communication Department students can use only one course from their Major Track requirements.

Geographic Information Systems minor

Office: 20 Houghton Hall

(716) 673-3884

Ann K. Deakin, Coordinator

Email: geographicinformation.systems@fredonia.edu

Website:

<http://www.fredonia.edu/departments/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 105	Visual BASIC Programming I
GIS 201	Geographic Information Systems I
GIS 301	Geographic Information Systems II
GEO 301	Cartography

GIS 450	Directed Study
Or	
GIS 480	Independent Study
Or	
GIS 490	Internship

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
CSIT 205	Visual BASIC II
ESCI 410	Environmental Assessment
GEO 330	Geomorphology
GIS 401	Special Topics in GIS
Statistics as advised	

Students with the social sciences focus should take GIS 360 Mapping the Social World and two additional courses as advised by the coordinator.

Examples of possible electives include:

BUAD 325	Principles of Marketing
ECON 380	Environmental/Natural Resource Economics
GIS 401	Special Topics in GIS
POLI 311	Fundamentals of Public Administration

SOC 215 Introduction to Public Health
Statistics as advised

International Studies minor

(Interdisciplinary Studies minor housed in the Department of Political Science)

Office: E388 Thompson Hall
(716) 673-4672

Alex Caviedes, Coordinator

Email: international.studies@fredonia.edu

Website: <http://www.fredonia.edu/departments/polisci/>

The Interdisciplinary Studies - International Studies minor program is now housed in the Department of Political Science. Please see the Political Science (see page 143) section of the catalog for details.

Italian Studies minor

Office: 2104 Fenton Hall
(716) 673-4496

Chiara De Santi, Coordinator

Email: Chiara.DeSanti@fredonia.edu

Website:
<http://www.fredonia.edu/departments/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
ITAL 116	Elementary Italian II
ITAL 210	Italian through Literature and Popular Culture (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 Cinema (focus on Italy)
LANG 400	Special Topics in languages and literatures (focus on Italy)
LANG 410	Directed Study (focus on Italy)
ARTH 215	Survey of Renaissance Art
ARTH 290	Art History Abroad (if in Italy)
ARTH 315	Renaissance Art
ARTH 318	Baroque Art
ENGL 389	Greek and Roman Literature
HIST 302	Republican/Imperial Rome
HIST 303	Medieval History I
HIST 304	Medieval History II
HIST 305	Europe in the Era of Renaissance
HIST 309	The Modernization of Europe
HIST 311	Europe in the Modern World
HIST 391	History of Christianity I
INDS 315	Italian American Experience
INDS 400	Independent Study - culturally based
INDS 480	Independent Study - general
PHIL 223	Roman Philosophy
PHIL 369	Topics on Philosophy (focus on Italy - Machiavelli, Dante, etc)
POLI 330	Western European Politics
POLI 343	International Migrations/Migrations Politics
POLI 439	Directed Study: Comparative politics (focus on Italy)
THEA 359	Commedia dell'Arte
THEA 451	History of the Theatre I
PSC 390	The Italian American Experience: Politics, Society and Identity (online Buffalo State)

Latino Studies minor

Office: E304 Thompson Hall
(716) 673-3274

Jennifer Hildebrand, Coordinator

Email: latino.studies@fredonia.edu

Website:

<http://www.fredonia.edu/departament/interdisciplinary/>

Requirements for the Minor in Latino Studies

The Latino Studies minor is an exciting interdisciplinary minor that takes the student 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 this time, when "globalization" and "immigration" have become part of the everyday political and social discourse, students gain an understanding of the complex dynamics of transnational communities and transculturation.

A minor in Latino Studies paves the road to careers in government, legislation, international organizations, international business and marketing, immigration laws, land management, urban planning, counseling, social work, the media, and many other fields.

Required: 21 credit hours from the following. Students declaring the Latino Studies minor may use past courses retroactively after consultation with the coordinator.

Core Courses (15 credit hours):

Two courses of introduction to the minor (6 credit hours)

INDS 225 Introduction to Latino History and Culture
and

AMST 202 Introduction to American Studies

Or

AMST 296 American Identities

One Spanish language course from the following:

SPAN 313 Spanish Conversation

Or

SPAN 314 Spanish Composition

Or

Demonstrated proficiency at this level

One History course from the following::

HIST 282 Pre-Columbian and Colonial Latin America

HIST 283 Latin America: Revolution and Reform

HIST 398 Themes in World History*

Capstone experience, one of the following:

INDS 403 Contemporary Issues of Latino Studies

Or

INDS 493 Latino Studies Internship

Electives (6 credit hours from two different disciplines):

ANTH 324 Anthropology of the Caribbean

ANTH 350 Special Topics*

ARTH 280 Survey of Precolumbian Art: Mesoamerican

DANC 231 African-Caribbean Dance

ENGL 241/ Introduction to Latino Literature

INDS 241

ENGL 299/ Special Topics*

ENGL 399/

ENGL 499

ENGL 304 Latina Literature and Cultural Studies

ENGL 344 Contemporary Multiethnic American Literature

HIST 359 Ethnicity and Race

INTL 303 Globalization in Latin America

LANG 327	Magic Realism in Latin American Literature
LANG 380	World in Cinema*
LANG 400	Special Topics*
MUS 334	Music of Latin America
POLI 343	International Migration and Immigration Policies
POLI 371	Civil Rights and Liberties
PSY 280	Special Topics
SOC 303	Social Class and Inequality
SOC 316	Minority Groups
SOC 350	Special Topics
SPAN 325	Survey of Spanish-American Literature
SPAN 340	Themes in Hispanic Culture*
SPAN 425	Spanish-American Fiction
WOST 203	Chicana Writers/Visual Artists

*courses need approval of coordinator

Study Abroad programs such as INED 399 J-Term in Puerto Rico, INED Study Abroad in Oaxaca, Mexico and INED 399 Study Abroad in Puebla, Mexico are strongly recommended. Students can explore other Study Abroad programs in the SUNY system in consultation with coordinator.

Leadership Studies minor

Office: Campus Life Office, Williams Center
(716) 673-3143

Mark Suida, Coordinator

Email: leadership.studies@fredonia.edu

Website:

<http://www.fredonia.edu/departament/interdisciplinary/>

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 SUNY Fredonia
- Maintain a cumulative grade point average of 2.5
- Consultation (and approval) with current Academic Advisor
- 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:

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.

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.

Core (6 credit hours):

SPST 201	Advanced Leadership Development
INDS 490	Internship in Leadership Development

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:

AMST 347	U.S. Immigration
COMM 465	Intercultural Communication
ECON 320	International Trade/Finance
ECON 345	Comparative Economic Systems
ENGL 351	Language and Society
SSED 204	World Regional Geography
INED 400	Study Abroad
MUED 315	Music, Play & Self
POLI 352	World Political Geography
POLI 356	U.S. Foreign Policy
PSY 370	Cross-Cultural Psychology

Communication Skills:

COMM 105	Public Speaking
----------	-----------------

COMM 221	Interpersonal Communication
BUAD 235	Introduction to Business Communications
ENGL 352	History of the English Language
ENGL 373	English Grammar for Everyone
THEA 130	Acting for Non-Majors

Groups and Organizations:

BUAD 321	Management and Organizational Behavior
BUAD 323	Organizational Behavior
COMM 301	Group Communication
COMM 373	Gender and Communication
COMM 460	Organizational Communication
COMM 222	Principles Public Relations
INDS 359	Ethnicity and Race
SPMG 210	Principles of Sport Management
PSY 245	Social Psychology
PSY 347	Organizational Psychology
PSY 355	Group Dynamics
PSY 391	Multicultural Counseling
SOC 204	Social Psychology
SOC 316	Minority Groups

Presentation Skills:

CSIT 104	Introduction to Microcomputer Software
CSIT 107	Web Programming I
COMM 111	Web Design
COMM 112	Desktop Video
COMM 114	Electronic Darkroom
COMM 116	Desktop Publishing
GIS 201	Geographic Information Systems I

Legal Studies minor

Note: This minor has been deactivated. The only students in the program are the students who were previously enrolled and are completing their program. New students who are interested in a legal career should plan to participate in the Pre-Law Advisement program.

Multi-Ethnic Studies minor

Office: E304 Thompson Hall
(716) 673-3274

Jennifer Hildebrand, Coordinator

Email: multiethnic.studies@fredonia.edu

Website:

<http://www.fredonia.edu/departments/interdisciplinary/>

The Multi-ethnic Studies minor provides an opportunity to study the histories and cultures of ethnic minority groups in North America and their relationships to each other as well as to the dominant culture.

The program is designed for students who desire a broad view of the ethnic research – African American, American Indian and Latino Studies. The Multi-ethnic Studies minor will merge facets of all three minors - for example, history, literature, language, anthropology, music, etc. – to give a broad-based understanding of those ethnic groups who have been marginalized or excluded from full participation in society.

The minor, with its wide scope, will appeal to students interested in learning more about the expressions and perspectives of North American minority groups and how the inter-relationships of race, ethnicity, gender, and class define our society.

Requirements for the minor in Multi-Ethnic Studies

Required: 21 credit hours from the following. Students declaring a Multi-ethnic Studies minor may use past courses retroactively after consultation with the coordinator.

Core Courses: (12 credit hours selected from the following)

AMST 296	American Identities
INDS 105	Introduction to American Indian Studies
INDS 106	Introduction to African American Studies
HIST 225/ INDS 225	Introduction to Latino History and Culture
SOC 316	Minority Groups

Electives: (9 credit hours)

Three courses; courses must be taken from each of the three areas.

African American Studies

ANTH 324	Anthropology of the Caribbean
DANC 231	African Caribbean Dance
EDU 305	Cultural/Linguistic Diversity
ENGL 240	Introduction to African American Literature and Culture
ENGL 340	Black Women Writers
ENGL 341	Harlem Renaissance
ENGL 342	African American Autobiography
HIST 328	Civil War Era
HIST 333	African American History to 1877
HIST 334	African American History since 1877
HIST 336	African American Black Women's History
HIST 344	African American Social Thought
MUS 265	History of Jazz
MUS 267	African American Music
POLI 328	African American Politics

American Indian Studies

ANTH 321	Anthropology of Indian America
EDU 305	Cultural/Linguistic Diversity
ENGL 242	American Indian Literature
HIST 282	Pre-Columbian and Colonial Latin America
HIST 289	Comparative North America
HIST 356	American Indian History
HIST 358	Twentieth Century American Indian Issues
HIST 380	Pre-Columbian/Colonial Mexico

Latino Studies

ANTH 324	Anthropology of the Caribbean
EDU 305	Cultural/Linguistic Diversity
ENGL 241	Introduction to Latino/a Literature
ENGL 304/ INDS 304	Latina Literature and Cultural Studies
HIST 282	Pre-Columbian and Colonial Latin America
HIST 283	Latin America: Revolution and Reform
HIST 289	Comparative North America
HIST 380	Pre-Columbian and Colonial Mexico
HIST 381	Mexico in the Modern World
LANG 327	Magic Realism in Latin American Literature
MUS 334	Music of Latin America
SPAN 215	Intermediate Spanish I
SPAN 315	Introduction to Readings in Hispanic Literature
SPAN 313	Spanish Conversation
SPAN 325	Survey of Spanish-American Literature
SPAN 425	Spanish-American Fiction
WOST 203	Chicana Writers/Visual Artists

Students would also be able to select from Special Topics courses in any discipline with the permission of their advisor.

The American Indian Studies minor also falls under the umbrella of the Multi-Ethnic Studies program (see American Indian Studies minor program information).

Museum Studies minor

Office: 305 Rockefeller Arts Center
(716) 673-4897

Tina Hastings, Coordinator

Email: museum.studies@fredonia.edu

Website:

<http://www.fredonia.edu/departments/interdisciplinary/>

The Museum Studies minor provides an interdisciplinary introduction to the field of museum work. Students may choose a public history, art, anthropology or general track depending on their interests. 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 partnered with a major in Art History, Visual Arts and New Media, or History will uniquely qualify SUNY Fredonia students for this ever-expanding discipline. The minor in combination with the Social Studies Adolescence Education major would prepare students to enter the emerging field of Museum Education. The minor will also be congruent with other academic programs such as American Studies, Anthropology, geosciences, etc. Moreover, the minor will provide opportunities for service learning through the internship and capstone courses, and will provide benefits to understaffed local cultural institutions.

Requirements for the minor in Museum Studies

Required: 24 credit hours from the following. No more than 6 credit hours from the student's major may be counted toward the minor. Students declaring a Museum Studies minor may use past courses retroactively after consultation with the coordinator.

Required Courses (12 credit hours)

INDS 202	Introduction to Museum Studies
INDS 302	Topics in Museum Studies
One Museum Internship/Practicum from the following, depending on track:	
HIST 490	Public History Internship
or	
ARTH 499	Art History Internship
or	
ARTH 460	Gallery Practicum
or	
ANTH 473	Museum Internship
INDS 494	Museum Studies Capstone
INDS 495	Museum Studies Portfolio Completion (0 credit hours)

Electives (12 credit hours chosen from history, art history, or anthropology, depending on track selected):

Art History Track

ARTH 101	Art in Culture to 1400
or	
ARTH 102	Art in Culture from 1400 to present
Three additional 200/300 level courses in Art History, as advised	

Anthropology Track

ANTH 115	Introductory Anthropology
ANTH 211	Archaeology
or	
ANTH 219	Cultural Anthropology

Two additional 300 level courses in Anthropology, as advised*
 *Courses in African, American Indian, or pre-Columbian Latin American history may also count toward this requirement

Public History Track

HIST 105 United States History I

Or

HIST 106 United States History II

Three additional 300 level courses in American History, as advised (9 credit hours)

General Track

12 credit hours in at least two of the above disciplines (Art History, History, Anthropology). At least 6 credit hours must be at the 300 level or above.

Public Health minor

Office: W393 Thompson Hall
 (716) 673-3469

Linda Dorsten, Coordinator

Email: publichealth.minor@fredonia.edu

Website:

<http://www.fredonia.edu/department/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

BIOL 110 Human Biology

or

BIOL 111 Introduction to Biology

or

BIOL 133 Principles of Biology II

BIOL 457 Biostatistics (or STAT 250 for Biology majors)

or

SOC 300/

PSY 210/

POLI 210/

COMM 295

SOC 415 Seminar in Public Health (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 110 Human Biology

BIOL 131 Principles of Biology I

BIOL 243 Biodiversity

BIOL 236 Human Anatomy and Physiology and Lab

BIOL 251 Basic Concepts in Biology

BIOL 310 Human Genome

BIOL 336 Mammalian Physiology

BIOL 338 Microbiology

BIOL 345 Emerging Infectious Diseases

or

BIOL 360 AIDS and STDs

or

BIOL 450 Molecular Basis of Disease

CHEM107 Chemistry for Consumers

or

CHEM113 Chemistry and the Environment

or

CHEM115 General Chemistry I

ESCI 105 Global Environmental Issues

or

ESCI 410 Environmental Assessment

2. Social/Behavioral Sciences (at least 3 credit hours required)

PSY 247 Health Psychology

SOC 240 Health and Society

SOC 311 Sociology of Addiction

SOC 321 Population and Society

SOC 345 Women, Health and Society

or

PSY 255 Psychology of Women

3. Specialty Groups/Courses (suggested courses)

Biosciences:

BIOL 437 Molecular Genetics Laboratory I

BIOL 470 Hormone Mechanisms

CHEM 116 General Chemistry II

CHEM 125- General Chemistry Laboratory I & II

CHEM 126

Women's Health:

HLTH 215 Personal and Community Health

HLTH 303 Fitness and Nutrition

or

HLTH 386 Wellness and Health Promotion

SOC 345 Women, Health and Society

or

PSY 255 Psychology of Women

SOC 472 Internship (after completing 15 credit hours of public health course work and with permission of Coordinator; includes on-campus internship at Birth Control Information Center)

Community Health:

COMM 101 Fundamentals of Communication

Or

COMM 105 Public Speaking

Or

COMM 460 Organization Communication

CRMJ 320 Crime and Crime Theory

Or

SOC 363 Victimology

CSIT 104 Introduction to Microcomputer Software

HLTH 215 Personal and Community Health

HLTH 386 Wellness and Health Promotion

POLI 371 Civil Rights and Liberties

SOC 337 Sociology of Aging

Or

SOC 338 Death and Dying

Fitness, Nutrition and Wellness:

COMM 101 Fundamentals of Communication

Or

COMM 105 Public Speaking

Or

COMM 460 Organization Communication

HLTH 115 First Aid Skills and Knowledge

HLTH 215 Personal and Community Health

HLTH 303 Fitness and Nutrition

HLTH 386 Wellness and Health Promotion

Specialty Courses:

SOC 350 Special Topics (permission of Coordinator required)

SOC 472 Internship (after completing 15 credit hours of public health course work and with permission of Coordinator; includes on-campus internship at Birth Control Information Center)

Religious Studies minor

Office: 2102 Fenton Hall

(716) 673-4892

Dale Tuggy, Coordinator

Email: religious.studies@fredonia.edu

Website:

<http://www.fredonia.edu/departments/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, English, 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

Electives: (Five courses selected from the following list of 3-credit courses. At least 6 credit hours must be at the 300-level or above. Not all electives may be taken within a single discipline)

ANTH 331 Anthropology of American Utopias

ENGL 291 The Bible as Literature

ENGL 310 Medieval Literature

ENGL 390 Jewish Literature

HIST 261 Islamic Civilization

HIST 355 American Religious History

HIST 389 Religion in the Western Tradition

HIST 399 History of Christianity I

HIST 399 History of Christianity II

PHIL 224 Medieval Thought

PHIL 238 Philosophy of Religion

PHIL 331 Eastern Thought

PHIL 369 Topics in Philosophy

PHIL 446 Early Modern Philosophy of Religion

PHIL 447 Contemporary Debates in Philosophy of Religion

PSY 380 Psychology of Religion

Russian, East-European and Eurasian Studies minor

Office: E332 Thompson Hall

(716) 673-3277

John Staples, Coordinator

Email: John.Staples@fredonia.edu

Website:

<http://www.fredonia.edu/departments/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

RUSS 115 Elementary Russian I

RUSS 116 Elementary Russian II

INED Study Abroad (minimum of 3 credit hours)

Optional Courses: (by advisement)

ECON 345	Comparative Economic Systems
ENGL 396	Russian Literature
HIST 313	Medieval Russia, 860-1700
HIST 314	Imperial Russia
HIST 316	20th Century Russia
HIST 324	History of the Ukraine
HIST 371	Russia after Stalin
INED 402	Study Abroad - American University in Bulgaria
INED 439	Study Abroad - St. Petersburg University
POLI 332	Russian Politics
PHIL 338	Marxist Thought

Self-Design minor

Office: 111 Reed Library
(716) 673-3173

Roger A. Byrne, Associate Dean for College of Arts & Sciences

Email: interdisciplinary.studies@fredonia.edu

Website:

<http://www.fredonia.edu/department/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).

Sport Administration minor

Office: W339 Thompson Hall
(716) 673-3892

Bruce Klonsky, Coordinator

Email: sport.psychology@fredonia.edu

Website:

<http://www.fredonia.edu/department/sportmanagement/>

One of two Interdisciplinary Studies sport minors, the Sport Administration minor program offers interested students the opportunity to explore administrative and related skills. Participation in an applied outside experience (i.e., practicum/internship or independent study) is strongly recommended.

The Sport Administration minor provides students with background in (a) the behavioral dimensions of sport, (b)

general management and organizational skills and issues, (c) sport-specific management principles, strategies, and issues; (d) marketing, finance, and legal issues, and (e) communication and ethical issues.

The course categories included in this program were strongly influenced by the Sport Management Program Standards established by the National Association for Sport and Physical Education and the North American Society for Sport Management. This track will aid in the preparation and viability of students for jobs and graduate work in sport management, marketing, and public relations.

Requirements for Sport Administration minor (21 credit hours)

Required Core Courses:

SPMG 210	Principles of Sport Management
PSY 237	Sport Psychology*
SOC 335	Sociology of Sport*

Elective Courses: (one course required of students)

BUAD 323	Organizational Behavior*
PSY 347	Organizational Psychology*

*prerequisite required

Areas of Concentration

Select three courses from the following two areas:

Marketing, Finance and Legal Issues:

BUAD 310	Legal Environment of Business
BUAD 330	Human Resource Management*
BUAD 328	Marketing Foundations*
BUAD 340	Marketing Research*
PHIL 310	Administrative Ethics

*prerequisite required

Communications and Ethical Issues:

COMM 200	Electronic Media Writing*
COMM 251	Audio Production I
COMM 255	TV Production I*
COMM 130	Foundations in Journalism
COMM 222	Principles of Public Relations
COMM 420	Communication Law and Ethics*
PHIL 211	Philosophy of Sport

BUAD 480	Business Internship
COMM 480	Communication Internship
ENGL 465	English Internship
SPMG 400	Internship

*prerequisite required

Sport & Exercise Science minor

Office: W339 Thompson Hall
(716) 673-3892

Bruce Klonsky, Coordinator

Email: sport.psychology@fredonia.edu

Website:

<http://www.fredonia.edu/department/sportmanagement/>

One of the two Interdisciplinary Studies Sport Administration/Science minors, the minor in Sport & Exercise Science offers interested students the opportunity to explore the psychological, physiological, and sociological aspects of sport. Participation in an applied outside experience (i.e., practicum/internship or independent study) is strongly recommended.

The Sport and Exercise Science minor will expose students to scientific principles and issues related to sport and exercise. The contributions of the behavioral,

social and physical sciences (psychology, sociology and physiology) will be emphasized. The core courses for this program include Sport Psychology, the Sociology of Sport, and the Physiology of Exercise and Sport. Students will also be required to choose one course in each of the following concentration areas: (a) physiological bases, (b) group and organizational contexts, (c) developmental and educational issues and principles, and (d) personality, assessment, and counseling issues.

The course categories utilized in this minor are strongly influenced by the criteria that the Association for Applied Sport Psychology requires for the certification of doctoral-level professional sport consultants. This program will aid in the preparation of students for graduate work dealing with sport and exercise behavior within their discipline (e.g. psychology, sociology, kinesiology, and exercise science). It will also provide important information about sport and exercise behavior for those planning to be coaches, fitness specialists, physical therapists, and athletic trainers.

Requirements for Sport & Exercise Science minor (22-27 credit hours)

Required Core Courses:

PHED 200	Human Physiology
PHED 203	Human Physiology II
PSY 237	Sport Psychology*
SOC 335	Sociology of Sport*

Elective Course: (one course)

PSY 247	Health Psychology*
PHED, PSY,	Internship
SOC	

Areas of Concentration

Physiological Bases: (one course)

PHED 315	Prevention and Care of Athletic Injuries
PSY 351	Physiological Psychology*

Group and Organizational Contexts: (one course)

PSY 355	Group Dynamics*
PSY 347	Organizational Psychology*

Developmental and Educational Issues: (one course)

EDU 225	Developmental Psychology
EDU 349	Educational Psychology*
PSY 349	Child Psychology*
PSY 364	Cognitive Development*
PSY 365	Social Development*

Personality, Assessment and Counseling Issues: (one course)

PSY 317	Tests and Measurements*
PSY 246	Personality*
PSY 356	Abnormal Psychology*
SOC 310	Sociology of Deviant Behavior
SOC 311	Sociology of Addiction

*prerequisite required

Note: An independent study or internship in SPMG, Psychology or Sociology can be substituted for one (1) course in these areas of concentration.

Statistics minor

Office: Fenton Hall 204
(716) 673-4709

Nancy Boynton, Coordinator

Email: Nancy.Boynton@fredonia.edu

Website:

<http://www.fredonia.edu/departments/interdisciplinary>

The Interdisciplinary Studies minor in Statistics is housed in the Department of Mathematical Sciences. Please see the Mathematical Sciences (see page 115) section of the catalog for details.

Web Programming minor

(housed in the Department of Computer & Information Sciences)

Office: 2154 Fenton Hall
(716) 673-4750

Reneta Barneva, Coordinator

Email: Reneta.Barneva@fredonia.edu

Website:

<http://www.fredonia.edu/departments/interdisciplinary>

The Interdisciplinary Studies minor in Web Programming is housed in the Department of Computer & Information Sciences. Please see the Computer and Information Sciences (see page 42) section of the catalog for details.

Women's Studies minor

Office: 241 Fenton Hall
(716) 673-3861

Jeanette McVicker, Co-Coordinator

Email: womens.studies@fredonia.edu

Office: 2113 Fenton Hall
(716) 673-3380

Carmen Rivera, Co-Coordinator

Email: womens.studies@fredonia.edu

Women's Studies Program Office

Office: 171A Fenton Hall
(716) 673-3158

Email: womens.studies@fredonia.edu

Website:

<http://www.fredonia.edu/departments/interdisciplinary/>

Requirements for the Minor in Women's Studies

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 director. No more than 9 credit hours should be used to fulfill the requirements of the student's major. Students declaring the Women's Studies minor may use past courses retroactively after consultation with the director.

Required Courses: (12 credit hours)

WOST 201	Introduction to Women's Studies
WOST 301/ ENGL 349/ PHIL 244	Feminist Theory
WOST 302/ ANTH 300/ SOC 306	Sex and Gender
WOST 401	Feminist Practice

Elective Courses: Students should take at least one course from each of the content areas for the major program. Within each category, take no more than one course from each departmental prefix (other than WOST). No more than 3 credit hours of electives can be at the 200-level.

International Studies

The Interdisciplinary Studies - International Studies major and minor programs are housed in the Department of Political Science. For information on these programs, please see the Political Science (see page 143) section of the catalog.

Liberal Arts Freshman Seminars

Office: Learning Center, 4th floor Reed Library
(716) 673-3188

Email: advising.center@fredonia.edu

Amy Leclair, *Coordinator of Academic Advising & Liberal Arts*

Website: <http://www.fredonia.edu/acadadv/lafye>

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 (see page 383).

Mathematical Sciences

Office: 211 Fenton Hall

(716) 673-3243

Email: mathematics.department@fredonia.edu

Joseph Straight, Chairperson

Keary Howard, Mathematics Education Coordinator

Website: <http://www.fredonia.edu/departments/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, to prepare high school mathematics teachers (grades 7 through 12), and Middle Childhood Education - Mathematics Specialist, 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 Master of Science in Education 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. 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 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), a Student Chapter of the Mathematical Association of America. 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 Scholarships, the Earl G. Mathewson Memorial Scholarship, the Santa A. B. DiPasquale Memorial Scholarship, the Mark Buckenmeyer 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 Sciences and Computer Information Systems.

Mathematics Bachelor of Science degree

Requirements for the Bachelor of Science Degree in Mathematics

(45 credit hours)

MATH 125 Software for Mathematics

or

CSIT 121 Computer Science I

MATH 122 University Calculus I

MATH 123 University Calculus II

MATH 210 Mathematical Structures and Proof

MATH 223 University Calculus III

MATH 224 Differential Equations

MATH 231 Linear Algebra

MATH 323 Intermediate Real Analysis

MATH 331 Abstract Algebra

STAT 350 Probability and Statistics

MATH 405 Senior Seminar (Capstone experience)

MATH 332 Abstract Algebra II

or

MATH 420 Advanced Calculus

Two additional MATH or STAT courses numbered 311 or higher, as advised

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:

Chemistry: CHEM 115 and CHEM 125

Physics: PHYS 230 and PHYS 232

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.

Applied Mathematics Bachelor of Science degree

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
MATH 122	University Calculus I
MATH 123	University Calculus II
MATH 210	Mathematical Structures and Proof
MATH 223	University Calculus III
MATH 224	Differential Equations
MATH 231	Linear Algebra
MATH 329	Mathematical Modeling
MATH 405	Senior Seminar (Capstone experience)
STAT 350	Probability and Statistics

Total Hours in Applied Mathematics Core: 33

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

Chemistry:	CHEM 115 and CHEM 125
Physics:	PHYS 230 and PHYS 232

Applied Mathematics/Finance and Economics Track:

This track requires the Applied Mathematics Core and the following courses:

ACCT 201	Principles of Financial Accounting
ACCT 202	Principles of Managerial Accounting
ECON 201	Principles of Macroeconomics
ECON 202	Principles of Microeconomics
MATH 365	Financial Mathematics

One additional MATH or STAT course numbered 311 or higher

Four courses chosen from the following as advised:

ACCT 250	Accounting Processes
ACCT 301	Intermediate Accounting I
ACCT 302	Intermediate Accounting II
ACCT 303	Cost Management
BUAD 320	Managerial Finance
BUAD 372	Financial Investments
BUAD 416	Portfolio Management
BUAD 417	Corporate Finance I
BUAD 418	Corporate Finance II
BUAD 472	International Finance
ECON 300	Statistical Analysis
ECON 305	Intermediate Microeconomic Theory
ECON 310	Intermediate Macroeconomic Theory
ECON 315	Money/Banking/Monetary Economics
ECON 350	Managerial Economics
ECON 400	Econometrics and Business Applications
ECON 410	Mathematical Economics

Total hours in Applied Mathematics/Finance and Economics Track: 63

Applied Mathematics/Statistics and Operations

Research Track: This track requires the Applied Mathematics Core, a minor in a field to which statistics or operations research can be applied, and the following courses:

STAT 355	Mathematical Statistics
----------	-------------------------

Two of the following four courses:

MATH 359	Probability Models in Operations Research
MATH 375	Deterministic Models in Operations Research
STAT 351	Applied Statistics
STAT 408	Special Topics (3 credit hours)

One additional MATH or STAT course numbered 311 or higher

Total hours in Applied Mathematics/Statistics and Operations Research Track: 45
(plus a minor)

Applied Mathematics/Physics Track:

The option requires the Applied Mathematics Core and the following courses:

MATH 325	Numerical Analysis
PHYS 230	University Physics I
PHYS 231	University Physics II
PHYS 232	University Physics I Lab
PHYS 233	University Physics II Lab
PHYS 234	Modern Physics

PHYS 331	Theoretical Mechanics
or	
PHYS 333	Electricity and Magnetism

PHYS 425	Mathematical Physics I
PHYS 426	Mathematical Physics II

One additional MATH or STAT course numbered 311 or higher*

Total hours in Applied Mathematics/Physics Track: 62

**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.

Mathematics Adolescence Education Bachelor of Science Degree

Requirements for the Bachelor of Science degree in Mathematics Adolescence Education (81-83 credit hours)

MATH 122	University Calculus I
MATH 123	University Calculus II
MATH 210	Mathematical Structures and Proof
MATH 223	University Calculus III
MATH 231	Linear Algebra
MAED 310	Reading and Writing Mathematics
MATH 323	Intermediate Real Analysis
MATH 331	Abstract Algebra
MATH 341	Geometry
MATH 381	History of Mathematics

MATH 405	Senior Seminar
or	
MAED 410	Seminar: Math. for High School Teachers

STAT 350	Probability and Statistics
----------	----------------------------

One additional MATH or STAT course numbered 311 or higher

MAED 105-	Introduction to Contemporary Mathematics
MAED 106	Education
EDU 224	Adolescent Development
EDU 250-	Introduction to the Exceptional Learner
EDU 251	Practicum in Inclusive Education II
MAED 276	Literacy and Technology for Science and Mathematics
EDU 301	Safe Schools/Healthy Students: Child Abuse and Child Abduction
EDU 302	Safe Schools/Healthy Students: Alcohol, Tobacco and Other Drug Abuse
EDU 303	Safe Schools/Healthy Students: Safety Education/Fire and Arson/School Violence
MAED 305/	Diversity in the Teaching of Science and
MAED 313	Mathematics
EDU 349	Educational Psychology
MAED 419	Secondary School Methods in Mathematics
EDU 430	Student Teaching (Capstone experience)
Total Hours in Adolescence Education – Mathematics 81-83	

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

Chemistry: CHEM 115 and CHEM 125
Physics: PHYS 230 and PHYS 232

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 local equivalent). Requirement is fulfilled.
- Scores of 65 percent - 84 percent on High School N.Y.S. Regents Exam (or local equivalent): 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 SUNY Fredonia proficiency exam.
- Scores below 65 percent on High School N.Y.S. Regents Exam (or local equivalent) or if student did not take a N.Y.S. Regents or local Exam: Student needs to take an Elementary I level course and an Elementary II level course of the same language or equivalent.

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

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 (see page 50) section of the catalog.

Mathematics - Middle Childhood Specialist Bachelor of Science degree

Requirements for the Bachelor of Science degree in Middle Childhood Education – Mathematics Specialist (83 credit hours)

MATH 122	University Calculus I
MATH 123	University Calculus II

MAED 301	Mathematics for School Teachers I
MAED 302	Mathematics for School Teachers II
MATH 210	Mathematical Structures and Proof
MATH 231	Linear Algebra
MAED 303	Mathematics for School Teachers III
MAED 310	Reading and Writing Mathematics
MATH 341	Geometry
MATH 381	History of Mathematics
MATH 405	Senior Seminar

STAT 150	Statistical Ideas
or	
STAT 200	Statistical Methods
or	
STAT 350	Probability and Statistics

One additional MATH or STAT course numbered 311 or higher

MAED 105-	Introduction to Contemporary Mathematics
MAED 106	Education
EDU 224	Adolescent Development
EDU 250-	Introduction to the Exceptional Learner
EDU 251	Practicum in Inclusive Education II
MAED 276	Literacy and Science and Mathematics
EDU 301	Safe Schools/Healthy Students: Child Abuse and Child Abduction
EDU 302	Safe Schools/Healthy Students: Alcohol, Tobacco and Other Drug Abuse
EDU 303	Safe Schools/Healthy Students: Safety Education/Fire and Arson/School Violence
MAED 305/	Diversity in the Teaching of Science and
MAED 313	Mathematics
EDU 321	Teaching in the Middle School
EDU 349	Educational Psychology
MAED 417	Middle School Methods in Mathematics
EDU 429	Student Teaching in Middle Childhood Education – Mathematics Specialist (Capstone experience)

Total Hours in Middle Childhood Education – Mathematics Specialist 83

Students in all certification 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 local equivalent). Requirement is fulfilled.
- Scores of 65 percent - 84 percent on High School N.Y.S. Regents Exam (or local equivalent): 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 SUNY Fredonia proficiency exam.
- Scores below 65 percent on High School N.Y.S. Regents Exam (or local equivalent) or if student did not take a N.Y.S. Regents or local Exam: Student needs to take an Elementary I level course and an Elementary II level course of the same language or equivalent.

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

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

Chemistry: CHEM 115 and CHEM 125
Physics: PHYS 230 and PHYS 232

(Majors in the Middle Childhood Mathematics Specialist Track may satisfy this requirement by taking SCI 301, SCI 302, and SCI 303.)

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 (see page 50) section of the catalog.

Mathematics Minor

Requirements for the Minor in Mathematics

MATH 122 University Calculus I
MATH 123 University Calculus II
MATH 210 Mathematical Structures and Proof
MATH 223 University Calculus III
Plus three additional MATH or STAT courses chosen from MATH 224, MATH 231, and courses numbered 311 or higher

Total hours required: 25-26

Applied Mathematics Minor

Requirements for the Minor in Applied Mathematics

MATH 122 University Calculus I
MATH 123 University Calculus II
MATH 223 University Calculus III
MATH 231 Linear Algebra
Plus three additional courses chosen from (MATH) 224, 322, 325, 329, 337, 359, 365, 375, 440; (STAT) 350, 351, 355; (PHYS) 425, 426; (CSIT) 241, 242; at least one of these courses must be a course numbered 311 or higher

Total hours required: 25-27

A student may not minor in both Mathematics and Applied Mathematics.

Statistics Minor

Office: Fenton Hall 204
(716) 673-4709
Nancy Boynton, Coordinator
Email: Nancy.Boynton@fredonia.edu
Website: <http://www.fredonia.edu/department/interdisciplinary/stats.asp>

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:

MATH 120 Survey of Calculus I
Or
MATH 122 University Calculus I

MATH 108 Prize Winning Mathematics
Or
MATH 231 Linear Algebra
Or
CSIT 121 Computer Science I

XXXX 200 One 200 level Statistics course from one of the academic departments

or
STAT 250 Statistics for Scientists
or
STAT 350 Probability and Statistics

BUAD 300 Statistical Analysis
or
ECON 300 Statistical Analysis
or
STAT 351 Applied Statistics

STAT 405 Statistics Seminar

Electives:

(Two additional courses selected from the following)

BIOL 457 Biostatistics
CSIT 473 Data Warehousing and Mining
ECON 400 Econometrics and Business Applications
MATH 359 Probability Models in Operations Research
PSY 310 Advanced Research Methods
STAT 355 Mathematical Statistics
STAT 408 Special Topics (in Statistics)
an additional course from BUAD 300, ECON 300 or STAT 351

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 credits 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.

Mathematical Sciences Graduate Program

Office: 223 Fenton Hall
(716) 673-3243
Joseph Straight, Chairperson
Keary Howard, Graduate Coordinator
Email: mathematics.department@fredonia.edu
Website:
<http://www.fredonia.edu/department/math/mathmsed.asp>

The Department of Mathematical Sciences offers a program leading to the

Master of Science in Education: Mathematics 7-12 and includes professional certification for grades 5-9 and 7-12.

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, 223, 323, 331, and at least two of MATH 341, STAT 350, and MATH 381.

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, 210, 231, 341, 381; (MAED) 301, 302, 303 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:

A course in research methods

One course each from three of the following categories:

- Social, Historical, and Legal Foundations of Education
- Design and evaluation of mathematics curricula
- Instructional methods
- Use of educational technology in the teaching and learning of mathematics.
- Psychological Foundations of Education

One course from each of four of the following categories:

- algebra or analysis
- geometry or topology
- number theory, probability, or statistics
- history or philosophy of mathematics
- applications of mathematics
- any approved course in mathematics

MAED 602 Mathematics Education Seminar
MAED 690 Graduate Project

For certification information, students should check the Graduate Teacher Education Certification (see page 187) section of the catalog.

Medical Technology/Biomedical Research Technology

Department of Biology
Office: 112 Jewett Hall
(716) 673-3283

Patricia Smith Astry, Director

Email: medical.technology@fredonia.edu

Website: <http://www.fredonia.edu/departments/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 accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS) and the American Medical Association Council on Health Education. It 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 SUNY 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 SUNY 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 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 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.

Stephen Johnson, M.S., MT (ASCP), Program Director, Medical Technology Program, St. Vincent's Hospital, Erie, PA.

Nancy Mitchell, M.S., MT (ASCP), Program Director, School of Medical Technology, Rochester General Hospital, Rochester, N.Y.

Students wishing to apply to other accredited internship programs may do so upon advisement.

Requirements for the Bachelor of Science Degree in Medical Technology

Required Biology Courses

BIOL 131-	Principles of Biology I & Lab
BIOL 132	
BIOL 133-	Principles of Biology II & Lab
BIOL 134	
BIOL 237-	Genetics & Lab
BIOL 238	
BIOL 245	Human Anatomy and Physiology I
BIOL 246	Human Anatomy and Physiology II
BIOL 256	Introduction to Clinical Sciences
BIOL 333-	Biochemistry & Lab
BIOL 334	

BIOL 338	Microbiology
BIOL 344	Parasitology
BIOL 431	Senior Seminar (Capstone experience)
BIOL 453	Basic Hematology
BIOL 461	Immunology and Serology

MEDT 490-491 Clinical Internship

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.

Requirements for Transfer Credit: The Medical Technology program requires students to complete 53-60 credit hours of biology courses, depending upon the track. 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.

Required Supporting Courses:

CHEM 115/ CHEM 125	General Chemistry I & Lab
CHEM 116/ CHEM 226	General Chemistry II & Lab
CHEM 215/ CHEM 225	Organic Chemistry I & Lab
CHEM 216/ CHEM 226	Organic Chemistry II & Lab
STAT 250	Statistics for Scientists
PHYS 121/ PHYS 123 and PHYS 122/ PHYS 124	College Physics I & Lab College Physics II & Lab

or

PHYS 230/ PHYS 232 and PHYS 231/ PHYS 233	University Physics I & Lab University Physics II & Lab
---	---

Chemistry and mathematics courses should be completed by the end of the sophomore year, physics courses by the end of the junior year.

Modern Languages and Literatures

Office: 2113 Fenton Hall

(716) 673-3380

Carmen S. Rivera, *Chairperson*

Email: modern.languages@fredonia.edu

Website:

<http://www.fredonia.edu/department/modernlanguages/>

With its interdisciplinary and global vision of a changing world, the Department of Modern Languages and Literatures 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 literature 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 modern languages that are spoken and used throughout the world. It offers a bachelor's degree in French and Spanish. SUNY 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 modern 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. Students can apply a maximum of 12 hours of study abroad with a minimum grade of C towards the major and/or minor in the language. 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 12 credit hours with a minimum grade of C towards the major. A minimum of 24 credit hours must be taken in the department at SUNY Fredonia.

For a minor, a student can transfer up to 9 credit hours with a minimum grade of C towards the program.

Notes:

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.

French Bachelor of Arts degree

Requirements for the Bachelor of Arts Degree in French

FREN 315 French Masterpieces I

or

FREN 316 French Plays and Prose

FREN 317 French Conversation

FREN 318 French Composition

FREN 319 Survey of French Literature I

FREN 308 Advanced French Phonetics and Diction

FREN 423 Senior Seminar (Capstone experience)

FREN 424 Stylistics

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.

Childhood and Early Childhood Education majors may earn a concentration in French. Students should consult the Childhood or Early Childhood Education 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 SUNY 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 SUNY 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.

Spanish Bachelor of Arts degree

Requirements for the Bachelor of Arts Degree in Spanish

SPAN 313	Spanish Conversation
SPAN 314	Spanish Composition
SPAN 315	Introduction to Hispanic Literature
SPAN 423	Senior Seminar (Capstone experience)

Plus 24 additional credit hours in the following categories:

- 12 credit hours in literature
- 3 credit hours in advanced grammar
- 3 credit hours in culture/civilization courses
- 6 credit hours of electives taught in target language at the 300-400 level

Students majoring in Spanish should pass (SPAN) 313, 314, 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 SUNY 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 SUNY 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.

Adolescence Education French or Spanish Bachelor of Arts degree

Requirements for the Bachelor of Arts Degree in Adolescence Education: French or Spanish (39 credit hours)

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:

Note: (F) indicates Field Experiences

EDU 105	Introduction to Contemporary Education (F)
EDU 106	Practicum in Inclusive Education I
EDU 224	Adolescent Development
EDU 250	Introduction to the Exceptional Learner with Field

	Experience (F)
EDU 251	Practicum in Inclusive Education II
EDU 276	Literacy and Technology in the Inclusive Classroom
EDU 301	Safe Schools/Healthy Students: Child Abuse and Child Abduction
EDU 302	Safe Schools/Healthy Students: Alcohol, Tobacco and Other Drug Abuse
EDU 303	Safe Schools/Healthy Students: Safety Education/Fire and Arson/School Violence
EDU 305	Cultural and Linguistic Diversity in the Classroom (F)
EDU 313	Practicum in Inclusive Education III
EDU 349	Educational Psychology
EDU 419	Secondary School (Adolescence) Methods (Fall Semester Only) (F)
EDU 430	Student Teaching in the Secondary School (Spring Semester Only) (Capstone experience)

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

Candidates wishing to enter 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, 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. 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.

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 "C+" 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), with a target level of Advanced Low. In order to graduate, candidates are required to take the OPI and report their results to the Modern Languages Program Coordinator prior to their student teaching semester. Candidates are responsible for the cost of this proficiency exam.

The Modern Languages Program Coordinator will work with the Office of Field Experience 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.

For certification information, please see the Education (see page 50) section of the catalog.

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.

Molecular Genetics Bachelor of Science degree

Department of Biology

Office: 203 Jewett Hall

(716) 673-3282

Patricia Smith Astry, Chairperson

Email: molecular.genetics@fredonia.edu

Website: <http://www.fredonia.edu/departments/biology/>

Virtually all areas of the life sciences are being affected by the application of molecular genetics in solving 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.

SUNY 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, nucleic acid hybridization, gel transfers, 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 the Bachelor of Science Degree in Molecular Genetics

BIOL 131-	Principles of Biology I & Lab
BIOL 132	
BIOL 133-	Principles of Biology II & Lab
BIOL 134	
BIOL 237-	Genetics & Lab
BIOL 238	
BIOL 243	Biodiversity
BIOL 333-	Biochemistry & Lab
BIOL 334	
BIOL 338	Microbiology
BIOL 431	Senior Seminar (Capstone experience)
BIOL 435	Developmental Biology
BIOL 436	Molecular Biology
BIOL 437	Molecular Genetics Lab

Nine (9) additional credit hours of biology electives at the 300-400 level.

CHEM 115/	General Chemistry I & Lab
CHEM 125	
CHEM 116/	General Chemistry II & Lab
CHEM 126	
CHEM 215/	Organic Chemistry I & Lab
CHEM 225	
CHEM 216/	Organic Chemistry II & Lab
CHEM 226	

PHYS 121/	College Physics I & Lab
PHYS 123	
PHYS 122/	College Physics II & Lab
PHYS 124	
or	
PHYS 230/	University Physics I & Lab
PHYS 232	
PHYS 231/	University Physics II & Lab
PHYS 233	

MATH 120-	Survey of Calculus I and II
MATH 121	
or	
MATH 122-	University Calculus I & II
MATH 123	

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.

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.

Music

Office: 1151 Mason Hall
(716) 673-3151

Karl Boelter, Director

Patricia J. Corron, Associate Director

Barry M. Kilpatrick, Assistant Director

Email: music.school@fredonia.edu

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

Curricular Area Chairs and Coordinators:

Academic Studies

Paul Murphy

Music Education

Christian Bernhard

Performance

Barry Kilpatrick

Music History/Literature

James A. Davis

Music Theory

Paul Murphy

Music Composition

Robert Deemer

Music Therapy

Joni Milgram-Luterman

Sound Recording Technology

Bernd Gottinger

Music Business (Music Track)

Harry Jacobson

Applied Studies

Sean Duggan, Keyboard

Kay H. Stonefelt, Percussion/Harp

Susan Royal, Woodwinds

Harry P. Jacobson, String

Marc J. Guy, Brass

Gwen Detwiler, Voice

The SUNY 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.

The following section describes the degree requirements of the undergraduate degree programs in Music meet the requirements of the National Association of Schools of Music (NASM).

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 I & II
MUS 164	
MUS 263	Music History in Western Civilization I
MUS 264	Music History in Western Civilization II
MUS 231	Conducting I
MUS 121-	Aural Skills I & II
MUS 122	
MUS 123-	Music Theory I & II
MUS 124	
MUS 221-	Aural Skills III & IV
MUS 222	
MUS 223	Music Theory III
MUS 354	Form and Analysis
MUS 118	Piano Class (waived for students whose principal instrument is piano)
MUS 100	Recital Seminar
MUS 120	Concert Attendance (each semester of private applied lessons)
MUS 105-	Applied Music
MUS 106	

(MUS) 125 and 126 for Bachelor of Music degree in Music Education and Bachelor of Music degree in Performance)

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.

Music Bachelor of Arts degree

(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.

Note: *The program requires 66 credit hours outside of Music.*

Musicianship Core

MUS 163-	Our World of Music I & II
MUS 164	
MUS 263	Music History in Western Civilization I
MUS 264	Music History in Western Civilization II
MUS 231	Conducting I
MUS 121-	Aural Skills I & II
MUS 122	
MUS 123-	Music Theory I & II
MUS 124	
MUS 221-	Aural Skills III & IV
MUS 222	
MUS 223	Music Theory III
MUS 354	Form and Analysis
MUS 118	Piano Class (waived for students whose principal instrument is piano)
MUS 100	Recital Seminar
MUS 120	Concert Attendance (each semester of private applied lessons)
MUS 105-	Applied Music
MUS 106	

Plus the following:

MUS 200	Recital Seminar
MUS 205-	Applied Music
MUS 206	
MUS 217-	Piano Class (waive for Piano Majors)
MUS 218	
MUS 300	Recital Seminar
MUS 305-	Applied Music
MUS 306	
MUS 400	Recital Seminar (Capstone experience)
MUS 405-	Applied Music
MUS 406	

1-credit ensemble using principal instrument each semester of residency

Graduation Recital

Additional requirements if voice is principal instrument:

MUS 033	Opera Production Practicum (one semester required during the freshman year)
---------	---

MUS 137/	Diction for Singers
MUS 140	

Note: 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.

Music Education Bachelor of Music degree

(90 to 96.5 credit hours in Music)

For the major in Music Education (Bachelor of Music degree; certification to teach music in the public schools):

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 a standardized test of both general and professional knowledge (the Liberal Arts and Sciences Test—LAST, the Assessment of Teaching Skills—Written Test—ATS—W), the Content Specialty Test (CST) in music, fingerprinting, practicum in a high needs school, and designated state workshops for all students recommended for teaching certification in music.

General Requirements:

Musicianship Core

MUS 163-	Our World of Music I & II
MUS 164	
MUS 263	Music History in Western Civilization I
MUS 264	Music History in Western Civilization II
MUS 231	Conducting I
MUS 121-	Aural Skills I & II
MUS 122	
MUS 123-	Music Theory I & II
MUS 124	
MUS 221-	Aural Skills III & IV
MUS 222	
MUS 223	Music Theory III
MUS 354	Form and Analysis
MUS 118	Piano Class (waived for students whose principal instrument is piano)
MUS 100	Recital Seminar
MUS 120	Concert Attendance (each semester of private applied lessons)
MUS 105-	Applied Music
MUS 106	
Graduation Recital	

Each student must declare a General/Choral or Instrumental concentration as designated by the Music Education Handbook.

General/Choral Concentration requirements are:

For Non-Piano/Non-Voice Students: (MUS) 217-218, 317-318, 417; (MUED) 203-204, 210-211, 301, 302, 391-392. Music Education electives by advisement, including brass, woodwinds, string and percussion secondary instruments. One (1) -credit ensemble each semester of residency, four of which must be choral ensembles.

For Keyboard Students: (MUS) 113, 415-416; (MUED) 203, 204, 210-211, 301, 302, 391-392. 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 (one semester in Freshman year), 137-138, 139-140, 217-218, 317-318, 417; (MUED) 210-211, 301, 302, 391-392. Music Education electives by advisement, including brass, woodwinds, string and percussion secondary instruments. Seven semesters in 1-credit choral ensembles.

Instrumental Concentration requirements are:

For Instrumental Applied Students: (MUS) 113, 217-218; (MUED) 161-164, 171-175, 185-187, 221-222, 260-264, 271-275, 285-287, 301 or 302, 304-305, 393-394, 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 principle instrument each semester, plus two semesters in a 1-credit choral ensemble, plus at least one semester of instrumental chamber music.

For Keyboard or Voice Students (this option only by permission of the Area Chair for Music Education): (MUS) 315, 316 (additional permission required), and (MUED) 161-164, 171-175, 185-187, 221-222, 260-264, 271-275, 285-287, 301 or 302, 304-305, and 393-394. 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 instrument ensembles and two must be 1-credit choral ensembles. A minimum of two semesters of Secondary Applied (MUS) 315-316 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 junior level Music Education course work. At the end of sophomore year, each student will submit a formal application for Professional Standing and must demonstrate the following:

1. 2.75 overall GPA (no MUED class with a grade lower than C)
2. Music Theory completed (MUS) 222 and 354 with no grade lower than a C-
3. (MUED) 150, 250 and 251 completed
4. Two practica completed
5. Secondary Instrument Competencies: vocal (MUS) 317 and (MUED) 204; instrumental (four playing classes, two proficiencies, (MUS) 113 and 218.
6. (MUS) 231 and 232.

Any student not meeting all standards will be denied acceptance into Professional Standing and will not be admitted into junior level Music Education 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 local equivalent). Requirement is fulfilled.
- Scores of 65 percent - 84 percent on High School N.Y.S. Regents Exam (or local equivalent): 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 SUNY Fredonia proficiency exam.
- Scores below 65 percent on High School N.Y.S. Regents Exam (or local equivalent) or if student did not take a N.Y.S. Regents or local Exam: Student needs to take an Elementary I level course and an Elementary II level course of the same language or equivalent.

Student Teaching

(Student teaching and assorted special seminar classes held irregularly during student teaching.) The student must have:

1. An overall 2.75 GPA;
2. An average of 2.5 in all MUED required courses and no less than a grade of C in any single MUED course;
3. A 2.0 average in MUS required courses, with no grade less than D+;
4. Satisfactorily completed all stated prerequisite competencies for performance, musicianship, and music education (Most competencies must be completed prior to student teaching either through course completion or special examination, except as noted in the Music Education Handbook. Some will be determined during student teaching).
5. 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, 250, 251, 300, 301, 302, 304, 305, 391, 392, 393, 394. Criteria are (1) dispositions toward teaching music including realism and accuracy in understanding the profession; (2) commitment, responsibility, and dedication to professional growth (i.e. "professionalism"); (3) ability to function under pressure, personal stability; (4) communication with professor(s) and peers, suitability of social adjustment and relations.
6. Completed and submitted student teaching application, personal data forms, and 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.

Composition Bachelor of Music degree

(91 credit hours in music)

The program explores artistic concepts and pragmatic tools that are necessary to begin a career in music composition.

Musicianship Core

MUS 163-	Our World of Music I & II
MUS 164	
MUS 263	Music History in Western Civilization I
MUS 264	Music History in Western Civilization II
MUS 231	Conducting I
MUS 121-	Aural Skills I & II
MUS 122	
MUS 123-	Music Theory I & II
MUS 124	
MUS 221-	Aural Skills III & IV
MUS 222	
MUS 223	Music Theory III
MUS 354	Form and Analysis
MUS 118	Piano Class (waived for students whose principal instrument is piano)
MUS 100	Recital Seminar
MUS 120	Concert Attendance (each semester of private applied lessons)
MUS 105-	Applied Music
MUS 106	

Plus the following:

MUS 298-	Composition Forum
MUS 299	
MUS 398-	
MUS 399	
MUS 498-	
MUS 499	
MUS 129-	Beginning Composition
MUS 130	

Or

MUS 127-	Applied Lessons (Composition)
MUS 128	
MUS 227-	Applied Music (Composition)
MUS 228	
MUS 327-	
MUS 328	
MUS 427	
MUS 285	Copyright
MUS 217-	Piano Class
MUS 218	
MUS 301	Composition Lab: Instrumentation
MUS 302	Composition Lab: Orchestration
MUS 311	Composition Lab: Music Notation
MUS 312	Composition Lab: Arranging
MUS 321	Composition Lab: Collaborative Composition
MUS 322	Composition Lab: Music of the 21st Century
MUS 491	Senior Project in Composition

Senior Composition Recital

1-credit ensemble each semester of residency, including at least two choral ensembles

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
MUS 403	Counterpoint
MUS 404	Choral Arranging
MUS 205-	Applied Lessons (principal performance instrument)
MUS 206/	
MUS 305-	
MUS 306	
MUS 200/	Recital Seminar
MUS 300	

Performance Concentration

MUS 225-	Applied Lessons (principal performance instrument)
MUS 226/	
MUS 325-	
MUS 326/	
MUS 425-	
MUS 426	
MUS 200/	Recital Seminar
MUS 300/	
MUS 400	
MUS 403	Counterpoint
	Senior Performance Recital (Capstone experience)

Electronic Music Concentration

MUS 205-	Applied Lessons (principal performance instrument)
MUS 206	
MUS 200	Recital Seminar
MUS 285	Copyright
MUS 440	Composition in Electronic Music I
MUS 441	Composition in Electronic Music II
MUS 442	Seminar in Computer Music
MUS 443	Seminar in New Music Software

Performance Bachelor of Music degree

(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

MUS 200	Recital Seminar
MUS 245-	Applied Music
MUS 246	
MUS 300	Recital Seminar
MUS 345-	Applied Music
MUS 346	
MUS 400	Recital Seminar
MUS 445-	Applied Music
MUS 446	
MUS 347	Junior Performance Recital
MUS 447	Senior Performance Recital (Capstone experience)
MUED 291	Technology in Music I

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
MUS 218	
MUS 355-	Pedagogy Practicum
MUS 356	
	Music Theory elective
	Music History elective

For a Major in Performance, Piano

MUS 340	Piano Pedagogy
MUS 420-	Piano Literature
MUS 421	
MUS 355-	Pedagogy Practicum
MUS 356	
MUS 415-	Piano Class
MUS 416	

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 and III
MUS 342	

For a Major in Performance, Stringed Instruments (71 credit hours)

MUS 217-	Piano Class
MUS 218	
MUS 355-	Pedagogy Practicum
MUS 356	
	6 credit hours of electives in music theory, musicology, string literature or chamber music literature

For a Major in Performance, Voice

MUS 137/	Diction for Singers
MUS 140	
MUS 217-	Piano Class
MUS 218	
MUS 317-	Piano Class
MUS 318	
MUS 344	Vocal Pedagogy
MUS 349	Vocal Pedagogy Practicum
MUS 417-	Piano Class (or successful completion of one semester of accompanying work under the supervision of the MUS 418 Class Piano Instructor)
MUS 418	
	Music theory elective
	Music history or literature elective

- A minimum of two semesters of German language and a minimum of two semesters of one of the Romance languages (French, Italian or Spanish).
- Voice performance majors are required to enroll for a minimum of four semesters of MUS 033 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
MUS 218	
MUS 355-	Pedagogy Practicum
MUS 356	
	Music Theory elective
	Music History elective

Music Therapy Bachelor of Science degree

(77-83 credit hours in MUS, MUED and MUTY)

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

MUS 163-	Our World of Music I & II
MUS 164	
MUS 263	Music History in Western Civilization I
MUS 264	Music History in Western Civilization II
MUS 231	Conducting I
MUS 121-	Aural Skills I & II
MUS 122	
MUS 123-	Music Theory I & II
MUS 124	
MUS 221-	Aural Skills III & IV
MUS 222	
MUS 223	Music Theory III
MUS 354	Form and Analysis
MUS 118	Piano Class (waived for students whose principal instrument is piano)
MUS 100	Recital Seminar
MUS 120	Concert Attendance (each semester of private applied lessons)
MUS 105-	Applied Music
MUS 106	

Plus the following:

MUS 113	Voice Class (waived if voice is principal instrument)
MUS 137-	Diction for Singers (required if voice is principal instrument)
MUS 138	
MUS 139-	
MUS 140	

MUS 217- MUS 218 MUS 317 MUS 415	Piano Class (waived if piano is principal instrument)
MUS 318 MUS 417- MUS 418	Piano Class (required if piano is principal instrument)
	Piano Class (music therapy section)
	Piano Class (music therapy section, as needed)
	Successful completion of Piano Proficiency Examination
MUS 109 Or MUS 119	Harp Class
	Free Improvisation
MUED 210- MUED 211 MUED 291 MUS 200 MUS 205- MUS 206 MUS 270 MUS 333 MUTY 112 MUTY 115 MUTY 116 MUTY 211- MUTY 212 MUTY 215 MUTY 216 MUTY 311- MUTY 312 MUTY 315 MUTY 316 MUTY 411	Guitar Class I & II
	Technology in Music I
	Recital Seminar
	Applied Music
	History of American Popular Music (CCC)
	Musics of the World (CCC)
	Music Therapy Clinical Observation and Seminar
	Introduction to Music Therapy
	Orientation to Clinical Practice
	Music Therapy Practicum and Seminar II & II
	Music Therapy Repertoire
	Impact of Music on Health and Behavior
	Music Therapy Practicum and Seminar III & IV
	(Capstone experience)
MUTY 416	Music Therapy Internship Seminar
MUTY 450	Internship in Music Therapy
PSY 129	Introduction to Psychology (CCC)
PSY 200	Statistics (CCC)
PSY 289	Lifespan Development (or other developmental psychology course with advisory approval)
PSY 351	Physiological Psychology
PSY 356	Abnormal Psychology
PSY 447	Introduction to Counseling
PHED 127	Yoga
Music eurhythmics class may substitute for yoga.	

Recommended ensemble experiences: 1-credit large ensembles 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.

Musical Theatre Bachelor of Fine Arts degree

Department of Theatre and Dance

Office: 212 Rockefeller Arts Center
(716) 673-3596

Thomas Loughlin, Chairperson

Email: musical.theatre@fredonia.edu

School of Music

Office: 1151 Mason Hall
(716) 673-3151

Karl Boelter, Director

Email: music.school@fredonia.edu

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.

The Musical Theatre degree is accredited by the National Association of the Schools of Music and the National Association of Schools of Theatre.

Admission to the Bachelor of Fine Arts in Musical Theatre Program

Candidates must be accepted academically by the Office of Admissions prior to auditioning. Students must audition during the year prior to entering Fredonia at designated audition dates. The auditions consist of acting, dance and singing. Audition information and application forms are available from the Department of Theatre and Dance, or on the theatre and dance website at <http://www.fredonia.edu/departments/theatredance>.

Transfer students should audition for the Musical Theatre degree the semester before transferring. The B.F.A. requires four years in the degree program for completion.

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.

Students select a specific track (Theatre or Music) upon entering the program.

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.

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:

Theatre Track

THEA 100	Theatre Majors Seminar
THEA 101-	Theatre and Dance Productions*
THEA 102	
THEA 121	Introduction to Technical Theatre
THEA 131	Acting Studio: Acting I
THEA 132	Acting Studio: Acting II

THEA 201-	Theatre and Dance Productions*
THEA 202	
THEA 220	Makeup
THEA 231-	Acting Studio: Scene Study I & II
THEA 232	
THEA 242-	Acting Studio: Introduction to Voice and
THEA 243	Movement I & II
THEA 301-	Theatre and Dance Productions*
THEA 302	
THEA 341	Acting Studio: Shakespeare
THEA 353	History of Musical Theatre
THEA 381	Musical Theatre Styles I
THEA 401-	Theatre and Dance Productions*
THEA 402	
THEA 424	Acting Studio: Audition Techniques
THEA 432	Musical Theatre Styles II
THEA 434	Musical Theatre Styles Lab
DANC 111	Modern Technique I
DANC 112	Ballet I
DANC 113	Jazz Dance I
DANC 114	Tap Dance I
DANC 211	Modern Technique II
DANC 264	Choreography I
DANC XXX	Elective
DANC XXX	Elective
MUS 100	Recital Seminar
MUS 101	Beginning Music Theory I
MUS 117-	Piano Class
MUS 118	
MUS 125-	Applied Voice
MUS 126	
MUS 115	Music Appreciation
MUS 137-	Diction for Singers
MUS 140	
MUS 200	Recital Seminar
MUS 217-	Piano Class 2
MUS 218	
MUS 235-	Musical Theatre Voice
MUS 236	
MUS 300	Recital Seminar
MUS 335-	Musical Theatre Voice
MUS 336	
MUS 400	Recital Seminar (Capstone experience)
MUS 435-	Musical Theatre Voice
MUS 436	

*Cannot be applied to the B.F.A. degree.

Music Track

THEA 100	Theatre Majors Seminar
MUS 021-	Choral Ensembles (four)
MUS 024	
MUS 033	Opera Production Practicum (four)
MUS 100	Recital Seminar
MUS 117-	Piano Class, Elementary
MUS 118	
MUS 121-	Aural Skills I & II
MUS 122	
MUS 123-	Music Theory I & II
MUS 124	
MUS 125-	Applied Voice
MUS 126	
MUS 137-	Diction for Singers
MUS 140	
MUS 200	Recital Seminar
MUS 217-	Piano Class, Intermediate
MUS 218	
MUS 221-	Aural Skills III & IV
MUS 222	
MUS 223	Music Theory III
MUS 354	Form and Analysis
MUS 235-	Musical Theatre Voice
MUS 236	
MUS 300	Recital Seminar

MUS 317-	Piano Class
MUS 318	
MUS 335-	Musical Theatre Voice
MUS 336	
MUS 400	Recital Seminar
MUS 435-	Musical Theatre Voice
MUS 436	
THEA 101-	Theatre and Dance Productions*
THEA 102	
THEA 121	Introduction to Technical Theatre
THEA 131	Acting Studio: Acting I
THEA 132	Acting Studio: Acting II
THEA 201-	Theatre and Dance Productions*
THEA 202	
THEA 220	Makeup
THEA 231-	Acting Studio: Scene Study I & II
THEA 232	
THEA 242-	Acting Studio: Introduction to Voice and
THEA 243	Movement I & II
THEA 301-	Theatre and Dance Productions*
THEA 302	
THEA 353	History of Musical Theatre
THEA 401-	Theatre and Dance Productions*
THEA 402	
THEA 424	Acting Studio: Audition Techniques (Capstone experience)
DANC 100	Introduction to Dance
DANC 111	Modern Technique I
DANC 112	Ballet I
DANC 113	Jazz Dance I
DANC 114	Tap Dance I

*Cannot be applied to the B.F.A. degree.

Other Programs

Concentration in Jazz Studies

(16 credit hours)

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
MUS 361	Jazz Improvisation
	2 semesters participation in Jazz Combo
	2 semesters participation in Jazz Ensemble

Concentration in Community Music

(24 credit hours)

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.

MUED 250 Foundations of Music Education I

Or

MUED 251 Foundations of Music Education II

MUED 450 Directed Study (practicum or project in Community Music)

MUTY 240 Music for Children with Disabilities

MUTY 270 Social Instruments

MUS 119 Free Improvisation

MUS 380 The Business of Music

Three courses from: Music (MUS) 264, 265, 270, 333, 334, 457.

Alternative, nontraditional, community-based ensembles by advisement.

The following, while not required in the concentration, are recommended for further study: (MUS) 401 or 404; (MUED) 291 or MUS 485.

Minor in Music

Thirty (30) credit hours: Music (MUS) 121*-122*, 123*-124* (or 101-102), 263*, 264*; four semesters of (MUS) 104; four participations in ensembles; and 12 credit hours of electives in music theory, music history and literature or music education, at least 6 of which must be from upper division courses (300-400 level).

*Course is designed for Music majors. Access requires satisfaction of prerequisites and/or testing.

Minor in Jazz

The program is for non-Music majors. (Majors should refer to Concentration in Jazz Studies.)

30 credit hours minimum

MUS 104 Applied Music Class Non-Music Majors (four semesters)

MUS 117- Piano Classes

MUS 118

MUS 121*- Aural Skills I & II

MUS 122*

MUS 123*- Music Theory I & II

MUS 124*

MUS 264* Music History

Or

MUS 115 Music Appreciation

MUS 265 History of Jazz

MUS 361 Jazz Improvisation

MUS 021- Jazz ensembles and combos (four semesters)

MUS 050

6 credit hours of electives in music

*Course is designed for Music majors. Access requires satisfaction of prerequisites and/or testing.

Music Concentration for Bachelor of Science Degree in Childhood Education

(34 credit hours)

MUS 121*- Aural Skills I & II

MUS 122*

MUS 123*- Music Theory I & II

MUS 124*

MUED 315 Music, Play and Self

MUS 450- Directed Studies

MUS 451

Plus Music History courses 300 and/or 400 level by advisement

Choose any three Piano Class courses (beginning with MUS 118)

Choose either Guitar Classes (MUED) 310 and 311) or Social Instruments (MUTY) 270

*Access to any course designed for Music majors requires satisfaction of prerequisites and/or testing.

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

MUS 130

MUS 301 Composition Lab: Instrumentation*

MUS 302 Composition Lab: Orchestration*

MUS 311 Composition Lab: Notation*

MUS 312 Composition Lab: Arranging*

MUS 321 Composition Lab: Collaboration*

MUS 322 Composition Lab: Music of the 21st Century*

MUS 361 Jazz Improvisation

MUS 362 Jazz Theory

MUS 403 Counterpoint

MUS 404 Choral Arranging

MUS 440 Composition in Electronic Media I

MUS 441 Composition in Electronic Media II

Other courses with advisor approval

*Primarily for Composition majors. Open to other Music majors if space available in class.

Approved Music History Electives for Majors:

MUS 262 American Music

MUS 265 History of Jazz

MUS 267 African American Music

MUS 270 History of Popular Music

MUS 333 Musics of the World

MUS 334 Music of Latin America

MUS 381 Survey of Song Literature

MUS 383 French Song

MUS 387 German Song

MUS 408 History and Literature of the Wind Band

MUS 409 History and Literature of the Guitar

MUS 420 Piano Literature

MUS 424 History of Opera

MUS 433 Romanticism and Music

MUS 453	Baroque Period in Music
MUS 454	Classical Period in Music
MUS 455	Romantic Period in Music
MUS 456	Modern Period in Music

Courses for Non-Music Majors:

The following courses are available to students who are not Music majors.

MUS 101-	Music Theory for the Non-Major
MUS 102	
MUS 104	Class Instruction in Applied Music
MUS 115	Music Appreciation
MUS 119	Free Improvisation
MUS 262	American Music
MUS 265	History of Jazz
MUS 267	African American Music
MUS 269	Music Criticism
MUS 270	History of Popular Music
MUS 333	Musics of the World
MUS 334	Latin American Music
MUS 433	Romanticism and Music
MUED 315	Music, Play and Self
MUTY 115	Introduction to Music Therapy

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 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.

Music Graduate Programs

Office: 1151 Mason Hall
(716) 673-3151

Karl Boelter, *Director*

Patricia Corron, *Associate Director and Graduate Coordinator*

Barry Kilpatrick, *Assistant Director*

Email: music.school@fredonia.edu

Website: <http://www.fredonia.edu/music/grad.asp>

The School of Music offers three graduate degrees: the Master of Music in Music Education, the Master of Music in Performance, and the Master of Music in Theory-Composition.

Accreditation: Degree program requirements are accredited by the National Association of Schools of Music (NASM).

Music Education Master of Music degree

(30-36 credit hours)

Requirements for Admission to Program without Deficiencies:

- Undergraduate studies equivalent to the Bachelor of Music Education degree offered at SUNY Fredonia.
- 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 Associate Provost for Graduate Studies and Research.
- A performance audition is not necessary; however, students in the Music Education degree program who desire to do a performance 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 degree. 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.
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.

Specific Requirements

MUS 521	Music Bibliography
MUS 624	Analytic Techniques
MUED 619	Foundations of Music Education I
MUED 620	Foundations of Music Education II
MUED 621	Foundations of Music Education III
MUED 695	Thesis/Final Project/Recital

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) or (MUED) 590 and 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) 555/565 can be applied only in this category. For those approved for the performance project option, electives will include (MUS) 605 and 606 as 4 of the 6 elective credits.

In-Service 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 Teacher Education Certification (see page 187) section of the catalog.

Specific Requirements

MUS 521	Music Bibliography
MUS 624	Analytic Techniques
MUED 619	Foundations of Music Education I
MUED 620	Foundations of Music Education II
MUED 621	Foundations of Music Education III

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) or (MUED) 590 and 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) 555/565 can be applied only in this category and require prior permission of the program advisor.

Music Therapy Master of Music degree

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 and mental health courses (Psychopathology and Developmental Psychology). The program is designed with the needs of full-time working music therapists in mind and may be pursued on a part-time basis.

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 degree

Graduate Core Curriculum

MUS 521	Music Bibliography
MUS 624	Analytic Techniques

Music Therapy Course Work

MUTY 505	Foundations of Advanced Music Therapy I
MUTY 510	Advanced Guitar Class for Music Therapists
MUTY 518	Advanced Clinical Piano Improvisation
MUTY 520	Theory of Vocal Psychotherapy
MUTY 530	Introduction to Guided Imagery and Music
MUTY 590	Special Studies (as advised)
MUTY 606	Foundations of Advanced Music Therapy II
MUTY 620	Vocal Psychotherapy Practice

MUTY 630	Theory and Practice in Guided Imagery and Music
MUTY 640	Clinical Applications to GIM Theory and Practice

Either:

MUTY 550	Internship in Music Therapy
or	
MUTY 650	Advanced Practicum in Music Therapy (four enrollments of 2 credit hours each)

Music Education Course Work

MUED 514	Psychology of Music
MUED 522	Psychological Research in Music

Psychology Course Work

PSY 5xx	Psychopathology
PSY 5yy	Lifespan Developmental Psychology

Performance Master of Music degree

(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 Associate Provost for Graduate Studies and Research.

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.

Instrumental (orchestral instruments, guitar, piano)

MUS 521	Music Bibliography
MUS 624	Analytic Techniques
MUS 692-	Graduate Performance Major (private applied
MUS 693	instruction)
MUS 694	Recital

Plus:

- 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

MUS 521	Music Bibliography
---------	--------------------

MUS 624	Analytic Techniques
MUS 592-	Graduate Performance Major (private applied instruction)
MUS 593	
MUS 692-	Graduate Performance Major
MUS 693	
MUS 624	Analytic Techniques
MUS 694	Recital
MUS 615	Graduate Diction for Singers
MUS 522	Style and Techniques of Song Literature
MUS 523	Sonata Duo and Chamber Ensemble Seminar
MUS 524	Techniques of Opera Coaching

Plus:

- 6 credit hours of music history, literature or theory (by advisement)
- Final Comprehensive Oral Examination

Voice

MUS 521	Music Bibliography
MUS 624	Analytic Techniques
MUS 592-	Graduate Performance Major (private applied instruction)
MUS 593	
MUS 692-	Graduate Performance Major
MUS 693	
MUS 615	Graduate Diction for Singers

Plus:

- 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

MUS 521	Music Bibliography
MUS 624	Analytic Techniques
MUS 692-	Graduate Performance Major
MUS 693	
MUS 694	Recital (performances as conductor)

Plus:

- 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

Theory-Composition Master of Music degree**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 SUNY Fredonia's (MUS) 121-122, 123-124, 221-222, 223-354), a music history survey (equivalent to (MUS) 263 and 264), and advanced undergraduate courses in theory, composition, orchestration, counterpoint, or music history totaling at least 12 semester hours.

Music Theory Track**Core Requirements**

MUS 521	Music Bibliography
MUS 624	Analytic Techniques

Required Theory Courses

MUS 503	Twentieth Century Counterpoint
MUS 614	Pedagogy of Theory
MUS 652	Schenkerian Analysis
MUS 653	Post-Tonal Analysis

Music History Requirements.

Select 3 of the following:

MUS 542	Renaissance
MUS 543	Baroque Period
MUS 544	Classical Period
MUS 545	Romantic Period
MUS 546	Modern Period

Final Requirements

During the final semester, theory track majors will complete the following projects:

MUS 695	Thesis (theory project)
---------	-------------------------

Plus:

- Final Comprehensive Oral Examination

Music Composition Track**Core Requirements**

MUS 521	Music Bibliography
MUS 624	Analytic Techniques

Composition Requirements

Note: Composition majors must study privately with the composition faculty for three semesters (9 credits)

MUS 609	Composition
MUS 651	Pedagogy of Composition

Music Theory Requirements

MUS 614 Pedagogy of Theory

Choose one course from the following:

MUS 503	Twentieth Century Counterpoint
MUS 652	Schenkerian Analysis
MUS 653	Post-Tonal Analysis

Music History Requirements

Select three courses from the following:

MUS 542	Renaissance
MUS 543	Baroque Period
MUS 544	Classical Period
MUS 545	Romantic Period
MUS 546	Modern Period

Final Requirements

During the final semester, composition track majors will complete the following projects:

MUS 695 Thesis (composition project)

Plus:

- Final Comprehensive Oral Examination

Philosophy

Office: 2110 Fenton Hall
(716) 673-3495

Neil Feit, 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.

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.

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.

Students are required to take:

One logic course

PHIL 116 Introduction to Deductive Logic

Or

PHIL 301 Intermediate Deductive Logic

One history of philosophy course

PHIL 222 The Greek Way

Or

PHIL 223 Roman Philosophy

Or

PHIL 224 Medieval Thought

Or

PHIL 226 The Age of Reason and Its Legacy

Or

PHIL 432 The Age of Analysis

One capstone course

PHIL 477 Capstone Seminar*

*Required for first-year students who enter in or after Fall 2007, and transfer students who enter in or after Fall 2009.

A Model Program would include:

PHIL 115 Philosophical Inquiry

PHIL 218 Introduction to Ethics

or

PHIL 265 Social and Political Thought

PHIL 345 The Meaning of Life

or

PHIL 441 Philosophy of Language and Semantics

PHIL 430 Philosophy of Mind

or

PHIL 351 Metaphysics

or

PHIL 353 Theory of Knowledge

Plus related philosophy courses and PHIL 477 capstone experience.

Seniors are strongly urged to take an additional seminar:

PHIL Selected Problems in Philosophy

446/449

or

PHIL Major Philosophers

460/469

Students should consult the department for current offerings in the above areas. All waivers of requirements must be approved by the chairperson.

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.

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.

Physics

Office: 103 Houghton Hall
(716) 673-3301

Michael Grady, Chairperson

Email: physics.department@fredonia.edu

Website: <http://www.fredonia.edu/departments/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 and pre-med 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, interdisciplinary majors in Geophysics and Mathematics-Physics (with the Geosciences and Mathematical Sciences departments, respectively), a major in Industrial Management, and courses to complement majors in other areas.

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 (see page 76)).

Physics Bachelor of Science degree

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 & Lab
PHYS 232	
PHYS 231/	University Physics II & Lab
PHYS 233	
PHYS 234	Modern Physics
PHYS 330	Thermodynamics
PHYS 400	Undergraduate Seminar (Capstone experience)
PHYS 425	Mathematical Physics I
PHYS 431	Introduction to Quantum Mechanics

and supporting math\CSIT courses:

MATH 122-	University Calculus I, II & III
MATH 123/	
MATH 223	
MATH 224	Differential Equations

CSIT 106	Scientific Programming using C/C++
----------	---------------------------------------

or

CSIT 121	Computer Science I
----------	--------------------

Track I – Theoretical Emphasis

PHYS 331	Theoretical Mechanics
PHYS 333	Electricity and Magnetism
PHYS 426	Mathematical Physics II

Plus 6 additional credit hours of physics from 321-479, 490

Plus 12 additional credit hours of science, mathematics, computer science, engineering, or education. Recommended courses include MATH 231 and CHEM 115-CHEM 116 (with CHEM 125- CHEM 126).

Track II – Experimental Emphasis

PHYS 333	Electricity and Magnetism
PHYS 340-	Optics & Lab
PHYS 341	
PHYS 426	Mathematical Physics II
PHYS 450	Advanced Lab

or

Experimental Physics Project (independent study or tutorial) Plus 4 additional credit hours of physics from 321-479, 490

Plus 12 additional credit hours of science, mathematics, computer science, engineering, or education. CHEM 115- CHEM 116 (with CHEM 125- CHEM 126) is strongly recommended. STAT 250 or STAT 350 and MATH 231 are recommended.

Track III – Computational Emphasis

PHYS 331	Theoretical Mechanics
PHYS 333	Electricity and Magnetism
PHYS 426	Mathematical Physics II

Computational Physics Project (independent study or tutorial)

Plus 4 additional credit hours of physics from 321-479, 490

Plus the following courses:

MATH 231	Linear Algebra
MATH 325	Numerical Analysis
CSIT 221	Computer Science II

STAT 350 is recommended

Track IV – Physics with Cooperative Engineering

PHYS 321	Engineering Mechanics I
PHYS 426	Mathematical Physics II

PHYS 331	Theoretical Mechanics
or	
PHYS 333	Electricity and Magnetism

PHYS 323 Circuit Analysis I
Or
PHYS 325/ Electronics & Lab
PHYS 327
Or
PHYS 326/ Digital Logic & Lab
PHYS 328

Plus 12 additional credit hours of science, mathematics, computer science, engineering, or education, including at least one additional course from PHYS 322 through 328 and 340/341 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- CHEM 116 (w/CHEM 125- CHEM 126) is strongly recommended and required by most engineering schools.

Note: *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 & Lab
PHYS 341

Plus 9 additional credit hours of physics from 321-479

Plus the following courses:

STAT 250 Statistics
or
STAT 350

POLI 276 Law and Society

POLI 277 Introduction to Law

Or
BUAD 310 Legal Environment of
Business

PHIL 106 Critical Thinking

Or
PHIL 116 Introduction. to Deductive
Logic

PHIL 218 Introduction to Ethics

Or
PHIL 310 Business Ethics

POLI 370 American Constitutional
Law

and
CHEM 115 - CHEM 116 (w/CHEM 125 - 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 & Lab
PHYS 341
or
PHYS 325/ Electronics & Lab
PHYS 327

CHEM 215- Organic Chemistry I & Lab
CHEM 216
and
CHEM 225- Organic Chemistry II & Lab
CHEM 226

Plus the following courses:

CHEM 115/ General Chemistry i & Lab
CHEM 125
CHEM 116/ General Chemistry II & Lab
CHEM 126
BIOL 131- Principles of Biology I &
BIOL 132 Lab
BIOL 133- Principles of Biology II &
BIOL 134 Lab
BIOL 237- Genetics & Lab
BIOL 238
BIOL 336- Mammalian Physiology &
BIOL 337 Lab

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.*

Track VII – Physics Adolescence (Secondary) Education

PHYS 331 Theoretical Mechanics
or
PHYS 333 Electricity and Magnetism

PHYS 340- Optics & Lab
PHYS 341

Plus 6 additional credit hours of physics from 311, 321-479, 490

Plus the following courses:

CHEM 115/ General Chemistry i & Lab
CHEM 125
CHEM 116/ General Chemistry II & Lab
CHEM 126
SCED 105- Nature of Science and
SCED 106 Science Education
EDU 224 Adolescent Development
EDU 250- Introduction to Exceptional
Learner
EDU 251 Practicum in Inclusive
Education II
SCED 276 Literacy and Technology for
Science and Mathematics
SCED 303 Assessment for Inquiry-
Based Science
SCED 305/ Diversity in the Teaching of
SCED 313 Science and Mathematics
EDU 349 Educational Psychology
SCED 419 Adolescence Science
Methods
EDU 301 Safe Schools/Healthy
Students: Child Abuse and
Child Abduction
EDU 302 Safe Schools/Healthy
Students: Alcohol, Tobacco

EDU 303	and other Drug Abuse Safe Schools/Healthy Students: Fire Safety and SAVE Legislation
EDU 430	Student Teaching in the Secondary School (Capstone experience)

The procedure to be followed for admission to the professional sequence of courses is described in the Education (see page 50) 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 local equivalent). Requirement is fulfilled.
- Scores of 65 percent - 84 percent on High School N.Y.S. Regents Exam (or local equivalent): 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 SUNY Fredonia proficiency exam.
- Scores below 65 percent on High School N.Y.S. Regents Exam (or local equivalent) or if student did not take a N.Y.S. Regents or local Exam: Student needs to take an Elementary I level course and an Elementary II level course of the same language or equivalent.

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

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.

Geophysics Bachelor of Science degree

Requirements for the Bachelor of Science Degree in Geophysics

Students interested in this joint major should contact the chairperson of the department of Physics or Geosciences.

Core Program (23 to 24 credit hours in geosciences; 19 to 21 credit hours in physics; 26 credit hours in related disciplines)

GEO 165	Geology I
GEO 169	General Geology Laboratory
GEO 215	Minerals and Rocks
GEO 335	Geophysics
GEO 370	Structural Geology
GEO 459	Seminar in Geosciences (Capstone experience)

or	
PHYS 400	Undergraduate Seminar (Capstone experience)
GEO 461	Field Geology
GEO XXX	Geology elective
PHYS 230/ PHYS 232	University Physics I & Lab
PHYS 231/ PHYS 233	University Physics II & Lab

One course (3-4 hours) from:

PHYS 321	Engineering Mechanics I
or	
PHYS 330	Thermodynamics
or	
PHYS 331	Theoretical Mechanics
or	
PHYS 333	Electricity and Magnetism

PHYS XXX	6 credit hours of electives from Physics 321 through 479
MATH 122- MATH 123/ MATH 223	University Calculus I, II & III

MATH 224	Differential Equations
CSIT XXX	Any course (preferably CSIT 104 Introduction to Microcomputer Software)

CHEM 115/ CHEM 125	General Chemistry I & Lab
CHEM 116/ CHEM 126	General Chemistry II & Lab
GEO 330	Geomorphology is strongly recommended.

Mathematics-Physics Bachelor of Science degree

Requirements for the Bachelor of Science Degree 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++
----------	---------------------------------------

or	
CSIT 121	Computer Science I

Plus 29 hours in mathematics including:	
MATH 122- MATH 123/ MATH 223	University Calculus I, II & III
MATH 210	Mathematical Structures and Proof
MATH 224	Differential Equations
MATH 231	Linear Algebra

Plus two courses at the 300 level or higher: MATH 323 and MATH 420, or MATH 323 and PHYS 425, or PHYS 425 and PHYS 426	
PHYS 230/ PHYS 232	University Physics I & Lab
PHYS 231/ PHYS 233	University Physics II & Lab
PHYS 234	Modern Physics
PHYS 431	Introduction to Quantum Mechanics

One course (3 credit hours) from:

PHYS 330	Thermodynamics
PHYS 331	Theoretical Mechanics
PHYS 333	Electricity and Magnetism

Plus 9 additional credit hours from Physics 321- 479, 490

Plus 9 credit hours of supporting courses as advised

Note: PHYS 400 is the suggested Capstone course for this program

Note: *Minimum cumulative GPA of 2.0 required in above courses for graduation.*

Physics Minor

Requirements for the Minor in Physics

A minimum of 23 credit hours in physics, including PHYS 230, PHYS 231, PHYS 232, PHYS 233, and PHYS 234 and 9 additional credit hours in physics courses numbered 311, 321 through 479, 490 as advised by a physics department faculty member and approved by the department. Additionally, 15 credit hours in mathematics - MATH 122, MATH 123, MATH 223 and MATH 224 are required.

Note: *Minimum cumulative GPA of 2.0 required in above courses for graduation.*

Additional Programs

The Department of Physics administers the Cooperative Engineering (see page 76) program and the degree program in Industrial Management (see page 90). See separate entries in the catalog for these programs.

Political Science

Office: E370 Thompson Hall
(716) 673-3207

David Rankin, *Chairperson*

Email: political.science@fredonia.edu

Website: <http://www.fredonia.edu/departments/polisci/>

Political science is a liberal arts discipline designed to prepare students as informed citizens and leaders in contemporary society. A major in Political Science must take a minimum of 36 credit hours within the discipline. The credit hours are divided into required core courses, upper-division courses selected from different subject areas, and the capstone seminar.

Fredonia graduates hold responsible positions in businesses and corporations as well as in federal, state, and local governments. Following completion of their study at SUNY Fredonia, some students continue their education in graduate or law school. The latter become attorneys in the public and private sectors. The department has regular advisory meetings on careers for its majors and sponsors a variety of internships. Each year the department selects students to spend a semester in Washington, D.C. Selectees may be either majors or non-majors, but must be juniors or seniors at the time they go to Washington. Fifteen (15) credit hours are granted for participation in the program.

Similar in structure to the Washington Semester Program but with residence in Albany, the Albany Semester Program provides an internship with a state agency or the New York State Legislature. It earns 15 credit hours. The Department of Political Science also offers a number of internships in local government and local law-related agencies.

Political Science majors are encouraged to satisfy General Education distribution requirements with courses in history and economics where possible. They are also advised to consider these departments in their selection of electives.

Students wishing to teach political science in the secondary schools may obtain provisional certification by completing the Social Studies Adolescence Education program (see the History (see page 88) 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. Requirement is fulfilled.
- Scores of 65 percent - 84 percent on High School N.Y.S. Regents 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 SUNY Fredonia proficiency exam.

- Scores below 65 percent on High School N.Y.S. Regents Exam or if student did not take a N.Y.S. Regents Exam: Student needs to take an Elementary I level course and an Elementary II level course of the same language or equivalent. The College Core Curriculum foreign language requirement differs from the certification requirement and must be satisfied for degree conferral.

The procedure to be followed for admission to the professional sequence of courses is described in the Education (see page 50) portion of the catalog. For updated information on the department, its programs and faculty, students should consult the department web site.

The Department of Political Science also provides the Interdisciplinary Studies - International Studies major and minor programs for the campus. See International Studies (see page 101) for program information.

Awards, Activities and Organizations

The department is a member of Pi Sigma Alpha, the national Political Science Honor Society. Outstanding undergraduates are encouraged to apply, and need not be political science majors 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 (see page 101) program within the Political Science department.

The Department of Political Science gives at least three scholarships to entering freshmen, good for two years, based on merit: the Political Science Alumni Scholarship, the Political Science Department Faculty Scholarship and a J.R. Soukup Freshmen Award.

The Department of Political Science annually gives the Erna G. and J. Murdoch Dawley Award to the outstanding graduating senior in Political Science. The endowed award is given at the conclusion of the spring term. A J.R. Soukup Pi Sigma Alpha Award is given annually in the spring term to the outstanding junior who not only demonstrates scholarship but is pursuing studies and/or a career in some form of private or public community service.

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.

Political Science majors can belong to the student Political Science Association, which organizes a variety of activities. These include trips to Washington, D.C., career days, election year debates, voter registration projects, parties, and others. Political Science majors may also participate in the Mock Trial program and competitions and in the annual simulation of European Union policy deliberations, in which many U.S. and European colleges and universities participate.

Political Science Bachelor of Arts degree

Requirements for the Bachelor of Arts Degree in Political Science

Minimum required: 36 credit hours

1. Required Core Courses (12 credit hours)

POLI 120	American Politics
POLI 150	U.S. and World Affairs
POLI 200	Statistics
POLI 241	Introduction to Comparative Politics

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
POLI 321	Political Parties and Interest Groups
POLI 322	New York Government
POLI 323	Elections in America
POLI 324	President and Congress
POLI 325	Public Opinion and Participation
POLI 326	Media and Politics
POLI 329	Topics in American Politics
POLI 370	American Constitutional Law
POLI 382	Social Welfare Policy

B. One course from Political Theory

C. Two courses from World Politics

Law and Politics Concentration

A. Three courses from the following:

POLI 353	International Law and Organization
POLI 370	American Constitutional Law
POLI 371	Civil Rights and Liberties
POLI 375	The Judicial Branch
POLI 379	Topics in Public Law
POLI 383	Courts and Social Policy

B. One course from Political Theory

C. Two courses from World Politics

World Politics Concentration

A. Four courses from the following:

Western Courses

POLI 330	Western European Politics
POLI 332	Russian Politics
POLI 343	International Migration
POLI 348	The European Union
POLI 349	Topics in Comparative Politics
POLI 351	The Inter-American System

Non-Western Courses

POLI 341	Political Economy of Development
POLI 345	Film and Politics
POLI 346	East Asian Political Economy

International Relations

POLI 352	World Political Geography
POLI 353	International Law and Organization
POLI 355	International Political Economy
POLI 356	U.S. Foreign Policy
POLI 359	Topics in International Politics
POLI 362	Terrorism and Counterterrorism

B. One course from American Politics

C. One course from Political Theory

Political Theory

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
POLI 361	Modern Political Theory
POLI 363	Game Theory
POLI 365	American Political Thought
POLI 369	Topics in Political Theory

(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	Senior Seminar
----------	----------------

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.

Geographic Information Systems

The program is sponsored jointly by the departments of Political Science and Geosciences. Students should see the Geographic Information Systems section of the catalog for more information.

Interdisciplinary Studies: International Studies Bachelor of Science degree

(Interdisciplinary major housed in the Department of Political Science)

Office: E388 Thompson Hall
(716) 673-4672

Alex Caviedes, Coordinator

Email: international.studies@fredonia.edu

Website: <http://www.fredonia.edu/department/polisci/>

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
ANTH 115	Introductory Anthropology
ECON 201	Macroeconomics
HIST 102	World History II
INTL 401	International Studies Capstone Project
POLI 150	U.S. and World Affairs
POLI 352	World Political Geography
Plus two of the next three courses listed below:	
ARTH 102	Art in Culture from 1400 to Present
ENGL 211	World Poetry
MUS 333	Musics of the World

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 SUNY 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 SUNY 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)

- a. 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
- b. 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
ECON 202	Microeconomics
ECON 320	International Trade and Finance
ECON 321	Economics of Multinational Corporations
ECON 335	Economic Development
ECON 345	Comparative Economic Systems
ECON 380	Environmental Economics and Natural Resource Economics
ECON 395	Comparative Human Resources
HIST 266	Modern East Asia
HIST 311	Europe in the Modern World
HIST 361	Modern Middle East
HIST 367	Twentieth Century China

HIST 368	Modern Japan
HIST 386	Global Studies
POLI 330	Western Europe
POLI 341	Political Economy of Development
POLI 344	Comparative Public Policy
POLI 346	East Asian Political Economy: Japan, China and Korea
POLI 348	European Union
POLI 349	Varieties of Capitalism
POLI 354	Middle East Politics
POLI 355	International Political Economy
POLI 356	U.S. Foreign Policy

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
ECON 202	Microeconomics
ECON 320	International Trade and Finance
ECON 321	Economics of Multinational Corporations
ECON 345	Comparative Economic Systems
ECON 395	Comparative Human Resources
LANG 378	Canada Today
FREN 323	France Today
GERM 323	Germany Since 1918
HIST 212	History of the Holocaust
HIST 309	Modernization of Europe
HIST 311	Europe in the Modern World
HIST 312	Modern Germany
HIST 317	Modern France
HIST 342	The American Century
HIST 368	Modern Japan
HIST 386	Global Studies
POLI 330	Western Europe
POLI 332	Russian Politics
POLI 346	East Asian Political Economy: Japan, China and Korea
POLI 348	European Union
POLI 349	Varieties of Capitalism
POLI 355	International Political Economy
POLI 362	Terrorism and Counterterrorism
SOC 321	Population and Society
SOC 361	Law in the World

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
ARTH 225	Modern Art 1900-1950
ENGL 240	Introduction to African American Literature and Culture
ENGL 241	Introduction to Latino Literature and Culture
ENGL 395	Third World Literature
ENGL 397	Contemporary Multicultural American Literature
LANG 371	Canadian Writers
LANG 378	Canada Today
FREN 310	Quebec Literature and Culture
SPAN 325	Survey of Spanish-American Literature
HIST 347	U.S. Immigration
HIST 351	Defining America
HIST 380	History of Mexico I
HIST 381	History of Mexico II
POLI 241	Comparative Politics
POLI 349	Varieties of Capitalism
POLI 351	Inter-American Relations

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 Africa
ANTH 322	Anthropology of Indian America
ANTH 324	Anthropology of the Caribbean
COMM 385	International Media
COMM 465	Intercultural Communication
ECON 202	Microeconomics
ECON 320	International Trade and Finance
ECON 321	Economics of Multinational Corporations
ECON 335	Economic Development
ECON 345	Comparative Economic Systems
ECON 380	Environmental Economics and Natural Resource Economics
ENGL 395	Third World Literature
HIST 261	Islamic Civilization
HIST 266	Modern East Asia
HIST 342	The American Century
HIST 361	Modern Middle East
HIST 366	Late Imperial China
HIST 367	Twentieth Century China
HIST 380	History of Mexico I
HIST 381	History of Mexico II
HIST 386	Global Studies (if not taken in core)
HIST 387	Comparative Slave Societies
POLI 241	Comparative Politics
POLI 334	African Politics
POLI 341	Political Economy of Development
POLI 345	Film and Global Politics
POLI 346	East Asian Political Economy: Japan, China and Korea
POLI 354	Politics of the Middle East
POLI 349	Varieties of Capitalism
POLI 362	Terrorism and Counterterrorism
SOC 321	Population and Society

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
COMM 386	International Films
ENGL 322	The Romantic Age
ENGL 326	Victorian and Early Modern Literature
ENGL 328	Modern English Literature
ENGL 396	Russian Literature
HIST 116	Modern Western Civilization
HIST 306	The Age of Reformation
HIST 309	Modernization of Europe
HIST 311	Europe in the Modern World
HIST 312	Modern Germany
HIST 322	French Revolution and Napoleon
FREN 315	French Masterpieces I
FREN 316	French Masterpieces II
FREN 319	Survey of French Literature I
FREN 320	Survey of French Literature II
SPAN 315	Introduction to Hispanic Literature
SPAN 319	Survey of Spanish Literature I
SPAN 320	Survey of Spanish Literature II
MUS 115	Music Appreciation
MUS 263	Music History in Western Civilization
MUS 350	Special Topics
PHIL 338	Marxist Thought
POLI 330	Western Europe
POLI 345	Film and Politics
POLI 348	European Union

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
COMM 465	Intercultural Communication
ECON 202	Microeconomics
ECON 345	Comparative Economic Systems
HIST 212	History of the Holocaust
HIST 309	Modernization of Europe
HIST 311	Europe in the Modern World
HIST 312	Modern Germany
HIST 342	The American Century
HIST 349	U.S. Military History
HIST 350	Vietnam and the Growth of the National Security State
HIST 361	Modern Middle East
HIST 368	Modern Japan
POLI 348	European Union
POLI 353	International Law and International Organizations
POLI 354	Politics of the Middle East
POLI 356	U.S. Foreign Policy
POLI 351	Inter-American Relations
POLI 361	Modern Political Theory
POLI 362	Terrorism and Counterterrorism
POLI 363	Game Theory

Interdisciplinary Studies: International Studies minor

(Interdisciplinary Studies minor housed in the Department of Political Science)

Office: E390 Thompson Hall
(716) 673-3887

Ivani Vassoler, Coordinator

Email: international.studies@fredonia.edu

Website: <http://www.fredonia.edu/departments/polisci/>

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
HIST 102	World History II
POLI 150	U.S. and World Affairs
ANTH 115	Introductory Anthropology

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 SUNY 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 SUNY 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.

Political Science Special Programs

Internships: No more than 3 credit hours of internship credit may count toward the Political Science major or minor. The department participates in various Interdisciplinary Studies majors and minors such as the Legal Studies minor, and also houses the International Studies (see page 144) major and minor (see page 147) programs.

The Department of Political Science participates in the Cooperative Engineering program (see page 76).

Pre-Law Advisement

Office: 232 Fenton Hall
(716) 673-3852
David Kaplin, *Pre-Law Advisor*

Office: E388 Thompson Hall
(716) 673-4672
Alex Caviedes, *Pre-Law Advisor*

Office: E366 Thompson Hall
(716) 673-4849
Fred Larson, *Pre-Law Advisor*
Email: prelaw-grp@fredonia.edu
Website:
<http://www.fredonia.edu/department/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 SUNY 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 SUNY 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 SUNY Fredonia students interested in attending law school should register with the Pre-Law Advising Program. Please see Dr. David Kaplin, in Fenton Hall 232.

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 or Dr. Frederick Larson.

Students interested in preparing for the Law School Admissions Test (LSAT) should contact Dr. David Kaplin.

Students interested in receiving advisement and assistance with the process of applying to law school can contact either Dr. Alex Caviedes, Dr. David Kaplin, or Dr. Frederick Larson.

Pre-Medicine and Allied Areas

Health Professions Advising Program

Office: 203 Jewett Hall
(716) 673-3282
Ted Lee, *Coordinator*
Email: pre-medicine@fredonia.edu
Website: <http://www.fredonia.edu/hpap>

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, 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 SUNY 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 Jewett Hall).

The Health Professions Advising Committee at SUNY 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. SUNY Fredonia students regularly intern at local practices and clinics.

The book, *Medical School Admissions Requirements* (AAMC, Washington, D.C.) is essential reading for any undergraduate who is seriously considering medical school. Students may borrow the copy of this book from the Health Professions Advising Office. The office has other books and DVDs on careers in medicine and the health professions that students can borrow as well.

Early Acceptance program with the Lake Erie College of Osteopathic Medicine (LECOM)

SUNY Fredonia has an affiliation agreement with LECOM that allows students to earn a baccalaureate degree from SUNY 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 SUNY Fredonia before matriculating to LECOM and a 3+4 track where students complete 3 years at SUNY Fredonia and 4 years at LECOM. Students in the 3+4 track earn the baccalaureate degree from SUNY 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 SUNY Fredonia. Students may apply as high school seniors or as SUNY 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 SUNY 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 SUNY 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 SUNY 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.

Psychology

Office: W357 Thompson Hall
(716) 673-3129

Cheryl Drout, 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 SUNY Fredonia.

For a minor, a minimum of 9 credit hours must be taken in the department at SUNY Fredonia.

The psychology department participates in the Cooperative Engineering (see page 76) program.

Psychology Bachelor of Arts degree

Requirements for the Bachelor of Arts Degree in Psychology

I. Courses in Psychology

Core Group - all required

PSY 129	Introduction to Psychology
PSY 130	Psychology Laboratory
PSY 200	Statistics
PSY 210	Research Methods

The above courses are to be completed by the end of the junior year.

One course from the Psychophysiology Area:

PSY 342	Perception
PSY 351	Physiological Psychology
PSY 361	Cognitive Neuroscience

One course from the Cognitive Area:

PSY 244	Cognitive Psychology
PSY 344	Psychology of Language
PSY 364	Cognitive Development

One course from the Social Area:

PSY 245	Social Psychology
PSY 246	Personality
PSY 365	Social Development

One course from the Clinical/Counseling Area:

PSY 356	Abnormal Psychology
PSY 379	Child Psychopathology
PSY 447	Introduction to Counseling

One Theoretical Thinking course (Capstone experience):

PSY 429	History and Systems of Psychology
PSY 430	Theories of Psychology
PSY 439	Senior Honors Seminar
PSY 445	Seminar in Social Psychology
PSY 454	Theories of Memory

Also required: One course of a developmental focus. PSY 364, PSY 365 or PSY 379 may count here as well as in the groupings above. PSY 349 (Child Psychology) also meets this requirement. Students choosing to take PSY 364, PSY 365 or PSY 379 to meet both requirements must take an additional psychology elective in order to fulfill the requirement that they have 35 hours of psychology courses.

Psychology electives: 6 credit hours of any psychology courses to bring total psychology credits to 35 credit hours

II. A minor in a field other than Psychology, chosen with advisement to complement the major.

III. At least one course in mathematics as advised by department.

IV. Of the total hours counting for graduation, a minimum of 30 hours must be at the 300 level or above, and 66 hours must be outside of psychology.

V. A minimum of 2.00 cumulative quality point average in all psychology courses.

As an alternative to the general psychology program, students may elect to specialize in one of the following tracks: School and Child, Counseling and Health, or Forensics.

Psychology Bachelor of Science degree

Requirements for the Bachelor of Science Degree in Psychology

I. Courses in Psychology:

Core Group - all required

PSY 129	Introduction to Psychology
PSY 130	Psychology Laboratory
PSY 200	Statistics
PSY 210	Research Methods

(The above courses are to be completed by the end of the junior year.)

PSY 310	Advanced Research Methods
PSY 489	Independent Study

One course from the Psychophysiology Area:

PSY 342	Perception
PSY 351	Physiological Psychology
PSY 361	Cognitive Neuroscience

One course from the Cognitive Area:

PSY 244	Cognitive Psychology
PSY 344	Psychology of Language
PSY 364	Cognitive Development

One course from the Social Area:

PSY 245	Social Psychology
PSY 246	Personality
PSY 365	Social Development

One course from the Clinical/Counseling Area:

PSY 356	Abnormal Psychology
PSY 379	Child Psychopathology
PSY 447	Introduction to Counseling

One Theoretical Thinking course (Capstone experience):

PSY 429	History and Systems of Psychology
PSY 430	Theories of Psychology
PSY 439	Senior Honors Seminar
PSY 445	Seminar in Social Psychology
PSY 454	Theories of Memory

Also required: One course of a developmental focus. PSY 364, PSY 365 or PSY 379 may count here as well as in the groupings above. PSY 349 Child Psychology also meets this requirement. Students choosing to take PSY 364, PSY 365 or PSY 379 to meet both requirements must take an additional psychology elective in order to fulfill the requirement that they have 41 hours of psychology courses.

Psychology electives: 6 credits of any psychology courses to bring total psychology credit hours to 41.

II. Related Science Courses (14 credits):

One Mathematics course (104, 105, 106, 108, 110, 120, 122) and either the Biology or Chemistry focus.

Biology Focus

BIOL 131-	Principles of Biology I & Lab
BIOL 132	
BIOL 133-	Principles of Biology II & Lab
BIOL 134	
CHEM 115	General Chemistry Lecture I

Chemistry Focus

CHEM 115/	General Chemistry Lecture I & Lab
CHEM 125	
CHEM 116/	General Chemistry Lecture II & Lab
CHEM 126	
BIOL XXX	One Biology course

As an alternative to the General B.S. requirements, students can elect to complete the following emphasis area with more specialized requirements:

Biopsychology/Cognitive Neuroscience Emphasis

Psychology courses – same as general BS except as noted:

- Psychophysiology Area – all three courses
- Additional BIOL courses – BIOL 243 Biodiversity and BIOL 434 Animal Behavior
- Other requirements – same as general B.S.

III. Of the total hours counting for graduation, a minimum of 36 hours must be at the 300 or 400 level and 66 hours must be outside of Psychology.

IV. Transfer students must take at least 23 hours in Psychology at Fredonia.

V. Honors thesis may be substituted for the Independent Study requirement.

VI. A minimum of 2.00 cumulative quality point average in all psychology courses.

Psychology Minor**Requirements for the Minor in Psychology***General Minor:*

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: Psychology (PSY) 244, 342, 344, 351, 361, or 364; and one course must come from the social area or the clinical/counseling area: Psychology (PSY) 245, 246, 356, 365, 379, or 447). For the minor, a minimum of 9 credit hours must be taken in the department at SUNY Fredonia.

Industrial-Organizational Psychology Minor:

A minimum of 21 credit hours, distributed as follows:

Core Courses: (12 credit hours)

PSY 129	Introduction to Psychology
PSY 200	Statistics
PSY 317	Tests and Measurements
PSY 347	Organizational Psychology

Three courses from the following:

PSY 227	Applied Psychology
PSY 245	Social Psychology
PSY 355	Group Dynamics
PSY 373	Human Factors
PSY 447	Introduction to Counseling
BUAD 321	Management and Organizational Behavior

School and Counseling Psychology Minor

A minimum of 18 credit hours, distributed as follows:

Required courses (9 credit hours)

PSY 129	Introduction to Psychology
PSY 200	Statistics
PSY 317	Tests and Measurements

Three courses from the following (9 credit hours)

PSY 364	Cognitive Development
PSY 365	Social Development
PSY 379	Child Psychopathology
PSY 447	Introduction to Counseling

A minimum of 2.00 cumulative quality point average in all psychology courses is required.

Science Education Graduate Program

Adolescence Science Education Master of Arts in Teaching degree

Department of Chemistry and Biochemistry

201 Houghton Hall

(716)673-3285

Holly Lawson, Program Coordinator

Email: chemistry.department@fredonia.edu

Website:

<http://www.fredonia.edu/gradstudies/prospective/degrees/mat.asp>

Program Purpose

This masters 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
EDU 508	Teaching Diverse Learners in Inclusive Settings
EDU 301	Safe Schools/Healthy Students: Child Abuse and Child Abduction
EDU 302	Safe Schools/Healthy Students: Alcohol, Tobacco and Other Drug Abuse
EDU 303	Safe Schools/Healthy Students: Safety Education/Fire and Arson/School Violence

Literacy:

EDU 536	Adolescent Literature and Technology Plus one of the following other courses:
EDU 506	Introduction to Literacy Learning
EDU 586	Literacy in the Content Areas
EDU 587	Psychological Foundations of Literacy

Methods:

SCED 560*	Foundations of Teaching Science to Adolescent Learners
SCED 660*	Developing Expertise in Science Teaching
SCED 680	Inquiry into Science Teaching in Context

Content:

BIOL, CHEM, 6 credit hours of electives upon advisement
GEO, PHY,
SCI, SCED

Supervised Teaching:

SCED 670 Student Teaching: Middle School
SCED 671 Student Teaching: High School

Required course for 5-6 extension:

EDU 321 Teaching in the Middle School

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.

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 2.75 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; 2.75 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).
- 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. Requirement is fulfilled.
- Scores of 65 percent - 84 percent on High School N.Y.S. Regents 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 SUNY Fredonia proficiency exam.
- Scores below 65 percent on High School N.Y.S. Regents Exam or if student did not take a N.Y.S. Regents Exam: Student needs to take an Elementary I level course and an Elementary II level course of the same language or equivalent.

Social Work Bachelor of Science degree

Office: W379 Thompson Hall
(716) 673-3470

Brian Masciadrelli, *Director*

Email: social.work@fredonia.edu

Website:

<http://www.fredonia.edu/department/sociology/socialwork/>

The Bachelor of Science in Social Work is one of several major degree programs offered by the Department of Sociology, Anthropology, Social Work, and Criminal

Justice. The program is accredited by the Council on Social Work Education, the profession's educational accreditation organization.

The goals of the SUNY Fredonia Social Work program are as follows:

1. The SUNY 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 SUNY 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 SUNY 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 SUNY 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 SUNY 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 SUNY 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.

Mission Statement.

The SUNY Fredonia Bachelor of Science degree in Social Work program strives to be a trusted partner in the missions of its home department, the Department of Sociology, Anthropology, Social Work, and Criminal Justice; the university; the academic community-at-large; and the social community-at-large. Through committed, quality teaching-learning activities and reciprocal learning relationships with the local community-at-large, the program prepares critical thinking, generalist social workers who are prepared to enter employment as entry level professionals in urban or rural agency settings and/or are prepared to continue their education at the graduate level. The program intends that the teaching-learning, research, and service activities will have a meaningful, positive influence on the well-being of each student, the university, and the community-at-large as it embraces the larger mission of social work to prevent and alleviate conditions arising from social problems and unmet human needs.

Program Overview

All program activities are designed to meet its mission and goals. The curriculum is designed to provide the professional foundation that gives students specific social work theory, knowledge and skills. It is built upon a liberal arts base and provides individualized opportunities for personal and professional growth. Students work with their advisors to choose elective courses to develop their specific interests. The Social Work club plans student-directed activities that increase opportunities to explore the nature of the profession. Through their academic experiences, students become better-rounded, responsible individuals who possess a spirit of inquiry, critical thinking and helping skills, and have the ability to use the self appropriately in relationships with others.

Social work academic offerings and program activities are continually assessed to help keep the program vibrant and relevant. Student achievement results on each required social work course, portfolio learning, and performance in the Field Practicum are compiled and used to analyze the curriculum. In addition, various kinds of surveys are conducted with graduating seniors, alumni, and community practitioners to help understand the program's performance. Each of these assessment strategies measures some or the entire program's following objectives:

Graduates of the SUNY Fredonia Social Work program will demonstrate the following ten competencies:

1. Identify as a professional social worker and conduct oneself accordingly.
2. Apply social work ethical principles to guide professional practice.
3. Apply critical thinking to inform and communicate professional judgments.
4. Engage diversity and difference in practice.
5. Advance human rights and social and economic justice.
6. Engage in research-informed practice and practice-informed research.
7. Apply knowledge of human behavior and the social environment.
8. Engage in policy practice to advance social and economic well-being and to deliver effective social work services.
9. Respond to contexts that shape practice.
10. Engage, assess, intervene, and evaluate with individuals, families, groups, organizations, and communities.

Advancement into the Professional Methods Sequence

Students who indicate their desire to major in Social Work and who meet the university acceptance requirements are designated official majors at the time of their acceptance. However, in the second semester of the sophomore year, all majors who wish to continue in the program and take upper level social work methods courses must successfully complete the Advancement process. An application with supporting documents must be filed by a

mid-March deadline date (varies every year). Supporting documents include a written response to questions posed on the application, transcripts, and three letters of recommendation. Students may be required to complete an interview process with social work faculty.

Transcripts must document that students have met the following advancement requirements:

1. A 2.25 average for the following prerequisite courses:

SOC 116	Introduction to Sociology
PSY 129	Introduction to Psychology
BIOL 110	Human Biology
SOC 200	Social Statistics

(or any other introduction to statistics course)

SOC 218	Introduction to Social Work
SOC 272	Exploring Community-Based Social Work

2. A cumulative grade point average of 2.00 or higher, and

3. A grade of "B-" or better in:

SOC 218	Introduction to Social Work
and	
SOC 272	Exploring Community-Based Social Work

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 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.

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 SUNY 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), Exploring Community-Based Social Work (Human Services Internship), 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 SUNY Fredonia course that it can stand in the place of the SUNY 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 SUNY 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 SUNY 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 SUNY Fredonia must complete their 500 practicum hours through the SUNY Fredonia program.

Note: No academic credit for life or work experience will be given as an equivalent for any required social work course, Introduction to Social Work, or Exploring Community-Based Social Work.

Field Practicum

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.

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 in the program is based upon the published criteria. Race, color, religion, creed, gender, ethnic or national origin, disability, age, political orientation, or sexual orientation plays no role in the program decisions. 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 courses to continue in the major. More specific expectations and policies are detailed in the student handbook.

Requirements for the Bachelor of Science Degree in Social Work

Degree candidates in Social Work must

- complete the College Core Curriculum (CCC);
- complete prerequisite courses;
- successfully complete the Advancement process in the second semester of their sophomore year;
- complete required social work courses (45 hours);
- 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);
- maintain and complete a portfolio;
- complete enough general elective hours and/or a minor to earn 120 credit hours; and
- consistently demonstrate professional behavior.

Prerequisite Courses:

SOC 116	Introduction to Sociology
PSY 129	Introduction to Psychology
BIOL 110	Human Biology
BUAD 200	Fundamentals of Statistics for Business and Economics
or	
EDU 200	Statistics
or	
POLI 200	Statistics
or	
PSY 200	Statistics
or	
SOC 200	Social Statistics
or	
STAT 200	Statistical Methods I
SOC 218	Introduction to Social Work
SOC 272	Exploring Community-Based Social Work

Required Social Work Courses:

SOCW 249	Social Welfare Institutions
POLI 382	Social Welfare Policy
SOC 300	Research Methods
SOCW 325	Foundations of Generalist Practice
SOCW 340	Human Behavior in the Social Environment I
SOCW 341	Human Behavior in the Social Environment II
SOCW 370	Generalist Practice Skills
SOCW 390	Practice with Individuals, Families & Small Groups
SOCW 400	Practice with Organizations and Larger Social Systems
SOCW 480	Field Practicum I
SOCW 485	Field Practicum I with Seminar
SOCW 490	Field Practicum II
SOCW 495	Field Seminar II with Seminar (Capstone experience)

Six (6) credit hours of Approved Social Work Electives

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://www.fredonia.edu/departments/sociology/>

The Department of Sociology, Anthropology, Social Work and Criminal Justice offers majors in Sociology, Social Work, and Criminal Justice. Minors in Sociology, Anthropology, and Criminal Justice are offered as well.

Student Honors and Awards

Sociology majors and minors 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.

Sociology Bachelor of Arts degree

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.

Requirements for the Bachelor of Arts Degree in Sociology

39 credit hours

Required Courses: 21 credit hours

ANTH 115	Introductory Anthropology
SOC 116	Introductory Sociology
SOC 200	Social Statistics (or equivalent)
SOC 202	Social Analysis
SOC 300	Research Methods
SOC 380	Sociological Theory (Fall semester only)
SOC 400	Senior Seminar (Spring semester only) (Capstone experience)

Elective Courses in sociology: 18 credit hours

Sociology Minor

Requirements for the Minor in Sociology

Eighteen (18) credit hours in sociology including SOC 116 (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.

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

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.

Social Work

For information on this program, interested persons should see the Social Work (see page 153) section of the catalog.

Criminal Justice

For information on the major, students should see the Criminal Justice (see page 46) section of the University Catalog.

Sound Recording Technology Bachelor of Science degree

Office: 1151 Mason Hall

(716) 673-3151

Karl Boelter, *Director*, School of Music

Bernd Gottinger, *Coordinator*

Email: soundrecording.technology@fredonia.edu

Website: <http://www.fredonia.edu/som/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.

Musicianship Core (35 credit hours)

MUS 163-	Our World of Music I & II
MUS 164	
MUS 263	Music History in Western Civilization I
MUS 264	Music History in Western Civilization II
MUS 231	Conducting I
MUS 121-	Aural Skills I & II
MUS 122	
MUS 123-	Music Theory I & II
MUS 124	
MUS 221-	Aural Skills III & IV
MUS 222	
MUS 223	Music Theory III
MUS 354	Form and Analysis
MUS 118	Piano Class (waived for students whose principal instrument is piano)
MUS 100	Recital Seminar
MUS 120	Concert Attendance (each semester of private applied lessons)
MUS 105-	Applied Music
MUS 106	
Plus	

*Ensembles: Selection of ensembles is by advisement, and by audition when applicable.

*Participation in ensembles is required especially during the semesters of private applied study.

Sound Recording Technology Requirements (in addition to Musicianship Core and ensembles):

SRT 105	Recording Techniques for Music
SRT 200- SRT 201	Recording Practicum
SRT 250- SRT 251	Recording Techniques
SRT 300- SRT 301	Recording Practicum
SRT 350- SRT 351	Technology and Practices of the Recording Industry
SRT 450- SRT 451	Senior Project/Seminar (Capstone experience)
CSIT 105	Visual BASIC I
MATH 122- MATH 123	University Calculus I & II
PHYS 121- PHYS 122 Or	College Physics I & II
PHYS 230- PHYS 231	University Physics I & II
PHYS 123- PHYS 124 Or	College Physics Lab I & II
PHYS 232- PHYS 233	University Physics Lab I & II
PHYS 311	Acoustics I
PHYS 318	Basic Electronics

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.

Sport Management and Exercise Science

Office: 112 Dods Hall
(716) 673-4959

Penny Hite, Chairperson

Email: sport-exercise.studies@fredonia.edu

Website:

<http://www.fredonia.edu/department/sportmanagement/>

The Department of Sport Management and Exercise Science offers a variety of major and minor programs emphasizing 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 following programs are included within the Department of Sport Management and Exercise Science:

- Bachelor of Science in Sport Management
- Minor in Athletic Coaching

The following Interdisciplinary Studies programs are affiliated with the department:

- Interdisciplinary Studies Bachelor of Science in Exercise Science: Exercise Science track
- Interdisciplinary Studies Bachelor of Science in Exercise Science: Sport Psychology track
- Interdisciplinary Studies minor: Sport Administration
- Interdisciplinary Studies minor: Sport & Exercise Science

Sport Management Bachelor of Science degree

Major in Sport Management (49 credit hours)

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) competes the requirements for a Bachelor of Science degree in Sport Management.

Sport Management Major Core

ACCT 201	Principles of Financial Accounting
BUAD 235	Introduction to Business Communication
PSY 237	Sport Psychology
STAT 200	Statistical Methods I
SPMG 210	Principles of Sport Management
SPMG 211	Facility Management
SPMG 212	Event Management
SPMG 218	Technology in Sport
SPMG 230	Sport in American Culture
SPMG 305	Economics of Sport
SPMG 330	Leadership and Management in Sport
SPMG 410	Sport Law & Risk Management
SPMG 428	Marketing & Public Relations in Sport

Choose one of the following courses:

BUAD 323	Organizational Behavior
PSY 347	Organizational Psychology

Internship (Capstone experience):

SPMG 298	Pre-Internship
SPMG 400	Sport Management Internship

Prerequisite courses:

ENGL 100	English Composition
ECON 201	Principles of Macroeconomics
ECON 202	Principles of Microeconomics
PSY 129	Introduction to Psychology
SOC 116	Introductory Sociology
PHIL 115	Philosophical Inquiry

CSIT 120	Computer Science Overview
or	
CSIT 121	Computer Science I

Elective Courses: Recommended as free electives beyond the major requirements but not required for the major.

BUAD 310	Legal Environment of Business
BUAD 328	Marketing Foundations
COMM 105	Public Speaking
COMM 111	Web Design

COMM 112	Desktop Video
COMM 222	Principles of Public Relations
COMM 322	Public Relations Writing
HLTH 303	Fitness and Nutrition
INDS 359	Ethnicity and Race
PHED 139	Weight Training
PHED 321	Coaching Techniques
PHED 499	Independent Study
PHIL 211	Philosophy of Sport
PSY 355	Group Dynamics
SOC 335	Sociology of Sport

Internships. Internships are an integral aspect of the program. Students will be placed in service organizations, recreation centers, public school athletic programs, sporting goods firms, fitness centers, etc. The internship requires a half-semester working full time or one semester working half time. The time commitment may be met by interning during the summer or early fall semester. Students must meet all transportation and living expenses while involved in the intern experience.

Athletic Coaching Minor

Minor in Athletic Coaching (18 credit hours)

The Athletic Coaching minor is offered to students who wish to be licensed in New York State to coach in the public schools and community recreation programs. The curriculum covers First Aid Skills and Knowledge, Philosophy and Principles and Organization of Athletics in Education, Health Sciences Applied to Coaching, Sport Specific Coaching Techniques, Sport Law and Risk Management, a pre-internship and an internship.

Course Requirements:

HLTH 115	First Aid Skills and Knowledge
HLTH 303	Fitness and Nutrition
PHED 220	Health Sciences Applied to Coaching
PHED 221	Philosophy, Principles and Organization of Athletics in Education
PSY 237	Sport Psychology

PHED 321 Coaching Techniques
PHED 400 Sport Studies Internship

Interdisciplinary Studies Bachelor of Science degree - Exercise Science

Department of Sport Management and Exercise Science
Office: 112 Dods Hall
(716) 673-4959

Todd Backes, Coordinator

Email: sport-exercise.studies@fredonia.edu

Website:

<http://www.fredonia.edu/departments/sportmanagement/>

The Interdisciplinary Studies - Exercise Science major, which concentrates on Human Performance, offers a curriculum for students pursuing careers in profit and nonprofit fitness and health promotion industries, Physical Therapy, Physicians Assistant, and Athletic Training programs. This major follows the protocols established by the National Association for Sport and Physical Education (NASPE) (Exercise Science Track). The Sport and Exercise Psychology Track follows the protocols established by the Association for Applied Sport Psychology (AASP).

This Interdisciplinary Studies major is housed within the Department of Sport Management & Exercise Science.

Exercise Science Track (57 credit hours)

The Applied Exercise Council of (NASPE) established the following national program guidelines for an undergraduate degree in Exercise Science. Foundation Science Core: anatomy, physiology, prevention and care of injuries, biomechanics, first aid, CPR and emergency procedures for exercise settings. Exercise Prescription for Normal and Special Populations: exercise testing, exercise class leadership, and exercise and aging. Specific knowledge relating to physiological testing and program leadership. Exercise prescription: interpreting exercise testing results, safety issues; individualized fitness prescriptions and re-evaluation of fitness programs; understanding precautions and modifications of exercise programs such as altitude, temperatures, environmental pollution, type; intensity, frequency, progression of an exercise program, and fitness for special populations. Exercise and Aging: knowledge of aging process. Health Promotion: competency in nutrition, weight control, stress management, goal setting, substance abuse. Administrative Tasks: knowledge of the organization and management of a fitness program such as facility scheduling, management, equipment purchasing, marketing and legal liability. Human Relations: written communications skills including writing business letters, reports and business proposals, speaking, motivating, program adherence and retention. Professional Development: knowledge of organizations, publications, programs, professionals and career planning.

Practical Experience: practical experience includes observation and an internship.

Exercise Science Track

Core courses:

CHEM 115/125	General Chemistry I & Lab
CHEM 116/126	General Chemistry II & Lab
BIOL 133/134	Principles of Biology II & Lab
STAT 200	Statistical Methods I
SPMG 218	Technology in Sport
PSY 237	Sport Psychology
BIOL 245	Human Anatomy & Physiology I
BIOL 246	Human Anatomy & Physiology II
EXSC 301	Kinesiology
EXSC 302	Exercise Prescription
HLTH 303	Fitness and Nutrition
EXSC 304	Exercise Nutrition
EXSC 305	Biomechanics
EXSC 306	Biomechanics Lab
HLTH 315	Prevention & Care of Athletic Injuries
EXSC 410	Advanced Exercise Physiology I
EXSC 420	Advanced Exercise Physiology II

Choose Capstone courses from the following:

SPMG 400	Internship
or	
SPMG 499	Independent Study

Pre-Requisite Courses

HLTH 115	First Aid Skills and Techniques
CSIT 120	Computer Science Overview
or	
CSIT 121	Computer Science I

Elective Courses: recommended as free electives beyond the major requirements.

PHED 101	Aqua-Aerobics
PHED 124	Basic Aerobics
PHED 125	Step Aerobics
PHED 139	Weight Training
SPMG 211	Facility Management
PHED 321	Coaching Techniques
PHED 390	Special Topics in Exercise Science
PHED 401	Senior Seminar in Exercise Science
PHED 499	Independent Study
PHIL 211	Philosophy of Sport
PSY 247	Health Psychology
PSY 447	Introduction to Counseling
PSY 351	Physiological Psychology
SOC 335	Sociology of Sport

Internship/Independent Study

An internship and/or independent study will be offered as part of the Exercise Science Track. Students will be placed in appropriate settings in which they can develop personal skills and an understanding of sport science. Students must meet all transportation and living expenses while involved in the intern experience.

Interdisciplinary Studies Bachelor of Science - Sport & Exercise Psychology

For information on the Bachelor of Science in Interdisciplinary Studies - Sport Psychology program, please see the Interdisciplinary Studies Major Programs section of the catalog.

***Interdisciplinary Studies: Sport & Exercise
Science/Sport Administration minors***

For information on the minor in Sport & Exercise Science and the minor in Sport Administration, please see the Interdisciplinary Studies Minor Programs (see page 103) section of the catalog.

Theatre and Dance

Office: 212 Rockefeller Arts Center
(716) 673-3596

Thomas Loughlin, *Chairperson*

Email: theatre.dance@fredonia.edu

Website: <http://www.fredonia.edu/departments/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 or Dance 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, Acting, Musical Theatre, or Theatrical Production and Design. 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 (see page 125).

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 Club are two SA-supported dance organizations that produce a number of dance concerts each year. Students also participate in student improvisational groups, including Random Acts and the Improv Society. 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 Arts 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 year prior to attending Fredonia, or Bachelor of Arts General Theatre Studies students may be admitted during their first year in residence. Portfolio review information and application forms are available on the department website. Students who are accepted into the B.F.A. Theatrical Production and Design program

select a specific track of study from the following options: Costume Design, Lighting, Technical Production, or Scenic Design. Each track of study is outlined in the B.F.A. Theatrical Production and Design section.

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 one or two technique classes per semester. They are welcome to participate in the assorted dance clubs on campus. The dance program sponsors activities throughout the year including performances, master classes, and workshops with professional artists.

Dance majors are required to complete a minor, allowing the pursuit of a secondary interest or as support for professional career goals. Recommended minors include Arts Administration (21 credit hours), Theatre (22 credit hours), Business Administration (24 credit hours), Communication (18 credit hours), Film Studies (21 credit hours), or Sport and Exercise Sciences (22 credit hours).

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 SUNY Fredonia as a B.A. Theatre Arts major and audition or interview a second time for their desired program. Under no circumstances may a student audition or interview more than twice for any program. Students who have completed 60 credit hours or more as a B.A. Theatre Arts major at SUNY 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 the B.F.A. Musical Theatre 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. 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, transfers should expect to spend a minimum of three years on the SUNY Fredonia campus.
- Students in the B.F.A. Acting and Musical Theatre programs 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.
- B.F.A. Musical Theatre students must also present vocal juries at the conclusion of each semester, and must perform a senior recital consisting of acting, singing and dancing components, or perform a lead role in a musical.
- 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.
- B.F.A. Theatrical Production and Design students, prior to graduation, must formally present portfolios to the faculty, and may participate in a senior design exhibit.

All department majors must successfully complete a minimum of 30 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.
- 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.

- 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.

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:

The Jack Cogdill Scholarship
 The President's Award for Excellence in Theatre
 The Mary Joyce Schaefer Scholarship
 The Theatre Arts Outstanding Senior Award
 Jurgen P. Banse-Fay Production Management Internship
 The Alice E. Bartlett: Excellence in Theatre Arts
 The Howard E. Marsh: Excellence in Musical Theatre
 The Bea Ullman Award for Excellence in Theatre Arts
 The Artist of Dionysus Award
 The Golden Batocio Award
 The Gary Eckhart Award for Excellence in Theatre
 The Harry John Brown & Paul Mockovak Award in Musical Theatre
 Theatre and Dance Award for Excellence in Stage Management
 The Trent Illig Memorial Award for Dance
 The Carol Prevett Award for Dance
 The John S. Mintum Outstanding Performance Scholarship
 The Georgiana von Tornow Scholarship
 The Michael J. Loughlin Award for Creative Uniqueness
 The Bruce Walford Award
 The Mary and Steve Rees Rising Junior Award
 The Keith Cronin Memorial Award: Excellence in Production and Design
 The NY State Federation of Home Bureaus/Sally Bulger Award
 The 1929 Graduate Ballet Fund

Theatre Arts Bachelor of Arts degree

Degree Requirements for Bachelor of Arts in Theatre Arts (48 credit hours)

Required Core Courses

THEA 100	Theatre Majors Seminar
THEA 101- THEA 102	Theatre and Dance Productions
THEA 114	Introduction to Performing Arts
THEA 117	Script Analysis
THEA 121	Introduction to Technical Theatre
THEA 133	Introduction to Acting
THEA 201	Theatre and Dance Productions

THEA 202 or DANC 250- DANC 251	Theatre and Dance Productions Dance Ensemble
---	---

THEA 220	Makeup I
----------	----------

THEA 301- THEA 302 or DANC 250- DANC 251	Theatre and Dance Productions Dance Ensemble
--	---

THEA 441	Directing I
THEA 451- THEA 452	History of the Theatre I & II
THEA 460	Theatre Management
THEA 481	Senior Projects Seminar
THEA 498	Senior Project

Electives (12 total credit hours taken from 2 different areas)

Design/Technical Courses

THEA 123	Introduction to Technical Production
THEA 125	Drawing and Drafting for the Theatre
THEA 222	Stagecraft I
THEA 223	Stage Lighting I
THEA 226	Scene Painting I
THEA 228	Costume Construction I
THEA 245	Sound for the Theatre
THEA 324	Stage Lighting II
THEA 325	Costume History
THEA 326	Scene Design I
THEA 327	Costume Design I
THEA 381	Technical Seminar (up to 3 credit hours)
THEA 420	Special Technical Problems

Performance courses

THEA 230	introduction to Scene Study
THEA 350	Introduction to Musical Theatre
THEA 353	History of Musical Theatre
THEA 359	Commedia dell'Arte
THEA 383	Acting Studio: Theatre Games
THEA 423	Alternative Acting Styles
THEA 442	Directing II
THEA 468	Devising Theatre

Miscellaneous courses

AADM 400 or AADM 410	Arts Administration Practicum Box Office Practicum
THEA 338	Special Topics (per advisement)
THEA 490	Professional Intern (up to 6 credit hours)

Dance or Literature Courses (up to 9 credit hours)

DANC 100	Introduction to Dance
DANC 111	Modern Technique I
DANC 211	Modern Technique II
DANC 311	Modern Technique III
DANC 112	Ballet I
DANC 212	Ballet II
DANC 312	Ballet III
DANC 113	Jazz Dance I
DANC 213	Jazz Dance II
DANC 313	Jazz Dance III
DANC 114	Tap Dance I

DANC 214	Tap Dance II
DANC 241	Dance Improvisation
ENGL 207	Drama and Film
ENGL 319	Modern Drama
ENGL 321	Contemporary Drama
ENGL 381	Narrative Film after 1940
ENGL 407	Tragedy
ENGL 412	Early Shakespeare
ENGL 414	Later Shakespeare
ENGL 416	Elizabethan Drama
ENGL 418	Restoration/18th Century Drama

All students in the B.A. Theatre Arts program must complete a minor program consisting of 18-24 credit hours.

Acting Bachelor of Fine Arts degree

Degree Requirements for Bachelor of Fine Arts in Acting

THEA 100	Theatre Majors Seminar
THEA 101-	Theatre and Dance Productions
THEA 102	
THEA 121	Introduction to Technical Theatre
THEA 131	Acting Studio: Acting I
THEA 132	Acting Studio: Acting II
THEA 201-	Theatre and Dance Productions
THEA 202	
THEA 220	Makeup
THEA 231-	Acting Studio: Scene Study I & II
THEA 232	
THEA 233-	Acting Lab I
THEA 234	
THEA 242-	Acting Studio: Introduction to Voice and
THEA 243	Movement I & II
THEA 246-	Voice and Movement Lab I & II
THEA 247	
THEA 301-	Theatre and Dance Productions
THEA 302	
THEA 341	Acting Studio: Shakespeare
THEA 345	Acting Studio: Voice and Movement III
THEA 346	Acting Studio: Voice and Movement IV
THEA 363-	Voice and Movement Lab III & IV
THEA 364	
THEA 401-	Theatre and Dance Productions
THEA 402	
THEA 424	Acting Studio: Audition Techniques
THEA 441	Directing I
THEA 451-	History of the Theatre I & II
THEA 452	
THEA 499	Performance/Production Seminar (Capstone experience)
ENGL 412	Early Shakespeare
Or	
ENGL 414	Later Shakespeare

Plus two acting studios chosen from the following:

THEA 331	Acting Studio: Styles
THEA 359	Commedia Dell'arte
THEA 382	Musical Theatre Styles I
THEA 383	Acting Studio: Theatre Games
THEA 423	Acting Studios: Alternative Acting Styles
THEA 432	Acting Studio: Musical Theatre Styles
THEA 468	Devising Theatre

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

THEA 353	History of Musical Theatre
DANC 100	Introduction to Dance
DANC 111	Modern Technique I
DANC 112	Ballet I
DANC 113	Jazz Dance I
DANC 114	Tap Dance I
ARTH 101	Art in Culture from Prehistory to 1400
ARTH 102	Art in Culture from 1400 to Present

ENGL 412	Early Shakespeare
ENGL 414	Later Shakespeare
HIST 115	Western Civilization I
HIST 116	Western Civilization I
MUS 263	Music History in Western Civilization I
MUS 264	Music History in Western Civilization II

Total: 74-76 credit hours

Musical Theatre Bachelor of Fine Arts degree

Department of Theatre and Dance

Office: 212 Rockefeller Arts Center

(716) 673-3596

Thomas Loughlin, Chairperson

Email: Musical.Theatre@fredonia.edu

School of Music

Office: 1151 Mason Hall

(716) 673-3151

Karl Boelter, 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:

Theatre Track

THEA 100	Theatre Majors Seminar
THEA 101-	Theatre and Dance Productions*
THEA 102	
THEA 121	Introduction to Technical Theatre
THEA 131	Acting Studio: Acting I
THEA 132	Acting Studio: Acting II
THEA 201-	Theatre and Dance Productions*
THEA 202	
THEA 220	Makeup
THEA 231-	Acting Studio: Scene Study I & II
THEA 232	
THEA 242-	Acting Studio: Introduction to Voice and
THEA 243	Movement I & II
THEA 301-	Theatre and Dance Productions*
THEA 302	
THEA 341	Acting Studio: Shakespeare
THEA 353	History of Musical Theatre
THEA 382	Acting Studio: Musical Theatre Styles I
THEA 401-	Theatre and Dance Productions*
THEA 402	
THEA 424	Acting Studio: Audition Techniques
THEA 432	Acting Studio: Musical Theatre Styles II
THEA 434	Musical Theatre Styles Lab
DANC 111	Modern Technique I
DANC 112	Ballet I
DANC 113	Jazz Dance I
DANC 114	Tap Dance I
DANC 211	Modern Technique II
DANC 264	Choreography I
DANC XXX	Elective
DANC XXX	Elective
MUS 100	Recital Seminar
MUS 101	Beginning Music Theory I
MUS 117-	Piano Class
MUS 118	
MUS 125-	Applied Voice
MUS 126	
MUS 115	Music Appreciation
MUS 137-	Diction for Singers
MUS 140	
MUS 200	Recital Seminar
MUS 217-	Piano Class 2

MUS 218	
MUS 235-	Musical Theatre Voice
MUS 236	
MUS 300	Recital Seminar
MUS 335-	Musical Theatre Voice
MUS 336	
MUS 400	Recital Seminar (Capstone experience)
MUS 435-	Musical Theatre Voice
MUS 436	

*Cannot be applied to the B.F.A. degree.

Music Track

THEA 100	Theatre Majors Seminar
MUS 021-	Choral Ensembles (four)
MUS 024	
MUS 033	Opera Production Practicum (four)
MUS 100	Recital Seminar
MUS 117-	Piano Class, Elementary
MUS 118	
MUS 121-	Aural Skills I & II
MUS 122	
MUS 123-	Music Theory I & II
MUS 124	
MUS 125-	Applied Voice
MUS 126	
MUS 137-	Diction for Singers
MUS 140	
MUS 200	Recital Seminar
MUS 217-	Piano Class, Intermediate
MUS 218	
MUS 221-	Aural Skills III & IV
MUS 222	
MUS 223	Music Theory III
MUS 354	Form and Analysis
MUS 235-	Musical Theatre Voice
MUS 236	
MUS 300	Recital Seminar
MUS 317-	Piano Class
MUS 318	
MUS 335-	Musical Theatre Voice
MUS 336	
MUS 400	Recital Seminar
MUS 435-	Musical Theatre Voice
MUS 436	
THEA 101-	Theatre and Dance Productions*
THEA 102	
THEA 121	Introduction to Technical Theatre
THEA 131	Acting Studio: Acting I
THEA 132	Acting Studio: Acting II
THEA 201-	Theatre and Dance Productions*
THEA 202	
THEA 220	Makeup
THEA 231-	Acting Studio: Scene Study I & II
THEA 232	
THEA 242-	Acting Studio: Introduction to Voice and
THEA 243	Movement I & II
THEA 301-	Theatre and Dance Productions*
THEA 302	
THEA 353	History of Musical Theatre
THEA 401-	Theatre and Dance Productions*
THEA 402	
THEA 424	Acting Studio: Audition Techniques (Capstone experience)
DANC 100	Introduction to Dance
DANC 111	Modern Technique I
DANC 112	Ballet I
DANC 113	Jazz Dance I
DANC 114	Tap Dance I

*Cannot be applied to 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.

Students select a specific track (Theatre or Music) upon entering the program.

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.

Dance Bachelor of Fine Arts degree

Degree Requirements for Bachelor of Fine Arts in Dance

DANC 111	Modern Technique I
DANC 211	Modern Technique II
DANC 311	Modern Technique III
DANC 112	Ballet I
DANC 212	Ballet II
DANC 312	Ballet III
DANC 113	Jazz Dance I
DANC 213	Jazz Dance II
DANC 313	Jazz Dance III
DANC 114	Tap Dance I
DANC 214	Tap Dance II

Note: Dance Majors must complete 16 credit hours at 200 or 300 level, a minimum of 4 credit hours each in Ballet, Modern, and Jazz, and at least 2 credit hours in Tap. Students will be placed based on experience and demonstrated proficiency.

DANC 101	Theatre and Dance Productions
DANC 102	Theatre and Dance Productions
DANC 241	Dance Improvisation

DANC 250	Dance Ensemble (1 credit hour taken 6 times)
or	
DANC 251	Dance Repertory (1 credit hour taken 6 times)

DANC 260	Dance Kinesiology
DANC 264	Choreography I
DANC 364	Choreography II
DANC 341	Selected Topics in Dance (1-3 credit hours)
DANC 353	Western Dance History
DANC 460	Senior Project (1 credit hour taken twice)

DANC Electives by Advisement (6 credit hours)

THEA 121	Introduction to Technical Theatre
THEA 130	Acting for Non-Majors
or	
THEA 133	Introduction to Acting
THEA 220	Makeup
MUS 101	Music Theory I
MUS 115	Music Appreciation

MUS 131	Applied Musicianship I
or	

MUS 374 Special Topics: Undergraduate Eurythmics

PHED 126 Body Sculpting

Or

PHED 139 Weight Training

HLTH 303 Fitness and Nutrition

Total: 70 – 73 credit hours

Dance majors are also required to complete a minor.

Theatrical Production and Design Bachelor of Fine Arts degree

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
THEA 102
THEA 201- Theatre and Dance Productions
THEA 202
THEA 301- Theatre and Dance Productions
THEA 302
THEA 401- Theatre and Dance Productions
THEA 402
THEA 100 Freshman Seminar
THEA 121 Introduction to Technical Theatre
THEA 125 Drawing and Drafting for the Theatre

THEA 130 Acting for Non-Majors

Or

THEA 133 Introduction to Acting

THEA 220 Makeup I
THEA 221 Digital Tools for the Performing Arts
THEA 222 Stagecraft I
THEA 223 Lighting and Sound Technology
THEA 226 Scene Painting I
THEA 228 Costume Construction I
THEA 303 Rendering I
THEA 304 Rendering II
THEA 315 Dramatic Imagination
THEA 324 Lighting Design I
THEA 326 Scene Design I
THEA 327 Costume Design I
THEA 334 Digital Tools for the Performing Arts II
THEA 381 Technical Seminar
THEA 441 Directing I
THEA 451 Theatre History I
THEA 452 Theatre History II
THEA 481 Senior Projects Seminar
THEA 499 Performance/Production Seminar

Track Courses (12 credit hours)

THEA 325 History of Costume
THEA 319 Costume Construction II
THEA 328 Costume Design II
THEA 420 Special Topics: Costume Crafts

Electives (6 credit hours)

ARTH 101 Art in Culture from Prehistory to 1400

Or

ARTH 102 Art in Culture from 1400 to the Present

THEA 245 Sound Design for the Theatre
THEA 322 Stagecraft II
THEA 420 Special Topics: Decor for the Theatre
THEA 420 Special Topics: Stagecraft
THEA 420 Special Topics: Lighting
THEA 426 Scene Design II
THEA 427 Scene Painting II
THEA 460 Theatre Management
THEA 429 Lighting Design II

THEA 337 Props for the Theatre

THEA 339 Stage Management

Total: 86 credit hours

Lighting Design Track

Core Courses (68 credit hours)

THEA 101- Theatre and Dance Productions
THEA 102
THEA 201- Theatre and Dance Productions
THEA 202
THEA 301- Theatre and Dance Productions
THEA 302
THEA 401- Theatre and Dance Productions
THEA 402
THEA 100 Freshman Seminar
THEA 121 Introduction to Technical Theatre
THEA 125 Drawing and Drafting for the Theatre

THEA 130 Acting for Non-Majors

or

THEA 133 Introduction to Acting

THEA 220 Makeup I
THEA 221 Digital Tools for the Performing Arts
THEA 222 Stagecraft I
THEA 223 Lighting and Sound Technology
THEA 226 Scene Painting I
THEA 228 Costume Construction I
THEA 303 Rendering I
THEA 304 Rendering II
THEA 315 Dramatic Imagination
THEA 324 Lighting Design I
THEA 326 Scene Design I
THEA 327 Costume Design I
THEA 334 Digital Tools for the Performing Arts II
THEA 381 Technical Seminar (.5 credit taken six times)
THEA 441 Directing I
THEA 451 Theatre History I
THEA 452 Theatre History II
THEA 481 Senior Project Seminar
THEA 499 Performance/Production Seminar

Track Courses (9 credit hours)

THEA 429 Lighting Design II
THEA 245 Sound Design for the Theatre
THEA 420 Special Topics: Lighting

Electives (9 credit hours)

ARTH 101 Art in Culture from Prehistory to 1400

or

ARTH 102 Art in Culture from 1400 to the Present

ARTS 105 Foundations in Drawing
THEA 319 Costume Construction II
THEA 322 Stagecraft II
THEA 325 History of Costume
THEA 328 Costume Design II
THEA 420 Special Topics: Costume Crafts
THEA 420 Special Topics: Decor for the Theatre
THEA 420 Special Topics: Stagecraft
THEA 426 Scene Design II
THEA 427 Scene Painting II
THEA 460 Theatre Management
THEA 337 Props for the Theatre
THEA 339 Stage Management

Total: 86 credit hours

Technical Production Track

Core Courses (68 credit hours)

THEA 101- Theatre and Dance Productions
THEA 102
THEA 201- Theatre and Dance Productions
THEA 202
THEA 301- Theatre and Dance Productions
THEA 302
THEA 401- Theatre and Dance Productions

THEA 402
 THEA 100 Freshman Seminar
 THEA 121 Introduction to Technical Theatre
 THEA 125 Drawing and Drafting for the Theatre

THEA 130 Acting for Non-Majors
 Or
 THEA 133 Introduction to Acting

THEA 220 Makeup I
 THEA 221 Digital Tools for the Performing Arts
 THEA 222 Stagecraft I
 THEA 223 Lighting and Sound Technology
 THEA 226 Scene Painting I
 THEA 228 Costume Construction I
 THEA 303 Rendering I
 THEA 304 Rendering II
 THEA 315 Dramatic Imagination
 THEA 324 Lighting Design I
 THEA 326 Scene Design I
 THEA 327 Costume Design I
 THEA 334 Digital Tools for the Performing Arts II
 THEA 381 Technical Seminar (.5 credit taken six times)
 THEA 441 Directing I
 THEA 451 Theatre History I
 THEA 452 Theatre History II
 THEA 481 Senior Project Seminar
 THEA 499 Performance/Production Seminar
Track Courses (9 credit hours)
 THEA 322 Stagecraft II

THEA 339 Stage Management
 Or
 THEA 245 Sound for the Theatre

THEA 420 Special Topics: Stagecraft 3

Elective Courses (9 credit hours)

ARTH 101 Art in Culture from Prehistory to 1400
 Or
 ARTH 102 Art in Culture from 1400 to the Present

ARTS 105 Foundations in Drawing
 THEA 245 Sound Design for the Theatre
 THEA 319 Costume Construction II
 THEA 322 Stagecraft II
 THEA 325 History of Costume
 THEA 328 Costume Design II
 THEA 337 Props for the Theatre
 THEA 339 Stage Management
 THEA 420 Special Topics: Costume Crafts
 THEA 420 Special Topics: Decor for the Theatre
 THEA 420 Special Topics: Lighting
 THEA 426 Scene Design II
 THEA 427 Scene Painting II
 THEA 429 Lighting Design II
 THEA 460 Theatre Management

Total: 86 credit hours

Scene Design Track

Core Courses (68 credit hours)

THEA 101- Theatre and Dance Productions
 THEA 102
 THEA 201- Theatre and Dance Productions
 THEA 202
 THEA 301- Theatre and Dance Productions
 THEA 302
 THEA 401- Theatre and Dance Productions
 THEA 402
 THEA 100 Freshman Seminar
 THEA 121 Introduction to Technical Theatre
 THEA 125 Drawing and Drafting for the Theatre

THEA 130 Acting for Non-Majors
 Or

THEA 133 Introduction to Acting

THEA 220 Makeup I
 THEA 221 Digital Tools for the Performing Arts
 THEA 222 Stagecraft I
 THEA 223 Lighting and Sound Technology
 THEA 226 Scene Painting I
 THEA 228 Costume Construction I
 THEA 303 Rendering I
 THEA 304 Rendering II
 THEA 315 Dramatic Imagination
 THEA 324 Lighting Design I
 THEA 326 Scene Design I
 THEA 327 Costume Design I
 THEA 334 Digital Tools for the Performing Arts II
 THEA 381 Technical Seminar (.5 credit taken six times)
 THEA 441 Directing I
 THEA 451 Theatre History I
 THEA 452 Theatre History II
 THEA 481 Senior Project Seminar
 THEA 499 Performance/Production Seminar

Track Courses (9 credit hours)

THEA 420 Special Topics
 THEA 426 Scene Design II
 THEA 427 Scene Painting II

Elective Courses (9 credit hours)

ARTH 101 Art in Culture from Prehistory to 1400
 or
 ARTH 102 Art in Culture from 1400 to the Present

ARTS 105 Foundations in Drawing
 THEA 245 Sound Design for the Theatre
 THEA 319 Costume Construction II
 THEA 322 Stagecraft II
 THEA 325 History of Costume
 THEA 328 Costume Design II
 THEA 420 Special Topics: Costume Crafts
 THEA 420 Special Topics: Lighting
 THEA 420 Special Topics: Stagecraft
 THEA 429 Lighting Design II
 THEA 460 Theatre Organization & Management

Total: 86 credit hours

Theatre Minor

Requirements for the Minor in Theatre

(22 credit hours)

THEA 101- Theatre and Dance Productions
 THEA 102
 THEA 114 Introduction to Performing Arts
 THEA 117 Script Analysis
 THEA 121 Introduction to Technical Theatre

THEA 130 Acting for Non-Majors
 or
 THEA 133 Introduction to Acting

THEA 201- Theatre and Dance Productions
 THEA 202

Two of the following:

THEA 325 History of Costume
 THEA 451 History of Theatre I
 THEA 452 History of Theatre II
 THEA 460 Theatre Organization and Management

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.

A. 10 credit hours from the following by advisement:
Dance (DANC) 111, 211, 311: Modern Technique I, II, III (2 credit hours each)
Dance (DANC) 112, 212, 312: Ballet I, II, III (2 credit hours each)
Dance (DANC) 113, 213, 313: Jazz I, II, III (2 credit hours each)
Dance (DANC) 114, 214 Tap I, II (2 credit hours each)
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, DANC 364: Choreography I, II (3 credit hours each)
MUS 101 Music Theory I (non-majors)
DANC 250 Dance Ensemble (1 credit hour taken twice)
DANC 260 Dance Kinesiology
DANC 353 Western Dance History

Total credit hours: 27

Visual Arts and New Media

Office: 217 Rockefeller Arts Center
(716) 673-3537

Robert Booth, *Chairperson*

Email: visualarts.newmedia@fredonia.edu

Website: <http://www.fredonia.edu/departments/art>

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 or in Visual Arts and New Media or a Bachelor of Fine Arts degree is available with majors in Animation and Illustration, Ceramics, Drawing and Painting, Graphic Design, Media Arts, Photography or Sculpture. 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 Art (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 Art (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 or an Art History minor 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 requires the submission of an acceptable portfolio for both freshman and transfer students. All prospective students are required to submit slides or a CD-ROM of their work for admission consideration; all accepted students must have examples of their work as slides, CD or DVD-ROMs or other approved media in their departmental file. In-person interviews are made for **transfer students only after** their initial mail-in portfolios have been reviewed. Transfer student interviews are scheduled on specific days throughout the year, 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. It is recommended that all prospective students contact the Department of Visual Arts and New Media or department website for additional information concerning portfolios and admission requirements.

Visiting Artist Program (VAP)

All Visual Arts and New Media majors participate in the Visiting Artist Program each semester, which provides an opportunity for exposure to a variety of art and design professionals from around the country. The program features a range of thought-provoking speakers each year, plus opportunities to attend several gallery openings during the semester. The speakers provide information about the many directions, options and possibilities inherent in art and design from professionals who are working regionally, nationally and internationally.

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

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 are often 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.

Art History Bachelor of Arts degree

Degree Requirements for the Bachelor of Arts in Art History

Total credit hours required: 42+ Visiting Artist Program

Core: (15+ credit hours)

ART 100	Visual Concepts
ARTH 101	Art in Culture from Prehistory to 1400
ARTH 102	Art in Culture from 1400 to the Present
ARTH 350	Art History Theory and Methods
ARTH 355	Writing About Art

27 credit hours of electives distributed as follows:

- 6 credit hours of 200-level Art History courses: one course in Ancient, Precolumbian, Medieval or Renaissance art and one course in Modern, Postmodern or Contemporary art
- 6 credit hours of 300-level Art History courses: one course in Ancient, Precolumbian, Medieval or Renaissance art and one course in Modern, Postmodern or Contemporary art
- 6 credit hours of 200 or 300-level Art History electives
- 3 credit hours of Art History Practicum (Capstone experience): ARTH 490 - Teaching Assistant, ARTH 460 - Gallery Practicum or ARTH 499 - Internship
- 6 credit hours of ARTS courses as advised
- Only 3 credit hours of ARTS 490 or ARTS 497 allowed to complete degree requirements

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 are also required to write a senior paper. This paper is typically in ARTH 355 - Writing About Art. The paper must meet the guidelines that are distributed in ARTH 355 and must be approved by the instructor of the course.

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.

Visual Arts and New Media Bachelor of Arts degree

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: (6 credit hours)

ARTH 101	Art in Culture from Prehistory to 1400
ARTH 102	Art in Culture from 1400 to the Present
ART 100	Visual Concepts
ARTS 102	Foundations in 2-D Form and Content
ARTS 105	Foundations in Drawing

ARTS 240	Foundations of 3-D Form and Content
Or	
ARTS 270	Foundations in Clay

ARTS 222	Introduction to Experimental Video Art
Or	
ARTS 225	Digital Foundations

Degree Requirements: (27 credit hours)

- Visual Arts/New Media courses at the 300-level or above (9 credit hours) - Excluding all ARTS 490 and ARTS 497 courses
- Visual Arts/New Media 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)

Bachelor of Fine Arts degree

Bachelor of Fine Arts Degree Requirements (requires admission to a specific major)

21-credit hour Foundation Program plus 52 credit hours of Major Requirements

Total credit hours required: 73+ Visiting Artist Program. 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.

Majors: Animation and Illustration, Ceramics, Drawing and Painting, Graphic Design, Media Arts, Photography, or Sculpture.

Foundation Program: (21 credit hours)

ART 100	Visual Concepts
ARTH 101	Art in Culture from Prehistory to 1400
ARTH 102	Art in Culture from 1400 to the Present
ARTS 102	Foundations in 2-D Form and Content
ARTS 105	Foundations in Drawing

ARTS 240	Foundations of 3-D Form and Content
or	
ARTS 270	Foundations in Clay

ARTS 222	Introduction to Experimental Video Art
or	
ARTS 225	Digital Foundations

Major Requirements: (52 credit hours)

Animation and Illustration

ARTS 115	Drawing and Painting I
ARTS 155	Introduction to Photography
ARTS 212	Life Drawing I
ARTS 241	Figure Modeling
ARTS 280	Introduction to Illustration
ARTS 285	Introduction to 2-D Animation
ARTS 380	Intermediate Illustration
ARTS 385	Intermediate 2-D Animation
ARTS 386	3D Modeling & Animation
ARTS 485	Advanced Animation/Illustration
ARTS 489	Animation and Illustration Capstone

Plus 12 credit hours of ARTS studio electives (Electives may emphasize another concentration within the visual arts as advised)

Plus 6 credit hours of Art History electives

ARTS 400 Senior Seminar (Capstone experience)

Ceramics

Ceramics students must take ARTS 240 Foundations of 3-D Form and Content in addition to ARTS 270 Foundations in Clay as part of Foundation Program.

ARTS 115	Drawing and Painting I
ARTS 155	Introduction to Photography
ARTS 212	Life Drawing I

ARTS 241	Figure Modeling
ARTS 271	Pottery on the Wheel
ARTS 370	Intermediate Ceramics
ARTS 470	Advanced Ceramics
ARTS 494	Directed Studio Projects
ARTS 495	Independent Studio Projects

Plus 15 credit hours of ARTS studio electives
(Electives may emphasize another major within the visual arts as advised)
Plus 6 credit hours of Art History Electives
ARTS 400 Senior Seminar (Capstone experience)

Drawing and Painting

ARTS 115	Drawing and Painting I
ARTS 155	Introduction to Photography
ARTS 215	Drawing and Painting II
ARTS 212	Life Drawing I
ARTS 312	Life Drawing II
ARTS 241	Figure Modeling
ARTS 230	Relief Printing
ARTS 235	Monotypes
ARTS 315	Drawing and Painting III

ARTS 340	3-D Methods and Materials
Or	
ARTS 370	Intermediate Ceramics

ARTS 415	Drawing and Painting IV
ARTS 494	Directed Studio Projects
ARTS 495	Independent Studio Projects
THEA 226	Scene Painting I
THEA 427	Scene Painting II
Plus 6 credit hours of Art History electives	
ARTS 400	Senior Seminar (Capstone experience)

Graphic Design

ARTS 115	Drawing and Painting I
ARTS 155	Introduction to Photography
ARTS 260	Graphic Design I
ARTS 261	Graphic Design II
ARTS 360	Graphic Design III
ARTS 361	Graphic Design IV
ARTS 365	Typography I
ARTS 366	Typography II
ARTH 371	History of Graphic Design
ARTS 460	Graphic Design V
ARTS 461	Graphic Design VI
ARTS 465	Typography III
ARTS 469	Design Realities and Professional Practices

Choose two of the following:

ARTS 212	Life Drawing I
ARTS 215	Drawing and Painting II
ARTS 255	Color Photography
ARTS 355	Digital Imaging

Plus 3 credit hours of ARTS studio electives
Plus 3 credit hours of Art History electives
ARTS 400 Senior Seminar (Capstone experience)

Media Arts

Media Arts students must take ARTS 222 - Introduction to Experimental Video Art in addition to ARTS 225 - Digital Foundations as part of Foundation Program.

ARTH 276	Film Form
ARTS 222	Introduction to Experimental Video
ARTS 225	Digital Foundations
ARTS 322	Intermediate Experimental Video
ARTS 323	Experimental Narrative
ARTS 324	Special Effects for Experimental Video
ARTS 340	3-D Methods and Materials

ARTS 155	Introduction to Photography
Or	
ARTS 255	Color and Light

ARTS 422	Advanced Experimental Video
----------	-----------------------------

ARTS 429	Experimental Video Capstone
ARTS 400	Senior Seminar (Capstone experience)
Plus 21 credit hours of Studio Art Electives and 3 credit hours of Art History Electives	

Photography

ARTS 155	Introduction to Photography
ARTS 212	Life Drawing I
ARTS 230	Relief Printing
ARTS 250	Black and White Technique
ARTS 255	Color Photography
ARTS 271	Pottery on the Wheel
ARTS 350	Historical Techniques
ARTS 352	Studio Lighting
ARTS 355	Digital Imaging
ARTS 340	3-D Methods and Materials
ARTS 459	Photographic Inquiry

Plus 6 credit hours of Art History electives
Plus 12 credit hours of ARTS electives
(Electives may emphasize another concentration within the visual arts as advised)
ARTS 400 Senior Seminar (Capstone experience)

Sculpture

Sculpture students must take ARTS 270 Foundations in Clay in addition to ARTS 240 Foundations of 3-D Form and Content as part of Foundation Program.

ARTS 240	Foundations of 3D Form and Content
ARTS 270	Foundations in Clay

ARTS 155	Introduction to Photography
or	
ARTS 255	Color and Light

ARTS 212	Life Drawing I
----------	----------------

ARTS 321	Installation Art
or	
ARTS 370	intermediate Ceramics

ARTS 241	Figure Modeling
ARTS 340	3-D Methods and Materials
ARTS 440	3-D Objects and Ideas
ARTS 494	Directed Studio Projects
ARTS 495	Independent Studio Projects
Plus 6 credit hours of Art History electives	
Plus 15 credit hours of ARTS studio electives	
(Electives may emphasize Special Effects for Film and Industry as advised)	
ARTS 400	Senior Seminar (Capstone experience)

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
ARTH 102	Art in Culture from 1400 to Present

Choose one of the following courses:

(Note that these courses are only offered every third semester)

ARTH 350	Art History Theory and Methods
or	
ARTH 355	Writing about Art

Plus the following electives (12 credit hours):
200-level ARTH courses (6 credit hours)
300-400 level ARTH courses (6 credit hours)

Students should consult with a department advisor in planning a course of study as an Art History minor.

Visual Arts and New Media Minor

Requirements for the Minor in the Visual Arts and New Media

(21 credit hours)

ARTS 105 Foundations in Drawing

ARTS 102 Foundations in 2-D Form and Content

Five courses in any combination from ARTS studio art courses offered in Visual and Media Arts

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.

Women's Studies

The Bachelor of Arts in Interdisciplinary Studies - Women's Studies is one of the degree programs in the Interdisciplinary Studies program group. Please see the Interdisciplinary Studies Major Program section of the catalog for information on this major.

The Women's Studies minor program is also included in the Interdisciplinary Studies section of the catalog.

Graduate Studies and Student Services

Office of Graduate Studies and Research
2142 Fenton Hall
(716) 673-3808

Kevin P. Kearns, *Interim Provost and Vice President for Academic Affairs*

Email: graduate.studies@fredonia.edu

Website: <http://www.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 and Research.

Graduate Mission Statement

The Graduate Program operates in full accord with SUNY Fredonia's Academic Integrity Policy, and graduate students are encouraged to become familiar with all the provisions of this particular policy. In addition, the Graduate Program declares all of the following goals as significant to its overall mission:

- To improve the quality of life for present and future generations by providing a high quality education for graduate students.
- To contribute to the advanced knowledge and practice of working professionals.
- To complement and enhance the undergraduate program by providing models of advanced work in the disciplines and professions.
- To generate and share new knowledge through research and publications by its faculty and students.
- To provide and support master's degree programs leading to advanced qualification in the professions and disciplines.

- To be actively involved in the life of the surrounding community in both curriculum development and related professional activities; to encourage a supportive sense of community that leads to civic responsibility and engagement; and to influence and facilitate the development of social and educational policy.
- To acknowledge the value of pluralism and diversity in culture and society.

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 Provost and Vice President for Academic Affairs and the University Senate. An annual report of all actions taken and policies recommended is sent to the Provost and Vice President for Academic Affairs and the Executive Committee of the University Senate.

The Graduate Council consists of one appointed faculty member representing each department with a graduate program; three elected members from the faculty-at-large: two from the College of Arts and Sciences; one from the College of Education; one graduate student appointed by the Graduate Council; and the Associate Provost for Graduate Studies and Research who serves as the presiding officer. Appointed members serve at the discretion of their departments. Elected representatives serve three-year terms. Council members starting in Fall 2012 include the following:

Jeanette McVicker, *Interim Chair*

Patricia J. Corron, *Associate Director, School of Music*

Keary J. Howard, *Associate Professor, Mathematical Sciences*

Mira T. Berkley, *Chair, Curriculum and Instruction*

Anna Thibodeau, *Chair, Language, Learning & Leadership*

Karry Kazial, *Associate Professor, Biology*

Holly Lawson, *Associate Professor, Chemistry*

Jamar Pickreign, *Professional Education Council*

Representative; Associate Dean, College of Education

TBA, *Elected-at-Large, College of Arts and Sciences*

Jacqueline Herbert, *Student Representative*

Kim Tillery, *Chair, Communication Disorders and Sciences*

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. SUNY 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.

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 SUNY 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 and Research 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 SUNY 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 SUNY 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 SUNY 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 15. 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 Associate Vice President for Graduate Studies and Research 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 SUNY 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 SUNY 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 SUNY 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 SUNY 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 SUNY 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 SUNY 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 SUNY 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.
- 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: 508 (paper), 180 (computer), or 64 (internet)
TOEIC: 594
IELTS: 5.0

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 SUNY 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 SUNY Fredonia Graduate Studies Office at the following address:

SUNY Fredonia Office of Graduate Studies
2142 Fenton Hall
SUNY Fredonia
Fredonia, NY 14063
(716) 673-3808
(716) 673-3712 (fax)

Persons who have further questions about these requirements should contact the SUNY 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.

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 Associate Vice President for Graduate Studies and Research.

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, as graduate tuition rates have yet to be finalized. 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	\$4,685.00
Out-of-State Resident Tuition	\$8,340.00
College Fee	\$ 12.50
Student Services and Programs Charge	\$731.50

Part-time, per credit hour:

*New York State Resident Tuition	\$ 390.00
Out-of-State Resident Tuition	\$ 695.00
College Fee	\$.85
Student Services and Programs Charge	\$ 61.00

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

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 Office of Student Accounts 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).

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.

In addition, the State University authorizes charges for such items as returned checks (\$20), late registration (\$40), orientation (\$65), 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 infirmity 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 Spring Break does not count as a week during the spring semester.

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, PLUS Loan) 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 to insure the student has not been over awarded Title IV federal funds. (Note: Any break of five or more consecutive days is excluded from the calculation) For additional information regarding the repayment of Title IV federal aid, students should contact the Student Accounts Office at (716) 673-3236 or email business@fredonia.edu.

Financial Aid

Tuition Assistance Program (TAP)

To qualify for the Tuition Assistance Program grant, graduate students must be legal residents of New York State for at least one year, be registered for a minimum of 12 credit hours per semester, and be enrolled in a program leading to a degree. The amount of the TAP award is based on the prior year New York Net Taxable family income. During Summer Session, students can be registered for a minimum of 6 credit hours distributed among all summer sessions to potentially qualify for TAP. Graduate assistants may be eligible for a full-time TAP award as long as they are registered for a minimum of 6 credit hours per semester. Students should note that TAP awards will not be refunded to graduate assistants whose tuition charges have been waived by SUNY Fredonia.

Federal Stafford Student Loan Program

The **Federal Stafford Student Loan Program** consists of the **Subsidized Stafford Loan** and the **Unsubsidized Stafford Loan**. Applicants for the Stafford Loan program must first complete the Free Application for Federal Student Aid (FAFSA) at <http://www.fafsa.ed.gov> using our SUNY Fredonia Federal School Code of 002844 in order to release their FAFSA data to Fredonia.

A student must be registered for a minimum of 6 credit hours per semester to qualify, and must be either a U.S. citizen or permanent resident of the U.S. Upon receipt of the FAFSA data from the Federal Central Processor, the SUNY Fredonia Financial Aid Office determines loan eligibility, and the New York State Higher Education Services Corp. (NYSHESC) provides an online Master Promissory Note for first-time loan borrowers at www.hesc.com.

The primary differences between Subsidized and Unsubsidized Stafford Loans:

Subsidized: Interest is paid by the federal government during in-school, grace and deferment periods and is based on need.

Unsubsidized: Interest is paid by the student during in-school, grace and deferment periods and can be used to replace expected family contribution.

The **Subsidized** and **Unsubsidized Stafford Loans** are similar in the following ways:

1. Fixed Interest Rate - contact the Financial Aid Office for current rates.
2. Repayment on principal begins six months after enrollment drops below 6 credit hours per semester.

Annual maximums for Subsidized and Unsubsidized Stafford Loans combined are \$20,500 for graduate students. The maximum amount that may be awarded to each student is \$138,500 for undergraduate and graduate work combined.

Electronic Funds Transfer

Loan approvals are sent electronically by the lender to SUNY Fredonia in two separate disbursements and will reflect the deduction of the 3 percent origination fee. The first disbursement normally arrives at the Office of Student Accounts one to two weeks after the loan approval during the academic year. The second disbursement is made at the midpoint of the loan period; the midpoint of the loan period occurs for the majority of students during the first two weeks of the spring semester.

Federal Direct Graduate PLUS Loan

To be eligible for the Graduate PLUS Loan you must be a graduate student enrolled at least half-time, be credit-worthy, and have exhausted the maximum amount in Stafford loans. There are no set limits for Direct Graduate PLUS Loans, but you may not borrow more than the cost of education minus any other financial aid received. If you are found to have an adverse credit history, you may still borrow a Graduate PLUS Loan if you get an endorser who does not have an adverse credit history. An endorser is someone who agrees to repay the Direct PLUS Loan if you do not repay the loan.

The interest rate is fixed at 7.9%. There is an origination fee of 4%. However, there is an up-front interest rebate of 1.5%. The Up-front Interest Rebate percentage is the amount given to borrowers after the Origination Fee has been deducted from each loan disbursed. Students must make all of the first 12 required monthly payments on time or the rebate amount will be added back to the principal balance of the loan.

To apply for the Federal Direct Graduate PLUS Loan, please visit <http://www.fredonia.edu/finaid/gradplus.asp>.

Good Academic Standing Requirements and Receipt of Graduate 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 (referred to as Good Academic Standing). The Financial Aid Office at SUNY Fredonia evaluates student aid recipient progress according to state requirements for TAP at the completion of each semester. The Financial Aid Office at SUNY Fredonia evaluates progress according to federal requirements for Stafford and Graduate PLUS loans at the completion of the academic year. Students should refer to the chart below.

Good Academic Standing Chart for Graduate Financial Aid

Before being certified for this payment	1	2	3	4	5	6	7	8
Percentage of attempted credit hours that must be completed with a passing/failing grade	0	100%	100%	100%	100%	100%	100%	100%
Must have accrued at least this many total credits	0	6	12	21	30	45	60	75
Maintain at least this Grade Point Average	0	2.0	2.50	2.75	3.00	3.00	3.00	3.00

Notification Procedure: The Financial Aid Office will notify the student between two and four weeks after the conclusion of each semester if Good Academic Standing Requirements were not met while the student received federal and/or state aid. The letter will inform the student of the loss of aid for the semester immediately following the one in which program pursuit and satisfactory academic progress 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 waiver to reinstate state aid (TAP) is available only once during graduate study. A request to reinstate federal aid may be granted only if exceptional circumstances can be documented. Waivers and reinstatement of aid are not automatic. They are approved only if in the best interest of the student and only if unusual circumstances (i.e. family illness or death, personal illness, personal emotional disturbances, change(s) in educational objective) prevented the student from meeting the expected criteria.

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. Students should contact any EOP or HEOP office for 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 interested persons should contact the nearest Rehabilitation Office.

Veterans 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, in 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 hasten processing. To further facilitate the start of benefits, the veteran, or their dependents who intend to utilize VA educational entitlements, should present pertinent data, such as the Social Security number, VA claim number, Certificate of Eligibility, DD214 Member 4 copy, and any other VA claim information.

The Veteran Affairs office is staffed by the coordinator and two veteran students 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 Veteran Affairs office. The coordinator is in liaison with the Regional Office in Buffalo, N.Y., for those situations that might need special attention.

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 per semester course load and perform duties in laboratories, lecture halls, offices, and classrooms. The stipends for fully-funded assistantships generally begin at \$6,700, 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. Information about current openings, benefits, and application procedures may be found on the Graduate Studies Graduate Assistant website at <http://www.fredonia.edu/gradstudies/current/gradasst.asp>.

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 \$10,000 per academic year may be awarded to a recipient enrolled in at least 9 credit hours per semester; awards for students who enroll in less than 9 credits may be prorated per credit. 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 (<http://www.fredonia.edu/registrar/calendar.asp>) 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

SUNY 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 Associate Provost for Graduate Studies and Research. 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 and Research, 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 SUNY 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 Associate Provost for Graduate Studies and Research 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 and Research, 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 SUNY 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 and Research 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 Vice President for Graduate Studies and Research 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 SUNY 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 SUNY 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 and Research. 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://www.fredonia.edu/gradstudies/current/final.asp#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 and Research 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 SUNY 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 SUNY 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 SUNY 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 SUNY 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 and Research.

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 and Research.

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.

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. **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 summer session. The graduate department chair from each degree-granting program will report to the Associate Vice President for Graduate Studies and Research the names of students with known deficiencies and remediation plans to address these deficiencies, in accordance with department 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.

SUNY Fredonia is aware that 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 Grade Appeals

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 Research 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 Research and the college Dean decide that the student has a case that merits investigation, the Associate Provost for Graduate Studies and Research, 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 and Research 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 Research 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 students 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 and Research 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.

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, etc.) during periods of sustained research and scholarship and to account for student enrollments and faculty involvement in capstone and theses 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 (INDS 695) that 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 INDS 695 course for which the student enrolls.

Student Responsibilities

A student must submit final copies of thesis work to the Graduate Studies Office by the last day of the semester in which the student completes his/her defense. A student must submit final copies of capstone work to the appropriate academic department by the last day of the semester in which the student completes all capstone requirements. If the student fails to meet this requirement, he/she will be required to enroll in INDS 695 until the thesis or capstone requirements are met and the final project is submitted.

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 both Department and Graduate Studies Office 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 SUNY 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 & Research 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 & Research 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

SUNY 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 (see page 152)	0834	M.A.T.
Bilingual ITI (see page 74)	0899.60	Adv.Cert.
Biology (see page 21)	0401	M.S.
Chemistry (see page 32)	1905	M.S.
Curriculum & Instruction in Inclusive Education	0829	M.S.Ed.
English (see page 81)	1501	M.A.
English 7-12 (see page 81)	1501.01	M.A.
Interdisciplinary Studies (see page 97)	4901	M.A./M.S.
Literacy Education (B-Grade 6) (see page 69)	0830	M.S. Ed.
Literacy Education (Grades 5-12) (see page 70)	0830	M.S. Ed.
Mathematics 7-12 (see page 118)	1701.01	M.S. Ed.
Music Education K-12 (see page 134)	0832	M.M.
Music Performance (see page 134)	1004	M.M.
Music Theory-Composition (see page 134)	1004.10	M.M.
Music Therapy (see page 135)	1099	M.M.
School Building Leadership (see page 75)	0828	Adv.Cert.
School District Leadership (see page 75)	0827	Adv.Cert.
Speech Language Pathology (see page 39)	1220	M.S.
TESOL (see page 71)	1508	M.S.Ed.
TESOL	1508	Adv.Cert.
TESOL ITI (see page 73)	0899.60	Adv.Cert.
TESOL ITI Special Education (see page 73)	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 SUNY 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 SUNY 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, 126 Reed Library, (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/studentservices.asp>).

Course Descriptions

Arts Administration

AADM 400 Arts Administration Practicum

Frequency: Every semester

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

AADM 410 Ticket Office Practicum

Frequency: Every semester

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

AADM 480 Independent Study

Frequency: Offered on occasion

Independent study of topics not covered in regular course offerings and pertinent to student's program of study or future career.

Credits: 1-3

AADM 490 Arts Administration Internship

Frequency: Every semester

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

Accounting

ACCT 201 Principles of Financial Accounting

Frequency: Every semester

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

ACCT 202 Principles of Managerial Accounting

Frequency: Every semester

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.

Prerequisite(s): ACCT 201

Credits: 3

ACCT 250 Accounting Processes

Frequency: Every year

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.

Prerequisite(s): ACCT 202 and (CSIT 104 or CSIT 151) or BUAD 161

Corequisite(s): ACCT 301

Credits: 3

ACCT 301 Intermediate Accounting I

Frequency: Every year

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.

Prerequisite(s): ACCT 202 or ACCT 250

Corequisite(s): ACCT 250

Credits: 3

ACCT 302 Intermediate Accounting II

Frequency: Every year

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.

Prerequisite(s): ACCT 301

Credits: 3

ACCT 303 Cost Management

Frequency: Every year

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.

Prerequisite(s): ACCT 202

Credits: 3

ACCT 304 Taxation I

Frequency: Every year

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.

Prerequisite(s): ACCT 202

Credits: 3

ACCT 305 Taxation II

Frequency: Every year

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.

Prerequisite(s): ACCT 304

Credits: 3

ACCT 311 Business Law I

Frequency: Every year

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.

Prerequisite(s): ENGL 100

Credits: 3

ACCT 312 Business Law II

Frequency: Every year

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.

Prerequisite(s): ACCT 311

Credits: 3

ACCT 401 Advanced Accounting

Frequency: Every year

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.

Prerequisite(s): ACCT 301

Credits: 3

ACCT 405 Auditing

Frequency: Every year

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.

Prerequisite(s): ACCT 302

Credits: 3

ACCT 407 Accounting Information Systems

Frequency: Every year

An introduction to the concepts underlying Accounting Information Systems (AIS). Students will study 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.

Prerequisite(s): ACCT 302 and ACCT 303 and CSIT 251

Credits: 3

ACCT 430 Independent Study

Frequency: Every semester

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

ACCT 440 Accounting Theory & Research

Frequency: Every year

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.

Prerequisite(s): ACCT 302

Credits: 3

ACCT 450 Senior Seminar

Frequency: Offered on occasion

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

ACCT 455 Adv Auditing&Fraud Examination

Frequency: Every year

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.

Prerequisite(s): ACCT 405 and ACCT 407

Credits: 3

ACCT 480 Internship

Frequency: Every semester

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

ACCT 500 Accounting Theory

Frequency: Every year

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.

Prerequisite(s): ACCT 302

Credits: 3

ACCT 510 Research Seminar in Accounting

Frequency: Every year

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.

Prerequisite(s): (ECON 200 or BUAD 200) and ACCT 500

Credits: 3

ACCT 520 Accounting Information Systems

Frequency: Every year

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.

Prerequisite(s): BUAD 261 and ACCT 302 and ACCT 303

Credits: 3

ACCT 530 Advanced Auditing

Frequency: Every year

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.

Prerequisite(s): ECON 200 and ACCT 405

Credits: 3

ACCT 540 Tax Accounting

Frequency: Offered on occasion

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.

Prerequisite(s): ACCT 302 and ACCT 305

Credits: 3

ACCT 550 Advanced Cost Management

Frequency: Offered on occasion

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.

Prerequisite(s): ACCT 303

Credits: 3

ACCT 560 Seminar in Accounting

Frequency: Offered on occasion

An examination of problems and issues of current concern in accounting. Recent contributions to theory, research, and practice will be investigated and discussed.

Prerequisite(s): ACCT 500

Credits: 3

ACCT 570 Tax Procedure and Research

Frequency: Every year

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).

Prerequisite(s): ACCT 305

Credits: 3

ACCT 580 Internship in Accounting

Frequency: Every semester

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.

Prerequisite(s): ACCT 500

Credits: 3

American Studies

AMST 202 Introduction to American Studies

Frequency: Every year

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

AMST 210 American Popular and Mass Cultures

Frequency: Every other year

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

AMST 215 Holidays and American Cultures

Frequency: Every year

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

AMST 289 Comparative North America

Frequency: Every other year

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

AMST 296 American Identities

Frequency: Every semester

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

AMST 338 19th Century American Culture

Frequency: Every other year

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.

Prerequisite(s): HIST 105 or HIST 133

Credits: 3

AMST 340 20th Century American Culture

Frequency: Every other year

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.

Prerequisite(s): HIST 106 or HIST 133 or AMST 202 or AMST 210

Credits: 3

AMST 347 United States Immigration

Frequency: Every other year

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.

Prerequisite(s): HIST 105 or HIST 106 or HIST 133

Credits: 3

AMST 399 Special Topics

Frequency: Offered on occasion

Variable-content course. Consult online Course Offerings and program notices for specific topic covered each semester.

Credits: 3

AMST 400 Concepts/Methods of American Studies

Frequency: Every year

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.

Prerequisite(s): AMST 202 or ENGL 200

Credits: 3

AMST 401 Independent Study

Frequency: Offered on occasion

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.

Prerequisite(s): AMST 202 or ENGL 200

Credits: 3

AMST 402 Senior Project

Frequency: Offered on occasion

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.

Prerequisite(s): AMST 202 or ENGL 200

Credits: 3-15

Anthropology

ANTH 115 Introductory Anthropology

Frequency: Every semester

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

ANTH 210 Physical Anthropology

Frequency: Offered on occasion
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.
Prerequisite(s): ANTH 115
Credits: 3

ANTH 211 Archaeology

Frequency: Offered on occasion
Survey of archaeology, including major theories and methods. Emphasis upon interpretation of major findings, both prehistoric and historic.
Prerequisite(s): ANTH 115
Credits: 3

ANTH 219 Cultural Anthropology

Frequency: Every other year
The acquisition, nature, and impact of culture. An examination and comparison of a variety of cultural systems.
Prerequisite(s): ANTH 115
Credits: 3

ANTH 300 Sex and Gender

Frequency: Every semester
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.
Prerequisite(s): ANTH 115 or SOC 116
Credits: 3

ANTH 301 Plagues And Peoples

Frequency: Every year
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.
Prerequisite(s): ANTH 115 or SOC 116
Credits: 3

ANTH 311 Anthropology of the Supernatural

Frequency: Offered on occasion
Survey of various belief systems. Topics include: cults, sacred beings, rituals, shamanism, witchcraft, and magic.
Prerequisite(s): ANTH 115
Credits: 3

ANTH 321 Anthropology of Indian America

Frequency: Offered on occasion
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.

Prerequisite(s): ANTH 115
Credits: 3

ANTH 322 Anthropology of Africa

Frequency: Every year
Survey course dealing with evolution of culture in Africa. Examination of range of variation of traditional African cultures and factors currently modifying them.
Prerequisite(s): ANTH 115
Credits: 3

ANTH 324 Anthropology of the Caribbean

Frequency: Every year
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.
Prerequisite(s): ANTH 115
Credits: 3

ANTH 331 Anthropology of American Utopias

Frequency: Every year
An examination of the background conditions producing utopias and an ethnographic/historical analysis of selected utopian ventures (e.g. Amish, Shakers, Counterculture Communes).
Prerequisite(s): ANTH 115 or SOC 116 or HIST 105 or HIST 106
Credits: 3

ANTH 350 Special Topics

Frequency: Offered on occasion
Special topics in anthropology not covered in detail by regular courses. Topic announced in online Course Offerings.
Credits: 1-3

ANTH 470 Directed Study

Frequency: Every semester
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

ANTH 473 Museum Internship

Frequency: Offered on occasion
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

Arabic

ARBC 115 Elementary Arabic I

Frequency: Offered on occasion
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

ARBC 116 Elementary Arabic II

Frequency: Offered on occasion

Study of fundamental vocabulary and speech patterns. Initial stress on listening comprehension and oral ability. Progressively greater emphasis on reading and writing skills.

Prerequisite(s): ARBC 115

Credits: 3

Art**ART 100 Visual Concepts**

Frequency: Every year

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

ART 120 Visiting Artists Program

Frequency: Every semester

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

Art History**ARTH 101 Art in Culture from Prehistory to 1400**

Frequency: Every semester

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

ARTH 102 Art in Culture from 1400 to the Present

Frequency: Every semester

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

ARTH 175 Computers and Society

Frequency: Every year

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

ARTH 205 Women in Art

Frequency: Every other year

A thematic and topical course exploring women's roles as both productive subjects and depicted objects in western visual culture.

Prerequisite(s): ART 115 or ARTH 101 or ART 116 or ARTH 102 or WOST 201

Credits: 3

ARTH 211 Survey of Medieval Art

Frequency: Offered on occasion

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

ARTH 215 Survey of Renaissance Art

Frequency: Offered on occasion

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

ARTH 220 Survey of 19th Century Art

Frequency: Offered on occasion

A survey of 19th century European and American art and visual culture including such movements as Romanticism, Realism, Impressionism and Post-Impressionism.

Credits: 3

ARTH 225 Modern Art 1900-1950

Frequency: Every year

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

ARTH 229 Art/Reality - 19th Century America

Frequency: Offered on occasion

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

ARTH 230 Black Art and Visual Culture in the U.S. 1850 - Present

Frequency: Offered on occasion

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.

Prerequisite(s): ARTH 102 or ART 116

Credits: 3

ARTH 276 Film Form

Frequency: Every year

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

ARTH 280 Survey of Precolumbian Art: Mesoamerica

Frequency: Every other year

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

ARTH 290 Art History Abroad

Frequency: Offered on occasion

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

ARTH 310 Ancient Art

Frequency: Offered on occasion

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.

Prerequisite(s): ART 115 or ARTH 101

Credits: 3

ARTH 311 Medieval Art

Frequency: Offered on occasion

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.

Prerequisite(s): ART 115 or ART 226 or ARTH 101 or ARTH 211

Credits: 3

ARTH 315 Renaissance Art

Frequency: Offered on occasion

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.

Prerequisite(s): ART 227 or ARTH 102 or ARTH 215

Credits: 3

ARTH 318 Baroque Art

Frequency: Offered on occasion

Art and architecture of Baroque and Rococo Europe during the 17th and 18th centuries, with a focus on Italy, France, the Netherlands, and England.

Prerequisite(s): ART 116 or ARTH 102

Credits: 3

ARTH 329 Art Since 1945

Frequency: Every other year

An in-depth examination of art and related concepts and theories since the mid-20th century.

Prerequisite(s): ART 116 or ART 221 or ARTH 102 or ARTH 225 or ARTH 101

Credits: 3

ARTH 345 Film Criticism

Frequency: Every year

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).

Prerequisite(s): ARTH 276 or FILM 220 or COMM 155

Credits: 3

ARTH 350 Art History Theory and Methods

Frequency: Every other year

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.

Prerequisite(s): (ART 115 and ART 116) or (ARTH 101 and ARTH 102)

Credits: 3

ARTH 351 Readings in Art History

Frequency: Offered on occasion

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.

Prerequisite(s): (ART 115 and ART 116) or (ARTH 101 and ARTH 102)

Credits: 3

ARTH 355 Writing About Art

Frequency: Every other year

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.

Prerequisite(s): (ART 115 and ART 116) or (ARTH 101 and ARTH 102)

Credits: 3

ARTH 359 New Media Writing

Frequency: Every year

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

ARTH 371 History of Graphic Design

Frequency: Every other year

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

ARTH 376 Film and Special Effects

Frequency: Every year

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

ARTH 380 Topics: Ancient Mesoamerican Art

Frequency: Every other year

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.

Prerequisite(s): (ART 115 and ART 116) or (ARTH 101 and ARTH 102)

Credits: 3

ARTH 390 Special Topics: Art History

Frequency: Offered on occasion

Selected areas of history of art supplementing the regular program.

Prerequisite(s): ART 115 or ART 116 or ARTH 101 or ARTH 102

Credits: 1-3

ARTH 440 Visual Culture

Frequency: Offered on occasion

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.

Prerequisite(s): ART 116 or ART 221 or ARTH 102 or ARTH 225

Credits: 3

ARTH 460 Gallery Practicum

Frequency: Offered on occasion

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

ARTH 490 Learning Assistant - Art History

Frequency: Every semester

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

ARTH 494 Directed Study: Art History

Frequency: Every semester

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

ARTH 495 Independent Study: Art History

Frequency: Every semester

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

ARTH 497 Research Practicum in Art History

Frequency: Every semester

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. Prerequisite(s): (ARTH 101 and ARTH 102) or (ART 115 and ART 116)

Credits: 1-3

ARTH 499 Internship

Frequency: Offered on occasion

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

Art - Studio**ARTS 102 Foundations in 2-D Form and Content**

Frequency: Every semester

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

ARTS 105 Foundations in Drawing

Frequency: Every semester

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

ARTS 115 Drawing and Painting I

Frequency: Every semester

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.

Prerequisite(s): (ARTS 102 and ARTS 105) or (ART 150 and ART 155)

Credits: 3

ARTS 120 Multimedia Applications

Frequency: Offered on occasion

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

ARTS 150 Camera Basics

Frequency: Offered on occasion

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

ARTS 155 Introduction to Photography

Frequency: Every semester

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

ARTS 205 Foundations in Drawing 2

Frequency: Every year

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.

Prerequisite(s): ARTS 105

Credits: 3

ARTS 212 Life Drawing I

Frequency: Every semester

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.

Prerequisite(s): ARTS 105 or ART 150

Credits: 3

ARTS 215 Drawing and Painting II

Frequency: Every semester

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.

Prerequisite(s): ARTS 115 or ART 285

Credits: 3

ARTS 220 Web Page Design

Frequency: Offered on occasion

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.

Prerequisite(s): MEDA 120 or ARTS 120

Credits: 3

ARTS 222 Introduction to Experimental Video Art

Frequency: Every year

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

ARTS 225 Digital Foundations

Frequency: Every year

A studio production course that offers the opportunity to investigate interactive art production methods with particular attention to time, narrative structure and sound, in addition to image-making. Emphasizes the conceptual and creative potential of sequence and motion and the relationships between interactive forms.

Credits: 3

ARTS 230 Relief Printing

Frequency: Every year

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.

Prerequisite(s): ARTS 105 or ART 150

Credits: 3

ARTS 235 Monotypes

Frequency: Every year

An introduction to monotypes and collagraphs. Students are directed to experiment with a wide range of approaches to the two techniques.

Prerequisite(s): ARTS 105 or ART 150

Credits: 3

ARTS 239 Contemporary Intaglio

Frequency: Every year

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.

Prerequisite(s): ARTS 105 or ART 150

Credits: 3

ARTS 240 Foundations of 3-D Form and Content

Frequency: Every semester

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

ARTS 241 Figure Modeling

Frequency: Every semester

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

ARTS 250 Black and White Technique

Frequency: Every year

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.

Prerequisite(s): ARTS 155 or ART 305

Credits: 3

ARTS 255 Color and Light

Frequency: Every semester

Explores aesthetic and technical knowledge necessary to master the art of color photography and digital techniques. Emphasis is placed primarily on aspects of color theory, perception and aesthetics and the use of color in photographic and digital image creation. Throughout the semester, issues of form, composition and light will be discussed in the context of students' own production. The course is designed to serve students with no prior background in photography as well as those with considerable experience with picture taking.

Prerequisite(s): ARTS 155 or ART 255

Credits: 3

ARTS 260 Graphic Design I

Frequency: Every year

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.

Prerequisite(s): (ARTS 102 and ARTS 105) or (ART 150 and ART 155)

Credits: 3

ARTS 261 Graphic Design II

Frequency: Every year

Continued application of organizational methods, concept development, structure and graphic translation in design practice. Introduction to fundamentals and language of typography.

Prerequisite(s): ARTS 260 or ART 259

Credits: 3

ARTS 270 Foundations in Clay

Frequency: Every semester

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

ARTS 271 Pottery on the Wheel

Frequency: Every semester

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

ARTS 280 Introduction to Illustration

Frequency: Every year

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.

Prerequisite(s): ARTS 102 or ARTS 105 or ART 155

Credits: 3

ARTS 285 Introduction to 2-D Animation

Frequency: Every year

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.

Prerequisite(s): ARTS 102 or ART 155

Credits: 3

ARTS 290 Special Topics: Studio Art

Frequency: Offered on occasion

Selected studio media and techniques.

Credits: 1-3

ARTS 312 Life Drawing II

Frequency: Every semester

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.

Prerequisite(s): ARTS 212 or ART 252

Credits: 3

ARTS 315 Drawing and Painting III

Frequency: Every year

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.

Prerequisite(s): ARTS 215 or ART 287

Credits: 3

ARTS 320 Media Performance I

Frequency: Every year

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.

Prerequisite(s): (MEDA 215 and MEDA 152) or (ARTS 222 and ARTS 225)

Credits: 3

ARTS 321 Installation Art

Frequency: Every other semester

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 the students to Installation Art.

Prerequisite(s): ARTS 240 or ARTS 270

Credits: 3

ARTS 322 Intermediate Experimental Video Art

Frequency: Every year

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.

Prerequisite(s): MEDA 152 or ARTS 222

Credits: 3

ARTS 323 Experimental Narrative

Frequency: Every other year

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.

Prerequisite(s): ARTS 222

Corequisite(s): ARTS 322 or ARTS 422

Credits: 3

ARTS 324 Special Effects for Experimental Video

Frequency: Every other year

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.

* Indicates that the course can be taken in the same semester

Prerequisite(s): (ARTS 222 or MEDA 152) and (ARTS 322* or ARTS 422*)

Credits: 3

ARTS 325 Interactivity for the Web

Frequency: Every year

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.

Prerequisite(s): MEDA 215 or ARTS 225

Credits: 3

ARTS 327 Audio and Desktop Multimedia

Frequency: Offered on occasion

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.

Prerequisite(s): (MEDA 152 and MEDA 205) or (ARTS 222 and ARTS 225)

Credits: 3

ARTS 340 3-D Methods and Materials

Frequency: Every semester

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.

Prerequisite(s): ARTS 240 or ARTS 241 or ART 257 or ART 258

Credits: 3

ARTS 341 Figure Modeling II

Frequency: Every year

Continuation of ARTS 241 - Figure Modeling; increased emphasis on technique and expressive content.

Prerequisite(s): ARTS 241 or ART 258

Credits: 3

ARTS 350 Historical Techniques

Frequency: Every year

An introduction to historical photographic techniques and the individuals who practiced these techniques. Students will study the early pioneers of photography, as well as their working methods. The working methods discussed in lectures and examined through readings will be put into practice through practical, hands-on experience with the materials. Students will broaden their knowledge of the history of photography as well as expand their photographic vision through the use of historical photographic processes.

Prerequisite(s): ARTS 250 or ARTS 255 or (ART 305 or ART 310)

Credits: 3

ARTS 352 Studio Lighting

Frequency: Every other year

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.

Prerequisite(s): ARTS 255 or ART 305

Credits: 3

ARTS 355 Digital Imaging

Frequency: Every year

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.

Prerequisite(s): ARTS 255

Credits: 3

ARTS 360 Graphic Design III

Frequency: Every year

Methods and processes of graphic design problem solving with an emphasis on symbols and images. Tailoring communication to audiences and acknowledging the role of context in the interpretation of form.

Prerequisite(s): ARTS 261 or ART 260

Credits: 3

ARTS 361 Graphic Design IV

Frequency: Every year

Development and preparation of design concepts for application in print media. Students analyze relationships between imagery, typography, sequence and content.

Prerequisite(s): ARTS 360 or ART 359

Credits: 3

ARTS 365 Typography I

Frequency: Every year

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.

Prerequisite(s): ARTS 261 or ART 260

Credits: 3

ARTS 366 Typography II

Frequency: Every year

Exploration of design using text type and typographic technology. Students investigate narrative and expressive use of typographic form and format/informational organization problems.

Prerequisite(s): ARTS 365 or ART 361

Credits: 3

ARTS 370 Intermediate Ceramics

Frequency: Every semester

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.

Prerequisite(s): ARTS 270 or ART 273 or ARTS 271 or ART 274 or ARTS 241 or ART 258

Credits: 3

ARTS 380 Intermediate Illustration

Frequency: Every year

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).

Prerequisite(s): (ARTS 280 and ARTS 285) or (ART 380 and ART 252)

Credits: 3

ARTS 385 Intermediate 2-D Animation

Frequency: Every year

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.

Prerequisite(s): (ARTS 280 and ARTS 285) or (ART 281 and ART 282)

Credits: 3

ARTS 386 3D Modeling & Animation

Frequency: Every other year

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.

Prerequisite(s): ARTS 385

Credits: 3

ARTS 390 Special Topics: Studio Art

Frequency: Offered on occasion

Selected studio media and techniques.

Credits: 1-3

ARTS 400 Senior Seminar

Frequency: Every semester

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

ARTS 415 Drawing and Painting IV

Frequency: Every semester

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

Prerequisite(s): ARTS 315 or ART 387

Credits: 3

ARTS 422 Advanced Experimental Video Art

Frequency: Every year

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.

Prerequisite(s): ARTS 222

Credits: 3

ARTS 425 Advanced Interactivity

Frequency: Every year

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.

Prerequisite(s): MEDA 265 or ARTS 325

Credits: 3

ARTS 429 Experimental Video Capstone

Frequency: Every year

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.

Prerequisite(s): ARTS 322 or ARTS 422 or ARTS 323 and ARTS 324

Credits: 3

ARTS 440 3-D Objects and Ideas

Frequency: Every semester

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. Prerequisite(s): (ARTS 340 and ARTS 240) or ARTS 241 or (ART 357 and ART 257) or ART 258

Credits: 3

ARTS 459 Photographic Inquiry

Frequency: Every year

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. Prerequisite(s): ARTS 350 or ARTS 352 or ARTS 355 or (ART 305 and ART 310)

Credits: 3

ARTS 460 Graphic Design V

Frequency: Every year

Emphasis on visual identity systems; conceptualization and development of entire programs, including two-dimensional and three-dimensional applications. Integration of corporate identity and environmental graphics and the formulation of design standards are addressed.

Prerequisite(s): ARTS 361 or ART 360

Credits: 3

ARTS 461 Graphic Design VI

Frequency: Every year

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.

Prerequisite(s): ARTS 460 or ART 401

Credits: 3

ARTS 465 Typography III

Frequency: Every year

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.

Prerequisite(s): ARTS 366 or ART 362

Credits: 3

ARTS 469 Design Realities/Professional Practice

Frequency: Every year

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.

Prerequisite(s): ART 401 or ARTS 460

Credits: 1-3

ARTS 470 Advanced Ceramics

Frequency: Every semester

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.

Prerequisite(s): ARTS 370 or ART 373

Credits: 3

ARTS 485 Advanced Animation/Illustration

Frequency: Every other year

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).

Prerequisite(s): ARTS 380 and ARTS 385 or (ART 381 and ART 382)

Credits: 3

ARTS 489 Animation and Illustration Capstone

Frequency: Every year

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.

Prerequisite(s): ART 481 or ARTS 485

Credits: 3

ARTS 490 Learning Assistant

Frequency: Every semester

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

ARTS 491 Workshops

Frequency: Offered on occasion

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

ARTS 494 Directed Studio Projects

Frequency: Every semester

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

ARTS 495 Independent Studio Projects

Frequency: Every semester

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

ARTS 496 Studio Art Internship

Frequency: Offered on occasion

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

ARTS 497 Studio Practicum

Frequency: Offered on occasion

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

Biology**BIOL 100 Studying for Success-Biology**

Frequency: Every year

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

BIOL 105 Freshman Seminar on Sexual Concerns

Frequency: Every year

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

BIOL 110 Human Biology

Frequency: Every semester

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

BIOL 111 Introduction to Biology

Frequency: Every semester

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

BIOL 115 Environmental Biology

Frequency: Every semester

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

BIOL 131 Principles of Biology I

Frequency: Every year

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 and the diversity of life. The course will also examine the concepts of ecology and nutrient cycles.

Credits: 3

BIOL 132 Principles of Biology I Laboratory

Frequency: Every year

Principles of Biology I laboratory is designed to complement the Principles of Biology I 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 and the diversity of life.

Credits: 1

BIOL 133 Principles of Biology II

Frequency: Every year

The course will provide an introduction to cell biology. Students are expected to learn the basic concepts of cellular chemistry, types of cells, cell division, and the central dogma of molecular biology. Students should also learn how cell biology is related to the fields of biochemistry, genetics, and molecular biology.

Credits: 3

BIOL 134 Principles of Biology II Laboratory

Frequency: Every year

The laboratory section for the lecture course. The experiments are designed to introduce students to techniques and procedures for studying cells. Students will perform basic skills and techniques that lead to proficiency for more advanced techniques in later courses. Emphasis is placed on students actually doing the procedures and performing the tasks to generate results.

Credits: 1

BIOL 237 Genetics

Frequency: Every year

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.

Prerequisite(s): BIOL 133

Credits: 3

BIOL 238 Genetics Laboratory

Frequency: Every year

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.

Prerequisite(s): BIOL 133

Corequisite(s): BIOL 237

Credits: 1

BIOL 243 Biodiversity

Frequency: Every year

The goal of the course is to develop an expanded knowledge of evolution illustrated through a discussion of biodiversity. Course content deals with organic evolution, Mendelian and population genetics, evolutionary mechanisms, and taxonomy. The course will also provide a survey of life: viruses, bacteria, archaea, protists, fungi, plants, and animals as well as comparative anatomies and physiologies explained within an evolutionary context.

Prerequisite(s): BIOL 131

Credits: 3

BIOL 244 Biodiversity Laboratory

Frequency: Every year

Laboratory course emphasizing a survey of the diversity of life including protists, plants, and animals. Further development of knowledge regarding hypothesis testing, evolution, use of taxonomic keys and constructing phylogenies.

Prerequisite(s): BIOL 131

Corequisite(s): BIOL 243

Credits: 1

BIOL 245 Human Anatomy and Physiology I

Frequency: Every Fall semester

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 designed for medical technology majors and those students planning careers in postgraduate allied health careers (e.g. pharmacy, physician's assistant, physical therapy).

Prerequisite(s): CHEM 116 and BIOL 133

Credits: 4

BIOL 246 Human Anatomy and Physiology II

Frequency: Every Spring Semester

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.

Prerequisite(s): BIOL 245

Credits: 4

BIOL 250 Basic Concepts in Biology

Frequency: Offered on occasion

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.

Prerequisite(s): BIOL 111 or BIOL 131

Credits: 1-6

BIOL 251 Basic Concepts in Biology

Frequency: Offered on occasion

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.

Prerequisite(s): BIOL 111 or BIOL 131

Credits: 1-3

BIOL 256 Introduction to Clinical Science

Frequency: Every year

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

BIOL 310 The Human Genome

Frequency: Offered on occasion

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.

Prerequisite(s): BIOL 110 or BIOL 111

Credits: 3

BIOL 330 General Ecology

Frequency: Every year

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.

Prerequisite(s): BIOL 243 or BIOL 144

Credits: 3

BIOL 331 General Ecology Laboratory

Frequency: Every year

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

BIOL 333 Biochemistry

Frequency: Every year

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.

Prerequisite(s): CHEM 215 and (CHEM 225 or CHEM 230)

Credits: 3

BIOL 334 Biochemistry Laboratory

Frequency: Every year

Introduction to laboratory practice using biochemical techniques to isolate and characterize proteins. Enzyme kinetics and bioinformatics are also covered.

* Indicates that the course can be taken in the same semester

Prerequisite(s): BIOL 333*

Credits: 1

BIOL 336 Mammalian Physiology

Frequency: Every year

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.

Prerequisite(s): BIOL 133 and CHEM 215

Credits: 3

BIOL 337 Mammalian Physiology Lab

Frequency: Every year

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.

Corequisite(s): BIOL 336

Credits: 1

BIOL 338 Microbiology

Frequency: Every year

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.

Prerequisite(s): BIOL 333 and (BIOL 237 or BIOL 335)

Credits: 3

BIOL 340 Cell and Subcellular Biology

Frequency: Offered on occasion

Cell structure and function at cellular and molecular level using animal, plant, and microbial cells to illustrate common and divergent tenets. Physical and chemical organization of cells, analysis of the cell concept, emphasis on biochemical, physiological, and ultrastructural properties. Laboratory exercises dealing with isolation and characterization of cell fractions. Two lectures, one laboratory.

Prerequisite(s): BIOL 333

Credits: 3

BIOL 343 Conservation

Frequency: Offered on occasion

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.

Prerequisite(s): BIOL 111

Credits: 3

BIOL 344 Parasitology

Frequency: Every year

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.

Prerequisite(s): BIOL 131 and BIOL 133

Credits: 1

BIOL 345 Emerging Infectious Diseases

Frequency: Offered on occasion

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. This course does not count for biology major upper level elective credit.

Credits: 3

BIOL 360 AIDS and STDs

Frequency: Offered on occasion

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.

Prerequisite(s): BIOL 111 or BIOL 131 or BIOL 110

Credits: 3

BIOL 365 Bioethics and New Embryology

Frequency: Every year

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 people should understand the science behind the ethical debates. The course is not about deciding what is right or wrong, but to provide a scientific basis for informed discussion.

Prerequisite(s): BIOL 110 or BIOL 111 or BIOL 133

Credits: 3

BIOL 375 Genes, Health, and Society

Frequency: Every year

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.

Prerequisite(s): BIOL 110 or BIOL 111 or BIOL 133

Credits: 3

BIOL 397 Biochemistry Seminar I

Frequency: Offered on occasion

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

BIOL 410 Tropical Biology

Frequency: Every other year

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

BIOL 417 Comparative Animal Physiology

Frequency: Offered on occasion

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.

Prerequisite(s): BIOL 336

Credits: 3

BIOL 419 Genes and Genomes

Frequency: Every other year

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.

Prerequisite(s): BIOL 237 or BIOL 335

Credits: 3

BIOL 420 Population/Community Ecology

Frequency: Offered on occasion

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.

Prerequisite(s): BIOL 330

Credits: 3

BIOL 421 Biological Conservation

Frequency: Every other year

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.

Prerequisite(s): BIOL 330

Credits: 3

BIOL 422 Physiological Ecology

Frequency: Offered on occasion

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.

Prerequisite(s): BIOL 330

Credits: 3

BIOL 424 Aquatic Biology

Frequency: Every other year

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.

Prerequisite(s): BIOL 243

Credits: 3

BIOL 426 Current Environmental Topics

Frequency: Every year

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.

Prerequisite(s): BIOL 330

Credits: 3

BIOL 427 Fisheries Science

Frequency: Every other year

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.

Prerequisite(s): BIOL 330

Credits: 3

BIOL 429 Field Biology

Frequency: Offered on occasion

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.

Prerequisite(s): BIOL 330

Credits: 3

BIOL 431 Senior Seminar

Frequency: Every semester

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

BIOL 434 Animal Behavior

Frequency: Every year

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.

Prerequisite(s): BIOL 243 or BIOL 144

Credits: 3

BIOL 435 Developmental Biology

Frequency: Every year

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.

Prerequisite(s): BIOL 333

Credits: 3

BIOL 436 Molecular Biology

Frequency: Every year

Students will study the basic principles of molecular biology including DNA replication, transcription, and translation.

Specific attention will be given to the molecular interactions between protein, DNA, and RNA molecules. Students should gain an understanding of the role of molecular interactions in the basic processes required for the flow of information in cells.

Prerequisite(s): BIOL 237 or BIOL 333 or BIOL 335

Credits: 3

BIOL 437 Molecular Genetics Laboratory

Frequency: Every year

Basic molecular genetics techniques are taught within a research project in which students isolate, characterize, and sequence a gene. Other experiments include the identification of organisms based on DNA sequences and the typing of human DNA.

Prerequisite(s): BIOL 238 or BIOL 334 or BIOL 335

Credits: 2

BIOL 438 Molecules and Medicine

Frequency: Every other year

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.

Prerequisite(s): BIOL 333

Credits: 3

BIOL 440-441 Undergraduate Research

Frequency: Every semester

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

BIOL 443 Plant Physiology

Frequency: Offered on occasion

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.

Prerequisite(s): BIOL 133

Credits: 3

BIOL 447 Evolution

Frequency: Every other year

Consideration of the theoretical framework of evolutionary biology and the mechanisms of evolution. Special topics include microevolution, macroevolution, and coevolution.

Prerequisite(s): BIOL 237 or BIOL 243 or BIOL 335

Credits: 3

BIOL 450-451 Modern Concepts in Biology

Frequency: Every semester

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

BIOL 453 Basic Hematology

Frequency: Every year

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.

Prerequisite(s): BIOL 131 and BIOL 133

Credits: 1

BIOL 457 Biostatistics

Frequency: Every other year

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.

Prerequisite(s): STAT 250

Credits: 3

BIOL 458 Lab Supervision in Biology

Frequency: Every semester

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

BIOL 461 Immunology and Serology

Frequency: Every year

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.

Prerequisite(s): BIOL 333 and (BIOL 237 or BIOL 335)

Credits: 3

BIOL 465 Advanced Experimental Biochemistry

Frequency: Every year

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.

Prerequisite(s): BIOL 334

Credits: 2

BIOL 466 Current Issues in Developmental Biology

Frequency: Every other year

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

BIOL 468 Biomembranes

Frequency: Every other year

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.

Prerequisite(s): BIOL 333

Credits: 3

BIOL 469 Eukaryotic Gene Regulation

Frequency: Offered on occasion

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.

Prerequisite(s): BIOL 237 or BIOL 335

Credits: 3

BIOL 470 Hormone Mechanisms

Frequency: Every other year

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.

Prerequisite(s): BIOL 333

Credits: 3

BIOL 472 Microbial Pathogenesis

Frequency: Offered on occasion

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

BIOL 473 Animal Communication

Frequency: Every other year

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.

Prerequisite(s): BIOL 330

Credits: 3

BIOL 475 Advanced Biochemistry

Frequency: Every year

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.

Prerequisite(s): BIOL 333

Credits: 3

BIOL 480 Molecular Biology of Disease

Frequency: Every year

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.

Prerequisite(s): BIOL 333

Credits: 3

BIOL 490 Biology Internship

Frequency: Every semester

Approved biology-related experiences in academia, government, industry or other foundations. Requires the permission of the department and faculty sponsor.

Credits: 1-15

BIOL 497 Biochemistry Seminar II

Frequency: Every year

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.

Prerequisite(s): BIOL 397

Credits: 1

BIOL 499 Independent Study - Undergraduate

Frequency: Every semester

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

BIOL 501 Biochemistry

Frequency: Offered on occasion

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.

Prerequisite(s): CHEM 216

Credits: 3

BIOL 502 Methods in Biochemistry

Frequency: Offered on occasion

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.

Prerequisite(s): BIOL 501

Credits: 3

BIOL 510 Tropical Biology

Frequency: Every other year

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

BIOL 512 Sociobiology

Frequency: Every other year

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

BIOL 517 Comparative Animal Physiology

Frequency: Offered on occasion

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.

Prerequisite(s): BIOL 336

Credits: 3

BIOL 519 Genes and Genomes

Frequency: Every other year

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.

Prerequisite(s): BIOL 333 and BIOL 335

Credits: 3

BIOL 520 Population and Community Ecology

Frequency: Offered on occasion

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.

Prerequisite(s): BIOL 330

Credits: 3

BIOL 522 Physiological Ecology

Frequency: Offered on occasion

Reading and discussion of primary literature relating to physiological and ecosystem ecology. Topics include resource acquisition, energetics, nutrient cycling, and energy flow.

Prerequisite(s): BIOL 330

Credits: 3

BIOL 524 Aquatic Biology

Frequency: Every other year

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.

Prerequisite(s): BIOL 330

Credits: 3

BIOL 526 Current Environmental Topics

Frequency: Every year

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

BIOL 527 Fisheries Science

Frequency: Every other year

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.

Prerequisite(s): BIOL 144

Credits: 3

BIOL 534 Animal Behavior

Frequency: Offered on occasion

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

BIOL 538 Molecules and Medicine

Frequency: Every other year

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.

Prerequisite(s): BIOL 501

Credits: 3

BIOL 543 Plant Physiology

Frequency: Offered on occasion

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

BIOL 544 Radiation Biology

Frequency: Offered on occasion

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

BIOL 547 Evolution

Frequency: Every other year

Consideration of the theoretical framework of evolutionary biology and the mechanisms of evolution. Special topics include microevolution, macroevolution and coevolution.

Credits: 3

BIOL 550-551 Current Concepts in Biology

Frequency: Offered on occasion

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

BIOL 557 Biostatistics

Frequency: Every other year

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

BIOL 564 Mammalogy

Frequency: Offered on occasion

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

BIOL 566 Current Issues in Developmental Biology

Frequency: Every year

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

BIOL 567 Biomembranes

Frequency: Every other year

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.

Prerequisite(s): BIOL 333

Credits: 3

BIOL 569 Eukaryotic Gene Regulation

Frequency: Offered on occasion

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.

Prerequisite(s): BIOL 241 and BIOL 335

Credits: 3

BIOL 570 Hormone Mechanisms

Frequency: Every other year

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. Prerequisite(s): BIOL 333

Credits: 3

BIOL 572 Microbial Pathogenesis

Frequency: Offered on occasion

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. Prerequisite(s): BIOL 333 and BIOL 335

Credits: 3

BIOL 573 Animal Communication

Frequency: Every other year

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

BIOL 580 Molecular Biology of Disease

Frequency: Every year

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

BIOL 600 Seminar

Frequency: Every other year

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

BIOL 601 Seminar

Frequency: Every other year

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

BIOL 611 Cell Regulation

Frequency: Offered on occasion

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.

Prerequisite(s): BIOL 501

Credits: 3

BIOL 646 Reproductive Physiology

Frequency: Offered on occasion

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.

Prerequisite(s): BIOL 501

Credits: 3

BIOL 650 Special Topics in Biology

Frequency: Offered on occasion

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

BIOL 690 Thesis Research

Frequency: Every semester

Directed research culminating in the preparation of a thesis.

Credits: 1-9

BIOL 691 Thesis

Frequency: Every semester

Directed research culminating in the preparation of a thesis.

Credits: 1-9

BIOL 699 Independent Study - Graduate

Frequency: Every semester

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

Business Administration

BUAD 100 Freshman Seminar

Frequency: Offered on occasion

A one-credit course intended to help incoming freshmen succeed in Business Administration and Accounting at SUNY 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 college as a whole.

Credits: 1

BUAD 101 Understanding Business

Frequency: Offered on occasion

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

BUAD 200 Fundamentals of Statistics for Business and Economics

Frequency: Offered on occasion

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

BUAD 235 Introduction to Business Communication

Frequency: Every year

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. Prerequisite(s): ENGL 100 or Waiver - SUNY Basic Comm of an or better

Credits: 3

BUAD 300 Statistical Analysis

Frequency: Every semester

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.

Prerequisite(s): 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 or MATH 123

Credits: 3

BUAD 310 Legal Environment of Business

Frequency: Every semester

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.

Prerequisite(s): ENGL 100

Credits: 3

BUAD 315 Principles of Business Finance

Frequency: Offered on occasion

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.

Prerequisite(s): (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

Credits: 3

BUAD 319 Health Care Finance

Frequency: Offered on occasion

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.

Prerequisite(s): BUAD 320

Credits: 3

BUAD 320 Managerial Finance

Frequency: Every semester

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. Prerequisite(s): 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

Credits: 3

BUAD 321 Management and Organizational Behavior

Frequency: Offered on occasion

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

BUAD 323 Organizational Behavior

Frequency: Every semester

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.

Prerequisite(s): 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)

Credits: 3

BUAD 325 Principles of Marketing

Frequency: Offered on occasion

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.

Prerequisite(s): ECON 201 and ECON 202

Credits: 3

BUAD 327 Production and Operations Management I

Frequency: Every semester

A fundamental course in the concepts of production and operations management (P/OM), and the use of quantitative methods and computer applications related to effective control of products and operative systems. Topics include P/OM strategy and international competition issues, decision-making tools, linear programming, waiting line models, process strategies, work measurement techniques, and purchasing management and Just-In-Time strategies. NOTE: Students must earn a minimum C- grade in the prerequisite courses listed below.

Prerequisite(s): (ECON 200 or EDU 200 or BUAD 200 or POLI 200 or SOC 200 or PSY 200 or STAT 200) and (MATH 120 or MATH 122) and ACCT 202 and ECON 201 and ECON 202

Credits: 3

BUAD 328 Marketing Foundations

Frequency: Every semester

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.

Prerequisite(s): 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)

Credits: 3

BUAD 330 Human Resource Management

Frequency: Every year

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.

Prerequisite(s): BUAD 323

Credits: 3

BUAD 340 Marketing Research

Frequency: Every year

A specialized marketing course that examines modern methodologies needed to effectively use new information technologies to meet the world's growing demand for competitively priced quality products and services. The nature and scope of computer-aided marketing research, research design and data collection methods, including sampling and focus groups, are reviewed. Individual and group field projects will be reported in oral and written presentations.

Prerequisite(s): (BUAD 328) and (BUAD 300) or ECON 300

Credits: 3

BUAD 342 Consumer Behavior

Frequency: Every year

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.

Prerequisite(s): BUAD 328

Credits: 3

BUAD 350 Special Topics

Frequency: Offered on occasion

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

BUAD 372 Financial Investments

Frequency: Every year

Characteristics of bonds, stocks, securities market, investment banking are reviewed. Sources of investment

information; analysis of securities; and efficient market theory are also reviewed.

* Indicates that the course can be taken in the same semester

Prerequisite(s): BUAD 320 and (BUAD 300* or ECON 300*)

Credits: 3

BUAD 374 Small Business Finance

Frequency: Every other year

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.

Prerequisite(s): BUAD 320

Credits: 3

BUAD 376 Business and Culture

Frequency: Offered on occasion

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

BUAD 378 Business and Ethics

Frequency: Offered on occasion

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.

Prerequisite(s): ACCT 202 and ECON 201 and ECON 202 and BUAD 200 or STAT 200 or ECON 200 or SOC 200 or PSY 200 or POLI 200

Credits: 3

BUAD 411 Marketing Management

Frequency: Every year

A challenging course employing the Harvard Case Method in which students will develop an ability to make critical marketing decisions, support those decisions with appropriate analysis, and communicate ideas both orally and in writing. The goal of the course is to help develop students' critical reasoning powers using real-life examples of marketing problems encountered by both domestic and multi-national companies and comparing student recommendations with actual results.

Prerequisite(s): BUAD 328

Credits: 3

BUAD 416 Portfolio Management

Frequency: Every year

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.

Prerequisite(s): BUAD 372

Credits: 3

BUAD 417 Corporate Finance I

Frequency: Every semester

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.

Prerequisite(s): BUAD 320

Credits: 3

BUAD 418 Corporate Finance II

Frequency: Offered on occasion

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.

Prerequisite(s): BUAD 317 or BUAD 417

Credits: 3

BUAD 427 Production and Operations Management II

Frequency: Every year

Continuation of BAUD 327 with emphasis on the nature of the production, operations, and material functions and their inter-relationship with quality. Discussions, problems, computer applications, and case studies of qualitative and quantitative methods of analysis currently available (e.g., material requirement planning, MRP I) to manage production operations functions. In-depth coverage of management science/operations research models to optimize resource utilization and management control in a production environment; capacity planning, reliability sampling, PERT/CPM scheduling and project management systems, transportation and location strategies, aggregate planning tactics, inventory management and Just-In-Time tactics, and materials resource planning (MRP II).

Prerequisite(s): BUAD 327

Credits: 3

BUAD 430 Independent Study

Frequency: Offered on occasion

Under faculty guidance, this course allows a student to independently study a subject or research a specific topic in business administration.

Credits: 1-6

BUAD 440 Advanced Human Resource Management

Frequency: Offered on occasion

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.

Prerequisite(s): BUAD 330

Credits: 3

BUAD 445 Integrated Marketing Communications

Frequency: Every year

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.

Prerequisite(s): BUAD 328 or BUAD 325

Credits: 3

BUAD 446 Sales Management

Frequency: Every year

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.

Prerequisite(s): BUAD 328

Credits: 3

BUAD 450 Senior Seminar

Frequency: Offered on occasion

Seminar dealing with contemporary problems that is designed so that students may utilize what they have learned. 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

BUAD 463 Information Technology Project Management

Frequency: Every year

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.

Prerequisite(s): BUAD 363

Credits: 3

BUAD 472 International Finance

Frequency: Every year

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.

Prerequisite(s): (BUAD 300 or ECON 300) and BUAD 317

Credits: 3

BUAD 474 Financial Intermediaries Management

Frequency: Offered on occasion

Explorations of the historical function of bank-type financial intermediaries, the associated regulation-deregulation-reregulation cycle, and associated current management issues and techniques.

Prerequisite(s): (BUAD 300 or ECON 300) and (BUAD 317 or BUAD 417) and ECON 315

Credits: 3

BUAD 480 Internship

Frequency: Every semester

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

BUAD 499 Strategic Management

Frequency: Every semester

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.

Prerequisite(s): BUAD 320 and BUAD 323 and BUAD 328

Credits: 3

BUAD 510 Modern Financial Instruments

Frequency: Every year

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.

Prerequisite(s): BUAD 317

Credits: 3

BUAD 520 Information Technology Management and E-Commerce

Frequency: Offered on occasion

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.

Prerequisite(s): BUAD 261

Credits: 3

BUAD 530 Advanced Financial Management

Frequency: Offered on occasion

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.

Prerequisite(s): BUAD 317

Credits: 3

BUAD 550 Organizational Communication

Frequency: Every year

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.

Prerequisite(s): BUAD 321

Credits: 3

BUAD 560 Marketing Strategy

Frequency: Offered on occasion

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.

Prerequisite(s): BUAD 325

Credits: 3

BUAD 570 Advanced Corporate Management

Frequency: Offered on occasion

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.

Prerequisite(s): BUAD 499

Credits: 3

BUAD 590 Business Ethics

Frequency: Every year

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.

Prerequisite(s): BUAD 321

Credits: 3

Comm Disorders & Sciences**CDS 100 Freshman Seminar in Speech Language Pathology**

Frequency: Every year

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

CDS 115 Introduction to Sign Language

Frequency: Every year

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

CDS 150 Introduction to Communicative Disorders

Frequency: Every year

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

CDS 201 Voice/Articulation/Resonance

Frequency: Offered on occasion

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

CDS 206 Fundamentals of Acoustics

Frequency: Every year

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

CDS 208 Geriatric Communication Disorders

Frequency: Offered on occasion

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

CDS 215 Intermediate Sign Language

Frequency: Every year

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.

Prerequisite(s): SPA 115 or CDS 115

Credits: 3

CDS 250 Speech and Language Development

Frequency: Every year

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

CDS 268 Phonetics

Frequency: Every year

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

CDS 280 Speech-Language Pathology I

Frequency: Every year

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.

Prerequisite(s): SPA 250 and SPA 268 or CDS 250 and CDS 268

Credits: 3

CDS 310 Speech and Hearing Mechanism

Frequency: Every year

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

CDS 316 Speech Science

Frequency: Every year

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.

Prerequisite(s): SPA 310 and SPA 268 or CDS 310 and CDS 268

Credits: 3

CDS 322 Hearing Problems and Tests

Frequency: Every year

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.

Prerequisite(s): SPA 310 or CDS 310

Credits: 3

CDS 323 Phonological/Language Disorders

Frequency: Every year

Assessment and intervention principles and practices appropriate for working with articulation and language problems of children.

Prerequisite(s): SPA 250 or CDS 250

Credits: 3

CDS 328 Clinical Methods

Frequency: Every year

Study of diagnostic and therapeutic methodologies for management of the communicatively impaired. Students will complete 25 hours in clinical observation.

Prerequisite(s): SPA 250 and SPA 268 and SPA 310 or CDS 250 or CDS 268 or CDS 310

Credits: 3

CDS 329 Clinical Practice: Communication Disorders

Frequency: Every semester

Application of the student's knowledge from the classroom to a clinical situation. Student interns assigned to college clinic or off-campus school sites provide speech/language testing and therapy to clients under faculty supervision. Required attendance at weekly staff meetings for case reviews and presentation of diagnostic and remedial materials. No less than a C grade in SPA 328 Clinical Methods, and a 2.75 GPA.

Prerequisite(s): SPA 250 and SPA 268 and SPA 310 and SPA 328 or CDS 250 or CDS 268 or CDS 310 or CDS 328

Credits: 3

CDS 330 Clinical Practice

Frequency: Offered on occasion

As required.

Credits: 3

CDS 331 Clinical Practice: Lecture and Staffing

Frequency: Every semester

Weekly meeting with Clinic Coordinator for lectures on tests and procedures appropriate to the current clinical environment.

Corequisite(s): CDS 329

Credits: 1

CDS 376 Literacy Development

Frequency: Every year

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 illiterate. Students will be able to identify cultural, educational, and linguistic issues related to the acquisition of literacy.

Credits: 3

CDS 390 Designing Surveys

Frequency: Offered on occasion

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.

Prerequisite(s): STAT 250 or ECON 200 or PSY 200 or SOC 200

Credits: 3

CDS 398 Clinical Methods in Evaluation

Frequency: Every year

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.

Prerequisite(s): SPA 250 and SPA 268 and SPA 310 or CDS 250 or CDS 268 or CDS 310

Credits: 3

CDS 399 Clinical Methods in Intervention

Frequency: Every year

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.

Prerequisite(s): SPA 398 or CDS 398

Credits: 3

CDS 400 Foundations of Speech Language Pathology in Educational Settings

Frequency: Every year

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

CDS 410 Clinical Procedures: Observation and Analysis

Frequency: Every year

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.

Prerequisite(s): SPA 398 and SPA 399 or CDS 398 and CDS 399

Credits: 3

CDS 418 Speech-Language Pathology II

Frequency: Every year

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.

Prerequisite(s): SPA 310 or CDS 310

Credits: 3

CDS 419 Aural Habilitation and Rehabilitation

Frequency: Every year

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.

Prerequisite(s): SPA 322 or CDS 322

Credits: 3

CDS 420 Advanced Speech Pathology

Frequency: Offered on occasion

Seminar devoted to assigned readings and to approved individual research. Strengthens student knowledge in specific areas in preparation for more advanced studies.

Prerequisite(s): SPA 280 and SPA 418 or CDS 280 and CDS 418

Credits: 3

CDS 432 Student Teaching

Frequency: Every semester

Field-based practicum at public schools, Board of Cooperative Educational Services (BOCES) facilities or community-based programs. Cooperating clinicians supervise students engaged in the provision of testing and therapy services to the speech/language and hearing impaired.

Prerequisite(s): SPA 329 or CDS 329

Credits: 10

CDS 490 Independent Study

Frequency: Every semester

Study of a particular problem in speech pathology and audiology. Periodic meetings with instructor; writing a substantial paper.

Credits: 1-3

CDS 495 Seminar in Speech-Language Pathology/Audiology

Frequency: Every other year

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

CDS 500 Child Language Disorders

Frequency: Every year

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

CDS 501 Professional Seminar

Frequency: Every year

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

CDS 502 Clinical Practice, Communication Disorders

Frequency: Every semester

An application of the student's knowledge from the classroom to a clinical situation. Students assigned to speech/language and audiological assessments and therapy at the university clinic under faculty supervision. Attendance at periodic staff meetings. Completion of three semesters or summer sessions of practicum required.

Credits: 1-3

CDS 510 Pediatric Audiology

Frequency: Every year

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.

Prerequisite(s): SPA 550 or CDS 550

Credits: 3

CDS 520 Multicultural Issues in Communication Disorders

Frequency: Offered on occasion

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

CDS 525 Speech and Hearing Problems in the Classroom

Frequency: Offered on occasion

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

CDS 530 Augmentative and Alternative Communication

Frequency: Offered on occasion

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

CDS 540 Diagnostic Theories and Practices

Frequency: Every year

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

CDS 551 Neuroscience for Communication Disorders

Frequency: Every year

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

CDS 552 Medical Speech-Language Pathology

Frequency: Every year

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.

Prerequisite(s): SPA 551 and SPA 598 or CDS 551 and CDS 598

Credits: 3

CDS 554 Early Intervention

Frequency: Every year

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

CDS 555 Dysphagia

Frequency: Every year

This course will cover the assessment, treatment, and prevention strategies for swallowing disorders (dysphagia) in the pediatric and adult populations.

Credits: 3

CDS 556 Corporate Speech Pathology

Frequency: Offered on occasion

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

CDS 557 Counseling for the Speech Language Pathologist

Frequency: Every year

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

CDS 558 Seminar: Traumatic Brain Injury

Frequency: Offered on occasion

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

CDS 560 Studies in Hearing Research

Frequency: Every year

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

CDS 565 Instrumentation in Communicative Disorders

Frequency: Every year

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

CDS 570 Contemporary Issues with the Hearing Impaired

Frequency: Every year

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

CDS 575 Craniofacial Anomalies

Frequency: Every year

Etiology, symptomatology and management of communication disorders related to cleft lip, cleft palate and associated disorders. Focus on interdisciplinary management.

Credits: 3

CDS 582 Fluency Disorders

Frequency: Every year

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

CDS 583 Phonological Theory and Disorders

Frequency: Every year

Intensive individualized study of the literature in speech, language, and related disciplines concerning normal and deviant phonology.

Credits: 3

CDS 584 Speech Sound Disorders and Language Intervention

Frequency: Every year

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

CDS 585 Auditory Processing Disorders

Frequency: Every year

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

CDS 589 Professional Issues

Frequency: Offered on occasion

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

CDS 595 Graduate Seminar in Speech

Frequency: Offered on occasion

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

CDS 598 Voice Disorders

Frequency: Every year

Course will cover assessment and treatment strategies for benign, malignant and neurogenic vocal pathologies. Case study format will be emphasized.

Credits: 3

CDS 599 Experimental Phonetics

Frequency: Every year

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

CDS 602 Topical Seminar in Speech Language Pathology and Audiology

Frequency: Every year

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

CDS 605 Advanced Clinical Methods and Practice

Frequency: Every semester

Externship in speech-language pathology or audiology. Students assigned to a health care facility, rehabilitation center or speech and hearing clinic. Students perform diagnostics and therapy with patients at the facility under the supervision of a licensed and ASHA certified staff speech-language pathologist or audiologist. Students enrolled in SPA 605 must have completed 21 hours of academic credit and 9 credits of SPA 502, for a total of 30 credit hours. Permission of department.

Credits: 6-12

CDS 606 Research Design in Communication Disorders and Sciences

Frequency: Every year

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

CDS 608 Neurogenic Language Disorders

Frequency: Every year

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.

Prerequisite(s): SPA 551 or CDS 551

Credits: 3

CDS 609 Independent Study

Frequency: Every semester

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

CDS 611 Motor Speech Disorders

Frequency: Every year

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

CDS 619 Comprehensive Exam

Frequency: Every year

A written comprehensive exam evaluating knowledge base in assessment, intervention, etiologies, prevention and characteristics of ASHA standard courses.

Credits: 0

CDS 629 Directed Studies in Research Methodology - Thesis Research

Frequency: Every semester

A minimum acceptable for the degree is 3 credit hours

Credits: 1-6

CDS 632 Graduate Student Teaching

Frequency: Offered on occasion

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

Chemistry

CHEM 100 Chemistry Freshmen Seminar

Frequency: Every year

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

CHEM 105 Food Chemistry

Frequency: Every year

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

CHEM 107 Chemistry for Consumers

Frequency: Every semester

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

CHEM 113 Chemistry and the Environment

Frequency: Every year

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

CHEM 114 Introduction to Chemistry

Frequency: Offered on occasion

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

CHEM 115 General Chemistry Lecture I

Frequency: Every semester

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

CHEM 116 General Chemistry Lecture II

Frequency: Every semester

Continuation of CHEM 115. Thermodynamics, chemical kinetics, chemical equilibrium, properties of acids and bases, aqueous solutions, electrochemistry, and nuclear chemistry.

Prerequisite(s): CHEM 115

Credits: 3

CHEM 125 General Chemistry Laboratory I

Frequency: Every semester

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

CHEM 126 General Chemistry Laboratory II

Frequency: Every semester

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

CHEM 130 Honors General Chemistry Laboratory

Frequency: Every year

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.

Prerequisite(s): CHEM 115 and CHEM 125

Credits: 1

CHEM 154 Nature of Science

Frequency: Every year

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

CHEM 170 Scientific Revolutions

Frequency: Every year

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

CHEM 215 Organic Chemistry Lecture I

Frequency: Every semester

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.

Prerequisite(s): CHEM 116

Credits: 3

CHEM 216 Organic Chemistry Lecture II

Frequency: Every year

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.

Prerequisite(s): CHEM 116

Credits: 3

CHEM 225 Organic Chemistry Laboratory I

Frequency: Every year

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

CHEM 226 Organic Chemistry Laboratory II

Frequency: Every year

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

CHEM 230 Advanced Organic Laboratory

Frequency: Every year

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.

Prerequisite(s): CHEM 225

Credits: 1

CHEM 291 Directed Laboratory Research

Frequency: Every semester

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

CHEM 292 Directed Laboratory Research

Frequency: Every semester

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

CHEM 302 Chemistry in Today's Society

Frequency: Offered on occasion

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

CHEM 305 Laboratory Supervision in Chemistry

Frequency: Every semester

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

CHEM 314 Principles of Physical Chemistry

Frequency: Offered on occasion

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.

Prerequisite(s): MATH 121 or MATH 123 and CHEM 116

Credits: 3

CHEM 315 Introduction to Physical Chemistry

Frequency: Every year

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.

Prerequisite(s): CHEM 116 and MATH 123 and PHYS 231 and PHYS 233

Credits: 3

CHEM 316 Advanced Physical Chemistry

Frequency: Every year

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.

Prerequisite(s): CHEM 116 and MATH 123 and PHYS 231 and PHYS 233

Credits: 3

CHEM 317 Analytical Chemistry, Quantitative Analysis

Frequency: Every year

Gravimetric, volumetric, and elementary instrumental determinations. Emphasis on volumetric analysis. neutralization, oxidation-reduction, complexometric, and electrochemical methods. Introduction to computer methods in chemistry.

Prerequisite(s): CHEM 116

Credits: 3

CHEM 318 Analytical Chemistry, Instrumental Analysis

Frequency: Every year

Continuation of CHEM 317. Application of instrumental methods to quantitative chemical analysis, including spectroscopy, potentiometry, chromatography, nuclear and chemical methods.

Prerequisite(s): CHEM 317

Credits: 3

CHEM 325 Physical Chemistry Laboratory I

Frequency: Every year

Laboratory experiments designed to accompany CHEM 315. One laboratory period per week.

Credits: 1

CHEM 326 Physical Chemistry Laboratory II

Frequency: Every year

Laboratory experiments designed to accompany CHEM 316. One laboratory period per week.

Credits: 1

CHEM 327 Analytical Chemistry I Laboratory

Frequency: Every year

Laboratory experiments designed to accompany CHEM 317.

Credits: 1

CHEM 328 Analytical Chemistry II Laboratory

Frequency: Every year

Laboratory experiments designed to accompany CHEM 318.

Credits: 2

CHEM 333 Biochemistry

Frequency: Every year

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.

Prerequisite(s): CHEM 216 and CHEM 226

Credits: 3

CHEM 334 Biochemistry Laboratory

Frequency: Every year

Introduction to laboratory practice using biochemical techniques to isolate and characterize proteins. Enzyme kinetics and bioinformatics are also covered.

Credits: 1

CHEM 371-372 Internship in Chemistry

Frequency: Every semester

Approved practical experience in industrial, environmental, commercial, forensic, or other laboratories. Internships may accompany paid working time arrangements.

Credits: 1-3

CHEM 391-392 Independent Lab Research

Frequency: Every semester

For students having junior standing. See CHEM 491-492 for list of study and research areas.

Credits: 1-3

CHEM 395 Introduction to Research

Frequency: Every year

Prepares the student to carry out independent research. Topics include the philosophy of research, descriptions of current faculty research interests, research records, laboratory safety, use of the chemical literature, technical writing, and research tools and methodology. One lecture per week.

Prerequisite(s): CHEM 216

Credits: 1

CHEM 397 Biochemistry Seminar I

Frequency: Every year

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

CHEM 405 Industrial Chemistry

Frequency: Offered on occasion

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.

Prerequisite(s): CHEM 315

Credits: 3

CHEM 407 Organometallics

Frequency: Every other year

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.

Prerequisite(s): CHEM 216

Credits: 3

CHEM 412 Advanced Organic Chemistry

Frequency: Every other year

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.

Prerequisite(s): CHEM 215 and CHEM 216

Credits: 3

CHEM 417 Polymer Chemistry

Frequency: Every other year

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.

Prerequisite(s): CHEM 216 and CHEM 315

Credits: 3

CHEM 462 Inorganic Chemistry

Frequency: Every year

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.

Prerequisite(s): CHEM 315

Credits: 3

CHEM 465 Advanced Experimental Biochemistry

Frequency: Every year

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.

Prerequisite(s): BIOL 334

Credits: 2

CHEM 472 Inorganic Chemistry Laboratory

Frequency: Every year

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. Prerequisite(s): CHEM 315 and CHEM 325

Credits: 1

CHEM 473 Environmental Aquatic Chemistry

Frequency: Every other year

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.

Prerequisite(s): CHEM 215

Credits: 3

CHEM 474 Environmental Atmospheric Chemistry

Frequency: Every other year

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.

Prerequisite(s): CHEM 215

Credits: 3

CHEM 475 Advanced Biochemistry

Frequency: Every year

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.

Prerequisite(s): BIOL 333

Credits: 3

CHEM 481 Special Topics in Chemistry

Frequency: Every year

Topics of special or current interest offered periodically.

Credits: 1-3

CHEM 490 Independent Study

Frequency: Every semester

Topics of special interest. Non-laboratory work in association with faculty supervisor. May require course prerequisites as determined by instructor.

Credits: 1-3

CHEM 491-492 Independent Laboratory Research

Frequency: Every semester

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.

Prerequisite(s): CHEM 395

Credits: 1-3

CHEM 495-496 Seminar: Advances in Chemistry

Frequency: Every semester

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.

Prerequisite(s): CHEM 216

Credits: 1

CHEM 497 Biochemistry Seminar II

Frequency: Every year

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

CHEM 499 Senior Thesis

Frequency: Every year

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

CHEM 507 Organometallics

Frequency: Offered on occasion

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

CHEM 511 Physical Organic Chemistry

Frequency: Offered on occasion

Molecular orbital theory, resonance, acid-base theory and mechanisms of organic reactions including unimolecular and bimolecular substitution reactions and intramolecular rearrangements.

Prerequisite(s): (CHEM 215 and CHEM 216) and (CHEM 315 and CHEM 316)

Credits: 3

CHEM 512 Advanced Organic Chemistry

Frequency: Offered on occasion

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

CHEM 515 Applied Spectroscopy

Frequency: Offered on occasion

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

CHEM 521 Advanced Physical Chemistry - Thermodynamics

Frequency: Offered on occasion

Application of theory of thermodynamics to chemical systems, including methods of quantum statistics.

Prerequisite(s): CHEM 326 and (MATH 121 or MATH 123)

Credits: 3

CHEM 522 Advanced Physical Chemistry - Quantum Chemistry

Frequency: Offered on occasion

Basic concepts of wave mechanics and the application to topics of interest to chemists.

Credits: 3

CHEM 562 Advanced Inorganic Chemistry

Frequency: Offered on occasion

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

CHEM 573 Environmental Aquatic Chemistry

Frequency: Offered on occasion

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

CHEM 574 Environmental Atmospheric Chemistry

Frequency: Every other year

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

CHEM 581 Special Topics in Chemistry

Frequency: Offered on occasion

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, to chemistry, heterocyclic chemistry, synthesis, polymer chemistry, topics in biochemistry chemistry, quantum chemistry, computers, or selected topics in chemical education.

Credits: 1-3

CHEM 690 Independent Study

Frequency: Offered on occasion

Extensive study on advanced level of chemistry not covered in detail in formal courses. Paper or other demonstration of accomplishment required.

Credits: 1-3

CHEM 691 Research I

Frequency: Offered on occasion

Projects in areas of analytical, physical, organic, inorganic, and biochemistry.

Credits: 1-3

CHEM 692 Research II

Frequency: Offered on occasion

Projects in areas of analytical, physical, organic, inorganic, and biochemistry.

Credits: 1-3

CHEM 693 Research III

Frequency: Offered on occasion

Projects in areas of analytical, physical, organic, inorganic, and biochemistry.

Credits: 1-3

CHEM 694 Research IV

Frequency: Offered on occasion

Projects in areas of analytical, physical, organic, inorganic, and biochemistry.

Credits: 1-3

Chinese**CHNS 115 Elementary Chinese I**

Frequency: Every year

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

CHNS 116 Elementary Chinese II

Frequency: Every year

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.

Prerequisite(s): CHNS 115

Credits: 3

Communication**COMM 101 Fundamentals of Communication**

Frequency: Every semester

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

COMM 102 Mass Media and Society

Frequency: Every year

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

COMM 105 Public Speaking

Frequency: Every semester

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

COMM 110 Desktop Motion

Frequency: Every year

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

COMM 111 Web Design

Frequency: Every semester

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

COMM 112 Desktop Video

Frequency: Every semester

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

COMM 113 Flash

Frequency: Every semester

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

COMM 114 Electronic Darkroom

Frequency: Every semester

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

COMM 115 Advanced Electronic Darkroom

Frequency: Every year

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.

Prerequisite(s): COMM 114

Credits: 1

COMM 116 Desktop Publishing

Frequency: Every semester

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***COMM 118 Desktop Audio**

Frequency: Every semester

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***COMM 120 WCVF/WDVL/WNYF-TV/Applied Communication Association/PRSSA Operations**

Frequency: Every semester

Extracurricular participation in the staffing of the college's radio station, WCVF, and WDVL; television station, WNYF-TV; or department societies.

*Credits: 0***COMM 130 Foundations in Journalism**

Frequency: Every semester

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***COMM 155 Rhetoric of Vision and Sound**

Frequency: Every semester

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***COMM 199 Communication Orientation**

Frequency: Every Fall semester

A course designed to introduce new majors to the department and faculty, and to suggest areas of study and activity.

*Credits: 1***COMM 200 Electronic Media Writing**

Frequency: Every semester

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.

Prerequisite(s): ENGL 100

*Credits: 3***COMM 221 Interpersonal Communication**

Frequency: Every year

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.

Prerequisite(s): COMM 101

*Credits: 3***COMM 222 Principles of Public Relations**

Frequency: Every semester

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.

Prerequisite(s): COMM 101

*Credits: 3***COMM 230 News Gathering**

Frequency: Every year

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.

Prerequisite(s): COMM 130

*Credits: 3***COMM 231 Storytelling: Words, Images, Sound**

Frequency: Every year

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.

Prerequisite(s): COMM 130

*Credits: 3***COMM 232 Critical Analysis of Journalism**

Frequency: Every year

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.

Prerequisite(s): COMM 130 or COMM 102

Credits: 3

COMM 235 Introduction to Business Communication

Frequency: Every semester

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.

Prerequisite(s): ENGL 100 or Waiver - SUNY Basic Comm of an or better

Credits: 3

COMM 244 Introduction to Social Media

Frequency: Every year

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.

Prerequisite(s): COMM 222

Credits: 3

COMM 251 Audio Production I

Frequency: Every semester

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.

* Indicates that the course can be taken in the same semester

Prerequisite(s): COMM 155*

Credits: 3

COMM 253 Digital Audio Production

Frequency: Every year

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.

Prerequisite(s): COMM 251

Credits: 3

COMM 255 Studio Production

Frequency: Every semester

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.

* Indicates that the course can be taken in the same semester

Prerequisite(s): COMM 155*

Credits: 3

COMM 259 Special Topics in Communication

Frequency: Offered on occasion

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

COMM 295 Communication Research and Survey Methods

Frequency: Every year

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.

Prerequisite(s): COMM 101

Credits: 3

COMM 301 Group Communication

Frequency: Every year

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.

Prerequisite(s): COMM 101

Credits: 3

COMM 302 Rhetoric and Criticism

Frequency: Every semester

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.

Prerequisite(s): COMM 101

Credits: 3

COMM 303 Health Communication

Frequency: Once a year

A Communication Studies course 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. 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

COMM 308 Documentary History and Criticism

Frequency: Every year

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.

Prerequisite(s): COMM 155 or FILM 220

Credits: 3

COMM 309 Film Analysis

Frequency: Every year

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.

Prerequisite(s): COMM 155

Credits: 3

COMM 312 Multimedia Integration

Frequency: Every semester

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.

Prerequisite(s): 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

Credits: 3

COMM 313 Political Communication

Frequency: Offered on occasion

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 the 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

COMM 314 Multimedia Supervision

Frequency: Every semester

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.

Prerequisite(s): COMM 110 or COMM 111 or COMM 112 or COMM 114 or COMM 115 or COMM 116 or COMM 118

Credits: 1

COMM 320 WCVF/WDVL/WNYF/ACA/PRSSA Management

Frequency: Every semester

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

COMM 321 Environmental Communication

Frequency: Once a year

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

COMM 322 Public Relations Writing

Frequency: Every year

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.

Prerequisite(s): COMM 222

Credits: 3

COMM 344 Public Relations Case Analysis

Frequency: Every semester

Analysis of classic and contemporary public relations cases in industry, labor, education, government, social welfare and trade associations.

Prerequisite(s): COMM 222

Credits: 3

COMM 346 Print/Digital Editing and Design

Frequency: Every year

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.

Prerequisite(s): COMM 230 and COMM 231

Credits: 3

COMM 347 Print/Digital Narrative

Frequency: Every year

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. Prerequisite(s): COMM 230 and COMM 231

Credits: 3

COMM 348 Audio/Video Advanced Tools

Frequency: Every year

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.

Prerequisite(s): COMM 231

Credits: 3

COMM 349 Audio/Video Advanced Production

Frequency: Every year

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.

Prerequisite(s): COMM 348

Credits: 3

COMM 350 Telecommunication Technology

Frequency: Every other year

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.

Prerequisite(s): COMM 102

Credits: 3

COMM 351 Audio Production II

Frequency: Every semester

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).

Prerequisite(s): COMM 251

Credits: 3

COMM 354 Video Field Production

Frequency: Every semester

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.

* Indicates that the course can be taken in the same semester

Prerequisite(s): COMM 255*

Credits: 3

COMM 358 Television News

Frequency: Every year

Electronic news gathering and studio news techniques in the context of a weekly news program. Legal and ethical issues in news gathering.

Prerequisite(s): COMM 354 or COMM 255

Credits: 3

COMM 359 Special Topics in Communication

Frequency: Offered on occasion

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

COMM 361 Script Writing Video/Film/Radio

Frequency: Every semester

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.

Prerequisite(s): COMM 251 or COMM 255 or THEA 121

Credits: 3

COMM 366 Postproduction

Frequency: Every semester

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.

Prerequisite(s): COMM 354

Credits: 3

COMM 368 Video Camera and Lighting Techniques

Frequency: Every year

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.

Prerequisite(s): COMM 354

Credits: 3

COMM 373 Gender and Communication

Frequency: Offered on occasion

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.

Prerequisite(s): COMM 101 or WOST 201

Credits: 3

COMM 375 Mass Media Theory

Frequency: Every other year

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.

Prerequisite(s): COMM 102

Credits: 3

COMM 379 Persuasion

Frequency: Every year

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.

Prerequisite(s): COMM 101 and COMM 105

Credits: 3

COMM 385 International Media

Frequency: Every year

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

COMM 386 International Films

Frequency: Every year

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

COMM 395 Radio News

Frequency: Every other year

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.

Prerequisite(s): COMM 351 or COMM 230 or COMM 231

Credits: 4

COMM 400 Telecommunications Management

Frequency: Every other year

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.

Prerequisite(s): COMM 102

Credits: 3

COMM 401 Television Studio Production II

Frequency: Every year

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.

Prerequisite(s): COMM 200 and COMM 255

Credits: 4

COMM 420 Communication Law and Ethics

Frequency: Every semester

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.

Prerequisite(s): COMM 102 or COMM 130

Credits: 3

COMM 422 Public Relations Campaigns

Frequency: Every year

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.

Prerequisite(s): COMM 295, 322, 344

Credits: 3

COMM 424 International Public Relations

Frequency: Every year

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.

Prerequisite(s): COMM 222

Credits: 3

COMM 430 Communication Theory

Frequency: Every year

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.

Prerequisite(s): COMM 105 and COMM 101

Credits: 3

COMM 440 Journalism Convergence Capstone

Frequency: Every year

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.

Prerequisite(s): COMM 349 or (COMM 346 and COMM 347)

Credits: 3

COMM 441 Multitrack Radio Production

Frequency: Offered on occasion

Examination and practice of advanced sound design, production with ancillary equipment, and multitrack recording techniques for broadcast applications.

Prerequisite(s): COMM 351

Credits: 3

COMM 444 Public Relations Senior Seminar

Frequency: Every year

An in-depth seminar on advanced topics in public relations that are not fully-covered, or covered at all, in other courses.

Prerequisite(s): COMM 322 and COMM 344

Credits: 1-3

COMM 451 Audio Documentaries/Soundscapes

Frequency: Every other year

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.

Prerequisite(s): COMM 351

Credits: 4

COMM 452 Documentary I

Frequency: Every Fall semester

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

Prerequisite(s): COMM 200 and COMM 366

Credits: 4

COMM 454 Fiction I

Frequency: Every Fall semester

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.

Prerequisite(s): COMM 251 and COMM 366

Credits: 4

COMM 456 Radio Programming/Production

Frequency: Every other year

Theory and practice of programming and promoting a radio station: formats, sources, techniques; and development and production of a weekly radio series.

Prerequisite(s): COMM 351

Credits: 4

COMM 457 Television Apprenticeship

Frequency: Every semester

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.

Prerequisite(s): COMM 255

Credits: 1-3

COMM 459 Special Topics in Communication

Frequency: Offered on occasion

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

COMM 460 Organizational Communication

Frequency: Every year

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.

Prerequisite(s): COMM 101

Credits: 3

COMM 462 Documentary II

Frequency: Every Spring Semester

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.

Prerequisite(s): COMM 308 and COMM 452

Credits: 4

COMM 464 Fiction II

Frequency: Every Spring Semester

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.

Prerequisite(s): COMM 454

Credits: 4

COMM 465 Intercultural Communication

Frequency: Every year

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.

Prerequisite(s): COMM 221

Credits: 3

COMM 466 Sound Design

Frequency: Every year

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).

Prerequisite(s): COMM 251

Credits: 4

COMM 470 Fredonia Radio Systems/WNYF/Leader Practicum

Frequency: Every semester

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.

Prerequisite(s): COMM 230

Credits: 3

COMM 475 Communication/Studio Supervision

Frequency: Every semester

Advanced students are given opportunities to demonstrate knowledge of and practice application of skills in educational setting or specific subjects.

Credits: 1-3

COMM 480 Communication Internship

Frequency: Every semester

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

COMM 490 Independent Study

Frequency: Every semester

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

COMM 499 Communication Senior Experience

Frequency: Every year

The course will discuss current trends and ethical issues in communication that are applicable to all Communication majors. Specific topics will vary from semester to semester. Discussion of "life after Fredonia" with faculty and professionals will also take place. There will also be a career preparation component. Restricted to seniors.

Credits: 1.5

COMM 590 Independent Study

Frequency: Offered on occasion

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

Criminal Justice

CRMJ 100 Introduction to Criminal Justice

Frequency: Every semester

An introduction to the organization and activities of the U.S. criminal justice system. Topics include: criminal law, policing, courts, and corrections.

Credits: 3

CRMJ 310 Law Enforcement Policy and Practice

Frequency: Every semester

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.

Prerequisite(s): CRMJ 100

Credits: 3

CRMJ 320 Crime and Crime Theory

Frequency: Every year

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.

Prerequisite(s): SOC 116 and CRMJ 100

Credits: 3

CRMJ 330 Criminal Law

Frequency: Every year

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.

Prerequisite(s): CRMJ 100

Credits: 3

CRMJ 331 Criminal Procedure

Frequency: Every year

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.

Prerequisite(s): CRMJ 100

Credits: 3

CRMJ 332 Homeland Security

Frequency: Every year

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.

Prerequisite(s): CRMJ 100

Credits: 3

CRMJ 333 Criminal Investigations

Frequency: Every year

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.

Prerequisite(s): CRMJ 100

Credits: 3

CRMJ 340 Introduction to Corrections

Frequency: Every semester

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.

Prerequisite(s): CRMJ 100

Credits: 3

CRMJ 350 Special Topics

Frequency: Offered on occasion

Special topics in Criminal Justice not covered in detail by regular courses.

Prerequisite(s): CRMJ 100

Credits: 3

CRMJ 360 Criminal Justice Ethics

Frequency: Every other year

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.

Prerequisite(s): CRMJ 100

Credits: 3

CRMJ 400 Senior Seminar

Frequency: Every semester

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. Prerequisite: Senior standing in the major. This course will be taught using a blended course format. Instruction for one third of this course will be delivered online.

Credits: 3

CRMJ 470 Criminal Justice Internship

Frequency: Every semester

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

CRMJ 472 Directed Study

Frequency: Every semester

Individualized study under the supervision of a faculty member. Permission of the department is required.

Credits: 1-3

Computer & Info Sciences

CSIT 100 Freshman Seminar

Frequency: Every year

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

CSIT 101 Programming with 3-D Graphics and Multimedia

Frequency: Every year

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

CSIT 104 Introduction to Microcomputer Software

Frequency: Every semester

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

CSIT 105 Visual BASIC I

Frequency: Every semester

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

CSIT 106 Scientific Programming Using C/C++

Frequency: Offered on occasion

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.

Prerequisite(s): MATH 120 or MATH 122

Credits: 3

CSIT 107 Web Programming I

Frequency: Every semester

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

CSIT 120 Computer Science Overview

Frequency: Every semester

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

CSIT 121 Computer Science I

Frequency: Every semester

Hands-on exposure to the following major topics: Problem solving, algorithm design and development, structured programming: top-down design and functional decomposition; elementary data types; expressions, I/O functions and control structures; functions: scope rules, pass by value, pass by reference; built-in functions; arrays; strings; function overloading; elementary sort and search algorithms. Background assumed: N.Y.S. Algebra II and Trigonometry (or Math B), or equivalent.

Credits: 3

CSIT 151 Introduction to Information Systems

Frequency: Every semester

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

CSIT 201 Computer Security and Ethics

Frequency: Every year

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

CSIT 203 Multimedia Systems

Frequency: Offered on occasion

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

CSIT 205 Visual BASIC II

Frequency: Every year

Advanced visual BASIC programming techniques; Active X controls, multiple forms, file I/O, interacting with databases, and error handling; Windows API calls and Windows registry functions; and advanced event-driven business applications.

Prerequisite(s): CSIT 105 or CSIT 121

Credits: 3

CSIT 207 Web Programming II

Frequency: Every semester

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. Prerequisite(s): CSIT 107 and (CSIT 105 or CSIT 121)

Credits: 3

CSIT 208 Computer Game Design and Implementation

Frequency: Offered on occasion

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

CSIT 221 Computer Science II

Frequency: Every semester

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 arithmetic; binary numbers and bitwise operations; class concepts; multi-dimensional arrays; linked lists; doubly-linked lists; stacks, queues and their implementations and applications; exception handling. The course provides a computer laboratory component to ensure practice with the above concepts.

Prerequisite(s): CSIT 121

Credits: 3

CSIT 224 Problem Solving Using Objects

Frequency: Every semester

Object-oriented design methodologies; object-oriented programming; class concepts, encapsulation; polymorphism, composition and inheritance; virtual functions; delayed binding; class-interfaces and message passing; generics/templates; function overloading; and exception handling; binary file I/O; advanced OO programming.

Prerequisite(s): CSIT 221

Credits: 3

CSIT 225 Java Programming

Frequency: Offered on occasion

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.

Prerequisite(s): CSIT 221

Credits: 3

CSIT 231 Systems Programming

Frequency: Every semester

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.

Prerequisite(s): CSIT 221

Credits: 3

CSIT 241 Discrete Mathematics for Computer Science I

Frequency: Every semester

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.

Prerequisite(s): (MATH 108 or MATH 120 or MATH 122) and (CSIT 105 or CSIT 121)

Credits: 3

CSIT 242 Discrete Mathematics for Computer Science II

Frequency: Every year

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.

Prerequisite(s): CSIT 221 and CSIT 241

Credits: 3

CSIT 251 Information Systems Structures

Frequency: Every semester

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.

Prerequisite(s): CSIT 151 or BUAD 161 or CSIT 104

Credits: 3

CSIT 291 Special Topics

Frequency: Offered on occasion

Selected topics in computer and information sciences based on instructor or student interest requiring basic understanding of computer information systems operations.

Credits: 0-3

CSIT 300 Internship

Frequency: Every semester

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

CSIT 305 Computer Laboratory Assistantship

Frequency: Every semester

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

CSIT 307 Web Development with Ruby on Rails

Frequency: Offered on occasion

Web Development with Ruby on Rails is a thorough introduction to the language Ruby and the environment Rails, emphasizing rapid prototyping and iterative development. The course includes a comprehensive project including the design and implementation of a web-based software product based on predefined specifications.

Prerequisite(s): CSIT 205 or CSIT 207 or CSIT 221

Credits: 3

CSIT 330 Mobile Applications Development

Frequency: Offered on occasion

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.

Prerequisite(s): CSIT 205 or CSIT 221 or CSIT 207

Credits: 3

CSIT 311 Assembly Language and Computer Organizations

Frequency: Every semester

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.

Prerequisite(s): CSIT 121

Credits: 3

CSIT 312 Computer Structures

Frequency: Every semester

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.

Prerequisite(s): CSIT 105 or CSIT 121

Credits: 3

CSIT 321 Paradigms of Programming Languages

Frequency: Every semester

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.

Prerequisite(s): CSIT 221

Credits: 3

CSIT 330 Mobile Applications Development

Frequency: Offered on occasion

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.

Prerequisite(s): CSIT 205 or CSIT 221

Credits: 3

CSIT 335 Data Communication and Networks I

Frequency: Every year

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.

Prerequisite(s): CSIT 205 or CSIT 221

Credits: 3

CSIT 341 Data Structures

Frequency: Every semester

Review basic data structures and algorithmic complexities; sorting; generalized lists; binary trees; binary search trees; tree traversals; advanced hierarchical structures: n-ary trees, heaps, balanced trees, tries; priority queues; hashing; graphs, graph algorithms; memory management; applications.

Prerequisite(s): CSIT 205 or CSIT 221

Credits: 3

CSIT 351 Business Systems Development

Frequency: Every year

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.

Prerequisite(s): CSIT 205 or CSIT 251

Credits: 3

CSIT 390 Directed Study

Frequency: Offered on occasion

An intensive project-oriented course utilizing emerging technologies. Departmental approval is required.

Credits: 1-3

CSIT 400 Directed Independent Study

Frequency: Offered on occasion

Independent study of a selected list of readings approved by a faculty advisor. Permission of the department required.

Credits: 1-3

CSIT 411 Programming for Embedded Microcontrollers

Frequency: Every other year

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.

Prerequisite(s): CSIT 221

Credits: 3

CSIT 413 Computer Architecture

Frequency: Every year

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.

Prerequisite(s): CSIT 311 or CSIT 312

Credits: 3

CSIT 425 Software Engineering

Frequency: Every year

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.

Prerequisite(s): CSIT 221 or CSIT 205

Credits: 3

CSIT 431 Introduction to Operating Systems

Frequency: Every semester

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.

Prerequisite(s): (CSIT 311 or CSIT 312) and CSIT 341 and CSIT 231

Credits: 3

CSIT 433 Compiler Construction

Frequency: Every other year

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.

Prerequisite(s): (CSIT 311 or CSIT 312) and CSIT 341

Credits: 3

CSIT 435 Data Communication and Networks II

Frequency: Every year

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.

Prerequisite(s): CSIT 311 or CSIT 312 or CSIT 335

Credits: 3

CSIT 436 Advanced Network Programming

Frequency: Offered on occasion

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.

Prerequisite(s): CSIT 435

Credits: 3

CSIT 437 Advanced Operating Systems

Frequency: Every year

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.

Prerequisite(s): CSIT 431

Credits: 3

CSIT 441 Analysis and Design of Algorithms

Frequency: Every other year

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.

Prerequisite(s): CSIT 242 and CSIT 341

Credits: 3

CSIT 443 Theory of Computation

Frequency: Every other year

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.

Prerequisite(s): CSIT 242 and CSIT 341

Credits: 3

CSIT 451 Introduction to Files and Databases

Frequency: Offered on occasion

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.

Prerequisite(s): CSIT 341

Credits: 3

CSIT 455 Relational and Object Databases

Frequency: Every year

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.

Prerequisite(s): CSIT 221 or CSIT 205

Credits: 3

CSIT 456 Information and Decision Support Systems

Frequency: Every other year

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.

Prerequisite(s): CSIT 341 and CSIT 351

Credits: 3

CSIT 461 Introduction to AI and Knowledge Engineering

Frequency: Every other year

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.

Prerequisite(s): CSIT 205 or CSIT 221

Credits: 3

CSIT 462 Computer Graphics

Frequency: Every other year

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.

Prerequisite(s): CSIT 221 or CSIT 205

Credits: 3

CSIT 463 Introduction to Digital Image Processing and Computer Vision

Frequency: Every other year

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.

Prerequisite(s): CSIT 205 or CSIT 221

Credits: 3

CSIT 471 Information Systems Management

Frequency: Every other year

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.

Prerequisite(s): CSIT 205 or CSIT 221

Credits: 3

CSIT 473 Data Warehousing and Mining

Frequency: Every other year

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.

Prerequisite(s): CSIT 205 or CSIT 221

Credits: 3

CSIT 475 Electronic Commerce

Frequency: Offered on occasion

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.

Prerequisite(s): (CSIT 205 or CSIT 221) and CSIT 207

Credits: 3

CSIT 490 Seminar on Selected Topics

Frequency: Offered on occasion

Studies, discussions, workshops and seminars on selected topics in computer science. Written reports and a formal presentation are required.

Credits: 1-3

CSIT 496 Special Topics

Frequency: Offered on occasion

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

CSIT 497 Thesis

Frequency: Offered on occasion

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.

Prerequisite(s): CSIT 341 or CSIT 351

Credits: 3

CSIT 499 Senior Project

Frequency: Offered on occasion

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.

Prerequisite(s): CSIT 341 or CSIT 351

Credits: 3

CSIT 536 Advanced Network Programming

Frequency: Offered on occasion

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

CSIT 537 Advanced Operating Systems

Frequency: Offered on occasion

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

CSIT 541 Algorithms

Frequency: Offered on occasion

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

CSIT 542 Advanced Data Structures

Frequency: Offered on occasion

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

CSIT 580 Computational Biology

Frequency: Offered on occasion

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

CSIT 591 Selected Topics in Computer Science

Frequency: Offered on occasion

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

CSIT 613 VLSI Design

Frequency: Offered on occasion

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

CSIT 625 Advanced Topics in Software Engineering

Frequency: Offered on occasion

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.

Prerequisite(s): CSIT 425

Credits: 3

CSIT 636 Network Security

Frequency: Offered on occasion

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

CSIT 639 Special Topics: Systems Structures

Frequency: Offered on occasion

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

CSIT 649 Selected Topics in Theory of Computation

Frequency: Offered on occasion

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

CSIT 665 Pattern Recognition

Frequency: Offered on occasion

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

CSIT 669 Selected Topics in Information Structures and Systems

Frequency: Offered on occasion

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

CSIT 670 Data Compression for Multimedia Applications

Frequency: Offered on occasion

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.

Prerequisite(s): CSIT 341

Credits: 3

CSIT 672 Multimedia Systems

Frequency: Offered on occasion

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

Dance

DANC 100 Introduction to Dance

Frequency: Every semester

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

DANC 101 Theatre and Dance Productions

Frequency: Every semester

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

DANC 102 Theatre and Dance Productions

Frequency: Every semester

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

DANC 105 Folk Dance

Frequency: Offered on occasion

Designed to cover the basics of folk dancing in many countries of the world.

Credits: 1

DANC 106 Square Dance

Frequency: Offered on occasion

An introductory course for the beginning square dancer. Emphasis is on modern square dancing, although other forms are covered.

Credits: 1

DANC 110 Dance Productions

Frequency: Every semester

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

DANC 111 Modern Technique I

Frequency: Every year

Introductory course in modern dance for the novice, covering various techniques. Attendance at all dance concerts on campus required.

Credits: 2

DANC 112 Ballet I

Frequency: Every year

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

DANC 113 Jazz Dance I

Frequency: Every year

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

DANC 114 Tap Dance I

Frequency: Every year

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

DANC 211 Modern Technique II

Frequency: Every year

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.

Prerequisite(s): DANC 111

Credits: 2

DANC 212 Ballet II

Frequency: Every year

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.

Prerequisite(s): DANC 112

Credits: 2

DANC 213 Jazz Dance II

Frequency: Every year

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.

Prerequisite(s): DANC 113 or DANC 131

Credits: 2

DANC 214 Tap Dance II

Frequency: Every year

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.

Prerequisite(s): DANC 114 or DANC 121

Credits: 2

DANC 231 African-Caribbean Dance

Frequency: Offered on occasion

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

DANC 241 Dance Improvisation

Frequency: Every year

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.

Prerequisite(s): DANC 111

Credits: 2

DANC 250 Dance Ensemble

Frequency: Every semester

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

DANC 251 Dance Repertory

Frequency: Every semester

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

DANC 260 Dance Kinesiology

Frequency: Every other year

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.

Prerequisite(s): DANC 111 or DANC 112 or DANC 113 or DANC 114

Credits: 3

DANC 264 Choreography I

Frequency: Every year

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.

Prerequisite(s): DANC 211

Credits: 3

DANC 311 Modern Technique III

Frequency: Every year

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.

Prerequisite(s): DANC 211

Credits: 2

DANC 312 Ballet III

Frequency: Every year

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.

Prerequisite(s): DANC 212

Credits: 2

DANC 313 Jazz Dance III

Frequency: Every other year

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.

Prerequisite(s): DANC 213

Credits: 2

DANC 321 Dance for the Musical Theatre

Frequency: Every other year

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.

Prerequisite(s): (DANC 114 or DANC 121) and DANC 211

Credits: 2

DANC 341 Selected Topics in Dance

Frequency: Every semester

Directed or Independent Study in dance-related topics. By advisement only. May be repeated for credit.

Credits: 1-3

DANC 353 Western Dance History

Frequency: Every other year

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.

Prerequisite(s): DANC 100 or DANC 111 or DANC 112 or DANC 113 or DANC 114

Credits: 3

DANC 364 Choreography II

Frequency: Every other year

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.
Prerequisite(s): DANC 363 or DANC 264

Credits: 3

DANC 370 Dance Studio Management

Frequency: Every other year

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.
Prerequisite(s): POLI 277 and COMM 116 and CSIT 104 or CSIT 151

Credits: 3

DANC 460 Senior Project

Frequency: Offered on occasion

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

DANC 461-462 Practicum in Dance

Frequency: Offered on occasion

Teaching of a beginning technique class for returning professionals or graduate students. By audition only.

Credits: 3

DANC 561 Practicum in Dance

Frequency: Offered on occasion

Internship in dance teaching for graduate dance students. By audition only. May be repeated.

Credits: 3

DANC 562 Practicum in Dance II

Frequency: Offered on occasion

Internship in dance teaching for graduate dance students. By audition only. May be repeated.

Credits: 3

Distance Learning

DIST 499 Distance Learning Special Topics

Frequency: Offered on occasion

This distance learning course is offered via transmission from another institution and is synchronous instruction.

Credits: 1-3

Economics

ECON 101 Introductory Economics

Frequency: Offered on occasion

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

ECON 102 Current Economic Issues

Frequency: Offered on occasion

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

ECON 200 Fundamentals of Statistics for Business Administration and Economics

Frequency: Every semester

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

ECON 201 Principles of Macroeconomics

Frequency: Every semester

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

ECON 202 Principles of Microeconomics

Frequency: Every semester

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

ECON 300 Statistical Analysis

Frequency: Every semester

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

Prerequisite(s): ECON 200 or BUAD 200 or EDU 200 or POLI 200 or SOC 200 or PSY 200 or STAT 200

Credits: 3

ECON 305 Intermediate Microeconomic Theory

Frequency: Every year

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.

Prerequisite(s): ECON 201 and ECON 202 and (MATH 120 or MATH 122)

Credits: 3

ECON 310 Intermediate Macroeconomic Theory

Frequency: Every year

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.

Prerequisite(s): ECON 201 and ECON 202 and (MATH 120 or MATH 122)

Credits: 3

ECON 312 Women in the Economy

Frequency: Offered on occasion

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.

Prerequisite(s): ECON 201 or ECON 202

Credits: 3

ECON 315 Money/Banking/Monetary Economics

Frequency: Every year

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.

Prerequisite(s): ECON 201 and ECON 202

Credits: 3

ECON 320 International Trade/Finance

Frequency: Every year

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.

Prerequisite(s): ECON 201 and ECON 202

Credits: 3

ECON 321 Multinational Corporations

Frequency: Offered on occasion

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.

Prerequisite(s): ECON 201

Credits: 3

ECON 325 Labor and Employment

Frequency: Every other year

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.

Prerequisite(s): ECON 202

Credits: 3

ECON 330 Public Sector Economics

Frequency: Offered on occasion

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.

Prerequisite(s): ECON 201 and ECON 202

Credits: 3

ECON 335 Economic Development

Frequency: Offered on occasion

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.

Prerequisite(s): ECON 201 and ECON 202

Credits: 3

ECON 340 Urban and Regional Economics

Frequency: Offered on occasion

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.

Prerequisite(s): ECON 202

Credits: 3

ECON 345 Comparative Economic Systems

Frequency: Every other year

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.

Prerequisite(s): ECON 101 or ECON 102 or ECON 201 or ECON 202

Credits: 3

ECON 350 Managerial Economics

Frequency: Offered on Occasion

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. Prerequisite(s): (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)

Credits: 3

ECON 360 Health Care Economics

Frequency: Offered on occasion

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.

Prerequisite(s): ECON 201 and ECON 202

Credits: 3

ECON 363 Game Theory

Frequency: Every other year

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. Prerequisite(s): POLI 200 or BUAD 200 or ECON 200 or EDU 200 or POLI 200 or PSY 200 or SOC 200 or STAT 200

Credits: 3

ECON 370 Evolution of Economic Thought

Frequency: Offered on occasion

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.

Prerequisite(s): ECON 201 and ECON 202

Credits: 3

ECON 380 Environmental/Natural Resource Economics

Frequency: Every other year

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.

Prerequisite(s): ECON 202

Credits: 3

ECON 381 Special Topics in Economics

Frequency: Offered on occasion

Examination of topics in economic issues, problems, theory and policy not covered in any other course offered by the department.

Prerequisite(s): ECON 201 and ECON 202

Credits: 1-3

ECON 395 Comparative Human Resources

Frequency: Offered on occasion

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.

Prerequisite(s): ECON 201 or ECON 202

Credits: 3

ECON 400 Econometrics and Business Applications

Frequency: Every other year

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.

Prerequisite(s): BUAD 300 or ECON 300

Credits: 3

ECON 405 Industrial Organization

Frequency: Offered on occasion

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.

Prerequisite(s): ECON 305 or ECON 350

Credits: 3

ECON 410 Mathematical Economics

Frequency: Offered on occasion

Introduces students to mathematical techniques used in economic analysis, including optimization theory, consumer and producer problems and general equilibrium models.

Prerequisite(s): ECON 305 or ECON 350 or MATH 223

Credits: 3

ECON 425 Financial Markets/Institutions

Frequency: Every other year

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.

Prerequisite(s): ECON 315

Credits: 3

ECON 430 Independent Study

Frequency: Every semester

Individualized study under the supervision of a faculty member.

Credits: 1-3

ECON 450 Senior Seminar

Frequency: Every year

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.

Prerequisite(s): ECON 305 or ECON 310

Credits: 3

ECON 480-481 Internship

Frequency: Every semester

Provides students the opportunities to earn credits for professional experience gained through learning-by-doing techniques.

Credits: 1-6

Education

EDU 100 Tutoring Theory Practice

Frequency: Every semester

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

EDU 101 First Field Experience

Frequency: Offered on occasion

Adolescence Education majors are introduced to teaching by enrolling in a 25-hour observation participation experience.

Credits: 0

EDU 105 Introduction to Contemporary Inclusive Education

Frequency: Every semester

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.

Corequisite(s): EDU 106

Credits: 3

EDU 106 Practicum in Inclusive Education I

Frequency: Every semester

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.

Corequisite(s): EDU 105

Credits: 0

EDU 110 Education Literature/Composition

Frequency: Offered on occasion

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

EDU 200 Statistics

Frequency: Offered on occasion

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

EDU 214 Introduction to Children's Literature

Frequency: Offered on occasion

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

EDU 215 Education in American Society

Frequency: Offered on occasion

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

EDU 218 Children's Literature in Literacy Instruction

Frequency: Offered on occasion

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

EDU 220 Child Development

Frequency: Offered on occasion

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

EDU 221 Introduction to Early Childhood Education

Frequency: Every year

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.

Prerequisite(s): (EDU 105 and EDU 106) and (EDU 220 or EDU 225)

Credits: 3

EDU 224 Adolescent Development

Frequency: Every semester

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

EDU 225 Child Development

Frequency: Every semester

Orderly sequence of childhood growth and development. Principles of physical, intellectual and personality changes emphasized, along with procedures for evaluating relevant research.

Credits: 3

EDU 227 The Electronic Classroom

Frequency: Offered on occasion

An introduction to computer managed instruction, computer based instruction, and the design and use of multimedia resources in the classroom.

Credits: 3

EDU 250 Introduction to the Exceptional Learner

Frequency: Every semester

Introductory survey of nature, needs, and education of children who are exceptional because of intelligence, behavioral disorders, and/or physical development.

Prerequisite(s): (EDU 105 and EDU 106) or (MAED 105 and MAED 106) or (SCED 105 and SCED 106) or ENED 101 or ENGL 101

Corequisite(s): EDU 251

Credits: 3

EDU 251 Practicum in Inclusive Education II

Frequency: Every semester

Candidates work directly with pupils with learning difficulties in area schools and agencies.

Corequisite(s): EDU 250

Credits: 0

EDU 275 Introduction to the Teaching of Reading in the Elementary School

Frequency: Offered on occasion

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

EDU 276 Literacy and Technology in Inclusive Educational Settings

Frequency: Every semester

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

EDU 300 Safe Schools/Healthy Students

Frequency: Every year

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

EDU 301 Safe Schools/Healthy Students: Child Abuse and Child Abduction

Frequency: Every year

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

EDU 302 Safe Schools/Healthy Students: Alcohol, Tobacco and Other Drug Abuse

Frequency: Every year

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

EDU 303 Safe Schools/Healthy Students: Safety Education/Fire and Arson/School Violence

Frequency: Every year

The course is designed to provide pre-service teachers (B-12) with an introduction to essential concepts in fire safety and school violence prevention. Students will develop their knowledge through Internet assignments, assigned readings, situational analysis, group discussion, video and lecture.

Credits: 1

EDU 305 Cultural and Linguistic Diversity in the Classroom

Frequency: Every semester

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.

Prerequisite(s): EDU 250 and EDU 251

Corequisite(s): EDU 313

Credits: 3

EDU 312 Infant and Toddler Care and Education

Frequency: Offered on occasion

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.

Prerequisite(s): EDU 105

Credits: 3

EDU 313 Practicum in Inclusive Education III

Frequency: Offered on occasion

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.

Corequisite(s): EDU 305

Credits: 0

EDU 314 Developmental Learning

Frequency: Offered on occasion

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

EDU 315 Early Childhood Curriculum Development

Frequency: Every year

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.

Prerequisite(s): EDU 221 or EDU 312

Credits: 3

EDU 321 Teaching in the Middle School

Frequency: Every year

Principles, materials, curriculum, and methods for teaching in the middle school. Required for certificate extension to middle school grades.

Credits: 3

EDU 326 Elements of Public School Law

Frequency: Offered on occasion

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

EDU 349 Educational Psychology

Frequency: Every semester

Areas of psychology utilized in the teaching and learning processes. Analyzing and interpreting scientific data related to individual differences, growth, learning, group processes, and evaluation.

Credits: 3

EDU 351 Classroom Management and Learning Principles

Frequency: Offered on occasion

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.

Prerequisite(s): EDU 349

Credits: 3

EDU 355 Assessment & Instruction of Students with Learning & Behavior Disorders in Inclusive Ed Settings

Frequency: Every semester

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.

Prerequisite(s): EDU 250

Corequisite(s): EDU 305 or EDU 313

Credits: 3

EDU 360 Developmental Disabilities

Frequency: Offered on occasion

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.

Prerequisite(s): EDU 250

Credits: 3

EDU 380 Working with Children Outside the Classroom

Frequency: Every semester

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

EDU 390 Special Topics in Education: Curriculum and Instruction

Frequency: Offered on occasion

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: 1-3

EDU 391 Special Topics in Education: Language, Learning, and Leadership

Frequency: Offered on occasion

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

EDU 395 Belize Project Orientation

Frequency: Every year

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

EDU 402 Teaching Mathematics in Inclusive Educational Settings

Frequency: Every year

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.

Prerequisite(s): MAED 302 and EDU 305 and EDU 313 and EDU 349

Credits: 1.5-3

EDU 403 Teaching Science in Inclusive Educational Settings

Frequency: Every year

Materials and procedures in a process-centered science curriculum. Investigation of new curricula illustrating guided discovery approach to teaching sciences.

Prerequisite(s): EDU 305 and EDU 313 and EDU 349

Credits: 3

EDU 404 Teaching Social Studies in Inclusive Educational Settings

Frequency: Every year

Curriculum, materials, and procedures in teaching social studies in the elementary school.

Prerequisite(s): EDU 305 and EDU 313 and EDU 349

Credits: 3

EDU 405 Teaching Literacy in Inclusive Educational Settings

Frequency: Every year

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.

* Indicates that the course can be taken in the same semester

Prerequisite(s): EDU 305* and (EDU 276 or SCED 276 or MAED 276)

Credits: 3

EDU 406 Literacy and Assessment in Inclusive Educational Settings

Frequency: Every year

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.

* Indicates that the course can be taken in the same semester

Prerequisite(s): (EDU 405*) and EDU 305* and EDU 313* and EDU 349 and (EDU 276 or MAED 276 or SSED 276)

Credits: 1.5-3

EDU 412 Integrated Methods for Early Childhood Education

Frequency: Every year

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.

Prerequisite(s): EDU 315

Corequisite(s): EDU 432

Credits: 3

EDU 416 Capstone Seminar - Advanced Study in Classroom Organization, Management, and Instruction

Frequency: Every semester

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: 1.5-3

EDU 417 Middle School (Grades 5-9) Methods in Mathematics

Frequency: Every year

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

EDU 419 Secondary School (Adolescence) Methods

Frequency: Every year

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

EDU 420 Student Teaching in the Elementary School - Primary

Frequency: Every semester

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

EDU 421 Student Teaching in Early Childhood Education - Pre-Kindergarten

Frequency: Every semester

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

EDU 422 Student Teaching in the Elementary School - Intermediate

Frequency: Every semester

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

EDU 423 Student Teaching in Early Childhood Education - Kindergarten

Frequency: Every semester

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

EDU 424 Student Teaching in the Elementary School - Primary (Hamburg)

Frequency: Offered on occasion

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

EDU 425 Student Teaching in Early Childhood Education - Grades 1 or 2

Frequency: Every semester

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

EDU 426 Student Teaching in the Elementary School - Intermediate (Hamburg)

Frequency: Offered on occasion

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

EDU 429 Student Teaching in Middle Childhood Education - Mathematics Specialist

Frequency: Every year

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.

Prerequisite(s): EDU 417 or MAED 417

Credits: 15

EDU 430 Student Teaching in the Secondary School

Frequency: Every year

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.

Prerequisite(s): EDU 419 or MAED 419 or SCED 419 or SSED 419

Credits: 15

EDU 432 Home/School Partnerships in a Diverse Society

Frequency: Every year

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.

Corequisite(s): EDU 412

Credits: 1.5-3

EDU 435 Student Teaching: Pre-K/Kindergarten

Frequency: Every semester

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

EDU 436 Student Teaching: Grades 1-3

Frequency: Every semester

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

EDU 437 Student Teaching: Grades 4-6

Frequency: Every semester

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

EDU 440 Student Teaching Inclusive Education - Primary

Frequency: Every semester

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

EDU 441 Student Teaching Inclusive Education - Intermediate

Frequency: Every semester

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

EDU 480 Internship - Curriculum and Instruction

Frequency: Every semester

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: 3-15

EDU 481 Internship: Language, Learning, and Leadership

Frequency: Every semester

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***EDU 490 Independent Study: Curriculum and Instruction**

Frequency: Every semester

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: 1-3***EDU 491 Independent Study: Language, Learning, and Leadership**

Frequency: Every semester

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***EDU 501 Advanced Study: Child Psychology**

Frequency: Offered on occasion

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***EDU 502 Psychology of Adolescence**

Frequency: Offered on occasion

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***EDU 503 Evaluation in the Schools**

Frequency: Offered on occasion

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***EDU 504 The Exceptional Learner**

Frequency: Offered on occasion

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***EDU 505 The Process of Writing: K-12**

Frequency: Offered on occasion

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***EDU 506 Introduction to Literacy Instruction**

Frequency: Every semester

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.

*Credits: 3***EDU 507 Group Processes in Education**

Frequency: Offered on occasion

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***EDU 508 Teaching Exceptional Learners in Inclusive Settings**

Frequency: Offered on occasion

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***EDU 509 Teaching of Thinking**

Frequency: Offered on occasion

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***EDU 514 Assessment and Instruction of Diverse Learners I**

Frequency: Offered on occasion

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***EDU 515 Dramatic Experiences in Elementary School**

Frequency: Offered on occasion

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

EDU 516 Improving Educational Outcomes: Working with Children and Families from Poverty

Frequency: Offered on occasion

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

EDU 518 Second Language Acquisition and Development Theories

Frequency: Every year

This course will help teacher educators better understand theories of second language acquisition (SLA) in order to help them with their lesson planning and delivery in instructing English language learners (ELLs). Students will become knowledgeable about the various theories and approaches to SLA, including but not limited to (a) Cognitive/Connectionist, (b) Behaviorist (c) Universal Grammar, (d) Input/Interaction, (e) Socio-cultural, and (f) Sociolinguistic theories, and be able to apply these theories to their teaching practices. This course will explore first language acquisition stages as they relate to SLA, as well as present the various individual factors which help to explain differences between and within ELLs.

Developmental stages of SLA will also be examined. Since ELLs are diverse, and their language learning needs are specific to themselves, educators must understand the various means and ways in which languages are learned in order to be reflective, responsive practitioners.

Credits: 3

EDU 519 Curriculum Theory for the Second Language Classroom

Frequency: Every other year

This course focuses on learning basis curriculum theory and providing models of curriculum development with an application to Pre K-12 classrooms. Curriculum development is grounded in constructivist, student-centered theories. Students will analyze basic curriculum models for ESL and bilingual education as well as an historical overview of language pedagogy appropriate for English Language Learners (ELLs). Introduction to ESL program models, sheltered instruction, Special Education Considerations for ELLs, designing instruction, differentiation, classroom management and appropriate learning environments conducive to language learning are studied. In addition to regular class meetings, this course requires a 25-hour Service Learning practicum. Practicum

placements will be made at the beginning of the semester and will provide an opportunity to work with ELLs.

Credits: 3

EDU 520 Curriculum Framework Theory/Development

Frequency: Every year

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

EDU 525 Curriculum Framework Integration/Innovation

Frequency: Every year

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

EDU 526 Middle School Curriculum

Frequency: Offered on occasion

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

EDU 528 Technology in the Schools

Frequency: Offered on occasion

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

EDU 529 Proactive Approaches to Classroom Management in Inclusive Settings

Frequency: Offered on occasion

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.

Credits: 3

EDU 530 Assessment and Instruction of Diverse Learners II

Frequency: Offered on occasion

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

EDU 531 Philosophy of Education

Frequency: Every other year

Orientation to major philosophical outlooks and problems in contemporary education.

Credits: 3

EDU 534 Curriculum Development for the Second Language Classroom - ESL II

Frequency: Every other year

The course provides an historical overview of methods and approaches to teaching English as a Second Language. Approaches and strategies may include grammar-translation approach, the Silent Way, the Audio-lingual Method, Total Physical Response, Jazz Chants, and the Natural Approach as well as Cooperative Learning, Multiple Intelligences, Whole Language, and psycho-sociolinguistic approaches. The course provides an opportunity for students to develop curriculum units, applying curriculum theory to various content areas. Students will apply ESL methods and materials to curriculum units and develop instructional strategies that exemplify "best practices" in the field. Students will employ innovative and technological strategies. English language development (ELD) lesson and unit planning as well as assessment of these are presented.

Prerequisite(s): EDU 519

Credits: 3

EDU 535 School and Society

Frequency: Offered on occasion

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

EDU 536 Adolescent Literacies, Literature and Technology

Frequency: Every year

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

EDU 538 Cultural Literature

Frequency: Offered on occasion

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.

Credits: 3

EDU 539 Current Issues and Problems in Education

Frequency: Offered on occasion

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.

Credits: 3

EDU 540 Content Area English as a Second Language

Frequency: Offered on occasion

This course explores Sheltered English Instruction by studying and using the Sheltered Instruction Observation Protocol (SIOP). Participants in the course will learn how to deliver high-quality and effective sheltered instruction and how to create instructional materials using this model. The primary goal of this course is to explore the different content areas in both school and the work place to be able to translate instruction into meaningful learning. The SIOP model in particular will be emphasized as this model operationalizes sheltered instruction by offering teachers a model for lesson planning and implementation that provides English Language Learners (ELLs) with access to grade-level content standards. Students will learn how to articulate language and content objectives, design meaningful instruction, and align appropriate assessments. Some emphasis will be placed on integrating funds of knowledge from communities and families and culturally relevant pedagogy into planning for instruction. The ideas of Two Way Sheltered Instruction—an instructional model used in a Two Way Immersion Bilingual Education program is explored. In addition to regular class meetings, this course requires a 25-hour Service Learning practicum. Practicum placements will be made at the beginning of the semester and will provide an opportunity to work with ELLs.

Prerequisite(s): EDU 519

Credits: 3

EDU 542 Evidence-Based Practices for Inclusive Settings

Frequency: Every year

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

EDU 543 Education for Gifted and Talented Students

Frequency: Offered on occasion

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

EDU 544 Secondary School (Adolescence) Curriculum

Frequency: Offered on occasion

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

EDU 545 History of American Education

Frequency: Offered on occasion

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

EDU 546 Models of Classroom Management

Frequency: Offered on occasion

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.

Credits: 3

EDU 547 Children's Literature and Technology

Frequency: Every year

A required course for candidates seeking New York State Teacher Certification as an L1 (Birth - grade 6) Reading Specialist. The course provides an overview of children's literature from the perspectives of readability, critical literacy, and censorship, and examines literature in non-print form. It addresses the feature of children using computers and technology to create and publish their own literature. The course also contains an emphasis on using a variety of materials and multicultural texts to assist readers and writers from diverse cultural and linguistic backgrounds.

Credits: 3

EDU 548 Practicum in International Teaching

Frequency: Offered on occasion

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

EDU 553 Citizenship Education: Moral-Legal Education

Frequency: Offered on occasion

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

EDU 555 Methods of Bilingual Education

Frequency: Every other year

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

EDU 556 Teaching Language Arts in Spanish

Frequency: Every other year

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

EDU 561 Contemporary Issues in Parent/Teacher Relationships

Frequency: Offered on occasion

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

EDU 562 Infant Development and Education

Frequency: Every other year

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

EDU 563 Cultural Perspectives

Frequency: Every other year

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.

Credits: 3

EDU 564 Linguistics for ESL Educators

Frequency: Every year

This course presents conceptual foundations of linguistics, examines structural/functional properties of language, and discusses the rules and principles which govern natural language (e.g., morphology, phonetics, phonology, syntax, semantics, and pragmatics). The course investigates the nature of language and the use of English in various linguistic and pragmatic contexts. Other aspects of linguistics, such as language change/variation, and elements of linguistics which impact language acquisition (both first and second) will also be explored.

Psycholinguistic elements of language will be studied in regards to language processing for ELLs. Further, language disorders and impairments will be studied from a linguistic perspective. Students will be able to apply this new linguistic knowledge to their teaching practices, particularly when working with ELLs.

Prerequisite(s): EDU 305 or EDU 563

Credits: 3

EDU 565 Sociolinguistics for TESOL Educators

Frequency: Every other year

This course will help teacher educators in understanding how language is used and how language functions in society, including the ideas of globalization and the social turn for second language acquisition. The latter reflects the growing current research on the relationship between language and social settings, including language and gender, identity, ethnicity, and culture. The idea of globalization has impacted the study of language and learning by infusing the literature with topics such as how language is used globally, its application in a variety of local/global situations (e.g., World English, language variation), and the impact of power on language in society at large via a critical approach. A wide range of topics in this course will address many of the sociolinguistic phenomena described above, such as the following: heritage language maintenance, language contact, investment, imagined communities, dialects and idiolects, discourse, language policy, digital literacies, and language socialization. This course will help future educators distinguish and form opinions on these key topics, and discover how sociopolitical, sociocultural, and sociolinguistic elements can affect language learning and

language use in the classroom. Since language learners are diverse, and language learning needs are specific to an individual, educators will come to understand the broad spectrum of English language in use, the complexities associated with the multiple varieties of English, and how this may impact their classroom in order to be reflective, responsive practitioners.

Credits: 3

EDU 566 Sociolinguistic Considerations for Educators of ELL Students

Frequency: Offered on occasion

After reviewing models of first and second language acquisition, the course will discuss sociolinguistic phenomena such as code switching, dialects and idiolects, language transfer, loan words, and appropriate discourse. Common misconceptions regarding "Spanglish" and other linguistic phenomena will be discussed. Phenomena associated with "languages in contact" will be emphasized. Students will apply theoretical models to classroom practice through research and projects. (May be taken instead of EDU 565: Language and Learning by TESOL candidates.)

Credits: 3

EDU 568 Foundations of Bilingual Education

Frequency: Every other year

This course provides the basic theories and program models related to teaching emergent bilingual students in P-12 classrooms. The course will address U.S. bilingual education in terms of historical, theoretical, and practice/methods—such as two-way sheltered instruction—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. Other topics related to bilingualism and cognition, restrictive language policies, effectiveness research, Special Education considerations for emergent bilingual students, heritage language programs, and indigenous language revitalization efforts. Two field studies are conducted at Western NY bilingual schools.

Credits: 3

EDU 569 Assessment and Evaluation of English Language Learners (ELLs)

Frequency: Every year

This course allows participants to view current school-based 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 will identify the purpose, instrument, method, and the use of assessments and evaluations most appropriate and valid for ELLs. This course explores relationships of assessment to instruction, Special Education Considerations for ELLs, 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 formative and summative 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 ELLs. In addition to regular class hours, this course has a 25-hour Service Learning practicum. Practicum placements will be made at the beginning of the semester and will provide an opportunity to work with English Language Learners (ELLs).
Credits: 3

EDU 570 Using Educational Research to Improve Instruction

Frequency: Every semester

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.

Credits: 3

EDU 579 Social Foundations of Literacy

Frequency: Every year

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

EDU 580 Teaching Grades 7-12

Frequency: Offered on occasion

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

EDU 581 Japanese Culture and Education

Frequency: Offered on occasion

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

EDU 582 Classroom Expectancy and Effects

Frequency: Offered on occasion

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

EDU 583 Individualized Literacy Instruction

Frequency: Every year

Encourages and prepares classroom teachers to teach reading through individualized and learner-orientated activities. Selection, preparation, production, and use of distinctive activities to individualize reading emphasized. Corequisite(s): EDU 653

Credits: 3

EDU 585 Adolescent Literature

Frequency: Every year

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

EDU 586 Literacy in the Content Areas

Frequency: Every year

The course extends studies in the foundations of literacy by emphasizing the relationships between learning how to read and write to reading and writing to learn. The primary focus of the course is to develop the understanding that literacy is addressed, explored, and taught in all curricular areas including science, social studies, and mathematics. Assignments will be adjusted to match requirements for majors in Literacy I or Literacy II.

Credits: 3

EDU 587 Psychological Foundations of Literacy

Frequency: Every year

Through interactive activities, candidates acquire knowledge about basic psychological foundations of reading, writing, spelling, and viewing, addressing linguistic components that are essential for literacy educators to comfortably instruct the increasingly diverse group of learners in today's classrooms. Addresses elementary and secondary literacy programs.

Credits: 3

EDU 588 Learning to Write: Pre K - Grade 6

Frequency: Offered on occasion

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

EDU 589 Writing in the Middle and Secondary Schools

Frequency: Offered on occasion

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

EDU 591 Special Topics: Curriculum and Instruction

Frequency: Every year

In-depth exploration of selected topics in professional education, with emphasis on Curriculum and Instruction. Principal focus of the course varies.

Credits: 3

EDU 592 Special Topics: Language, Learning, and Leadership

Frequency: Every year

In-depth exploration of selected topics in professional education, with emphasis on Language, Learning, and Leadership. Principal focus of the course varies.

Credits: 3

EDU 598 Special Education Considerations for Assessment of English Language Learners

Frequency: Every year

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

EDU 601 Issues, Trends, and Research in Autism

Frequency: Every year

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

EDU 603 Issues, Trends, and Research in Elementary (Childhood) Science

Frequency: Every other year

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.

Credits: 3

EDU 605 Issues, Trends, and Research in Elementary (Childhood) Language

Frequency: Every year

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

EDU 611 Advanced Seminar in Elementary Education

Frequency: Offered on occasion

Individual research on problems of special interest, under the guidance of one or more faculty members.

Credits: 3

EDU 613 Remediation of Literacy Difficulties

Frequency: Every year

A second clinic course, in which candidates learn theory and then demonstrate in practice understandings about the nature, causes, and remediation of literacy difficulties. Includes supervised clinic/practicum.

Prerequisite(s): EDU 583

Credits: 3

EDU 614 Principles of School Administration and Leadership

Frequency: Every year

This 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 use of case studies is an integral part of the course. The paradox of the principalship, the need to be both an effective leader and manager, will be investigated.

Credits: 3

EDU 615 School Building Leader

Frequency: Every year

This 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 K-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

EDU 616 Supervision I: Theory/Practice

Frequency: Every year

This 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

EDU 617 Supervision II: Supervision to Improve Instruction

Frequency: Every year

This 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.

Credits: 3

EDU 618 Internship I: Educational Leadership

Frequency: Every year

This structured field experience provides the opportunity to directly participate in the activities related to the functions of a school leader in a school district for a minimum of 300 clock hours. Candidates attend seminars to discuss leadership issues and explore topics raised by their experiences in the field. Candidates work with an approved mentor in the field to develop an internship proposal addressing specific leadership competencies. Candidates will also further develop their leadership philosophy, write and analyze case studies, and read and discuss topical educational issues affecting school leadership.

Credits: 3-6

EDU 619 Internship II: Educational Leadership

Frequency: Every year

This structured field experience provides the continuing opportunity to directly participate in the activities related to the functions of a school leader for a minimum of 300 clock hours. The course will emphasize 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. Candidates will prepare an internship portfolio reflecting their experience.

Credits: 3

EDU 620 Public School Finance

Frequency: Every year

This 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.

Credits: 3

EDU 624 Contemporary Problems in School Leadership

Frequency: Every year

This 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

EDU 625 Early Childhood Curriculum

Frequency: Offered on occasion

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

EDU 626 Public School Law

Frequency: Every year

This 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

EDU 629 Issues, Trends, and Research in Early Childhood Education

Frequency: Offered on occasion

Explores basic issues in early childhood education, current trends, and past and current research.

Credits: 3

EDU 630 Creating Safe and Productive Schools

Frequency: Every year

This course is based upon the primary assumption that positive and productive school cultures can be created and that daily staff actions play the major role in this process. The role of the school building leader as the primary person responsible for guiding and shaping the attitudes and actions that influence a positive school culture will be emphasized. Topics will include: School law as it applies to student behavior; student code of conduct; equity issues in student discipline; maintaining a safe environment; and preventing violence in schools.

Credits: 3

EDU 635 Curriculum Development in Social Studies Education

Frequency: Offered on occasion

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

EDU 636 Issues, Trends, and Research in Elementary School Social Studies

Frequency: Every year

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

EDU 640 Issues, Trends, and Research in Elementary (Childhood) Mathematics

Frequency: Offered on occasion

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.

Credits: 3

EDU 642 Activity-Oriented Elementary Mathematics

Frequency: Offered on occasion

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

EDU 643 Math Assessment in Support of All Learners

Frequency: Offered on occasion

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

EDU 651 Issues and Research in Literacy

Frequency: Every year

Candidates will analyze issues and research in literacy and write a research or curriculum proposal for a thesis project.

Prerequisite(s): EDU 570 and EDU 583 and EDU 652

Credits: 3

EDU 652 Literacy Assessment

Frequency: Every year

Investigates the nature and possible causes of literacy disabilities as well as principles underlying the assessment and diagnosis of literacy difficulties. Candidates will develop competence in analyzing reading and writing problems through the use of a variety of diagnostic techniques.

Credits: 3

EDU 653 Diagnoses of Literacy Difficulties

Frequency: Every year

Includes the administration, interpretation, and evaluation of individual diagnostic instruments used in the evaluation of reading disabilities, as well as the preparation of case studies. Course participants will be involved in the development and evaluation of professional development programs that involve paraprofessionals.

Prerequisite(s): EDU 506

Corequisite(s): EDU 583

Credits: 3

EDU 655 Clinical Applications of Literacy Instruction

Frequency: Offered on occasion

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.

Prerequisite(s): EDU 583 and EDU 613

Credits: 3

EDU 659 Master's Thesis/Project in Literacy

Frequency: Every semester

The course is designed to help candidates refine their skills in the analysis and evaluation of research and go through the process of conducting educational research, including the preparation of a project or thesis. Candidates should have completed 33 credit hours of their program, including EDU 651 or EDU 660, before registering for the course.

Prerequisite(s): EDU 651 or EDU 660

Credits: 3

EDU 660 Conducting Educational Research (TESOL)

Frequency: Every semester

This course will help prepare TESOL educators understand the various functions, benefits of, and uses for educational research and is a part of the three-course sequence for the College of Education (COE) as defined by the COE's Master's Project Handbook. Completing this course will further help TESOL candidates better design research projects suitable to the field and are to be constructed and created at the high standard to which students are held accountable. The research projects developed in this course should help further the field of education, particularly as related to TESOL (both teaching and learning). This course will scaffold students who have learned how to synthesize research from EDU 570 through the stages of designing a research proposal, thus preparing them for the final stages of their degree wherein students successfully complete their own Master's project or thesis in EDU 690. This knowledge will help advance TESOL candidates into becoming scholarly teachers who are able to reflect on their core educational values, continually engage in their own learning process, and know how to approach issues, concerns or problems within their school community.

Prerequisite(s): EDU 570

Credits: 3

EDU 662 Policy Development, Politics and Ethical Practices

Frequency: Every year

This course is designed to provide a theoretical basis and practical experience for working in a school district administrative capacity. In particular, the course work will examine the process of policy development and the political and ethical dimensions of district level leadership. Candidates will gain practical experience in the field of educational administration under the supervision of a certified and practicing district administrator and the course professor. Each candidate will be required to plan, develop and implement a district wide field project. This project should be chosen to provide a depth of experience through immersion in a specific district issue requiring: research, planning, negotiating, leading, and managing change common to district level administrators. This experience is designed to give the candidate the opportunity to put into practice the theories, skills, and strategies studied in course work. Through working closely with practitioners, college faculty, and classmates, the candidate will have the opportunity to reflect on decisions made and actions taken in the field, share the insights gained, and craft recommendations for responding effectively to future similar situations.

Credits: 3

EDU 664 School District Leadership Seminar: Media, Governance, and Crisis Management

Frequency: Every year

This course examines the role of the district level leader in responding to crises, governing the district, and managing media relations. Emphasis on central office administration, coordination of other municipal entities, local, state, and federal regulatory agencies will be studied. Effective practices in crisis management, media communications, and public/taxpayer relations will be investigated and developed. Candidates will gain practical experience in the field of educational administration under the supervision of a certified and practicing district administrator and the course professor. Each candidate will be required to plan, develop and implement a district wide field project. This project should be chosen to provide a depth of experience through immersion in a specific district issue requiring: research, planning, negotiating, leading, and managing change common to district level administrators. This experience is designed to give the candidate the opportunity to put into practice the theories, skills, and strategies studied in course work. Through working closely with practitioners, college faculty, and classmates, the candidate will have the opportunity to reflect on decisions made and actions taken in the field, share the insights gained, and craft recommendations for responding effectively to future similar situations.

Credits: 3

EDU 670 Independent Study: Curriculum and Instruction

Frequency: Every semester

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

EDU 671 ESOL/BE Practicum & Supervision 20 Day

Frequency: Every other year

This course provides classroom instruction and field experience for educators of LEP/ELL students. It provides a supervised student teaching experience for graduate students who are already certified in an approved area of education. Students are placed in an approved ESL/BE classroom or resource room at a grade level appropriate to their circumstances; students already holding an early childhood or childhood certificate will be placed in a middle school or secondary school (grades 5-12); students already holding a middle school or adolescent certificate will be placed in an elementary school setting (grades K-6). The field placement shall be for four days per week, six hours per day, for a minimum of six weeks, maximum of ten weeks depending whether taken in the fall/spring or summer session. The seminar focuses on topics germane to teaching students in grades K-12 in an ESL/BE setting. Students will attend a three hour seminar once a week throughout the semester or summer session. Classroom theory is applied to field practice. Required course.

Prerequisite(s): EDU 518 and EDU 519 and EDU 540 and EDU 568 and EDU 569

Credits: 3

EDU 672 Independent Study: Language, Learning, and Leadership

Frequency: Every semester

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

EDU 673 ESOL/BE Practicum & Supervision (40 day)

Frequency: Every semester

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 MSEd and TESOL & BE CAS programs. Prerequisites: Satisfactory completion of EDU 518, 519, 540, 568, 569 & ongoing recommendation of Department of Language, Learning & Leadership.

Prerequisite(s): EDU 518 and EDU 519 and EDU 540 and EDU 568 and EDU 569

Credits: 3

EDU 680 Master's Comprehensive Examination

Frequency: Every semester

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

EDU 690 Master's Thesis/Project (TESOL)

Frequency: Every semester

EDU 690 is offered primarily as a structured independent study where students, with guidance, complete the approved Master's Research Project independently. Students will make appointments with the professor as necessary. Students entering the class without an approved EDU 660 or Human Subjects Review (HSR) proposal must meet with the professor every week until your proposal is approved by the professor.

The primary goal of this course is to enable TESOL candidates to develop and complete the capstone project/thesis while learning skills and being provided with resources and support. Students will design and complete a high quality project/thesis. Students will either continue their work in 660 or will develop an exhaustive literature review and a hypothesis/problem area/research question(s) to be examined, and design a methods section. Depending on which option is chosen (curriculum project/action research/master's thesis), this will determine the remaining requirements, but students will be obliged to meet all expectations outlined in the COE Master's Project Handbook. Students will be required to disseminate findings/project to an approved conference. (e.g., SUNY Fredonia's Research Expo)

Prerequisites for enrollment in this class include 30 credit hours in the student's program of study and a grade of B or better in EDU 660.

Prerequisite(s): EDU 660

Credits: 3-6

EDU 690-691 Master's Thesis/Project

Frequency: Every semester

Research including the preparation of a project, essay, or thesis.

Credits: 3-6

English Education

ENED 101 Introduction to English Adolescence Education

Frequency: Every year

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

ENED 103 Readings and Observation in English Adolescence Education

Frequency: Every year

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.

Prerequisite(s): ENED 101 or ENGL 101

Credits: 1.5

ENED 250 Literacy and Technology

Frequency: Every year

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

ENED 352 Teaching Writing in the Primary Grades

Frequency: Every year

Examines the writing process as it applies to primary-grade students and offers developmentally-appropriate approaches for teaching drafting, revising, and editing.

Credits: 3

ENED 353 Reading and Writing Children's Literature

Frequency: Every other year

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

ENED 354 Literature for Intermediate Grades

Frequency: Every year

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

ENED 355 Adolescent Literature

Frequency: Every year

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

ENED 356 Teaching Writing in the Secondary School

Frequency: Every year

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

ENED 357 Literacy/Language/Learning Theory

Frequency: Every year

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

ENED 358 Teaching Writing in the Intermediate Grades

Frequency: Every year

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

ENED 359 Teaching Poetry in Elementary and Middle School

Frequency: Offered on occasion

Practical approaches for helping elementary and middle school students experience and enjoy many forms of poetry. Includes reading, writing and collecting poems.

Credits: 3

ENED 360 Multicultural English Education in Theory and Practice

Frequency: Every other year

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

ENED 399 Special Topics in English Education

Frequency: Offered on occasion

Variable-content course; topic announced in the online Course Offerings each semester that the course is offered.

Credits: 1-3

ENED 413 Teaching Shakespeare

Frequency: Every other year

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

ENED 450 Seminar for Teachers of English

Frequency: Every year

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.

Corequisite(s): ENED 451 or ENGL 401

Credits: 3

ENED 451 Methods for English Education

Frequency: Every year

Principles, materials and methods for teaching English. Note: Must be taken before student teaching.

Corequisite(s): ENED 450

Credits: 3

ENED 452 Inquiries in Student Teaching

Frequency: Every year

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.

Corequisite(s): ENED 453

Credits: 3

ENED 453 Student Teaching in the Secondary School - English Grades 7-12

Frequency: Every year

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.

Prerequisite(s): ENED 450 and ENED 451

Corequisite(s): ENED 452

Credits: 12

ENED 554 Teaching Writing in the Secondary School

Frequency: Every other year

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

ENED 601 Structured Field Experience Completion

Frequency: Every semester

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

ENED 665 Studies in English Education

Frequency: Every other year

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

ENED 690 Advanced Research Seminar

Frequency: Every Fall semester

This required course for graduate students in English provides a seminar-styled workshop environment for independent student research 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, engage in peer critique for proposals and drafts, finalize faculty committees and review professional opportunities in the field. Students conducting independent classroom research 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 the seminar.

Prerequisite(s): ENGL 500 and ENGL 502

Credits: 3

ENED 692 Action Research Thesis Completion

Frequency: Every year

Culmination of research undertaken in ENED 690, which results in an action research thesis and includes a successful oral defense.

Prerequisite(s): ENED 690

Credits: 3

English

ENGL 100 English Composition

Frequency: Every semester

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

ENGL 106 The English Major: An Introduction to Literary Studies

Frequency: Every semester

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, and the multiple functions and genres of literature and writing. This course will also require a significant literary research paper designed to introduce students to effective modes of library research, strategies for integrating secondary sources, and important terms and concepts that are fundamental to literary analysis. The

small class size will also encourage active discussion and the development of oral presentation skills.

Credits: 3

ENGL 160 Visiting Writers Program

Frequency: Every semester

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).

Corequisite(s): ENGL 361 or ENGL 362 or ENGL 460 or ENGL 461

Credits: .5

ENGL 200 Introduction to American Studies

Frequency: Every year

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

ENGL 204 Survey of English Literature

Frequency: Offered on occasion

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

ENGL 205 Epic and Romance

Frequency: Every semester

Readings in world literature from ancient to contemporary. Readings include epics from the oral and written traditions and romances from several traditions.

Credits: 3

ENGL 206 Survey of American Literature

Frequency: Offered on occasion

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

ENGL 207 Drama and Film

Frequency: Every semester

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

ENGL 208 American Popular and Mass Cultures

Frequency: Every other year

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

ENGL 209 Novels and Tales

Frequency: Every semester

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

ENGL 211 World Poetry

Frequency: Every semester

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

ENGL 214 American Fiction

Frequency: Offered on occasion

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

ENGL 215 Detective Fiction

Frequency: Offered on occasion

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

ENGL 216 Science Fiction

Frequency: Offered on occasion

Historical and generic survey of science fiction through representative works and major authors; examination of its relationships with other types of literature.

Credits: 3

ENGL 217 Fantasy Fiction

Frequency: Offered on occasion

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

ENGL 240 Introduction to African American Literature and Culture

Frequency: Every other year

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 INDS 240.

Credits: 3

ENGL 241 Introduction to Latino/a Literature

Frequency: Offered on occasion

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 INDS 241.

Credits: 3

ENGL 242 American Indian Literature

Frequency: Every other year

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 INDS 242.

Credits: 3

ENGL 260 Introduction to Creative Writing

Frequency: Every semester

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

ENGL 261 Literary Publishing

Frequency: Every year

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.

Prerequisite(s): ENGL 260

Credits: 3

ENGL 280 Introduction to Film

Frequency: Every other year

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

ENGL 291 The Bible as Literature

Frequency: Offered on occasion

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

ENGL 296 American Identities

Frequency: Every year

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***ENGL 299 Special Topics**

Frequency: Offered on occasion

Variable-content course; topic announced in the online Course Offerings each semester.

*Credits: 1-4***ENGL 300 European Literary Landmarks**

Frequency: Offered on occasion

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***ENGL 301 American Literary Landmarks**

Frequency: Every year

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***ENGL 302 British Literary Landmarks**

Frequency: Every year

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***ENGL 303 Global Literary Landmarks**

Frequency: Every other year

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***ENGL 304 Latina Literature and Cultural Studies**

Frequency: Offered on occasion

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***ENGL 306 Middle Eastern Literatures**

Frequency: Offered on occasion

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***ENGL 310 Medieval Literature**

Frequency: Every other year

Study of selected texts representative of the literature flourishing in Western Europe between 600 and 1500.

*Credits: 3***ENGL 312 Renaissance Literature**

Frequency: Every other year

Study of Renaissance texts, with a focus on English Renaissance literature.

*Credits: 3***ENGL 313 Scribbling Women**

Frequency: Every other year

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***ENGL 314 Women Writers**

Frequency: Every other year

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***ENGL 315 The Gothic Novel**

Frequency: Every other year

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.

*Credits: 3***ENGL 316 The Early 17th Century**

Frequency: Every other year

Study of Jacobean drama, metaphysical and neo-classical poetry, and emerging prose styles.

Credits: 3

ENGL 318 Studies in Poetry

Frequency: Every other year

Advanced-level course in analysis of poetry: introduction to various critical approaches; background study of poetic techniques; independent work on one poet.

Credits: 3

ENGL 319 Modern Drama

Frequency: Every other year

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

ENGL 320 The Restoration and 18th Century

Frequency: Every other year

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

ENGL 321 Contemporary Drama

Frequency: Every other year

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

ENGL 322 The Romantic Age

Frequency: Every other year

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

ENGL 324 Myth and Symbol in Literature

Frequency: Offered on occasion

Study of myth theory, mythology, and literary symbolism in world literature.

Credits: 3

ENGL 326 Victorian Literature

Frequency: Every other year

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

ENGL 327 Modern European Literature

Frequency: Offered on occasion

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

ENGL 328 Modern British Literature

Frequency: Every other year

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

ENGL 329 Graphic Literature

Frequency: Every other year

Exploration of the evolution, subject matters, forms, and conventions of graphic texts with emphasis on their literary form.

Credits: 3

ENGL 330 The Contemporary Novel

Frequency: Every other year

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

ENGL 331 American Literary Roots

Frequency: Every other year

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

ENGL 332 American Romanticism in Literature

Frequency: Every other year

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

ENGL 333 Environmental Literature

Frequency: Offered on occasion

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

ENGL 334 Realism/Naturalism in American Literature

Frequency: Every other year

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

ENGL 335 Modern American Poetry

Frequency: Every other year

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

ENGL 336 Modernism in American Literature

Frequency: Every other year

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

ENGL 338 Contemporary American Literature

Frequency: Every other year

Study of contemporary works, genres and movements with attention to literary form, historical contexts and other interdisciplinary concerns.

Credits: 3

ENGL 339 Contemporary American Poetry

Frequency: Every other year

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

ENGL 340 Black Women Writers

Frequency: Every other year

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

ENGL 341 Harlem Renaissance

Frequency: Every other year

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

ENGL 342 African American Autobiography

Frequency: Every other year

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

ENGL 343 Queer Studies in Literature

Frequency: Offered on occasion

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 transgendered 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

ENGL 344 Contemporary Multiethnic American Literature

Frequency: Every other year

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

ENGL 345 Critical Reading

Frequency: Every semester

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

ENGL 346 History of Literary Criticism

Frequency: Offered on occasion

Survey of representative texts in literary criticism from Plato to the mid-19th century.

Credits: 3

ENGL 348 Modern Literary Criticism

Frequency: Offered on occasion

Study of major documents, theoretical concerns, and dominant trends in literary criticism from the mid-19th century to the present.

Credits: 3

ENGL 349 Feminist Theory

Frequency: Every year

In-depth critical exploration of selected theories to explain the sources of women's roles in society. A multidisciplinary approach will be employed to account for the social, economic, political, and cultural status of women in contemporary societies. Cross-listed as WOST 301 and PHIL 244.

Prerequisite(s): ENGL 345 or WOST 201

Credits: 3

ENGL 351 Language and Society

Frequency: Offered on occasion

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

ENGL 352 History of the English Language

Frequency: Every other year

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

ENGL 355 Adolescent Literature

Frequency: Every year

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

ENGL 361 Intermediate Fiction Writing

Frequency: Every year

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.

* Indicates that the course can be taken in the same semester

Prerequisite(s): ENGL 160*

Credits: 3

ENGL 362 Intermediate Poetry Writing

Frequency: Every year

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

ENGL 365 Form and Theory of Writing

Frequency: Every other year

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.

Prerequisite(s): ENGL 260

Credits: 3

ENGL 366 Opinion in Journalism

Frequency: Offered on occasion

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

ENGL 369 Argumentative Writing

Frequency: Every year

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.

Prerequisite(s): ENGL 100

Credits: 3

ENGL 373 English Grammar for Everyone

Frequency: Every year

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

ENGL 374 Writing and Social Change

Frequency: Every other year

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.

Prerequisite(s): ENGL 100

Credits: 3

ENGL 375 Writing for the Professions

Frequency: Offered on occasion

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

ENGL 378 Advanced Writing I: The Essay

Frequency: Offered on occasion

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.

Prerequisite(s): ENGL 100

Credits: 3

ENGL 380 Film: Silence to Sound

Frequency: Offered on occasion

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

ENGL 381 Narrative Film After 1940

Frequency: Offered on occasion

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

ENGL 386 Women in Global Cinema

Frequency: Offered on occasion

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

ENGL 387 American Film

Frequency: Offered on occasion

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

ENGL 389 Greek and Roman Literature

Frequency: Offered on occasion

Introduction to major literary genres of classical Greece and Rome; emphasis on characteristic forms and themes. Readings in Modern English translations.

Credits: 3

ENGL 390 Jewish Literature

Frequency: Offered on occasion

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

ENGL 391 Romanticism in World Literature

Frequency: Offered on occasion

An exploration of basic themes commonly associated with the concept of Romanticism as identified in literature from Eastern and Western cultures.

Credits: 3

ENGL 392 Asian Literature

Frequency: Offered on occasion

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

ENGL 393 Literatures of Colonization and Globalization

Frequency: Offered on occasion

Study of texts from a variety of genres, time periods, and world cultures that explore the dynamics of colonization and globalization.

Credits: 3

ENGL 394 Japanese Literature

Frequency: Offered on occasion

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

ENGL 395 Non-Western Literature

Frequency: Offered on occasion

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

ENGL 396 Russian Literature

Frequency: Offered on occasion

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

ENGL 397 Discourses of the Enlightenment

Frequency: Offered on occasion

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

ENGL 399 Special Topics

Frequency: Offered on occasion

Variable-content course; topic announced in the online Course Offerings each semester that the course is offered.

Credits: 1-4

ENGL 400 Senior Seminar

Frequency: Every semester

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. Students must also enroll in ENGL 401 Portfolio Completion while taking Senior Seminar.

Corequisite(s): ENGL 401

Credits: 3

ENGL 401 Portfolio Completion

Frequency: Every semester

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

ENGL 404 Literary London

Frequency: Every year

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

ENGL 405 Page and Stage

Frequency: Every semester

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, for productions as well.

Credits: 1.5

ENGL 407 Tragedy

Frequency: Offered on occasion

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

ENGL 408 Arthurian Literature

Frequency: Every other year

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

ENGL 410 Chaucer

Frequency: Every other year

Study of The Canterbury Tales and Troilus and Criseyde. Introduction to Middle English language and period and to significant Chaucerian scholarship.

Credits: 3

ENGL 412 Early Shakespeare

Frequency: Every year

Study of Shakespeare's works to 1600; emphasis on his growth as a dramatist.

Credits: 3

ENGL 414 Later Shakespeare

Frequency: Every year

Study of Shakespeare's works from 1600 to end of his career.

Credits: 3

ENGL 416 Elizabethan Drama

Frequency: Offered on occasion

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

ENGL 418 Restoration/18th Century Drama

Frequency: Offered on occasion

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

ENGL 420 Milton

Frequency: Offered on occasion

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

ENGL 422 English Novel I

Frequency: Offered on occasion

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

ENGL 424 English Novel II

Frequency: Offered on occasion

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

ENGL 425 Yeats and Company

Frequency: Every other year

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

ENGL 427 Major Writers

Frequency: Every year

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

ENGL 430 Bloomsbury Modernism

Frequency: Offered on occasion

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

ENGL 446 Contemporary Literary Theory

Frequency: Offered on occasion

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

ENGL 455 Writing Tutors

Frequency: Every year

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.

Corequisite(s): ENGL 456

Credits: 3

ENGL 456 ESL Tutoring

Frequency: Every year

Focus on tutoring students whose first language is not English.

Corequisite(s): ENGL 455

Credits: 1

ENGL 460 Advanced Poetry Writing

Frequency: Every year

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.

Prerequisite(s): ENGL 362

Credits: 3

ENGL 461 Advanced Fiction Writing

Frequency: Offered on occasion

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.

Prerequisite(s): ENGL 360

Credits: 3

ENGL 465 English Internships

Frequency: Every semester

English internships. Interns work 40 hours for 1 credit hour. Enrollment requires a completed Learning Contract and permission of the department.

Credits: 1-12

ENGL 490 Independent Study

Frequency: Every semester

Study of a particular author, topic, or work. Periodic meetings with instructor and writing a substantial paper. Department approval.

Credits: 1-6

ENGL 499 Special Topics

Frequency: Offered on occasion

A variable-content course. Topics announced in online Course Offerings.

Credits: 3

ENGL 500 Introduction to Graduate Studies in English

Frequency: Every year

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

ENGL 502 Directed Study

Frequency: Every semester

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.

Prerequisite(s): ENGL 500

Credits: 1.5

ENGL 510 Major Writers

Frequency: Every year

Study in-depth of one writer or up to three writers related on the basis of a unifying principle.

Credits: 3

ENGL 512 Historical Perspectives in Literature

Frequency: Every year

Study of the development of important movements or concepts in literature.

Credits: 3

ENGL 514 Comparative Approaches to Literature

Frequency: Every year

Study of literary works from different time periods, nations, or cultures.

Credits: 3

ENGL 516 Criticism and Theory I

Frequency: Every other year

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

ENGL 518 Criticism and Theory II

Frequency: Every other year

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

ENGL 520 Graduate Seminar in Literature and Culture

Frequency: Every other year

A variable-content course, interdisciplinary in nature, featuring a contemporary topic central to the discipline.

Credits: 3

ENGL 580 Studies in Literature

Frequency: Every semester

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

ENGL 590 Special Topics

Frequency: Offered on occasion

A variable-content course on topics announced in the online Course Offerings each semester.

Credits: 1-6

ENGL 605 Independent Study

Frequency: Every semester

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

ENGL 690 Advanced Research Seminar

Frequency: Every Fall semester

This required course for graduate students in English provides a seminar-styled workshop environment for independent student research 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, engage in peer critique for proposals and drafts, finalize faculty committees and review professional opportunities in the field. Students conducting independent classroom research 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 the seminar.

Prerequisite(s): ENGL 500 and ENGL 502

Credits: 3

ENGL 691 Thesis Research II

Frequency: Every semester

Directed research culminating in a thesis. ENGL 690 and ENGL 691 must be taken sequentially in separate semesters.

Prerequisite(s): ENGL 690

Credits: 3

ENGL 694 English Graduate Internship

Frequency: Every semester

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

ENGL 695 Graduate Seminar in Professional Studies

Frequency: Every Spring Semester

A seminar facilitating the transition from graduate student to scholar-teacher, focusing on such topics as employment, conference presentations, publications, pedagogical techniques, and other professional endeavors.

Prerequisite(s): ENGL 500 and ENGL 502 and ENGL 690 or ENED 690

Credits: 1.5

Environmental Sciences

ESCI 100 Environmental Sciences First-Year Seminar

Frequency: Every year

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

ESCI 105 Global Environmental Issues

Frequency: Every year

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

ESCI 310 Methods in Environmental Analysis

Frequency: Every year

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. Prerequisite(s): GEO 165 and GEO 169 and BIOL 133 and BIOL 134 and STAT 250

Corequisite(s): CHEM 215 or CHEM 225

Credits: 3

ESCI 410 Environmental Assessment

Frequency: Every year

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.

Prerequisite(s): GEO 330 and GEO 243 and BIOL 244

Credits: 3

ESCI 440 Environmental Sciences Seminar

Frequency: Every year

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

ESCI 441 Environmental Sciences Senior Seminar

Frequency: Every year

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

ESCI 490 Environmental Sciences Practicum

Frequency: Every semester

Independent research, independent study, or internship under the direction of a participating faculty advisor.

Credits: 1-3

Film Studies

FILM 220 Film Form

Frequency: Every year

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

FILM 309 Film Analysis

Frequency: Every year

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.

Prerequisite(s): COMM 155

Credits: 3

FILM 399 Special Topics

Frequency: Every other year

A variable-content course. The topic will be announced in the online Course Offerings when the course is offered.

Credits: 1-4

FILM 401 Independent Study

Frequency: Every other year

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: 1-3

FILM 470 Senior Film Seminar

Frequency: Every year

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

French

FREN 115 Elementary French I

Frequency: Every semester

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

FREN 116 Elementary French II

Frequency: Every semester

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.

Prerequisite(s): FREN 115 or NY Regents French Exam
Score of an 80 or better

Credits: 3

FREN 215 Intermediate French I

Frequency: Every year

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.

Prerequisite(s): FREN 116 or NY Regents French Exam
Score of an 85 or better

Credits: 3

FREN 216 Intermediate French II

Frequency: Every year

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.

Prerequisite(s): FREN 215

Credits: 3

FREN 308 Advanced French Phonetics and Diction

Frequency: Every year

Detailed study of rules of pronunciation and transcription into International Phonetic Alphabet (IPA). Pronunciation drills, exercises in sound discrimination and intonation.

Prerequisite(s): FREN 215 or FREN 216

Credits: 3

FREN 310 The Literature/Culture of Quebec

Frequency: Offered on occasion

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.

Prerequisite(s): FREN 216

Credits: 3

FREN 315 French Masterpieces

Frequency: Every other year

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.

Prerequisite(s): FREN 216

Credits: 3

FREN 316 French Plays and Prose

Frequency: Every other year

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.

Prerequisite(s): FREN 216

Credits: 3

FREN 317 French Conversation

Frequency: Every year

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.

Prerequisite(s): FREN 216

Credits: 3

FREN 318 French Composition

Frequency: Every year

Syntactical patterns of French, vocabulary building, translation, and free composition. Useful techniques of composition, problems of translation and questions of style discussed.

Prerequisite(s): FREN 216

Credits: 3

FREN 319 Survey of French Literature I

Frequency: Every year

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.

Prerequisite(s): FREN 315 or FREN 316

Credits: 3

FREN 320 Survey of French Literature II

Frequency: Every year

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.

Prerequisite(s): FREN 315 or FREN 316

Credits: 3

FREN 323 France Today

Frequency: Offered on occasion

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.

Prerequisite(s): FREN 315 or FREN 316

Credits: 3

FREN 341 Le Grand Siecle

Frequency: Offered on occasion

Detailed study of 17th century French classicism, its formation, flowering. Student reports, discussions.

Prerequisite(s): FREN 315 or FREN 316

Credits: 3

FREN 351 The Enlightenment

Frequency: Offered on occasion

Major works of 18th century French literature; emphasis on Montesquieu, Voltaire, Diderot, Rousseau, Marivaux, and Beaumarchais. Class work in French.

Prerequisite(s): FREN 315 or FREN 316

Credits: 3

FREN 361 Contemporary French Literature

Frequency: Offered on occasion

Novel and theater since Proust. Emphasis on post-1940 trends: existentialism, the New Novel and Theatre of the Absurd.

Prerequisite(s): FREN 315 or FREN 316

Credits: 3

FREN 380 French Drama in Practice

Frequency: Offered on occasion

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.

Prerequisite(s): FREN 317 and (FREN 315 or FREN 316)

Credits: 3

FREN 381 Topics for French Conversation

Frequency: Every other year

Students engage in discussions and presentations on a variety of topics covering social, scientific, artistic, philosophical, psychological, religious, and political issues.

Prerequisite(s): FREN 308 and FREN 317

Credits: 2

FREN 400 Special Topics in French

Frequency: Offered on occasion

Special areas in French language, literature, or culture and civilization not covered by regular courses.

Prerequisite(s): FREN 315 or FREN 316

Credits: 1-3

FREN 410 Directed Study

Frequency: Offered on occasion

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

FREN 417 Romanticism and Realism

Frequency: Offered on occasion

Detailed study of literary movements and major writers of 19th century.

Prerequisite(s): FREN 315 or FREN 316

Credits: 3

FREN 422 Advanced French Conversation

Frequency: Offered on occasion

Intensive practice in spoken French and listening comprehension at an advanced level.

Prerequisite(s): FREN 317 and FREN 421

Credits: 3

FREN 423 Senior Seminar

Frequency: Every year

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.

Prerequisite(s): (FREN 318 and FREN 319) or FREN 320

Credits: 3

FREN 424 Stylistics

Frequency: Every year

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.

Prerequisite(s): FREN 318

Credits: 3

FREN 500 Special Topics in French

Frequency: Offered on occasion

Special areas in French not covered by regular courses. Permission of department.

Credits: 1-3

FREN 510 Directed Study in French

Frequency: Offered on occasion

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

Geosciences**GEO 101 Geology of National Parks**

Frequency: Every semester

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

GEO 102 Freshman Seminar

Frequency: Every Fall semester

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

GEO 121 Landform Geography

Frequency: Every year

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

GEO 139 Mass Extinctions

Frequency: Offered on occasion

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

GEO 140 Catastrophic Weather

Frequency: Every semester

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

GEO 141 Age of Dinosaurs

Frequency: Every semester

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

GEO 142 Drifting Continents

Frequency: Every semester

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

GEO 143 Evolution of Life

Frequency: Every semester

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

GEO 145 Geology of New York State

Frequency: Every semester

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

GEO 146 Great Ice Age

Frequency: Every semester

One of a series of five-week introductory courses exploring topics in the geological sciences. Any three fulfill the College Core Curriculum Natural Sciences requirement.

Credits: 1

GEO 148 Trembling Earth

Frequency: Every year

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

GEO 149 Volcanoes

Frequency: Every semester

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

GEO 150 Moons and Planets

Frequency: Every year

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

GEO 152 Evolution of Western Science

Frequency: Every other year

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

GEO 160 Oceanography

Frequency: Every year

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

GEO 165 Geology I

Frequency: Every semester

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

GEO 169 General Geology Lab

Frequency: Every semester

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.

* Indicates that the course can be taken in the same semester

Prerequisite(s): GEO 165*

Credits: 1

GEO 175 Thirsty Planet

Frequency: Every year

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

GEO 180 Weather and Climate

Frequency: Every year

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

GEO 210 Geology II

Frequency: Every year

Physical history of the earth in relationship to orderly development of life throughout geological time. Lecture format.

Prerequisite(s): GEO 165

Credits: 3

GEO 215 Minerals and Rocks

Frequency: Every other year

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.

* Indicates that the course can be taken in the same semester

Prerequisite(s): GEO 165*

Credits: 4

GEO 301 Cartography

Frequency: Every year

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

GEO 311 Global Climate

Frequency: Every year

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

GEO 329 Regional Field Geology

Frequency: Every other year

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.

Prerequisite(s): GEO 210

Credits: 2

GEO 330 Geomorphology

Frequency: Every year

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.

Prerequisite(s): GEO 165 and GEO 169

Credits: 4

GEO 331 Restless Earth

Frequency: Offered on occasion

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.

Prerequisite(s): GEO 165

Credits: 3

GEO 335 Geophysics

Frequency: Every other year

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.

Prerequisite(s): GEO 165 and GEO 169

Credits: 4

GEO 341 Stars and Galaxies

Frequency: Offered on occasion

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

GEO 345 Paleontology

Frequency: Every other year

Principles of paleontology; biologic relationships of fossil organisms, particularly ancient invertebrates. Emphasizes evolutionary principles and trends. Field work supplements lecture and laboratory.

Prerequisite(s): GEO 210

Credits: 4

GEO 359 Vanishing Earth Resources

Frequency: Every other year

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.

Prerequisite(s): GEO 121 or GEO 165

Credits: 3

GEO 370 Structural Geology

Frequency: Every year

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.

Prerequisite(s): GEO 165 and GEO 169

Credits: 4

GEO 400 Stratigraphy

Frequency: Every year

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.

Prerequisite(s): GEO 165 and GEO 169 and GEO 210

Credits: 4

GEO 410 Directed Study

Frequency: Every semester

Independent study and research in areas beyond formal courses. Permission of department.

Credits: 1-3

GEO 411 Mineralogy

Frequency: Every other year

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.

* Indicates that the course can be taken in the same semester

Prerequisite(s): CHEM 115* and GEO 165*

Credits: 4

GEO 421 Petrology

Frequency: Every other year

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.

Prerequisite(s): GEO 411

Credits: 4

GEO 431 Geochemistry

Frequency: Every other year

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.

Prerequisite(s): GEO 411

Credits: 4

GEO 445 Geosciences Internship

Frequency: Every semester

Approved work-training experience with state or federal agency, museum, or industrial firm. Permission of department.

Credits: 1-15

GEO 450 Hydrogeology

Frequency: Every year

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.

Prerequisite(s): GEO 165 and GEO 330 and GEO 169

Credits: 4

GEO 455 Laboratory Supervision in Geosciences

Frequency: Every semester

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

GEO 459 Seminar in Geosciences

Frequency: Every semester

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

GEO 461 Field Geology

Frequency: Every other year

Two-week geologic mapping course immediately following end of spring semester (Summer Session I). Held at Catskill, N.Y.

Prerequisite(s): GEO 370

Credits: 3

GEO 471 Senior Thesis

Frequency: Every semester

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

GEO 480-489 Special Topics in Geosciences

Frequency: Every semester

Special area of geosciences not covered by regular courses.

Credits: 1-4

GEO 505 Earth Science of Chautauqua County

Frequency: Offered on occasion

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

GEO 580-589 Special Topics in Advanced Geosciences

Frequency: Offered on occasion

Special areas of problems in advanced geosciences not covered by regular graduate courses.

Credits: 3

GEO 590 Independent Study

Frequency: Offered on occasion

Independent study of topics not covered in regular graduate course offerings and pertinent to student's program of study or future career.

Credits: 3

GEO 610 Independent Research

Frequency: Offered on occasion

Independent research and study in current geoscientific problems based on laboratory and field research or current literature.

Credits: 3

GEO 615 Independent Research

Frequency: Offered on occasion

Independent research and study in current geoscientific problems based on laboratory and field research or current literature.

Credits: 3

GEO 690 Thesis Research

Frequency: Offered on occasion

Thesis research projects in an area of the geosciences.

Credits: 1-3

German

GERM 115 Elementary German I

Frequency: Every semester

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

GERM 116 Elementary German II

Frequency: Every semester

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.

Prerequisite(s): GERM 115 or NY Regents German Exam Score of an 80 or better

Credits: 3

GERM 215 Intermediate German I

Frequency: Offered on occasion

Increases proficiency in listening, speaking, reading and writing skills in German. Further development of vocabulary and grammar. Selected cultural and literary readings.

Prerequisite(s): GERM 116 or NY Regents German Exam Score of an 85 or better

Credits: 3

GERM 216 Intermediate German II

Frequency: Offered on occasion

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.

Prerequisite(s): GERM 215

Credits: 3

GERM 317 German Conversation

Frequency: Offered on occasion

Conversational exercises: reports, discussions. Readings from newspapers and cultural texts stressing contemporary colloquial German. Emphasis on idioms.

Prerequisite(s): GERM 215

Credits: 3

GERM 318 German Composition

Frequency: Offered on occasion

Practice in writing colloquial and formal German. Emphasis on idioms; style and structure in dialogue, descriptive and critical writing.

Prerequisite(s): GERM 215

Credits: 3

GERM 323 Germany Since 1918

Frequency: Offered on occasion

Cultural aspects of the Weimar Republic, the Third Reich, and contemporary Germany. Guest lecturers, readings, and films. in English.

Prerequisite(s): GERM 215

Credits: 3

GERM 400 Special Topics in German

Frequency: Offered on occasion

Special areas in German language, literature, or culture and civilization not covered by regular courses.

Credits: 1-3

GERM 410 Directed Study

Frequency: Offered on occasion

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

Geographic Info Systems

GIS 201 Geographic Information Systems I

Frequency: Every year

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

GIS 301 Geographic Information Systems II

Frequency: Every year

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.

Prerequisite(s): GIS 201

Credits: 3

GIS 350 Remote Sensing/Image Processing

Frequency: Every other year

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).

Prerequisite(s): GIS 201

Credits: 3

GIS 360 Mapping the Social World

Frequency: Every other year

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

GIS 401 Special Topics in Geographic Information Systems

Frequency: Offered on occasion

In-depth examination of GIS topics introduced in GIS 201 or GIS 301. May be taken more than once as topics vary.

Prerequisite(s): GIS 301

Credits: 3

GIS 450 Directed Study

Frequency: Every semester

Participation in GIS-related faculty research.

Prerequisite(s): GIS 201

Credits: 3

GIS 460 Teaching Assistant

Frequency: Every semester

Students have the opportunity to assist the instructor in the laboratory components of GIS 201 and GIS 301.

Prerequisite(s): GIS 201

Credits: 1-3

GIS 480 Independent Study

Frequency: Every semester

Individualized study under the close supervision of a faculty member. Students should have specific topics or projects in mind before approaching an instructor.

Prerequisite(s): GIS 201

Credits: 3

GIS 490 Internship

Frequency: Every semester

Provides opportunities for testing concepts and applications presented in the classroom. Interns have found opportunities in both the public and private sector.

Prerequisite(s): GIS 201

Credits: 3-6

History

HIST 100 History Freshmen Seminar

Frequency: Every year

A one-credit course designed to help incoming freshmen - especially prospective History majors, minors, and social studies majors - to succeed at SUNY Fredonia. The course will introduce first-year students to the academic, social, and citizenship aspects of college life. Further, it will introduce prospective History majors/minors and social studies majors to departmental personnel, expectations, and career opportunities in history and associated disciplines. The course will also increase student awareness of the special techniques appropriate to the successful study and enjoyment of history and related disciplines. Finally, the seminar will introduce the student to the wide range of university resources, functions, and extra-curricular opportunities available to the Fredonia student.

Credits: 1

HIST 101 World History I

Frequency: Every semester

Survey of the human experience from the Neolithic Revolution to the linking of the world (3500 B.C.E. - 1500 C.E.).

Credits: 3

HIST 102 World History II

Frequency: Every semester

Survey of the human experience from the linking of the world to the present (1500 C.E. - 2000 C.E.).

Credits: 3

HIST 105 United States History I

Frequency: Every semester

Survey from colonial times to 1877 of political, economic, social, and cultural development of America, including examples from New York State.

Credits: 3

HIST 106 United States History II

Frequency: Every semester

Survey from 1877 of political, economic, social, and cultural development of America, including examples from New York State.

Credits: 3

HIST 107 Themes from American History

Frequency: Offered on occasion

Exploration in-depth of single themes from the history of America. Specific themes vary from semester to semester.

Credits: 1-3

HIST 115 Western Civilization I

Frequency: Every semester

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

HIST 116 Western Civilization II

Frequency: Every semester

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

HIST 118 Themes from Western Civilization

Frequency: Offered on occasion

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

HIST 133 American Cultures

Frequency: Every semester

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

HIST 134 Western Cultures

Frequency: Every semester

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

HIST 135 World Cultures

Frequency: Every semester

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

HIST 201 Doing History

Frequency: Every semester

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

HIST 202 Applied History

Frequency: Offered on occasion

Introduces students to applied historical research. Focus varies with semesters, e.g., creation of historical documentaries; local history archives and research.

Credits: 3

HIST 203 History Through Films

Frequency: Offered on occasion

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

HIST 206 Introduction to African American Studies

Frequency: Offered on occasion

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

HIST 212 History of the Holocaust

Frequency: Every year

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

HIST 215 Holidays and American Culture

Frequency: Offered on occasion

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

HIST 225 Introduction to Latino History and Culture

Frequency: Every other year

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

HIST 250 Introduction to Russia, Eastern Europe & Eurasia, 1789-Present

Frequency: Every year

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

HIST 261 Islamic Civilization

Frequency: Every other year

The political, religious and social development of the Islamic Empire from pre-Islamic to Napoleonic era.

Credits: 3

HIST 264 East Asian Civilizations

Frequency: Every year

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

HIST 265 Pre-modern East Asia

Frequency: Offered on occasion

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

HIST 266 Modern East Asia

Frequency: Offered on occasion

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

HIST 268 History of South Asia

Frequency: Offered on occasion

Survey of the subcontinent from the Indus civilization to the present (3000 R.C.E. - 2000 C.E.).

Credits: 3

HIST 272 Africa to 1800

Frequency: Every year

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

HIST 273 Africa From the 1800s

Frequency: Every year

The course builds on HIST 272 (but is not a necessary prerequisite), providing students with a survey examination of African history from the encroachment of European imperialism to the recent past. Students will be introduced to the historical context of various significant issues affecting many African states and peoples today. Themes explored include the imposition of colonial rule; collaboration and resistance; decolonization; one party states and dictators; conflict and genocide; economic dependence and development; and how these themes affected the everyday lives of various African communities.

Credits: 3

HIST 282 Pre-Columbian and Colonial Latin America

Frequency: Every other year

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

HIST 283 Latin America: Revolution and Reform

Frequency: Every other year

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

HIST 288 The Atlantic World, 1500-1820

Frequency: Every other year

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

HIST 289 Comparative North America

Frequency: Every other year

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

HIST 299 Experimental Course in History

Frequency: Offered on occasion

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

HIST 301 The Greek World

Frequency: Offered on occasion

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.

Prerequisite(s): HIST 101 or HIST 115 or HIST 134

Credits: 3

HIST 302 Republican/Imperial Rome

Frequency: Offered on occasion

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.

Prerequisite(s): HIST 101 or HIST 115 or HIST 134

Credits: 3

HIST 303 Medieval History I

Frequency: Offered on occasion

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.

Prerequisite(s): HIST 101 or HIST 115 or HIST 134

Credits: 3

HIST 304 Medieval History II

Frequency: Offered on occasion

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.

Prerequisite(s): HIST 101 or HIST 115 or HIST 134

Credits: 3

HIST 305 Europe in the Era of the Renaissance

Frequency: Offered on occasion

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.

Prerequisite(s): HIST 101 or HIST 115 or HIST 134

Credits: 3

HIST 306 The Age of Reformation

Frequency: Offered on occasion

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.

Prerequisite(s): HIST 101 or HIST 115 or HIST 134

Credits: 3

HIST 309 The Modernization of Europe

Frequency: Every other year

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.

Prerequisite(s): HIST 102 or HIST 116 or HIST 134

Credits: 3

HIST 310 World Environmental History

Frequency: Every year

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.

Prerequisite(s): HIST 102 or HIST 116 or HIST 135

Credits: 3

HIST 311 Europe in the Modern World

Frequency: Every other year

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.

Prerequisite(s): HIST 102 or HIST 116 or HIST 134

Credits: 3

HIST 312 Modern Germany

Frequency: Every other year

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.

Prerequisite(s): HIST 102 or HIST 116 or HIST 134

Credits: 3

HIST 313 Medieval Russia, 860-1700

Frequency: Every other year

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.

Prerequisite(s): HIST 101 or HIST 115 or HIST 134

Credits: 3

HIST 314 Imperial Russia

Frequency: Every other year

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.

Prerequisite(s): HIST 102 or HIST 116 or HIST 134

Credits: 3

HIST 315 The Formation of France

Frequency: Offered on occasion

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.

Prerequisite(s): HIST 115 or HIST 134

Credits: 3

HIST 316 20th Century Russia

Frequency: Every other year

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.

Prerequisite(s): HIST 102 or HIST 116 or HIST 134

Credits: 3

HIST 317 Modern France

Frequency: Offered on occasion

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.

Prerequisite(s): HIST 116 or HIST 134

Credits: 3

HIST 321 The Dutch Republic, 1500-1800

Frequency: Offered on occasion

Survey of the history of the Dutch Republic from the Burgundian and Habsburg periods to the Napoleonic Era, 1500-1800.

Prerequisite(s): HIST 102 or HIST 115 or HIST 116 or HIST 134

Credits: 3

HIST 322 French Revolution and Napoleon

Frequency: Offered on occasion

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.

Prerequisite(s): HIST 116 or HIST 134

Credits: 3

HIST 323 Victorian Britain

Frequency: Every other year

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.

Prerequisite(s): HIST 102 or HIST 116 or HIST 134

Credits: 3

HIST 324 History of the Ukraine

Frequency: Every other year

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.

Prerequisite(s): HIST 102 or HIST 116

Credits: 3

HIST 325 Colonial America

Frequency: Every other year

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.

Prerequisite(s): HIST 105 or HIST 133

Credits: 3

HIST 326 20th Century Britain

Frequency: Every other year

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.

Prerequisite(s): HIST 102 or HIST 116 or HIST 134

Credits: 3

HIST 327 Antebellum United States, 1820-1861

Frequency: Every other year

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.

Prerequisite(s): HIST 105 or HIST 133

Credits: 3

HIST 328 Civil War Era

Frequency: Every other year

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.

Prerequisite(s): HIST 105 or HIST 133

Credits: 3

HIST 330 Industrial America, 1890-1920

Frequency: Every other year

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.

Prerequisite(s): HIST 106 or HIST 133

Credits: 3

HIST 331 The Inter-War Years, 1919-1945

Frequency: Offered on occasion

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.

Prerequisite(s): HIST 106 or HIST 133

Credits: 3

HIST 332 United States History: 1945-Present

Frequency: Every year

The major cultural, economic, and political developments since World War II, including the Cold War, 1960s counterculture, Civil Rights movement, the Reagan era.

Prerequisite(s): HIST 106 or HIST 133

Credits: 3

HIST 333 African American History to 1877

Frequency: Every other year

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.

Prerequisite(s): HIST 105 or HIST 133

Credits: 3

HIST 334 African American History Since 1877

Frequency: Every other year

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.

Prerequisite(s): HIST 106 or HIST 133

Credits: 3

HIST 335 American Women

Frequency: Every other year

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.

Prerequisite(s): HIST 106 or HIST 133

Credits: 3

HIST 336 African American Black Women's History

Frequency: Offered on occasion

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).

Prerequisite(s): HIST 333 or HIST 334 or ENGL 240 or ENGL 340

Credits: 3

HIST 337 History of New York

Frequency: Every other year

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.

Prerequisite(s): HIST 105 or HIST 106 or HIST 133

Credits: 3

HIST 338 19th Century American Culture

Frequency: Every other year

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.

Prerequisite(s): HIST 105 or HIST 133 or AMST 202 or AMST 210

Credits: 3

HIST 339 20th Century American Culture

Frequency: Every other year

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.

Prerequisite(s): HIST 106 or HIST 133 or AMST 202 or AMST 210

Credits: 3

HIST 340 The Westward Movement

Frequency: Offered on occasion

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.

Prerequisite(s): HIST 105 or HIST 106 or HIST 133

Credits: 3

HIST 341 American Revolution and Republic

Frequency: Every other year

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.

Prerequisite(s): HIST 105 or HIST 133

Credits: 3

HIST 342 The American Century

Frequency: Every other year

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.

Prerequisite(s): HIST 106 or HIST 133

Credits: 3

HIST 343 Civil Rights Movement

Frequency: Every other year

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.

Prerequisite(s): HIST 105 or HIST 106 or INDS 106

Credits: 3

HIST 344 African American Social Thought

Frequency: Every other year

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.

Prerequisite(s): HIST 333 or HIST 334

Credits: 3

HIST 345 Asian American History

Frequency: Every other year

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.

Prerequisite(s): HIST 106 or HIST 133

Credits: 3

HIST 346 History of American Cities

Frequency: Every other year

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.

Prerequisite(s): HIST 105 or HIST 106 or HIST 133

Credits: 3

HIST 347 U.S. Immigration

Frequency: Every other year

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.

Prerequisite(s): HIST 105 or HIST 106 or HIST 133

Credits: 3

HIST 348 The American Metropolis Since World War II

Frequency: Every other year

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.

Prerequisite(s): HIST 106 or HIST 133

Credits: 3

HIST 349 U.S. Military History

Frequency: Offered on occasion

The development of American military strategy and tactics. Focus on Civil War, World War I, and World War II.

Credits: 3

HIST 350 Vietnam/National Security State

Frequency: Every other year

American foreign policy from F.D.R. to Nixon and its effects on Vietnam, American domestic policy and the growth of the National Security State.

Prerequisite(s): HIST 106 or HIST 133

Credits: 3

HIST 351 Defining America

Frequency: Offered on occasion

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.

Prerequisite(s): HIST 106 or HIST 133

Credits: 3

HIST 352 Environmental History of North America

Frequency: Every other year

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.

Prerequisite(s): HIST 105 or HIST 106 or HIST 133

Credits: 3

HIST 353 U.S. Consumer Culture

Frequency: Every other year

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.

Prerequisite(s): HIST 106 or HIST 133

Credits: 3

HIST 354 History of Globalization in Mexico

Frequency: Offered on occasion

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

HIST 355 American Religious History

Frequency: Offered on occasion

American religion from the Puritans to the present as set in the larger social, economic and cultural context.

Prerequisite(s): HIST 105 or HIST 106 or HIST 133

Credits: 3

HIST 356 American Indian History

Frequency: Every other year

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.

Prerequisite(s): HIST 105 or HIST 106 or HIST 133

Credits: 3

HIST 357 Indians and Europeans in Early America

Frequency: Offered on occasion

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.

Prerequisite(s): HIST 102 or HIST 105 or HIST 115 or HIST 133

Credits: 3

HIST 358 20th Century American Indian Issues

Frequency: Offered on occasion

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.

Prerequisite(s): HIST 106 or HIST 133

Credits: 3

HIST 359 Ethnicity and Race

Frequency: Every year

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

HIST 361 Modern Middle East

Frequency: Every other year

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.

Prerequisite(s): HIST 261 or HIST 102

Credits: 3

HIST 362 History of American Education

Frequency: Every other year

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.

Prerequisite(s): HIST 105 or HIST 106 or HIST 133

Credits: 3

HIST 363 Chinese Culture Through Films

Frequency: Offered on occasion

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.

Prerequisite(s): HIST 102 or HIST 264 or HIST 265

Credits: 4

HIST 364 Historical Landscape and National Identity in Modern East Asia

Frequency: Every other year

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.

Prerequisite(s): HIST 102 or HIST 264 or HIST 265

Credits: 3

HIST 366 Late Imperial China

Frequency: Every other year

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.

Prerequisite(s): HIST 264 or HIST 102

Credits: 3

HIST 367 20th Century China

Frequency: Every other year

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.

Prerequisite(s): HIST 264 or HIST 102

Credits: 3

HIST 368 Modern Japan

Frequency: Offered on occasion

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.

Prerequisite(s): HIST 264 or HIST 102

Credits: 3

HIST 370 History of South Africa

Frequency: Every other year

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.

Prerequisite(s): HIST 102 or HIST 116

Credits: 3

HIST 371 Russia After Stalin

Frequency: Every other year

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.

Prerequisite(s): HIST 102 or HIST 116 or HIST 134

Credits: 3

HIST 372 Africa in the 19th Century

Frequency: Every other year

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.

Prerequisite(s): HIST 102 or HIST 272

Credits: 3

HIST 373 African Urban History

Frequency: Every other year

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.

Prerequisite(s): HIST 101 or HIST 102 or HIST 115 or HIST 116

Credits: 3

HIST 375 History of Authority

Frequency: Offered on occasion

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

HIST 376 Film and American Culture

Frequency: Offered on occasion

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.

Prerequisite(s): HIST 106 or HIST 133

Credits: 3

HIST 378 Canada and the Canadians

Frequency: Every other year

Contemporary Canada: history, geography, population, parliamentary government, economic structure, free trade, Quebec nationalism and the British legacy.

Credits: 3

HIST 380 Pre-Columbian/Colonial Mexico

Frequency: Every other year

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

HIST 381 Mexico in the Modern World

Frequency: Every other year

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

HIST 385 International Communication

Frequency: Offered on occasion

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

HIST 386 Global Studies

Frequency: Every other year

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).

Prerequisite(s): HIST 101 or HIST 102

Credits: 3

HIST 387 Comparative Slave Societies

Frequency: Offered on occasion

The development, effects, and elimination of slavery in different societies and in various eras. Includes historians' debates on slavery and its impact.

Credits: 3

HIST 389 Religion in the Western Tradition

Frequency: Every other year

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.

Prerequisite(s): HIST 101 or HIST 102 or HIST 115 or HIST 116 or HIST 134

Credits: 3

HIST 390 Interpreting the Global Past

Frequency: Offered on occasion

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).

Prerequisite(s): HIST 102 or HIST 116

Credits: 3

HIST 391 History of Christianity I

Frequency: Every other year

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.

Prerequisite(s): HIST 101 or HIST 115 or HIST 134 or HIST 303 or HIST 304 or HIST 305 or INDS 120

Credits: 3

HIST 394 Globalization

Frequency: Every other year

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.

Prerequisite(s): HIST 101 or HIST 102 or HIST 135

Credits: 3

HIST 396 Themes in American History

Frequency: Every year

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.

Prerequisite(s): HIST 105 or HIST 106 or HIST 133

Credits: 3

HIST 397 Themes in European History

Frequency: Every year

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.

Prerequisite(s): HIST 115 or HIST 116 or HIST 134

Credits: 3

HIST 398 Themes in World History

Frequency: Every year

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.

Prerequisite(s): HIST 101 or HIST 102 or HIST 135

Credits: 3

HIST 399 Experimental Course in History

Frequency: Offered on occasion

Varies in content from semester to semester. Students should consult the online Course Offerings and department notices for specific subject covered each semester.

Credits: 1-3

HIST 400 Directed Study

Frequency: Every semester

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

HIST 409 Topics in Modern/Contemporary Europe

Frequency: Offered on occasion

Subject matter and credit hours will vary by semester and by instructor.

Credits: 1-3

HIST 432 Topics in 20th Century U.S. History

Frequency: Offered on occasion

Subject matter and credit hours will vary by semester and by instructor.

Prerequisite(s): HIST 106

Credits: 1-3

HIST 490 Public History Internship

Frequency: Every semester

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

HIST 495 Capstone Seminar

Frequency: Every semester

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.

Prerequisite(s): HIST 201

Credits: 3

HIST 499 Honors Research Seminar

Frequency: Every year

Focus is on historiography and research methodology through preparation of a research paper based on primary sources. By invitation only.

Prerequisite(s): HIST 201

Credits: 3

HIST 500 Special Topics

Frequency: Offered on occasion

Directed Study of a defined topic, to be arranged with and supervised by the instructor.

Credits: 0-3

Health Education**HLTH 115 First Aid Skills and Knowledge**

Frequency: Every semester

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

HLTH 215 Personal and Community Health

Frequency: Every year

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

HLTH 217 Fitness & Wellness for Life: A Multidisciplinary Perspective

Frequency: Every semester

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

HLTH 300 Education in Drugs/Alcohol/Tobacco

Frequency: Every semester

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

HLTH 302 Stress Management

Frequency: Every semester

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

HLTH 303 Fitness and Nutrition

Frequency: Every semester

The development of knowledge and skills necessary to become personally responsible for fitness and nutrition. Contents will be used as a basis for assessment of personal fitness and nutritional status and necessary personal behavior modification. Investigation of basic fitness and nutritional facts, energy balance, obesity, dieting, and nutrition as related to disease, for personal goal setting.

Credits: 3

HLTH 343 Drugs and Behavior

Frequency: Every year

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

HLTH 386 Wellness and Health Promotion

Frequency: Every semester

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

HLTH 400 Internship

Frequency: Every semester

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

HLTH 499 Independent Study

Frequency: Every semester

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

HLTH 500 Wellness and Health Promotion for the Elderly

Frequency: Offered on occasion

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

HLTH 502 Stress Management

Frequency: Every year

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

Honors

HONR 201-230 Honors Sem CCC: World History

Frequency: Every year

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. HONR201 Honors Seminar College Core Curriculum: World History

Credits: 3

HONR 300 Honors Colloquium

Frequency: Every semester

A discussion course for students in the Honors Program. Subjects of discussion range from current events to campus activities to metaphysical speculations.

Credits: 1

HONR 400-401 Honors Thesis

Frequency: Offered on occasion

Directed research leading to the preparation of a thesis.

Credits: 3

Interdisciplinary Studies

INDS 100 International Student Seminar

Frequency: Every semester

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

INDS 101 Colloquium

Frequency: Offered on occasion

Explores the basic concepts and views of International Studies as well as offering an introduction to each area of specialization.

Credits: 1

INDS 105 Introduction to American Indian Studies

Frequency: Offered on occasion

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

INDS 110 SUNYMEU: Freshman

Frequency: Every year

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

INDS 111 Religion and Culture in the Time of the Crusades

Frequency: Offered on occasion

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

INDS 120 World Religions

Frequency: Every year

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

INDS 199 Service Learning

Frequency: Every semester

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

INDS 202 Introduction to Museum Studies

Frequency: Every year

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

INDS 206 Introduction to African American Studies

Frequency: Offered on occasion

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

INDS 210 SUNYMEU: Sophomore

Frequency: Every year

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

INDS 215 Introduction to Leadership Seminar

Frequency: Offered on occasion

An overview of the leadership minor. Introduces students to the minor through readings and discussions. The course will help students develop their own meaning of leadership and begin to develop their own style through the readings and self evaluation. The course will engage students to take a more active role in planning their paths as campus

leaders and future leaders. It will also introduce the goals of the Leadership Minor program through the use of the University Catalog and the leadership advisement guide.

Credits: 1

INDS 225 Introduction to Latino History and Culture

Frequency: Every year

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

INDS 240 African American Literature and Culture

Frequency: Every year

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

INDS 241 Introduction to Latino Literature and Culture

Frequency: Every year

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

INDS 242 American Indian Literature

Frequency: Every year

Study of a variety of works, including traditional tales and lyrics, tale cycles, novels, poems, and memoirs, produced by Native Americans from historical beginnings to the present. Cross-listed with ENGL 242

Credits: 3

INDS 250 Introduction to Russia, Eastern Europe & Eurasia, 1789-Present

Frequency: Every year

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

INDS 285 Mock Trial I

Frequency: Every year

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

INDS 287 Mock Trial II

Frequency: Every year

Preparation of case materials for participation in the trial competition sponsored by the American Mock Trial Association. Competition includes both civil and criminal litigation.

Prerequisite(s): INDS 285 or POLI 285

Credits: 3

INDS 299 Service Learning

Frequency: Every semester

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

INDS 302 Special Topics: Museum Studies

Frequency: Every year

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.

Prerequisite(s): INDS 202

Credits: 3

INDS 304 Latina Literature and Cultural Studies

Frequency: Every year

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

INDS 310 SUNYMEU: Junior

Frequency: Every year

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

INDS 315 Italian American Experience

Frequency: Offered on occasion

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

INDS 359 Ethnicity and Race

Frequency: Every year

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

INDS 389 Special Topics

Frequency: Offered on occasion

Topics of special or current interest offered periodically and taught from an interdisciplinary perspective.

Credits: 1-3

INDS 399 Service Learning

Frequency: Every semester

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

INDS 400 Independent Study

Frequency: Offered on occasion

Intensive individual study of some aspect of multicultural studies involving a paper or project.

Credits: 1-3

INDS 402 Independent Study: African American Topics

Frequency: Every year

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

INDS 403 Latino Studies Capstone

Frequency: Every year

The capstone experience for the Latino Studies minor. Selected interdisciplinary reading, research, discussions, and reports on current issues in Latino Studies.

Credits: 3

INDS 404 American Indian Capstone

Frequency: Every year

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

INDS 410 SUNYEMU: Senior

Frequency: Every year

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***INDS 480 Independent Study**

Frequency: Every semester

Open only to Interdisciplinary Studies majors. Proposed independent studies must be described in the student's approved Interdisciplinary Studies proposal.

*Credits: 1-6***INDS 489 Special Topics**

Frequency: Every year

Topics of special or current interest offered periodically and taught from an interdisciplinary perspective.

*Credits: 0-3***INDS 490 Internship**

Frequency: Every semester

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***INDS 491 African American Studies Internship**

Frequency: Offered on occasion

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***INDS 492 American Indian Studies Internship**

Frequency: Offered on occasion

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***INDS 493 Latino Studies Internship**

Frequency: Offered on occasion

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***INDS 494 Museum Studies Capstone**

Frequency: Every semester

Internship with a museum (history, art, anthropological), archive, historical site, etc. appropriate to the track selected. Enrollment is to be arranged with an appropriate supervisor and faculty sponsor, by permission only. In conjunction with the internship and in consultation with the site supervisor and faculty sponsor, the student will propose and curate an exhibit that utilizes items from the museum's collection. Student should also enroll in INDS 495.

Prerequisite(s): INDS 302 and (HIST 490 or ARTH 499 or ARTH 450 or ANTH 473)

Corequisite(s): INDS 495

*Credits: 3***INDS 495 Museum Studies Portfolio Completion**

Frequency: Every semester

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.

Prerequisite(s): INDS 302

Corequisite(s): INDS 494

*Credits: 0***INDS 499 Service Learning**

Frequency: Every semester

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***INDS 589 Special Topics**

Frequency: Every year

Topics of special or current interest offered periodically and taught from an interdisciplinary perspective.

*Credits: 1-3***INDS 590 Independent Study**

Frequency: Every semester

Independent study of interdisciplinary topics not covered in regular graduate course offerings and pertinent to the student's program of study.

*Credits: 1-3***INDS 690-691 Research**

Frequency: Offered on occasion

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: 1-3

INDS 695 Thesis/Capstone Research Continuation

Frequency: Every semester

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

International Education**INED 299 International - Special Topics**

Frequency: Offered on occasion

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

INED 399 International - Special Topics

Frequency: Offered on occasion

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

INED 400 Study Abroad

Frequency: Every semester

Opportunities for study abroad as arranged through the Office of International Education.

Credits: 1-23

INED 401 Study Abroad - Aichi University, Japan

Frequency: Every year

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

INED 402 Study Abroad - American University in Bulgaria

Frequency: Every semester

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: 15

INED 403 Study Abroad - IAU in Aix en Provence, France

Frequency: Every semester

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

INED 404 Study Abroad - Northumbria University, England

Frequency: Every semester

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: 15

INED 405 Study Abroad - University Autonoma Benito Juarez, Mexico

Frequency: Every semester

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: 15

INED 408 Study Abroad - Music Conservatory of Seville, Spain

Frequency: Every semester

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

INED 409 Study Abroad - Izmir University of Economics

Frequency: Every semester

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

INED 437 Study Abroad - University of the Sunshine Coast Australia

Frequency: Every semester

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

INED 438 Study Abroad - UPAEP Mexico

Frequency: Every semester

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

INED 439 Study Abroad - St. Petersburg University Russia

Frequency: Every semester

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

INED 450 International Internship

Frequency: Every semester

Opportunities for international internships as arranged through the Office of International Education.

Credits: 1-15

INED 451 Study Abroad - Washington, D.C.

Frequency: Every semester

Prior selection required.

Credits: 1-15

INED 499 International - Special Topics

Frequency: Offered on occasion

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

INED 599 Study Abroad Special Topics

Frequency: Offered on occasion

Study abroad experience with emphasis that changes according to content and experiences.

Credits: 1-15

International Studies**INTL 101 Introduction to International Studies**

Frequency: Offered on occasion

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

INTL 302 Russia after Stalin

Frequency: Every other year

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.

Prerequisite(s): HIST 102 and HIST 116

Credits: 3

INTL 303 Globalization in Latin America

Frequency: Offered on occasion

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

INTL 305 Transitions in Central Europe

Frequency: Offered on occasion

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

INTL 400 Special Topics

Frequency: Offered on occasion

Course content varies based on student and faculty interest.

Credits: 3

INTL 401 Intl Studies Senior Project

Frequency: Every year

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

INTL 500 Overseas Graduate Study - Special Topics

Frequency: Offered on occasion

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

Italian

ITAL 115 Elementary Italian I

Frequency: Every semester

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

ITAL 116 Elementary Italian II

Frequency: Every semester

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.

Prerequisite(s): ITAL 115

Credits: 3

ITAL 210 Italian Through Literature and Popular Culture

Frequency: Every year

Students will strengthen their language skills and develop an understanding of Italian culture. Emphasis will be on communication in Italian.

Prerequisite(s): ITAL 116

Credits: 3

Foreign Languages

LANG 315 Transitions in Bulgaria

Frequency: Offered on occasion

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

LANG 322 French Civilization/Culture

Frequency: Every year

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

LANG 323 Germany Since 1918

Frequency: Offered on occasion

Cultural aspects of the Weimar Republic, the Third Reich, and contemporary Germany. Guest lecturers, readings, and films in English.

Credits: 3

LANG 327 Magic Realism in Latin American Literature

Frequency: Offered on occasion

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

LANG 371 Canadian Writers

Frequency: Offered on occasion

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

LANG 378 Canada Today

Frequency: Every year

A look at the history, politics, culture, and geography of Canada and an analysis of contemporary issues affecting Canada and its neighbors.

Credits: 3

LANG 380 World in Cinema: Special Topics

Frequency: Every year

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

LANG 385 German Film

Frequency: Offered on occasion

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 vonTrotta will be shown to contrast their work and style.

Credits: 3

LANG 388 Spanish Civilization/Culture

Frequency: Offered on occasion

A comprehensive introduction to aspects of Spanish civilization and culture: geography, history, social customs, political movements, literature and art. In English.

Credits: 3

LANG 400 Special Topics in Languages and Literatures

Frequency: Offered on occasion

Special areas in foreign languages and literatures not covered by regular courses.

Credits: .5-3

LANG 405 French Women Writers

Frequency: Every year

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

LANG 406 Women in French Literature

Frequency: Every year

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

LANG 410 Directed Study

Frequency: Offered on occasion

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

LANG 415 Bulgaria Study Tour

Frequency: Offered on occasion

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.

Prerequisite(s): LANG 315 or INTL 305

Credits: 3

LANG 500 Special Topics in Foreign Language

Frequency: Offered on occasion

Special area in any of the foreign languages and literatures not covered by regular courses.

Credits: 1-3

LANG 510 Directed Study

Frequency: Offered on occasion

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

Liberal Arts

LART 150 Liberal Arts Freshman Seminar

Frequency: Every year

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

LART 151 Liberal Arts Freshmen Explore for Major

Frequency: Every year

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

Mathematics Education

MAED 105 Introduction to Contemporary Mathematics Education

Frequency: Every semester

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.

Corequisite(s): MAED 106

Credits: 3

MAED 106 Contemporary Mathematics Education - Field Experience

Frequency: Every semester

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.

Corequisite(s): MAED 105

Credits: 0

MAED 207 Mathematics Tutoring in the Community

Frequency: Every semester

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

MAED 276 Literacy and Technology for Science and Mathematics

Frequency: Every semester

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

MAED 301 Mathematics for School Teachers I

Frequency: Every semester

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

MAED 302 Mathematics for School Teachers II

Frequency: Every semester

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.

Prerequisite(s): MAED 301

Credits: 3

MAED 303 Mathematics for School Teachers III

Frequency: Every semester

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.

Prerequisite(s): MAED 302

Credits: 3

MAED 305 Diversity in the Teaching of Science and Mathematics

Frequency: Every semester

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.

Corequisite(s): MAED 313

Credits: 3

MAED 310 Reading and Writing Mathematics

Frequency: Every semester

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.

Prerequisite(s): MATH 210

Credits: 3

MAED 313 Diversity in the Teaching of Science and Mathematics Field Experience

Frequency: Every semester

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.

Corequisite(s): MAED 305

Credits: 0

MAED 325 Technology Integration in Mathematics Education

Frequency: Every year

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.

Prerequisite(s): MAED 302

Credits: 3

MAED 400 Independent Study

Frequency: Offered on occasion

Independent study of a selected list of readings approved by a faculty advisor. Permission of department required.

Credits: 1-3

MAED 410 Seminar: Mathematics for High School Teachers

Frequency: Every year

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

MAED 417 Middle School (Grades 5-9) Methods in Mathematics

Frequency: Every year

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

MAED 419 Secondary School (Grades 7-12) Methods in Mathematics

Frequency: Every year

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

MAED 500 Independent Study

Frequency: Offered on occasion

Independent study of a set of related topics agreed to by the student and the instructor.

Credits: 1-6

MAED 509 Technology in Mathematics Education

Frequency: Offered on occasion

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

MAED 512 Design and Evaluation of Mathematics Curricula

Frequency: Offered on occasion

Study of the design and evaluation of various models of mathematics curricula including the latest National Council Teachers of Mathematics (NCTM) materials.

Credits: 3

MAED 514 Instructional Methods in Mathematics

Frequency: Offered on occasion

A critical study of the literature on current methods of teaching mathematics.

Credits: 3

MAED 518 History of Mathematics Education

Frequency: Offered on occasion

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

MAED 522 Differential Equations

Frequency: Offered on occasion

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

MAED 523 Real Analysis

Frequency: Offered on occasion

Topology of the real line, measure and integration on the real line, function spaces and their topologies.

Credits: 3

MAED 524 Complex Analysis

Frequency: Offered on occasion

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

MAED 531 Rings and Fields

Frequency: Offered on occasion

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

MAED 532 Abstract Algebra with Applications

Frequency: Offered on occasion

Study of selected applications of abstract algebra. Topics selected from: identification numbers, symmetry, applications to combinatorics, coding theory, cryptography.

Credits: 3

MAED 535 Number Theory

Frequency: Offered on occasion

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

MAED 537 Combinatorics

Frequency: Offered on occasion

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

MAED 540 Graph Theory

Frequency: Offered on occasion

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

MAED 541 Euclidean Geometry

Frequency: Offered on occasion

Neutral geometry; Euclidean geometry; comparison of various models of Euclidean geometry, such as that of Hilbert and the MSG; 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

MAED 542 Non-Euclidean Geometry

Frequency: Offered on occasion

Neutral geometry; hyperbolic geometry; elliptic geometry; various models of hyperbolic and elliptic geometry; comparison of results to those of Euclidean geometry.

Prerequisite(s): MATH 341

Credits: 3

MAED 545 Geometric Topology

Frequency: Offered on occasion

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

MAED 550 Statistics for Mathematics Educators

Frequency: Offered on occasion

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

MAED 551 Statistics

Frequency: Offered on occasion

Regression, hypothesis testing and confidence intervals in regression, nonparametric statistics, chi-square tests, sampling, use of activities in probability and statistics.

Credits: 3

MAED 575 Linear Optimization

Frequency: Offered on occasion

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.

Prerequisite(s): MATH 231

Credits: 3

MAED 581 History of Mathematics

Frequency: Offered on occasion

A study of selected topics in the history of mathematics and their applications to teaching. Permission of instructor required.

Credits: 3

MAED 591 Math Academy: K-12 Materials

Frequency: Every year

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

MAED 599 Special Topics

Frequency: Offered on occasion

Selected readings, discussions, reports and problem solutions on a topic of interest in mathematics, mathematics education or statistics.

Credits: 1-3

MAED 602 Mathematics Education Seminar

Frequency: Every year

Selected reading, discussions, and reports on current issues in mathematics education.

Credits: 3

MAED 690 Graduate Project

Frequency: Every year

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.

Prerequisite(s): MAED 602

Credits: 3

Mathematics

MATH 100 Mathematics First-Year Seminar

Frequency: Every year

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

MATH 104 Elementary Mathematical Models

Frequency: Offered on occasion

Sequences and difference equations; models of growth, including linear, quadratic, geometric, and logistic growth models; linear regression; other growth and regression models and an introduction to chaos as time permits. The course uses elementary mathematical models as a vehicle for developing the students' algebraic, geometric, and problem-solving abilities. Background assumed: N.Y.S. integrated Algebra and Geometry (or Math A), or equivalent.

Credits: 3

MATH 105 Survey of Precalculus

Frequency: Every semester

The course is designed to prepare students to take Survey of Calculus (MATH 120) and emphasizes multi-step problem solving. Topics include algebraic, exponential and logarithmic functions and their graphs, transformations and combinations of functions, a review of algebra and geometry, 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 who have completed a calculus course.)

Background assumed: N.Y.S. Integrated Algebra and Geometry (or Math A), or equivalent.

Credits: 3

MATH 106 University Precalculus

Frequency: Every semester

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

MATH 108 Prize-Winning Mathematics

Frequency: Every year

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

MATH 110 Mathematics in Action

Frequency: Every semester

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

MATH 112 Preparation for Calculus

Frequency: Summer, JTerm

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

MATH 117 Why Mathematics?

Frequency: Offered on occasion

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

MATH 120 Survey of Calculus I

Frequency: Every semester

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. Credit may not be earned for both MATH 120 and MATH 122.

Prerequisite: MATH 105 or four years of college preparatory mathematics.

Credits: 3

MATH 121 Survey of Calculus II

Frequency: Every semester

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 120 and MATH 122.

Prerequisite(s): MATH 120

Credits: 3

MATH 122 University Calculus I

Frequency: Every semester

Functions, inverse functions, limits, continuity, derivatives, indeterminate forms, antiderivatives; applications to rectilinear motion, graphing, maxima-minima, related rates; computational technology. Credit will not be given for both MATH 120 and MATH 122. Prerequisite: MATH 106 or four years of college preparatory mathematics.

Credits: 4

MATH 123 University Calculus II

Frequency: Every semester

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.

Prerequisite(s): MATH 122

Credits: 4

MATH 124 Survey of Calculus III

Frequency: Offered on occasion

Review of trigonometry: trigonometric and inverse trigonometric functions; trigonometric identities; law of sines; law of cosines. Calculus related to the trigonometric and inverse trigonometric functions: derivatives; applications of derivatives; integrals; applications of integrals. Polynomial approximation and power series representation as time permits. This course combined with MATH 120 and 121 can be used to substitute for MATH 122 and 123. Not open to students who have completed MATH 123 or equivalent.

Prerequisite(s): MATH 121

Credits: 3

MATH 125 Software for Mathematics

Frequency: Every year

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.

Prerequisite(s): MATH 122

Credits: 3

MATH 190 Honors Problem Solving

Frequency: Every year

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.

Corequisite(s): MATH 123

Credits: 2

MATH 210 Mathematical Structures and Proof

Frequency: Every semester

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.

Prerequisite(s): MATH 121 or MATH 123

Credits: 4

MATH 223 University Calculus III

Frequency: Every semester

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.

Prerequisite(s): MATH 123 or MATH 124

Credits: 4

MATH 224 Differential Equations

Frequency: Every year

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.

Prerequisite(s): MATH 123

Credits: 3

MATH 231 Linear Algebra

Frequency: Every semester

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.

Prerequisite(s): MATH 121 or MATH 123

Credits: 4

MATH 290 Sophomore Honors Mathematics

Frequency: Every year

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.

Prerequisite(s): MATH 210

Corequisite(s): MATH 231

Credits: 3

MATH 307 Math and Music

Frequency: Offered on occasion

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

MATH 309 Mathematical Sciences Internship

Frequency: Offered on occasion

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

MATH 315 Theory of Equations

Frequency: Offered on occasion

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.

Prerequisite(s): MATH 210

Credits: 3

MATH 322 Partial Differential Equations

Frequency: Offered on occasion

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.

Prerequisite(s): MATH 224

Credits: 3

MATH 323 Intermediate Real Analysis

Frequency: Every year

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.

Prerequisite(s): MATH 210 and MATH 123

Credits: 3

MATH 325 Numerical Analysis

Frequency: Every other year

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.

Prerequisite(s): (MATH 123 or MATH 124)

Credits: 3

MATH 329 Mathematical Modeling

Frequency: Every year

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.

Prerequisite(s): MATH 223 and MATH 231

Credits: 3

MATH 331 Abstract Algebra I

Frequency: Every year

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.

Prerequisite(s): MATH 210 and MATH 231

Credits: 3

MATH 332 Abstract Algebra II

Frequency: Every other year

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.

Prerequisite(s): MATH 331

Credits: 3

MATH 335 Number Theory

Frequency: Every other year

Study of integers and their properties; divisibility; primes; congruencies; multiplicative functions; quadratic residues; quadratic reciprocity; Diophantine equations.

Prerequisite(s): MATH 210

Credits: 3

MATH 337 Combinatorics

Frequency: Every other year

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.

Prerequisite(s): MATH 210 and MATH 231

Credits: 3

MATH 341 Geometry

Frequency: Every semester

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.

Prerequisite(s): MATH 210

Credits: 3

MATH 359 Probability Models in Operations Research

Frequency: Every other year

Topics chosen from stochastic processes; birth-death processes; queuing theory; inventory theory; reliability; decision analysis; simulation.

Prerequisite(s): STAT 350 and MATH 231

Credits: 3

MATH 365 Financial Mathematics

Frequency: Every other year

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, option pricing, capital asset pricing models, and portfolio risk analysis.

Prerequisite(s): MATH 231 and STAT 350

Credits: 3

MATH 375 Deterministic Models in Operations Research

Frequency: Every other year

Topics chosen from linear programming and applications; network analysis; game theory; dynamic, integer and nonlinear programming.

Prerequisite(s): MATH 231

Credits: 3

MATH 381 History of Mathematics

Frequency: Every year

Chronological study of the development of mathematics. Emphasis on the solution of selected mathematical problems associated with historical periods.

Prerequisite(s): MATH 210

Credits: 3

MATH 390 Honors Special Topics

Frequency: Every year

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.

Prerequisite(s): MATH 290

Credits: 2

MATH 400 Independent Study

Frequency: Every semester

Independent study of a selected list of readings approved by a faculty advisor. Permission of department required.

Credits: 1-3

MATH 405 Senior Seminar

Frequency: Every semester

Studies from selected areas of mathematics. Written reports and formal presentations will be required. Senior standing or permission of instructor required.

Credits: 1

MATH 408 Special Topics Seminar

Frequency: Offered on occasion

Selected readings, discussions, and reports on topics in mathematics. Permission of department required.

Credits: 1-3

MATH 420 Advanced Calculus

Frequency: Every year

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.

Prerequisite(s): MATH 231 and MATH 223

Credits: 3

MATH 423 Topics in Analysis

Frequency: Offered on occasion

Topics vary, depending on the instructor, but may include measure and integration, basic functional analysis, complex analysis, residue theory, and special functions.

Prerequisite(s): MATH 323

Credits: 3

MATH 440 Graph Theory

Frequency: Offered on occasion

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.

Prerequisite(s): MATH 210 and MATH 231

Credits: 3

MATH 490 Honors Thesis

Frequency: Every year

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.

Prerequisite(s): MATH 390

Credits: 3

Medical Technology**MEDT 490 Clinical Internship**

Frequency: Every semester

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

MEDT 491 Clinical Internship

Frequency: Every semester

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

Music Education

MUED 128 Instruments for Vocal/General Concentration

Frequency: Every semester

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

MUED 150 Introduction to Public School Music

Frequency: Every year

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

MUED 161 Beginning Trumpet

Frequency: Every semester

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

MUED 162 Beginning Trombone

Frequency: Every semester

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

MUED 163 Beginning French Horn

Frequency: Every semester

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

MUED 164 Beginning Tuba/Euphonium

Frequency: Every semester

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

MUED 171 Beginning Clarinet

Frequency: Every semester

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

MUED 172 Beginning Flute

Frequency: Every semester

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

MUED 173 Beginning Oboe

Frequency: Every semester

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 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

MUED 174 Beginning Bassoon

Frequency: Every semester

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

MUED 175 Beginning Saxophone

Frequency: Every semester

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

MUED 185 Beginning Violin/Viola

Frequency: Every semester

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

MUED 186 Beginning Cello

Frequency: Every semester

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

MUED 187 Beginning String Bass

Frequency: Every semester

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

MUED 203 Intermediate Voice Class

Frequency: Every year

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.

Prerequisite(s): MUS 113

Credits: 1.5

MUED 204 Advanced Voice Class

Frequency: Every year

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.

Prerequisite(s): MUED 203

Credits: 1.5

MUED 210 Guitar Class

Frequency: Every semester

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

MUED 211 Guitar Class

Frequency: Every semester

Continuation of MUED 210. Includes I, IV, V7 chords in the keys of A, F, B; secondary dominants; more advanced accompaniment patterns.

Prerequisite(s): MUED 210

Credits: 1

MUED 221 Percussion Class

Frequency: Every semester

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

MUED 222 Advanced Percussion

Frequency: Every semester

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.

Prerequisite(s): MUED 221

Credits: 1

MUED 250 Foundations of Music Education I

Frequency: Every semester

Emphasizes growth characteristics typical of public school students K-6 with special regard for their ability to process and respond to and with music: perceptual, psychomotor, and cognitive abilities; affectivity; brain development and function; creativity. Students are expected to develop a knowledge base sufficient to demonstrate competence in

working effectively with students in music classes at the elementary level of public school.

Corequisite(s): MUED 252 or MUED 255

Credits: 2

MUED 251 Foundations of Music Education II

Frequency: Every semester

For music education students to develop an understanding of basic principles of educational psychology and educational sociology, with specific application to teaching of music to adolescents in the public schools. The course will cover theories, methods, principles, and current issues within educational psychology and sociology.

Corequisite(s): MUED 253 or MUED 256

Credits: 2

MUED 252 Child Abuse/Neglect Reporting

Frequency: Every semester

The course covers the basics of identifying and reporting suspected child abuse and maltreatment, at the local, state, and federal levels.

Corequisite(s): MUED 250

Credits: 0

MUED 253 Alcohol, Tobacco, and Drug Abuse Identification

Frequency: Every semester

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.

Corequisite(s): MUED 251

Credits: 0

MUED 255 Foundations I Practicum - Elementary

Frequency: Every semester

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

MUED 256 Foundations II Practicum - Middle School

Frequency: Every semester

Students act as music teachers or teacher aides for approximately 40 contact hours. This requirement may be completed during the January recess, in May/June after the student has taken MUED 250 or by several other alternatives approved by the area chair for Music Education/Music Therapy.

Credits: 0

MUED 260 Brass Pedagogy

Frequency: Every semester

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

MUED 261 Advanced Trumpet

Frequency: Every year

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

MUED 262 Advanced Trombone

Frequency: Every year

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

MUED 263 Advanced French Horn

Frequency: Every year

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

MUED 264 Advanced Tuba/Euphonium

Frequency: Every year

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

MUED 271 Advanced Clarinet

Frequency: Every year

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

MUED 272 Advanced Flute

Frequency: Every year

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

MUED 273 Advanced Oboe

Frequency: Every year

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

MUED 274 Advanced Bassoon

Frequency: Every year

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

MUED 275 Advanced Saxophone

Frequency: Every year

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

MUED 285 Advanced Violin/Viola

Frequency: Every year

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

MUED 286 Advanced Cello/String Bass

Frequency: Every year

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

MUED 291 Technology in Music I

Frequency: Every semester

Overview of technology and its application to music composition, instruction, notation, performance, theory, and music education. Fundamentals of electronic music, MIDI, and computer usage.

Prerequisite(s): MUS 124

Credits: 2

MUED 292 Technology in Music II

Frequency: Every year

Overview of technology and its application to music composition, instruction, notation, performance, theory, and music education. Fundamentals of electronic music, MIDI, and computer usage.

Prerequisite(s): MUS 124 and MUED 291

Credits: 2

MUED 300 Foundations in Music Education III

Frequency: Every semester

Foundations in Music Education III is the final foundations course in the music education sequence. It is a reading intensive course in the history of educational thought and practices in music education in the United States from the Colonial Period to current times. Students will study the philosophical bases and historical foundations for music education praxis. The course moves chronologically from the roots of Philosophy in Ancient Greece to today, but most emphasis is placed on 20th Century thought and movements in American music education. Professional Standing required.

Corequisite(s): MUED 303

Credits: 3

MUED 301 General Music in Elementary School

Frequency: Every semester

Specific competencies are developed for implementing general music activities and programs in grades K through 6. Intern teaching with students in elementary school classrooms. Professional Standing required.

Corequisite(s): MUED 356

Credits: 2

MUED 302 General Music in Secondary School

Frequency: Every semester

Specific competencies are developed for implementing general music activities and programs in middle school through high school. Intern teaching with students in middle school or high school. Professional Standing required.

Corequisite(s): MUED 356

Credits: 2

MUED 303 Literacy Instruction Workshop

Frequency: Every semester

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.

Corequisite(s): MUED 300

Credits: 0

MUED 304 Instrumental Music in Elementary School

Frequency: Every semester

Covers various strategies and techniques employed in elementary and middle school lessons, small and large ensembles, various instructional models, methods, and materials. Emphasis on developing new skills and strategies to plan, deliver, and assess meaningful educational experiences in elementary and middle school settings. Intern teaching with students in elementary and middle school classrooms. Professional Standing.

Corequisite(s): MUED 393

Credits: 2

MUED 305 Instrumental Music in Secondary School

Frequency: Every semester

Covers various strategies and techniques employed in high school lessons, small and large ensembles, various instructional models, methods and materials. Emphasis on developing new skills and strategies to plan, deliver and assess meaningful educational experiences in a high school setting. Intern teaching with high school students. Professional standing.

Corequisite(s): MUED 394

Credits: 2

MUED 310 Guitar Class

Frequency: Every semester

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.

Prerequisite(s): MUED 211

Credits: 1

MUED 311 Guitar Class

Frequency: Every semester

Continuation of MUED 310; includes pedagogy of guitar for individuals in public schools, music therapy, and private instruction.

Prerequisite(s): MUED 310

Credits: 1

MUED 315 Music, Play, and Self

Frequency: Every semester

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

MUED 331 Marching Band Techniques

Frequency: Offered on occasion

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

MUED 355 Foundations III Practicum - Secondary

Frequency: Every semester

Continuation of previous practicum.

Prerequisite(s): MUED 256

Credits: 0

MUED 356 Methods Practicum - Elective

Frequency: Every semester

Continuation of previous practicum.

Credits: 0

MUED 391 Elementary School Choral Rehearsal Techniques

Frequency: Every year

Course covers a conducting review, child's voice, music selection, and rehearsal techniques such as pacing, chunking, sequencing, warm-ups, and teaching the National Standards in a performing ensemble. Taught in a laboratory setting with students rehearsing each other.

Prerequisite(s): MUS 232 and MUS 317

Credits: 3

MUED 392 Secondary School Choral Rehearsal Techniques

Frequency: Every year

Course covers audition procedures, score preparation, music selection, conducting, changing voices, teaching sight reading, recruitment, assessment, pop ensembles, and the development of a choral curriculum. Taught in a laboratory setting with students rehearsing each other.

Prerequisite(s): MUS 232 and MUS 317

Credits: 3

MUED 393 Elementary School Instrumental Rehearsal Techniques

Frequency: Every semester

Implements methods and strategies studied in MUED 304 in a laboratory rehearsal experience. Score study,

rehearsal planning, assessment, conducting, and rehearsal techniques appropriate to elementary and middle school levels. Professional Standing.

Corequisite(s): MUED 304

Credits: 2

MUED 394 Secondary School Instrumental Rehearsal Techniques

Frequency: Every semester

Implements methods and strategies studies in MUED 305 in a laboratory rehearsal experience. Score study, rehearsal planning, assessment, conducting, and rehearsal techniques appropriate to high school level. Professional Standing.

Corequisite(s): MUED 305

Credits: 2

MUED 400 Professional Semester

Frequency: Every 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.

Prerequisite(s): EDU 303 or SAVE Workshop of an 1 or better

Credits: 12

MUED 450-451 Directed Study in Music Education

Frequency: Every semester

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

MUED 470-479 Special Topics in Music Education

Frequency: Offered on occasion

Studies of area supplementing, not replacing, regular course offerings.

Credits: 1-3

MUED 485 Advanced Instrument Pedagogy

Frequency: Every semester

For instrument majors to learn advanced techniques for teaching their instrument. Course involves teaching beginning instrument classes with guidance and instruction from faculty.

Prerequisite(s): MUS 325 and MUED 304 and MUED 393

Credits: 2

MUED 510 Principles of Music Education with Media

Frequency: Offered on occasion

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

MUED 513 Systematic Design of Curricula for Music Education

Frequency: Offered on occasion

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

MUED 514 Psychology of Music

Frequency: Every year

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

MUED 522 Psychological Research in Music

Frequency: Every year

Resources, techniques, applications, and processes in research in music education and therapy. Special emphasis will be on psychological and experimental research.

Credits: 3

MUED 555 Special Topics Workshop

Frequency: Every year

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

MUED 560 Teaching Hand Drumming in Schools

Frequency: Every year

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

MUED 565 Special Topics Seminar

Frequency: Every year

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

MUED 590-591 Special Studies

Frequency: Every semester

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: 1-6

MUED 609 Administration and Supervision of School Music

Frequency: Offered on occasion

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

MUED 610 Music Assessment

Frequency: Offered on occasion

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

MUED 618 Seminar in Music Education

Frequency: Every year

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

MUED 619 Foundations of Music Education I

Frequency: Every year

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

MUED 620 Foundations of Music Education II

Frequency: Every year

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

MUED 621 Music Education Foundation III

Frequency: Every year

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.

Prerequisite(s): MUED 619 and MUED 620

Credits: 3

MUED 651 Philosophical Perspectives of Music Education

Frequency: Offered on occasion

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

MUED 652 Psychological Perspectives for Music Education

Frequency: Offered on occasion

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

MUED 695 Thesis/Final Project

Frequency: Offered on occasion

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

Music

MUS 021-048 Special Ensemble

Frequency: Every semester

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. MUS021 University Chorus

Credits: .5

MUS 100 Recital-Seminar

Frequency: Every semester

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

MUS 101 Beginning Music Theory I

Frequency: Every year

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

MUS 102 Beginning Music Theory II

Frequency: Every year

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

MUS 103 Beginning Piano Class for Non-Majors

Frequency: Offered on occasion

A one semester beginning piano class for non-majors.

Credits: 1

MUS 104 Applied Music Class for Non-Music Majors

Frequency: Offered on occasion

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

MUS 105 Applied Music Major

Frequency: Every semester

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

MUS 106 Applied Music Major

Frequency: Every semester

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

MUS 107 Double Reed Class I

Frequency: Every year

(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

MUS 108 Double Reed Class II

Frequency: Every year

(Required for all freshman oboe and bassoon majors.) A continuation of Class I. The course covers shaping, gouging and refinement of scraping skills.

Prerequisite(s): MUS 107

Credits: .5

MUS 109 Harp Class, Elementary

Frequency: Every semester

Introductory course for beginners on the harp. Hand position, finger exercises, and tone production.

Credits: 1

MUS 110 Harp Class, Intermediate

Frequency: Every year

Continuing development of tone and technique: elementary harp repertoire.

Prerequisite(s): MUS 109

Credits: 1

MUS 111 The Rudiments of Music

Frequency: Every semester

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.

Prerequisite(s): Mus Theory Rudiments Exam of an 85 or better

Credits: 1

MUS 113 Voice Class

Frequency: Every semester

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

MUS 115 Music Appreciation

Frequency: Every semester

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

MUS 117-118 Piano Class, Elementary

Frequency: Every semester

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.

Prerequisite(s): MUS 117

Credits: 1

MUS 119 Free Improvisation

Frequency: Every semester

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

MUS 120 Concert Attendance

Frequency: Every semester

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

MUS 121 Aural Skills I

Frequency: Every semester

Course deals with various aspects of ear training including melodic, harmonic, and formal perception as well as sightsinging skills.

Credits: 2

MUS 122 Aural Skills II

Frequency: Every semester

A continuation of MUS 121 dealing with various aspects of ear training including melodic, harmonic, and formal perceptions as well as sightsinging skills.

Prerequisite(s): MUS 121

Credits: 2

MUS 123 Music Theory I

Frequency: Every semester

Course deals with elements of counterpoint, harmony, rhythm, and phrase analysis. Prerequisite: Satisfactory completion of Rudiments Exam.

Prerequisite(s): Mus Theory Rudiments Exam of an 85 or better

Credits: 3

MUS 124 Music Theory II

Frequency: Every semester

A continuation of MUS 122 dealing with more advanced aspects of harmony, melody, form, and style analysis.

Prerequisite(s): MUS 123

Credits: 3

MUS 125-126 Applied Music Major

Frequency: Every semester

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

MUS 127-128 Applied Lessons (Composition)

Frequency: Every semester

Weekly hour private applied instruction for music majors in the Bachelor of Music Composition program.

Prerequisite(s): MUS 127

Credits: 2

MUS 129-130 Beginning Composition

Frequency: Every semester

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.

* Indicates that the course can be taken in the same semester

Prerequisite(s): MUS 129 and MUS 121* and MUS 123*

Credits: 2

MUS 131 Applied Musicianship I

Frequency: Every semester

Study of solfege and conducting as basic tools of musicianship.

Credits: 1

MUS 132 Applied Musicianship II

Frequency: Every semester

Study of solfege and conducting as basic tools of musicianship.

Credits: 1

MUS 137-140 Diction for Singers

Frequency: Every year

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

MUS 163-164 Our World of Music

Frequency: Every year

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

MUS 198-199 Composition Forum

Frequency: Every semester

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.

Corequisite(s): MUS 198

Credits: 0

MUS 200 Recital Seminar

Frequency: Every semester

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

MUS 205 Applied Music Major

Frequency: Every semester

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.

Prerequisite(s): MUS 106

Credits: 2

MUS 206 Applied Music Major

Frequency: Every semester

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.

Prerequisite(s): MUS 205

Credits: 2

MUS 209 Harp Class, Advanced

Frequency: Offered on occasion

Advanced training in technique: scales, arpeggios, harmonies, pedal studies, chords, octaves, glissandi, and finger exercises in velocity.

Prerequisite(s): MUS 110

Credits: 1

MUS 217 Piano Class, Intermediate

Frequency: Every semester

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.

Prerequisite(s): MUS 118

Credits: 1

MUS 218 Piano Class, Intermediate

Frequency: Every semester

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.

Prerequisite(s): MUS 217

Credits: 1

MUS 221 Aural Skills III

Frequency: Every semester

A continuation of MUS 123 dealing with more advanced aspects of ear training including melodic, harmonic, and formal perception as well as sightsinging skills.

Prerequisite(s): MUS 122

Credits: 2

MUS 222 Aural Skills IV

Frequency: Every semester

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.

Prerequisite(s): MUS 221

Credits: 2

MUS 223 Music Theory III

Frequency: Every semester

A continuation of MUS 124 dealing with more advanced aspects of harmony, form, and style analysis.

Prerequisite(s): MUS 124

Credits: 3

MUS 224 Music Theory IV

Frequency: Every semester

A continuation of MUS 223 dealing with advanced harmony, form, and style analysis.

Prerequisite(s): MUS 223

Credits: 2

MUS 225 Applied Music Major

Frequency: Every semester

Bassoon, Cello, Clarinet, Classical Guitar, Double Bass, Euphonium, Flute, French Horn, Harp, Oboe, Percussion, Piano, Saxophone, Trombone, Trumpet, Tuba, Viola, Violin, Voice.

Prerequisite(s): MUS 126

Credits: 2

MUS 226 Applied Music Major

Frequency: Every semester

Bassoon, Cello, Clarinet, Classical Guitar, Double Bass, Euphonium, Flute, French Horn, Harp, Oboe, Percussion, Piano, Saxophone, Trombone, Trumpet, Tuba, Viola, Violin, Voice.

Prerequisite(s): MUS 225

Credits: 2

MUS 227 Applied Music (Composition)

Frequency: Every semester

Weekly hour private applied instruction for music majors in the Bachelor of Music in Music Composition program.

Prerequisite(s): MUS 128

Corequisite(s): MUS 298

Credits: 2

MUS 228 Applied Music (Composition)

Frequency: Every semester

Weekly hour private applied instruction for music majors in the Bachelor of Music in Music Composition program.

Prerequisite(s): MUS 227

Corequisite(s): MUS 299

Credits: 2

MUS 231 Conducting I

Frequency: Every year

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.

Prerequisite(s): MUS 124

Credits: 2

MUS 232 Conducting II

Frequency: Every year

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.

Prerequisite(s): MUS 231

Credits: 2

MUS 235 Musical Theatre Voice

Frequency: Every semester

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.

Prerequisite(s): MUS 126

Credits: 3

MUS 236 Musical Theatre Voice

Frequency: Every semester

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.

Prerequisite(s): MUS 235

Credits: 3

MUS 245 Performance Major

Frequency: Every semester

Bassoon, Cello, Clarinet, Classical Guitar, Double Bass, Euphonium, Flute, French Horn, Harp, Oboe, Percussion, Piano, Saxophone, Trombone, Trumpet, Tuba, Viola, Violin, Voice.

Prerequisite(s): MUS 126

Credits: 3

MUS 246 Performance Major

Frequency: Every semester

Bassoon, Cello, Clarinet, Classical Guitar, Double Bass, Euphonium, Flute, French Horn, Harp, Oboe, Percussion, Piano, Saxophone, Trombone, Trumpet, Tuba, Viola, Violin, Voice.

Prerequisite(s): MUS 245

Credits: 3

MUS 262 American Music

Frequency: Every other year

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

MUS 263 Music History in Western Civilization I

Frequency: Every year

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

MUS 264 Music History in Western Civilization II

Frequency: Every semester

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

MUS 265 History of Jazz

Frequency: Every year

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

MUS 267 African American Music

Frequency: Every year

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

MUS 269 Music Criticism

Frequency: Every year

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.

Prerequisite(s): ENGL 100

Credits: 3

MUS 270 The History of American Popular Music, 1900-1963

Frequency: Offered on occasion

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.

Prerequisite(s): ENGL 100

Credits: 3

MUS 285 Music Copyright

Frequency: Every other year

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.

Prerequisite(s): MUS 380

Credits: 3

MUS 298-299 Composition Forum

Frequency: Every semester

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.

Corequisite(s): MUS 228

Credits: 0

MUS 300 Recital Seminar

Frequency: Every semester

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

MUS 301 Composition Lab: Instrumentation

Frequency: Offered on occasion

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.

Prerequisite(s): MUS 121 and MUS 123

Credits: 2

MUS 302 Composition Lab: Orchestration

Frequency: Offered on occasion

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.

Prerequisite(s): MUS 301

Credits: 2

MUS 305 Applied Music Major

Frequency: Every semester

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.

Prerequisite(s): MUS 206

Credits: 2

MUS 306 Applied Music Major

Frequency: Every semester

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.

Prerequisite(s): MUS 305

Credits: 2

MUS 311 Composition Lab: Music Notation

Frequency: Offered on occasion

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.

Prerequisite(s): MUS 121 and MUS 123

Credits: 2

MUS 312 Composition Lab: Music Arranging

Frequency: Offered on occasion

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.

Prerequisite(s): MUS 121 and MUS 123

Credits: 2

MUS 315-316 Secondary Applied Study

Frequency: Every semester

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

MUS 317 Piano Class

Frequency: Every semester

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.

Prerequisite(s): MUS 218

Credits: 1

MUS 318 Piano Class

Frequency: Every semester

More advanced class with emphasis on performance of solo piano literature, accompaniment of vocal and instrumental solos and choral accompaniments.

Prerequisite(s): MUS 317

Credits: 1

MUS 321 Composition Lab: Collaborative Composition

Frequency: Offered on occasion

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.

Prerequisite(s): MUS 121 and MUS 123

Credits: 2

MUS 322 Composition Lab: Music of the 21st Century

Frequency: Offered on occasion

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.

Prerequisite(s): MUS 121 and MUS 123

Credits: 2

MUS 325-326 Applied Music Major

Frequency: Every semester

Bassoon, Cello, Clarinet, Classical Guitar, Double Bass, Euphonium, Flute, French Horn, Harp, Oboe, Percussion, Piano, Saxophone, Trombone, Trumpet, Tuba, Viola, Violin, Voice.

Prerequisite(s): MUS 226

Credits: 2

MUS 327 Applied Music (Composition)

Frequency: Every semester

Weekly hour private applied instruction for music majors in the Bachelor of Music in Music Composition program.

Prerequisite(s): MUS 228

Corequisite(s): MUS 398

Credits: 2

MUS 328 Applied Music (Composition)

Frequency: Every semester

Weekly hour private applied instruction for music majors in the Bachelor of Music in Music Composition program.

Prerequisite(s): MUS 327

Corequisite(s): MUS 399

Credits: 2

MUS 330 Advanced Instrumental Conducting

Frequency: Every semester

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.

Prerequisite(s): MUS 231 and MUS 232 and MUS 222 and MUS 224

Credits: 2

MUS 333 Musics of the World

Frequency: Every year

Non-technical introduction to ethnomusicology. Survey of musical styles from around the world emphasizing how music reflects and influences society.

Credits: 3

MUS 334 Music of Latin America

Frequency: Offered on occasion

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

MUS 335-336 Musical Theatre Voice

Frequency: Every semester

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.

Prerequisite(s): MUS 236

Credits: 3

MUS 340 Piano Pedagogy I

Frequency: Every other year

Introduction to piano pedagogy, consisting of an overview of various approaches to teaching piano; the philosophy of piano pedagogy with attention to survey of learning theories, child psychology and cognitive strategies; an historical overview of piano pedagogy; and observation and supervision of teaching.

Prerequisite(s): MUS 226

Credits: 2

MUS 341 Piano Pedagogy II

Frequency: Offered on occasion

Introduction to the beginning and intermediate repertoire available to the piano student, with specific study of assigned literature. Study of various approaches to teaching piano technique. Overview of a variety of available method books. Introduction to regional associations of piano teachers, piano forums, Music Teacher National Association (MTNA), National Federation of Music Clubs, National Guild of Piano Teachers, World Piano Pedagogy Conference, etc. Observations and performance practicum.

Credits: 2

MUS 342 Piano Pedagogy III

Frequency: Offered on occasion

Studying topics relevant to the more advanced piano student, adult students, students with disabilities, etc. Establishing teacher-student-parent relationships.

Treatment of business issues (e.g., establishing a studio, taxes, billing, etc.). Integration of piano instruction with theory and improvisation. Observations and performance practicum.

Prerequisite(s): MUS 341

Credits: 2

MUS 344 Vocal Pedagogy

Frequency: Every year

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

MUS 345-346 Performance Major

Frequency: Every semester

Bassoon, Cello, Clarinet, Classical Guitar, Double Bass, Euphonium, Flute, French Horn, Harp, Oboe, Percussion, Piano, Saxophone, Trombone, Trumpet, Tuba, Viola, Violin, Voice.

Prerequisite(s): MUS 246

Credits: 3

MUS 347-347 Junior Recital

Frequency: Every semester

Student performs Junior Performance Recital while enrolled. Enrollment is concurrent with Performance Major

lessons, either MUS 345 or MUS 346. MUS347 Junior Recital

Credits: 1

MUS 349 Vocal Pedagogy Practicum

Frequency: Every semester

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.

Prerequisite(s): MUS 344

Credits: 1

MUS 350 Special Topics in Music History

Frequency: Offered on occasion

A course to permit music history instructors to initiate special studies in specialized subjects.

Credits: 3

MUS 351 Independent Study Music History

Frequency: Offered on occasion

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

MUS 354 Form and Analysis

Frequency: Every semester

The final course in the music theory sequence for music majors; students engage critical and stylistic analysis of music throughout the ages and into the present.

Prerequisite(s): MUS 223

Credits: 3

MUS 355-356 Pedagogy Practicum

Frequency: Every semester

Music Performance majors in orchestral instruments tutoring secondary or non-major applied music classes under supervision of applied studio faculty.

Credits: 0

MUS 358 Governments and the Avant Garde

Frequency: Offered on occasion

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

MUS 361 Jazz Improvisation

Frequency: Every year

A performance lab and study of various theoretical foundations of improvised jazz. Mainstream style is emphasized.

Prerequisite(s): MUS 122 and MUS 124

Credits: 2

MUS 362 Jazz Theory

Frequency: Every year

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

MUS 371 Woodwind Repair

Frequency: Every other year

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.

Prerequisite(s): MUED 271 and MUED 272

Credits: 2

MUS 372-379 Special Topics in Music

Frequency: Offered on occasion

Study of music areas supplementing but not replacing regular courses. Topics, credit hours, and instructor determined by school.

Credits: 1-3

MUS 380 The Business of Music

Frequency: Every other year

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

MUS 381 Survey of Song Literature

Frequency: Every other year

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.

* Indicates that the course can be taken in the same semester

Prerequisite(s): MUS 264*

Credits: 3

MUS 383 French Song

Frequency: Offered on occasion

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.

Prerequisite(s): MUS 137 and MUS 138 and MUS 139 and MUS 140

Credits: 2

MUS 385 Music Contracts

Frequency: Every other year

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.

Prerequisite(s): MUS 285

Credits: 3

MUS 387 German Song

Frequency: Offered on occasion

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: 2

MUS 395 Career/Business Management for Musicians

Frequency: Every other year

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

MUS 396 Guitar Pedagogy

Frequency: Every other year

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

MUS 398 Composition Forum

Frequency: Every semester

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.

Corequisite(s): MUS 327

Credits: 0

MUS 399 Composition Forum

Frequency: Every semester

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.

Corequisite(s): MUS 328

Credits: 0

MUS 400 Recital Seminar

Frequency: Every semester

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

MUS 403 Counterpoint

Frequency: Every other year

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.

Prerequisite(s): MUS 222 and MUS 224

Credits: 3

MUS 404 Choral Arranging

Frequency: Every year

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.

Prerequisite(s): MUS 222 and MUS 223 and MUS 224 or MUS 354

Credits: 2

MUS 405-406 Applied Music Major

Frequency: Every semester

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.

Prerequisite(s): MUS 306

Credits: 2

MUS 408 History and Literature of the Wind Band

Frequency: Offered on occasion

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

MUS 409 History and Literature of the Guitar

Frequency: Offered on occasion

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

MUS 415 Piano Class for Keyboard Majors

Frequency: Every year

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.

Prerequisite(s): MUS 317 and MUS 318

Credits: 1

MUS 416 Piano Class for Keyboard Majors

Frequency: Every year

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.

Prerequisite(s): MUS 415

Credits: 1

MUS 417 Piano Class for Non-Keyboard Majors

Frequency: Every semester

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.

Prerequisite(s): MUS 317 and MUS 318

Credits: 1

MUS 418 Piano Improvisation for Non-Keyboard Majors

Frequency: Every semester

Emphasis on harmonization of lead sheets with jazz voicings, chord substitution, creative harmonization, tritone substitution; improvisation of 12 bar blues and boogie.

Prerequisite(s): MUS 317 and MUS 318

Credits: 1

MUS 420 Piano Literature I

Frequency: Every other year

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.

Prerequisite(s): MUS 221 and MUS 222 and MUS 223

Credits: 3

MUS 421 Piano Literature II

Frequency: Every other year

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.

Prerequisite(s): MUS 420

Credits: 3

MUS 424 The History of Opera

Frequency: Offered on occasion

Technical study of opera emphasizing its musical and dramatic development, relating it to social, cultural, and intellectual forces influencing it.

Prerequisite(s): MUS 122 and MUS 123 and MUS 124

Credits: 3

MUS 425-426 Applied Music Major

Frequency: Every semester

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.

Prerequisite(s): MUS 326

Credits: 2

MUS 427 Applied Music (Composition)

Frequency: Every semester

Weekly hour private applied instruction for music majors in the Bachelor of Music in Music Composition program.

Prerequisite(s): MUS 328

Corequisite(s): MUS 498

Credits: 2

MUS 428 Applied Music (Composition)

Frequency: Every semester

Weekly hour private applied instruction for music majors in the Bachelor of Music in Music Composition program.

Prerequisite(s): MUS 427

Corequisite(s): MUS 499

Credits: 2

MUS 433 Romanticism and Music

Frequency: Offered on occasion

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

MUS 435-436 Musical Theatre Voice

Frequency: Every semester

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.

Prerequisite(s): MUS 336

Credits: 3

MUS 439 Composition Seminar

Frequency: Every semester

Continuation of free composition with detailed study of 20th century compositional techniques.

Credits: 3

MUS 440 Composition for Electronic Media I

Frequency: Every year

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.

Prerequisite(s): MUS 122 and MUS 123 and MUS 124

Credits: 3

MUS 441 Composition for Electronic Media II

Frequency: Every year

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.

Prerequisite(s): MUS 122 and MUS 123 and MUS 124 and MUS 440

Credits: 3

MUS 442 Seminar in Computer Music

Frequency: Every year

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.

Prerequisite(s): MUS 440 or MUS 441

Credits: 3

MUS 443 Seminar in New Music Software

Frequency: Every year

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.

Prerequisite(s): MUS 440 or MUS 441

Credits: 3

MUS 445-446 Performance Major

Frequency: Every semester

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.

Prerequisite(s): MUS 346

Credits: 3

MUS 447-447 Senior Recital

Frequency: Every semester

Student performs Senior Performance Recital while enrolled. Enrollment is concurrent with Performance Major lessons, either MUS 445 or MUS 446. MUS447 Senior Recital

Credits: 1

MUS 450 Directed Studies

Frequency: Every semester

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

MUS 451 Directed Studies

Frequency: Every semester

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

MUS 453 The Baroque Period in Music

Frequency: Offered on occasion

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

MUS 454 The Classical Period in Music

Frequency: Offered on occasion

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

MUS 455 The Romantic Period in Music

Frequency: Offered on occasion

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

MUS 456 The Modern Period in Music

Frequency: Offered on occasion

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

MUS 457 Seminar in Popular Music

Frequency: Offered on occasion

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

MUS 458 Cult of Elizabeth/Patronage in Arts

Frequency: Offered on occasion

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

MUS 460-461 Independent Study

Frequency: Every semester

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

MUS 465 Music Business Internship

Frequency: Every semester

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

MUS 470-471 Special Topics Workshop

Frequency: Offered on occasion

Usually summer or other short-term workshops/institutes dealing with specific music literature, topics, problems, or teaching approaches and techniques.

Credits: 1-6

MUS 476 Audio and Desktop Multimedia

Frequency: Every year

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.

Prerequisite(s): MUED 291

Credits: 3

MUS 485 Multimedia for Musicians

Frequency: Every year

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.

Prerequisite(s): MUED 291

Credits: 3

MUS 491 Senior Project in Composition

Frequency: Every semester

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

MUS 498 Composition Forum

Frequency: Every semester

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.

Corequisite(s): MUS 427

Credits: 0

MUS 499 Composition Forum

Frequency: Every semester

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.

Corequisite(s): MUS 428

Credits: 0

MUS 502 Harmonic Styles Since 1850

Frequency: Offered on occasion

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.

Prerequisite(s): MUS 221

Credits: 3

MUS 503 20th Century Counterpoint

Frequency: Offered on occasion

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

MUS 506 Basic Studies Seminar: Theory

Frequency: Every other year

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

MUS 507 Basic Studies Seminar: History

Frequency: Every other year

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

MUS 508 History and Literature of the Wind Band

Frequency: Every other year

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

MUS 520 Piano Literature

Frequency: Every other year

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

MUS 521 Music Bibliography

Frequency: Offered on occasion

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

MUS 522 Style and Techniques of Song Literature

Frequency: Offered on occasion

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

MUS 523 Sonata Duo and Chamber Ensemble Seminar

Frequency: Every year

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

MUS 524 Techniques of Opera Coaching

Frequency: Offered on occasion

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.

Prerequisite(s): MUS 615

Credits: 3

MUS 542 Renaissance Period in Music

Frequency: Offered on occasion

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

MUS 543 Baroque Period in Music

Frequency: Offered on occasion

Detailed study of styles, trends, and developments in music, 17th and 18th centuries through preclassical era. Music studied through scores, recordings, and performance. Review of important historical and theoretical developments.

Credits: 3

MUS 544 Classical Period in Music

Frequency: Offered on occasion

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

MUS 545 Romantic Period in Music

Frequency: Offered on occasion

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

MUS 546 Modern Period in Music

Frequency: Offered on occasion

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

MUS 550 Compositional Technology Since 1950

Frequency: Offered on occasion

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

MUS 555 Special Topics Workshop

Frequency: Offered on occasion

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

MUS 565 Special Topics Seminar

Frequency: Offered on occasion

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

MUS 566 Advanced Choral Conducting/Analysis of History Styles

Frequency: Offered on occasion

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.

Prerequisite(s): MUS 222 and MUS 224 and MUS 232

Credits: 3

MUS 575 Music and Computer Multimedia

Frequency: Every semester

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

MUS 576 Audio and Desktop Multimedia

Frequency: Every year

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.

Prerequisite(s): MUS 291

Credits: 3

MUS 580 The Art of Improvisation

Frequency: Every year

The course, which will explore the world of free improvisation, will enhance the expressive skills of performers, educators, and music therapists.

Credits: 1-3

MUS 590-591 Special Studies

Frequency: Offered on occasion

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

MUS 592-593 Graduate Performance Major

Frequency: Every semester

Two semesters of advanced applied instruction for candidates for Master of Music in Performance degree culminating in a public performance.

Credits: 3

MUS 601 Applied Music Minor I

Frequency: Every semester

Half-hour lessons in secondary applied instruments. Permission of School of Music.

Credits: 1

MUS 602 Applied Music Minor II

Frequency: Every semester

Half-hour lessons in secondary applied instruments. Permission of School of Music.

Credits: 1

MUS 603 Applied Music Minor III

Frequency: Every semester

Half-hour lessons in secondary applied instruments. Permission of School of Music.

Credits: 1

MUS 604 Applied Music Minor IV

Frequency: Every semester

Half-hour lessons in secondary applied instruments. Permission of School of Music.

Credits: 1

MUS 605 Applied Music Major I

Frequency: Every semester

Hour lessons in major applied instruments. Permission of School of Music.

Credits: 2

MUS 606 Applied Music Major II

Frequency: Every semester

Hour lessons in major applied instruments. Permission of School of Music.

Credits: 2

MUS 607 Applied Music Major III

Frequency: Every semester

Hour lessons in major applied instruments. Permission of School of Music.

Credits: 2

MUS 608 Applied Music Major IV

Frequency: Every semester

Hour lessons in major applied instruments. Permission of School of Music.

Credits: 2

MUS 609 Composition

Frequency: Every semester

Advanced free composition for graduate study, concentrating on individual creative musical inclinations of each student. Seminar and private study of 20th century creative concepts.

Prerequisite(s): MUS 438 or MUS 439

Credits: 3

MUS 610 Composition

Frequency: Every semester

Advanced free composition for graduate study, concentrating on individual creative musical inclinations of each student. Seminar and private study of twentieth century creative concepts.

Prerequisite(s): (MUS 438 or MUS 439) and MUS 609

Credits: 3

MUS 611 Composition

Frequency: Offered on occasion

Continuation of advanced composition pursuing mature, professional creative expression.

Prerequisite(s): MUS 610

Credits: 3

MUS 612 Composition

Frequency: Offered on occasion

Continuation of advanced composition pursuing mature, professional creative expression.

Prerequisite(s): MUS 610 and MUS 611

Credits: 3

MUS 614 The Pedagogy of Music Theory

Frequency: Offered on occasion

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

MUS 615 Graduate Diction for Singers

Frequency: Offered on occasion

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

MUS 624 Analytic Techniques

Frequency: Offered on occasion

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

MUS 631 Art of Wind Conducting

Frequency: Every year

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

MUS 632 Wind Conducting Symposium

Frequency: Every year

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

MUS 651 Pedagogy of Music Composition

Frequency: Every other year

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

MUS 652 Schenkerian Analysis

Frequency: Every other year

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.

Prerequisite(s): MUS 624

Credits: 3

MUS 653 Post-Tonal Analysis

Frequency: Every other year

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.

Prerequisite(s): MUS 624

Credits: 3

MUS 665 Advanced Choral Conducting and Analysis

Frequency: Offered on occasion

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

MUS 666 Choral Literature for Secondary Schools

Frequency: Offered on occasion

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

MUS 692-693 Graduate Performance Major

Frequency: Every semester

Two semesters of advanced applied instruction for candidates for Master of Music in Performance degree culminating in a public performance. MUS692 Graduate Performance Major

Prerequisite(s): MUS 593

Credits: 3

MUS 694 Recital

Frequency: Every semester

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

MUS 695 Thesis

Frequency: Offered on occasion

Candidate for degree in Theory-Composition engages in advanced work culminating in thesis project or composition/arrangement.

Credits: 1-3

Music Business

MUSB 201 The Business of Music

Frequency: Every semester

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

MUSB 301 Music Copyrights

Frequency: Every year

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.

Prerequisite(s): MUS 380 or MUSB 201

Credits: 3

MUSB 320 Music Contracts

Frequency: Every year

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.

Prerequisite(s): MUS 285 or MUSB 301

Credits: 3

MUSB 350 Special Topics in Music Business

Frequency: Offered on occasion

Special topics in Music Business not covered in detail by regular courses and not offered on a regular basis.

Credits: 1-3

MUSB 420 Student Record Label

Frequency: Every year

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.

Prerequisite(s): (MUSB 201 and MUSB 320) or (MUS 380 and MUS 385)

Credits: 3

MUSB 425 Music Marketing and Promotion

Frequency: Every year

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.

Prerequisite(s): (MUSB 201 and MUSB 320) or (MUS 380 and MUS 385)

Credits: 3

MUSB 430 Independent Study

Frequency: Offered on occasion

This is a course for highly motivated students to undertake special studies in music business under faculty guidance.

Credits: 1-3

MUSB 465 Music Business Internship

Frequency: Every year

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

MUSB 480 Independent Study

Frequency: Every semester

This is a course for highly motivated students to undertake special studies in music business under faculty guidance.

Credits: 1-3

Music Therapy

MUTY 112 Music Therapy Clinical Observation and Seminar

Frequency: Every year

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

MUTY 115 Introduction to Music Therapy

Frequency: Every year

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

MUTY 116 Orientation to Clinical Practice

Frequency: Every year

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

MUTY 211 Clinical Placement and Seminar I

Frequency: Every year

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

MUTY 212 Clinical Placement and Seminar II

Frequency: Every year

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

MUTY 215 Music Therapy Repertoire

Frequency: Every year

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

MUTY 216 Impact of Music on Human Health and Behavior

Frequency: Every year

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

MUTY 240 Music for Children with Disabilities

Frequency: Every year

A basic introduction to the child with disabilities, state and federal guidelines applicable to music in special education and how music can be used as a teaching method. Lecture, discussion, class demonstration.

Credits: 2

MUTY 270 Social Instruments

Frequency: Every semester

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

MUTY 301 Seminar in Music Therapy

Frequency: Every semester

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.

Prerequisite(s): MUTY 115 and MUTY 300

Credits: 1

MUTY 302 Practicum in Music Therapy

Frequency: Every semester

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

MUTY 311 Clinical Placement and Seminar III

Frequency: Every year

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

MUTY 312 Clinical Placement and Seminar IV

Frequency: Every year

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

MUTY 315 Methods of Music Therapy

Frequency: Every year

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

MUTY 316 Principles of Music Therapy

Frequency: Every year

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

MUTY 411 Clinical Placement and Seminar V

Frequency: Every year

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

MUTY 414 Psychology of Music

Frequency: Every other year

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

MUTY 416 Music Therapy Internship Seminar

Frequency: Every year

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

MUTY 422 Psychological Research in Music

Frequency: Every other year

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

MUTY 450 Internship in Music Therapy

Frequency: Every semester

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

MUTY 505 Foundations of Advanced Music Therapy I

Frequency: Every year

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

MUTY 510 Advanced Guitar Skills for Music Therapists

Frequency: Every year

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

MUTY 518 Advanced Clinical Piano Improvisations

Frequency: Every year

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

MUTY 520 Theory of Vocal Psychotherapy

Frequency: Every year

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

MUTY 530 Introduction to Guided Imagery and Music

Frequency: Every year

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

MUTY 550 Internship in Music Therapy

Frequency: Every semester

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 of 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

MUTY 590 Special Studies in Music Therapy

Frequency: Every year

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

MUTY 605 Foundations of Advanced Music Therapy II

Frequency: Every year

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

MUTY 620 Vocal Psychotherapy Practice

Frequency: Every year

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

MUTY 630 Theory and Practice in Guided Imagery and Music

Frequency: Every year

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

MUTY 640 Clinical Applications of Guided Imagery and Music Theory and Practice

Frequency: Every year

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. Its 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

MUTY 650 Advanced Practicum in Music Therapy

Frequency: Every semester

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

Prerequisite(s): MUTY 518 and MUTY 520 and MUTY 530

Credits: 2

Physical Education

PHED 100 Champs/Lifeskills

Frequency: Offered on occasion

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

PHED 101 Aqua-Aerobics

Frequency: Every semester

Course introduces a sequence of water exercises that enhances the student's aerobic fitness.

Credits: 1

PHED 102 Learn to Swim

Frequency: Every semester

Course emphasizes the basic skills needed to learn to swim. Course is designed for non-swimmers.

Credits: 1

PHED 103 Intermediate Swimming

Frequency: Every semester

Course emphasizes the intermediate skills needed to develop individual strokes.

Credits: 1

PHED 104 Advanced Swimming

Frequency: Every semester

Course emphasizes advanced stroke development and training techniques involved in advanced swimming.

Credits: 1

PHED 105 Swimming and Conditioning

Frequency: Every semester

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

PHED 106 Lifeguard Training

Frequency: Every year

Course emphasizes the skills and techniques needed to gain lifeguard certification. Lifeguard certification is possible at the end of the course.

Credits: 3

PHED 107 WSI-Water Safety Instructor

Frequency: Every year

Course follows the Red Cross guidelines to train Water Safety Instructors. WSI is possible at the completion of this course.

Credits: 2

PHED 108 Basic Scuba

Frequency: Every semester

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

PHED 110 Advanced Scuba Diving

Frequency: Every semester

Course introduces the advanced techniques of SCUBA diving needed for open water diving.

Prerequisite(s): PHED 108

Credits: 1

PHED 112 Zumba®

Frequency: Every semester

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

PHED 113 Basic Bowling

Frequency: Every semester

Introduces students to the fundamentals of bowling including scoring, approaches and strategies needed to attain basic competencies as a beginning bowler.

Credits: 1

PHED 116 Golf - Basic

Frequency: Every year

Course introduces the student to the skills and rules needed to develop introductory golf proficiency.

Credits: 1

PHED 117 Running and Conditioning

Frequency: Every semester

Course teaches the student the basics of aerobic conditioning as a means of developing physical fitness.

Credits: 1

PHED 120 Ice Skating - Basic

Frequency: Every semester

Student will learn the basic skills needed to begin ice skating. Balance, footwork, turning and stopping are emphasized in the course.

*Credits: 1***PHED 121 Ice Skating - Intermediate**

Frequency: Every semester

Course emphasizes in-depth skills introduced in basic ice skating.

*Credits: 1***PHED 122 Figure Skating**

Frequency: Every semester

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***PHED 124 Basic Aerobics**

Frequency: Every semester

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***PHED 125 Step Aerobics**

Frequency: Every semester

Course introduces the student to aerobic exercise through a step aerobics technique.

*Credits: 2***PHED 126 Body Sculpting (Women)**

Frequency: Every semester

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***PHED 127 Yoga**

Frequency: Every semester

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***PHED 128 Racquetball - Basic**

Frequency: Offered on occasion

The basic skills, rules and techniques of scoring are taught in the course.

*Credits: 1***PHED 129 Racquetball - Intermediate**

Frequency: Offered on occasion

Strategies of singles and doubles play are emphasized in the course.

*Credits: 1***PHED 131 Self-Defense**

Frequency: Every semester

Course emphasizes the basic techniques needed to defend oneself. Stances and defensive strategies are emphasized.

*Credits: 1***PHED 132 Skiing**

Frequency: Every semester

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***PHED 134 Tennis - Basic**

Frequency: Every semester

Course emphasizes the rules, grips, stances and elementary stroke development for the beginning player.

*Credits: 1***PHED 135 Tennis - Intermediate**

Frequency: Every semester

Course introduces in-depth tennis skills and advanced techniques and strategies for singles and doubles play.

*Credits: 1***PHED 138 Volleyball**

Frequency: Every semester

Course introduces basic volleyball skills necessary for the student interested in intramural or recreational play.

*Credits: 1***PHED 139 Weight Training**

Frequency: Every semester

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***PHED 141 Advanced Conditioning**

Frequency: Every other year

The course introduces students to the fundamentals of advanced training techniques. Techniques include weight training, powerlifting, aerobics, agility, interval and plyometric training.

*Credits: 1***PHED 180 Assistant Scuba Instructor**

Frequency: Every semester

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.

Prerequisite(s): PHED 108

Credits: 2

PHED 199 Special Topics

Frequency: Every semester

Special topics in wellness.

Credits: 1-6

PHED 200 Human Physiology I

Frequency: Every year

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

PHED 201 Human Physiology Lab I

Frequency: Every year

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.

Corequisite(s): PHED 200

Credits: 1

PHED 202 Human Anatomy

Frequency: Every year

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

PHED 203 Human Physiology II

Frequency: Every year

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.

Prerequisite(s): PHED 200 and PHED 201

Corequisite(s): PHED 204

Credits: 3

PHED 204 Human Physiology II Laboratory

Frequency: Every year

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.

Corequisite(s): PHED 203

Credits: 1

PHED 214 Emergency Medical Technician (EMT-B)

Frequency: Every year

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

PHED 220 Health Sciences Applied to Coaching

Frequency: Every semester

The course will fulfill the N.Y.S.E.D. 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.

Prerequisite(s): HLTH 115

Credits: 3

PHED 221 Philosophy, Principles and Organization of Athletics in Education

Frequency: Every year

The course will fulfill the N.Y.S.E.D. Philosophy and Principles of Coaching 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: 2

PHED 301 Kinesiology

Frequency: Every year

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

PHED 302 Exercise Prescription

Frequency: Every year

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

PHED 304 Exercise Nutrition

Frequency: Every year

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.

Prerequisite(s): PHED 200 and HLTH 303

Credits: 3

PHED 306 Biomechanics

Frequency: Every year

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.

Prerequisite(s): STAT 200 or PSY 200 or ECON 200 or SOC 200 and PHED 301

Credits: 3

PHED 307 Biomechanics Laboratory

Frequency: Every year

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.

Corequisite(s): PHED 306

Credits: 1

PHED 311 The Psychology of Coaching

Frequency: Every year

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

PHED 315 Prevention and Care of Athletic Injuries

Frequency: Every year

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.

Prerequisite(s): HLTH 115 and BIOL 245

Credits: 3

PHED 316 Athletic Training Internship

Frequency: Every semester

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.

Prerequisite(s): HLTH 115

Credits: 1-3

PHED 321 Coaching Techniques

Frequency: Every semester

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

PHED 390 Special Topics in Exercise Science

Frequency: Every year

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: 1-3

PHED 400 Sports Studies Internship

Frequency: Every semester

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.

Prerequisite(s): PHED 398

Credits: 1-6

PHED 401 Senior Seminar in Exercise Science

Frequency: Every year

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

PHED 499 Independent Study

Frequency: Every semester

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

PHED 530 Legal Aspects of Sport and Physical Activity

Frequency: Every year

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

Philosophy

PHIL 105 Philosophical Ideas

Frequency: Every year

Introduction to the central ideas of prominent Western philosophers, earliest times to present. Lecture class.

Credits: 3

PHIL 106 Critical Thinking

Frequency: Every other year

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

PHIL 115 Philosophical Inquiry

Frequency: Every semester

Discussion of some central problems of philosophy such as existence of God, nature of reality, conditions of knowledge, question of free will versus determinism, and foundations of morality. How should one live? What makes society just? Can we survive death? Such questions are universal and fundamental to all humanity. Discussion class.

Credits: 3

PHIL 116 Introduction to Deductive Logic

Frequency: Every year

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

PHIL 218 Introduction to Ethics

Frequency: Every other year

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

PHIL 222 The Greek Way

Frequency: Every other year

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

PHIL 223 Roman Philosophy

Frequency: Offered on occasion

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

PHIL 224 Medieval Thought

Frequency: Every other year

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

PHIL 226 The Age of Reason and Its Legacy

Frequency: Every other year

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

PHIL 228 American Philosophy

Frequency: Every other year

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

PHIL 238 Philosophy of Religion

Frequency: Every year

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

PHIL 244 Feminist Theory

Frequency: Every year

In-depth critical exploration of selected theories to explain the sources of women's roles in society. A multidisciplinary approach will be employed to account for the social, economic, political and cultural status of women in contemporary societies.

Prerequisite(s): ENGL 345 or WOST 201

Credits: 3

PHIL 258 Life and Death

Frequency: Every year

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

PHIL 265 Social/Political Philosophy

Frequency: Every other year

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

PHIL 270 Philosophy of the Arts

Frequency: Offered on occasion

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

PHIL 274 Existentialism

Frequency: Offered on occasion

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

PHIL 301 Intermediate Deductive Logic

Frequency: Offered on occasion

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.

Prerequisite(s): PHIL 116

Credits: 3

PHIL 302 Abortion, Philosophy, and Law

Frequency: Offered on occasion

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

PHIL 303 Crime and Punishment

Frequency: Every other year

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

PHIL 310 Business Ethics

Frequency: Offered on occasion

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

PHIL 312 Current Moral Issues and Principles

Frequency: Every year

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

PHIL 313 Sex and Love

Frequency: Every year

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

PHIL 317 Philosophy of Science

Frequency: Every other year

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

PHIL 330 Libertarianism

Frequency: Offered on occasion

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

PHIL 331 Eastern Thought

Frequency: Every other year

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

PHIL 337 Religious Pluralism

Frequency: Offered on occasion

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

PHIL 338 Marxist Thought

Frequency: Every other year

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

PHIL 345 The Meaning of Life

Frequency: Offered on occasion

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

PHIL 346 Human Happiness

Frequency: Offered on occasion

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

PHIL 351 Metaphysics

Frequency: Every other year

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

PHIL 353 Theory of Knowledge

Frequency: Every other year

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

PHIL 362 Philosophy of Law

Frequency: Every other year

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

PHIL 364 Justice, Law, and Economics

Frequency: Offered on occasion

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

PHIL 369 Topics in Philosophy

Frequency: Offered on occasion

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

PHIL 430 Philosophy of Mind

Frequency: Every other year

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

PHIL 432 The Age of Analysis: Philosophy Since 1900

Frequency: Every other year

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

PHIL 441 Philosophy of Language and Semantics

Frequency: Offered on occasion

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

PHIL 446-449 Selected Problems

Frequency: Every other year

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

PHIL 460-469 Major Philosophers

Frequency: Every other year

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

PHIL 477 Capstone Seminar

Frequency: Every year

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

PHIL 481 Directed Study

Frequency: Every semester

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

PHIL 485 Independent Study

Frequency: Every semester

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

Physics

PHYS 101 Contemporary Physics for Non-Science Majors

Frequency: Every semester

(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

PHYS 104 The Big Bang

Frequency: Offered on occasion

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

PHYS 107 Particles and Waves

Frequency: Offered on occasion

Introductory level course on topics of special interest not covered in regular courses.

Credits: 1-3

PHYS 111 Introduction to Physical Sciences

Frequency: Offered on occasion

An inquiry and algebra based approach to the major topics of physics: motion, conservation laws, heat, electricity, optics, and introductory atomic physics.

Credits: 3

PHYS 117 Sound, Light and Color

Frequency: Every other year

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

PHYS 118 Introduction to Astronomy

Frequency: Every year

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

PHYS 121 College Physics I

Frequency: Every year

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

PHYS 122 College Physics II

Frequency: Every year

A non-calculus lecture sequence: wave motion, sound, electromagnetic fields, circuits, optics, quantum

phenomena. Students requiring a laboratory component should include PHYS 124.

Prerequisite(s): PHYS 121

Credits: 3

PHYS 123 College Physics Lab I

Frequency: Every year

One three-hour laboratory session per week treating topics covered in PHYS 121.

Corequisite(s): PHYS 121

Credits: 1

PHYS 124 College Physics II Lab

Frequency: Every year

One three-hour laboratory session per week treating topics covered in PHYS 122.

Corequisite(s): PHYS 122

Credits: 1

PHYS 199 Special Topics

Frequency: Offered on occasion

Introductory level course on topics of special interest not covered in regular courses.

Credits: 1-3

PHYS 200 Engineering Graphics

Frequency: Offered on occasion

Introduction to tools, language, and procedures basic to training of an engineering draftsman. Emphasis on drafting techniques, two-dimensional and isometric representation.

Credits: 2

PHYS 205 Science and Civilization

Frequency: Every year

A survey of the major scientific discoveries and the scientists behind these discoveries. The course will discuss historical developments from Ptolemy to Kirby (the co-inventor of the integrated circuit chip).

Credits: 3

PHYS 206 Genesis of the Universe

Frequency: Offered on occasion

A non-mathematical course covering historical, philosophical, theological and scientific aspects concerning the genesis of the universe.

Credits: 3

PHYS 230 University Physics I

Frequency: Every year

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. Prerequisite(s): MATH 122

Corequisite(s): PHYS 232

Credits: 4

PHYS 231 University Physics II

Frequency: Every year

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.

Prerequisite(s): MATH 123 and PHYS 230

Corequisite(s): PHYS 233

Credits: 4

PHYS 232 University Physics I Lab

Frequency: Every year

One three-hour laboratory session per week treating topics covered in PHYS 230.

Corequisite(s): PHYS 230

Credits: 1

PHYS 233 University Physics II Lab

Frequency: Every year

One three-hour laboratory session per week treating topics covered in PHYS 231.

Corequisite(s): PHYS 231

Credits: 1

PHYS 234 Modern Physics

Frequency: Every year

Special relativity, wave motion, basic concepts of quantum mechanics, atomic structure, solid state, and nuclear physics, including a weekly three hour lab.

Prerequisite(s): PHYS 231

Credits: 4

PHYS 311 Acoustics I

Frequency: Every year

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.

Prerequisite(s): PHYS 121 or PHYS 230

Credits: 3

PHYS 312 Acoustics II

Frequency: Offered on occasion

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.

Prerequisite(s): PHYS 311

Credits: 3

PHYS 318 Basic Electronics

Frequency: Every year

Introduction to electronic circuits, devices, and systems with practical applications to recording engineering and biomedical instrumentation. Non-majors only.

Prerequisite(s): (MATH 120 or MATH 122) and (PHYS 122 or PHYS 231)

Credits: 3

PHYS 321 Engineering Statics

Frequency: Every year

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.

Prerequisite(s): PHYS 230

Credits: 3

PHYS 322 Mechanics of Solids

Frequency: Every year

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.

Prerequisite(s): PHYS 321

Credits: 4

PHYS 323 Circuit Analysis I

Frequency: Every year

A development of network analysis including Ohm's and Kirchhoff's laws, operational amplifiers, nodal analysis, network theorems, trees and links, energy-storage elements, RC and RL circuits, and second order circuits.

Prerequisite(s): PHYS 231

Credits: 3

PHYS 324 Circuit Analysis II

Frequency: Every year

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.

Prerequisite(s): PHYS 323

Credits: 3

PHYS 325 Electronics

Frequency: Every other year

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.

Prerequisite(s): PHYS 231

Corequisite(s): PHYS 327

Credits: 3

PHYS 326 Digital Logic

Frequency: Every year

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.

Corequisite(s): PHYS 328

Credits: 3

PHYS 327 Electronics Lab

Frequency: Every other year

Laboratory to accompany and supplement PHYS 325.

Corequisite(s): PHYS 325

Credits: 1

PHYS 328 Digital Lab

Frequency: Every year

Laboratory to accompany and supplement PHYS 326.

Corequisite(s): PHYS 326

Credits: 1

PHYS 329 Engineering Dynamics

Frequency: Every year

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.

Prerequisite(s): PHYS 230

Credits: 3

PHYS 330 Thermodynamics

Frequency: Every year

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).

Prerequisite(s): PHYS 230

Credits: 3

PHYS 331 Theoretical Mechanics

Frequency: Every year

Vector-tensor approach to classical mechanics including kinematics, dynamics, oscillations, Lagrange's and Hamilton's equations, transformations, central force, and rigid body motion.

Prerequisite(s): MATH 224 and PHYS 230

Credits: 3

PHYS 333 Electricity and Magnetism

Frequency: Every year

Mathematical theory of electrostatics and electromagnetism employing vector calculus. Applications of Maxwell's equations.

Prerequisite(s): PHYS 231 and (PHYS 425 or MATH 420)

Credits: 3

PHYS 340 Optics

Frequency: Every other year

An introduction to geometrical, physical, and modern optics.

Prerequisite(s): PHYS 231

Corequisite(s): PHYS 341

Credits: 3

PHYS 341 Optics Laboratory

Frequency: Every other year

Laboratory to accompany and supplement PHYS 340.

Corequisite(s): PHYS 340

Credits: 1

PHYS 400 Undergraduate Seminar

Frequency: Every year

Presentations by students discussing topics in physics.

Counted once for the physics credit hour requirements.

Credits: 1

PHYS 401 Special Relativity

Frequency: Offered on occasion

Tensor calculus approach to relativistic kinematics, dynamics, optics, electrodynamics, and selected applied topics.

Prerequisite(s): PHYS 234

Credits: 3

PHYS 425 Mathematical Physics I

Frequency: Every year

Applied methods including cartesian and noncartesian vector and tensor analysis, eigenvectors and eigenvalues, infinite series, complex functions.

Prerequisite(s): MATH 224

Credits: 3

PHYS 426 Mathematical Physics II

Frequency: Every year

Applied methods including partial differential equations of physics, boundary value problems, Sturm-Liouville theory and eigenfunctions, special functions, Green's functions.

Prerequisite(s): PHYS 425

Credits: 3

PHYS 431 Introduction to Quantum Mechanics

Frequency: Every year

Concept of wave-particle duality, Schrodinger's wave equation with applications to potential problems, to the hydrogen atom, and to atomic spectra; perturbation theory, and spin-orbit interaction.

Prerequisite(s): PHYS 234

Corequisite(s): PHYS 425

Credits: 3

PHYS 434 Solid State Physics

Frequency: Offered on occasion

Crystal structure, conduction theory, binding and energy levels and other properties of conductors, semiconductors, dielectrics, and magnetics.

Prerequisite(s): PHYS 431

Credits: 3

PHYS 440 Seminar: Wave Motion in Physics

Frequency: Offered on occasion

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.

Prerequisite(s): PHYS 234

Credits: 1

PHYS 442 Computational Physics and Engineering

Frequency: Offered on occasion

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.

Prerequisite(s): MATH 223 and PHYS 230

Credits: 1

PHYS 444 Seminar: Quantum Information and Measurement

Frequency: Offered on occasion

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.

Prerequisite(s): PHYS 431

Credits: 1

PHYS 450 Advanced Laboratory

Frequency: Every other year

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.).

Prerequisite(s): PHYS 234 or CHEM 316

Credits: 1

PHYS 468 Independent Study

Frequency: Offered on occasion

Independent work on a theoretical or experimental topic under the supervision of a faculty member.

Credits: 1-3

PHYS 469 Directed Research

Frequency: Offered on occasion

Theoretical or experimental research under the supervision of a faculty member.

Credits: 1-3

PHYS 470-479 Special Topics

Frequency: Every semester

Area not covered in regular courses. Broad range of topics consistent with teaching and research interests of department.

Credits: 1-3

PHYS 480 Laboratory Supervision in Physics

Frequency: Every semester

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

PHYS 490 Honors Thesis

Frequency: Every year

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

PHYS 530 Kinetic Theory and Statistical Mechanics

Frequency: Offered on occasion

Maxwell-Boltzmann collision theory. H-theorem, transport equation, quantum statistics partition functions, equipartition theorem, applications to thermodynamic systems, ergodicity.

Credits: 3

PHYS 531 Mathematical Physics I

Frequency: Offered on occasion

Mathematical methods including eigenfunctions and eigenvalues, variational principles, abstract vector spaces, integral equations, Green's functions, partial differential equations of physics.

Credits: 3

PHYS 532 Mathematical Physics II

Frequency: Offered on occasion

Mathematical methods including eigenfunctions and eigenvalues, variational principles, abstract vector spaces, integral equations, Green's functions, partial differential equations of physics.

Credits: 3

PHYS 533 Electromagnetic Theory I

Frequency: Offered on occasion

Potential theory and boundary value problems, electromagnetic field relations, magnetohydrodynamics, Leinard-Wiechert potentials.

Prerequisite(s): PHYS 531

Credits: 3

PHYS 534 Electromagnetic Theory II

Frequency: Offered on occasion

Potential theory and boundary value problems, electromagnetic field relations, magnetohydrodynamics, Leinard-Wiechert potentials.

Prerequisite(s): PHYS 531

Credits: 3

PHYS 540 Modern Optics

Frequency: Offered on occasion

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

PHYS 541 Advanced Dynamics

Frequency: Offered on occasion

Lagrangian and Hamiltonian methods, variational principles, relativistic mechanics, transformation theory, oscillations, fields.

Prerequisite(s): PHYS 531

Credits: 3

PHYS 543 Quantum Mechanics I

Frequency: Offered on occasion

Solutions to wave equations, approximation methods, time dependent problems, vector spaces, matrix formulation, identical particles, scattering, radiation, second quantization.

Prerequisite(s): PHYS 531

Credits: 3

PHYS 544 Quantum Mechanics II

Frequency: Offered on occasion

Solutions to wave equations, approximation methods, time dependent problems, vector spaces, matrix formulation, identical particles, scattering, radiation, second quantization.

Prerequisite(s): PHYS 531

Credits: 3

PHYS 546 Reactor Physics

Frequency: Offered on occasion

Nuclear reactions and radiations, reactor theory, instrumentation, control, fuel, shielding, heat transfer, and applications of nuclear reactors.

Prerequisite(s): PHYS 432

Credits: 3

PHYS 570 Special Topics

Frequency: Offered on occasion

Areas not covered in regular courses. Broad range of advanced topics consistent with teaching and research interests of department.

Credits: 1-3

PHYS 630 Advanced Nuclear Physics

Frequency: Offered on occasion

Current experimental and theoretical topics including nuclear properties and systematics, nucleon scattering, nuclear forces and structure, reactions, decay processes, nuclear spectroscopy.

Prerequisite(s): PHYS 531 and PHYS 432

Credits: 3

PHYS 631 Atomic and Molecular Structure

Frequency: Offered on occasion

Quantum mechanical treatment of atomic and molecular energy levels including transitions, fine and hyperfine structure, isotopic effects, beam methods, collision and ionization phenomena.

Prerequisite(s): PHYS 543

Credits: 3

PHYS 690-691 Research

Frequency: Offered on occasion

Experimental or theoretical research in physics including a thesis.

Credits: 3

Political Science

POLI 100 Freshman Seminar

Frequency: Offered on occasion

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

POLI 120 American Politics

Frequency: Every semester

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

POLI 121 American Public Policy

Frequency: Every semester

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.

Prerequisite(s): POLI 120

Credits: 3

POLI 150 U.S. and World Affairs

Frequency: Every year

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

POLI 200 Statistics

Frequency: Every year

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

POLI 210 Research Methods

Frequency: Every other year

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.

Prerequisite(s): POLI 200 or STAT 200

Credits: 3

POLI 240 Urbanization and Environmental Challenges

Frequency: Offered on occasion

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

POLI 241 Introduction to Comparative Politics

Frequency: Every year

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

POLI 276 Law and Society

Frequency: Every semester

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

POLI 277 Introduction to Law

Frequency: Every year

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

POLI 280 Special Topics in Politics

Frequency: Offered on occasion

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

POLI 285 Mock Trial I

Frequency: Every year

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

POLI 287 Mock Trial II

Frequency: Every year

Preparation of case materials for participation in the trial competition sponsored by the American Mock Trial Association. Competition includes both civil and criminal litigation.

Prerequisite(s): INDS 285 or POLI 285

Credits: 3

POLI 311 Fundamentals of Public Administration

Frequency: Every year

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.

Prerequisite(s): POLI 120

Credits: 3

POLI 313 American Power Structures

Frequency: Every other year

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.

Prerequisite(s): POLI 120

Credits: 3

POLI 321 Political Parties and Interest Groups

Frequency: Every other year

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.

Prerequisite(s): POLI 120

Credits: 3

POLI 322 New York Government

Frequency: Every other year

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.

Prerequisite(s): POLI 120

Credits: 3

POLI 323 Elections in America

Frequency: Every other year

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.

Prerequisite(s): POLI 120

Credits: 3

POLI 324 President and Congress

Frequency: Every year

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.

Prerequisite(s): POLI 120

Credits: 3

POLI 325 Public Opinion and Participation

Frequency: Offered on occasion

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.

Prerequisite(s): POLI 120

Credits: 3

POLI 326 Media and Politics

Frequency: Every other year

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

POLI 328 African American Politics

Frequency: Offered on occasion

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.

Prerequisite(s): POLI 120

Credits: 3

POLI 329 Topics in American Politics

Frequency: Offered on occasion

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.

Prerequisite(s): POLI 120

Credits: 3

POLI 330 Western European Politics

Frequency: Every other year

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.

Prerequisite(s): POLI 120 or POLI 150

Credits: 3

POLI 331 Canadian Politics

Frequency: Every other year

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.

Prerequisite(s): POLI 120 or POLI 150

Credits: 3

POLI 332 Russian Politics

Frequency: Every other year

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.

Prerequisite(s): POLI 120 or POLI 150

Credits: 3

POLI 334 African Politics

Frequency: Every other year

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. Prerequisite(s): POLI 120 or POLI 150

Credits: 3

POLI 335 Germany and Europe

Frequency: Offered on occasion

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.

Prerequisite(s): POLI 120 or POLI 150 or HIST 116

Credits: 3

POLI 341 Political Economy of Development

Frequency: Every other year

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.

Prerequisite(s): POLI 120 or POLI 150

Credits: 3

POLI 343 International Migration and Immigration Politics

Frequency: Every other year

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.

Prerequisite(s): POLI 241

Credits: 3

POLI 344 Comparative Public Policy

Frequency: Every other year

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.

Prerequisite(s): POLI 120

Credits: 3

POLI 345 Film and Politics

Frequency: Every other year

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

POLI 346 East Asian Political Economy

Frequency: Every other year

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.

Prerequisite(s): POLI 120 or POLI 150

Credits: 3

POLI 348 The European Union

Frequency: Every other year

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.

Prerequisite(s): POLI 120

Credits: 3

POLI 349 Topics in Comparative Politics

Frequency: Offered on occasion

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.

Prerequisite(s): POLI 120 or POLI 150

Credits: 3

POLI 351 The Inter-American System

Frequency: Every other year

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.

Prerequisite(s): POLI 150 or POLI 241

Credits: 3

POLI 352 World Political Geography

Frequency: Every year

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.

Prerequisite(s): POLI 120

Credits: 3

POLI 353 International Law and Organization

Frequency: Every other year

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.

Prerequisite(s): POLI 150

Credits: 3

POLI 354 Politics of the Middle East

Frequency: Every other year

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.

Prerequisite(s): POLI 120 or POLI 150

Credits: 3

POLI 355 International Political Economy

Frequency: Every other year

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.

Prerequisite(s): ECON 201

Credits: 3

POLI 356 U.S. Foreign Policy

Frequency: Every other year

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.

Prerequisite(s): POLI 150

Credits: 3

POLI 359 Topics in International Politics

Frequency: Offered on occasion

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.

Prerequisite(s): POLI 150

Credits: 3

POLI 360 Classical Political Theory

Frequency: Every other year

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.

Prerequisite(s): POLI 120 or POLI 150 or POLI 276 or POLI 277

Credits: 3

POLI 361 Modern Political Theory

Frequency: Every other year

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.

Prerequisite(s): POLI 120 or POLI 150 or POLI 276 or POLI 277

Credits: 3

POLI 362 Terrorism and Counterterrorism

Frequency: Every year

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.

Prerequisite(s): POLI 150

Credits: 3

POLI 363 Game Theory

Frequency: Every other year

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.

Prerequisite(s): POLI 200 or BUAD 200 or ECON 200 or EDU 200 or POLI 200 or PSY 200 or SOC 200 or STAT 200

Credits: 3

POLI 365 American Political Thought

Frequency: Every other year

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.

Prerequisite(s): POLI 120

Credits: 3

POLI 369 Topics in Political Theory

Frequency: Offered on occasion

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.

Prerequisite(s): POLI 120 or POLI 150 or POLI 276 or POLI 277

Credits: 3

POLI 370 American Constitutional Law

Frequency: Every year

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.

Prerequisite(s): POLI 120 or POLI 276

Credits: 3

POLI 371 Civil Rights and Liberties

Frequency: Every year

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.

Prerequisite(s): POLI 120 or POLI 276

Credits: 3

POLI 375 The Judicial Branch

Frequency: Every other year

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.

Prerequisite(s): POLI 120

Credits: 3

POLI 379 Topics in Public Law

Frequency: Offered on occasion

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.

Prerequisite(s): POLI 120 or POLI 150 or POLI 276 or POLI 277

Credits: 3

POLI 380 Policy Evaluation

Frequency: Every other year

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.

Prerequisite(s): POLI 120 and POLI 210 and (POLI 200 or STAT 200)

Credits: 3

POLI 381 Urban Politics and Policy

Frequency: Every other year

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.

Prerequisite(s): POLI 120

Credits: 3

POLI 382 Social Welfare Policy

Frequency: Every year

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.

Prerequisite(s): POLI 120 or SOCW 249

Credits: 3

POLI 383 Courts and Social Policy

Frequency: Every other year

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.

Prerequisite(s): POLI 276

Credits: 3

POLI 387 Environmental Policy

Frequency: Every other year

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.

Prerequisite(s): 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

Credits: 3

POLI 389 Topics in Public Policy

Frequency: Offered on occasion

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.

Prerequisite(s): POLI 120 or POLI 150

Credits: 3

POLI 401 Washington (D.C.) Seminar

Frequency: Every semester

Prior selection required.

Credits: 3

POLI 402 Washington (D.C.) Internship

Frequency: Every semester

Prior selection required.

Credits: 3-12

POLI 403 Independent Study (Washington, D.C.)

Frequency: Every semester

Prior selection required.

Credits: 3

POLI 405 Independent Study (Albany, N.Y.)

Frequency: Every semester

Prior selection required.

Credits: 3

POLI 406 Seminar in State Politics - Albany, N.Y.

Frequency: Every semester

Prior selection required.

Credits: 3

POLI 407 Albany (N.Y.) Internship

Frequency: Every semester

Prior selection required.

Credits: 3-12

POLI 419 Directed Study: Public Administration

Frequency: Offered on occasion

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.

Prerequisite(s): POLI 120 and POLI 311

Credits: 1-3

POLI 429 Directed Study: American Politics

Frequency: Offered on occasion

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.

Prerequisite(s): POLI 311 or POLI 313 or POLI 321 or POLI 322 or POLI 323 or POLI 324

Credits: 1-3

POLI 439 Directed Study: Comparative Politics

Frequency: Offered on occasion

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.

Prerequisite(s): 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)

Credits: 1-3

POLI 440 Senior Seminar Preparation

Frequency: Every year

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 questions, have it approved, choose a faculty member to supervise the thesis, and begin to review the literature relevant to the chosen topic.

Credits: 1

POLI 449 Directed Study: Political Economy

Frequency: Offered on occasion

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.

Prerequisite(s): POLI 120 and POLI 150 and (POLI 334 or POLI 341 or POLI 344 or POLI 346 or POLI 354)

Credits: 1-3

POLI 450 Senior Seminar

Frequency: Every semester

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

POLI 459 Directed Study: International Politics

Frequency: Offered on occasion

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.

Prerequisite(s): POLI 120 and POLI 150 and (POLI 341 or POLI 346 or POLI 354 or POLI 355 or POLI 356)

Credits: 1-3

POLI 469 Directed Study: Political Theory

Frequency: Offered on occasion

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.

Prerequisite(s): POLI 120 and POLI 150 and (POLI 360 or POLI 361 or POLI 363 or POLI 365)

Credits: 1-3

POLI 479 Directed Study: Law

Frequency: Offered on occasion

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.

Prerequisite(s): POLI 120 and (POLI 276 or POLI 277 or POLI 370 or POLI 371 or POLI 383)

Credits: 1-3

POLI 489 Directed Study: Public Policy

Frequency: Offered on occasion

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.

Prerequisite(s): POLI 380 or POLI 381 or POLI 382 or POLI 383 or POLI 387

Credits: 1-3

POLI 490 Internship in Local Politics and Government

Frequency: Every semester

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

POLI 491 Seminar in Local Politics and Government

Frequency: Every semester

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.

Prerequisite(s): POLI 490

Credits: 3

POLI 492 Legal Intern

Frequency: Every year

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

POLI 494 Legal Internship Seminar

Frequency: Offered on occasion

Discussion and reporting on selected readings and experiences encountered in legal internships. Also involves writing a research paper.

Prerequisite(s): POLI 492

Credits: 3

POLI 495 Political Science Honors Thesis I

Frequency: Every year

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

POLI 496 Political Science Honors Thesis II

Frequency: Every year

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.

Prerequisite(s): POLI 495

Credits: 3

POLI 499 Directed Study: Political Science

Frequency: Offered on occasion

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.

Prerequisite(s): POLI 150 and POLI 200 and POLI 210

Credits: 1-3

POLI 520 Civic Education and Engagement

Frequency: Offered on occasion

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

POLI 525 The Presidency and the Law

Frequency: Offered on occasion

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

POLI 530 Seminar in Comparative Politics: Western Europe

Frequency: Offered on occasion

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

POLI 535 Political Economy of Macro Political Institutions

Frequency: Offered on occasion

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

POLI 548 European Union

Frequency: Offered on occasion

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

POLI 550 Seminar in International Politics

Frequency: Offered on occasion

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

POLI 595 Special Topics in Political Science

Frequency: Offered on occasion

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

POLI 596 Special Topics in Political Science

Frequency: Offered on occasion

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

POLI 599 Independent Study

Frequency: Offered on occasion

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

Psychology**PSY 100 Freshman Seminar**

Frequency: Every year

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

PSY 129 Introduction to Psychology

Frequency: Every semester

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

PSY 130 Psychology Laboratory

Frequency: Every semester

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.

* Indicates that the course can be taken in the same semester

Prerequisite(s): PSY 129*

Credits: 1

PSY 200 Statistics

Frequency: Every semester

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

PSY 210 Research Methods

Frequency: Every semester

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).

Prerequisite(s): PSY 129 and PSY 200

Credits: 4

PSY 227 Applied Psychology

Frequency: Every other year

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.

Prerequisite(s): PSY 129

Credits: 3

PSY 237 Sport Psychology

Frequency: Every year

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.

Prerequisite(s): PSY 129

Credits: 3

PSY 238 Performance Enhancement

Frequency: Every other year

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.

Prerequisite(s): PSY 129

Credits: 3

PSY 244 Cognitive Psychology

Frequency: Every semester

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.

Prerequisite(s): PSY 129

Credits: 3

PSY 245 Social Psychology

Frequency: Every semester

Introduction to interpersonal behavior. Topics include attraction, prejudice and discrimination, attitudes, social influence, aggression, social perception, and group behavior.

Prerequisite(s): PSY 129

Credits: 3

PSY 246 Personality

Frequency: Every year

Biological and social determinants of personality and its development. Methods of studying personality.

Prerequisite(s): PSY 129

Credits: 3

PSY 247 Health Psychology

Frequency: Every other year

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.

Prerequisite(s): PSY 129

Credits: 3

PSY 255 Psychology of Women

Frequency: Every year

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.

Prerequisite(s): PSY 129 or WOST 201

Credits: 3

PSY 273 States of Consciousness

Frequency: Every year

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

PSY 276 Human Sexuality

Frequency: Every other year

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.

Prerequisite(s): PSY 129

Credits: 3

PSY 280 Special Topics

Frequency: Offered on occasion

Special topics in psychology not covered in detail by regular courses and not offered on a regular basis.

Prerequisite(s): PSY 129

Credits: 3

PSY 289 Lifespan Human Development

Frequency: Offered on occasion

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).

Prerequisite(s): PSY 129

Credits: 3

PSY 291 Psychology of Religion

Frequency: Every other year

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.

Prerequisite(s): PSY 129

Credits: 3

PSY 300 Intermediate Statistics

Frequency: Offered on occasion

Application of statistical concepts to experimental design in psychological research.

Prerequisite(s): PSY 200

Credits: 3

PSY 310 Advanced Research Methods

Frequency: Every other year

In-depth examination of various methodologies employed in psychology, including factorial design.

Prerequisite(s): PSY 210

Credits: 3

PSY 317 Tests and Measurements

Frequency: Every other year

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.

Prerequisite(s): PSY 129 and PSY 200

Credits: 3

PSY 328 Positive Psychology

Frequency: Every year

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.

Prerequisite(s): PSY 129

Credits: 3

PSY 342 Perception

Frequency: Every semester

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.

Prerequisite(s): PSY 129

Credits: 3

PSY 344 Psychology of Language

Frequency: Every other year

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.

Prerequisite(s): PSY 129

Credits: 3

PSY 347 Organizational Psychology

Frequency: Every other year

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.

Prerequisite(s): PSY 129

Credits: 3

PSY 349 Child Psychology

Frequency: Every year

A review of research findings and normative data pertaining to children in such areas as perception, learning, cognition, and personality.

Prerequisite(s): PSY 129

Credits: 3

PSY 351 Physiological Psychology

Frequency: Every semester

Study of physiological basis of behavior.

Prerequisite(s): PSY 129

Credits: 3

PSY 355 Group Dynamics

Frequency: Every other year

Analysis and evaluation of concepts, hypotheses, techniques, and research in group dynamics.

Prerequisite(s): PSY 245 or SOC 204

Credits: 3

PSY 356 Abnormal Psychology

Frequency: Every semester

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.

Prerequisite(s): PSY 129

Credits: 3

PSY 358 Psychology and the Law

Frequency: Every year

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.

Prerequisite(s): PSY 129

Credits: 3

PSY 361 Cognitive Neuroscience

Frequency: Every year

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.

Prerequisite(s): PSY 129

Credits: 3

PSY 364 Cognitive Development

Frequency: Every year

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.

Prerequisite(s): PSY 129

Credits: 3

PSY 365 Social Development

Frequency: Every year

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.

Prerequisite(s): PSY 129

Credits: 3

PSY 366 Psychology of Adulthood

Frequency: Offered on occasion

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.

Prerequisite(s): PSY 129

Credits: 3

PSY 370 Cross-Cultural Psychology

Frequency: Every year

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.

Prerequisite(s): PSY 129

Credits: 3

PSY 373 Human Factors

Frequency: Every year

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.

Prerequisite(s): PSY 129

Credits: 3

PSY 379 Child Psychopathology

Frequency: Every year

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.

Prerequisite(s): PSY 356

Credits: 3

PSY 380 Special Topics

Frequency: Offered on occasion

Special topics in psychology not covered in detail by regular courses and not offered on a regular basis.

Prerequisite(s): PSY 129

Credits: 3

PSY 391 Multicultural Counseling

Frequency: Every other year

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.

Prerequisite(s): PSY 129

Credits: 3

PSY 429 History and Systems of Psychology

Frequency: Every year

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.

Prerequisite(s): PSY 210

Credits: 3

PSY 430 Theories of Psychology

Frequency: Every year

A discussion of the principles, assumptions, construction, and application of various theories of human behavior.

Prerequisite(s): PSY 210

Credits: 3

PSY 439 Senior Honors Seminar

Frequency: Every year

In-depth analysis of selected topics.

Prerequisite(s): PSY 210

Credits: 3

PSY 445 Seminar in Social Psychology

Frequency: Every other year

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.

Prerequisite(s): PSY 210 and PSY 245

Credits: 3

PSY 447 Introduction to Counseling

Frequency: Every semester

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.

Prerequisite(s): PSY 129

Credits: 3

PSY 454 Theories of Memory

Frequency: Every year

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.

Prerequisite(s): PSY 210 and (PSY 244 or PSY 364)

Credits: 3

PSY 458 Practicum in Teaching

Frequency: Every semester

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.

Prerequisite(s): PSY 210

Credits: 3

PSY 479 Internship in Psychology

Frequency: Every semester

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

PSY 489 Independent Study

Frequency: Every semester

Individual student research conducted under guidance of selected instructors, with permission of instructor.

Credits: 1-3

PSY 510 Contemporary Issues in Psychology

Frequency: Offered on occasion

Critical review of recent contributions to the field, including topics such as motivation, learning, personality, perception, and social influence.

Credits: 3

PSY 546 Classroom Expectancy Effects

Frequency: Every year

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

PSY 550 Studies in Psychology

Frequency: Offered on occasion

Exploration in-depth of selected topics in psychology. Major focus varies from semester to semester.

Credits: 1-3

PSY 570 Japanese Culture and Education

Frequency: Every year

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

Russian

RUSS 115 Elementary Russian I

Frequency: Offered on occasion

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

RUSS 116 Elementary Russian II

Frequency: Offered on occasion

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.

Prerequisite(s): RUSS 115

Credits: 3

Science Education

SCED 105 Nature of Science and Science Education

Frequency: Every year

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.

Corequisite(s): SCED 106

Credits: 3

SCED 106 Nature of Science Education Field Experience

Frequency: Every year

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.

Corequisite(s): SCED 105

Credits: 0

SCED 276 Literacy and Technology for Science and Mathematics

Frequency: Every year

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

SCED 303 Assessment for Inquiry-Based Science

Frequency: Every year

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.

Prerequisite(s): SCED 105 and SCED 106 or (EDU 105 and EDU 106)

Credits: 3

SCED 305 Diversity in the Teaching of Science and Mathematics

Frequency: Every year

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.

Prerequisite(s): SCED 105

Corequisite(s): SCED 313

Credits: 3

SCED 313 Diversity in Teaching Math and Science Field Experience

Frequency: Every year

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.

Corequisite(s): SCED 305

Credits: 0

SCED 419 Adolescence Science Methods

Frequency: Every year

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

SCED 491 Special Topics in Science Education

Frequency: Every year

Courses which are interdisciplinary in science and education. Titles and topics will vary each semester based on instructor and student interest.

Credits: 3

SCED 510 Nature in the School Curriculum

Frequency: Every year

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

SCED 511 Teaming with Nature

Frequency: Every year

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

SCED 512 Vernal Pool Project

Frequency: Every year

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

SCED 540 The Earth in Space

Frequency: Every other year

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

SCED 541 Electricity and Magnetism

Frequency: Every other year

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

SCED 542 Light and Color

Frequency: Every other year

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

SCED 543 Moving Objects

Frequency: Every other year

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

SCED 544 Properties of Matter

Frequency: Every other year

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

SCED 560 Foundations of Teaching Science to Adolescent Learners

Frequency: Every year

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: 4

SCED 591 Special Topics in Science Education

Frequency: Every year

Courses which are interdisciplinary in science and education. Titles and topics will vary each semester based on instructor and student interest.

Credits: 1-3

SCED 660 Developing Expertise in Science Teaching

Frequency: Every year

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: 4

SCED 670 Student Teaching - Middle School Science

Frequency: Every year

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.

Prerequisite(s): SCED 560 and SCED 660

Corequisite(s): SCED 680

Credits: 6

SCED 671 Student Teaching - Secondary School Science

Frequency: Every year

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.

Prerequisite(s): SCED 560 and SCED 660

Corequisite(s): SCED 680

Credits: 6

SCED 680 Inquiry into Science Teaching in Context

Frequency: Every year

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.

Prerequisite(s): SCED 560 and SCED 660

Corequisite(s): SCED 670 or SCED 671

Credits: 3

Science

SCI 301 Science for Elementary Educators I

Frequency: Every semester

In-depth focus on key concepts in the areas of chemistry and physics. Application of these concepts to real world situations and to topics in the elementary science curriculum are emphasized.

Credits: 3

SCI 302 Science for Elementary Educators Lab

Frequency: Every semester

Designed for childhood education majors, 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

SCI 303 Science for Elementary Educators II

Frequency: Every semester

In-depth focus on key concepts in the areas of biology and geology. Applications of these concepts to real world situations and to topics in the elementary science curriculum are emphasized.

Credits: 3

SCI 325 Science Teaching Assistantship

Frequency: Every semester

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.

Prerequisite(s): SCI 301 and SCI 302 and SCI 303

Credits: 1-2

SCI 491 Special Topics in Interdisciplinary Science

Frequency: Every year

Courses which are interdisciplinary in science. Titles and topics will vary each semester based on instructor and student interest.

Credits: 1-6

SCI 591 Special Topics in Interdisciplinary Science

Frequency: Every year

Courses which are interdisciplinary in science. Titles and topics will vary each semester based on instructor and student interest.

Credits: 3

Time Shortened Degree

SDEG 100 Humanities

Frequency: Every year

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

SDEG 102 Chemistry

Frequency: Every year

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

Seneca

SEN 115 Elementary Seneca I

Frequency: Offered on occasion

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

Sociology

SOC 116 Introductory Sociology

Frequency: Every semester

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

SOC 160 Special Topics

Frequency: Offered on occasion

A course covering material not covered by existing courses. Offered on an occasional basis.

Credits: 3

SOC 200 Social Statistics

Frequency: Every semester

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.

Prerequisite(s): SOC 116

Credits: 3

SOC 201 Social Problems

Frequency: Every other year

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).

Prerequisite(s): SOC 116

Credits: 3

SOC 202 Social Analysis

Frequency: Every semester

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.

Prerequisite(s): SOC 116

Credits: 3

SOC 204 Social Psychology

Frequency: Offered on occasion

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.

Prerequisite(s): SOC 116

Credits: 3

SOC 215 Introduction to Public Health

Frequency: Every year

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

SOC 218 Introduction to Social Work

Frequency: Every year

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.

Prerequisite(s): SOC 116

Credits: 3

SOC 240 Health and Society

Frequency: Offered on occasion

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.

Prerequisite(s): SOC 116

Credits: 3

SOC 272 Exploring Community-Based Social Work

Frequency: Every year

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.

Prerequisite(s): SOC 218

Credits: 3

SOC 300 Research Methods

Frequency: Every semester

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.

Prerequisite(s): SOC 116 and (SOC 200 or BUAD 200 or ECON 200 or EDU 200 or POLI 200 or PSY 200 or STAT 200)

Credits: 3

SOC 303 Social Class and Inequality

Frequency: Every year

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.

Prerequisite(s): SOC 116

Credits: 3

SOC 306 Sex and Gender

Frequency: Every semester

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.

Prerequisite(s): SOC 116 or ANTH 115

Credits: 3

SOC 310 Sociology of Deviant Behavior

Frequency: Every other year

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.

Prerequisite(s): SOC 116

Credits: 3

SOC 311 Sociology of Addiction

Frequency: Offered on occasion

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.

Prerequisite(s): SOC 116

Credits: 3

SOC 312 Plagues and Peoples

Frequency: Every year

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.

Prerequisite(s): SOC 116 or ANTH 115

Credits: 3

SOC 316 Minority Groups

Frequency: Every year

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.

Prerequisite(s): SOC 116

Credits: 3

SOC 320 Family Sociology

Frequency: Every year

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.

Prerequisite(s): SOC 116

Credits: 3

SOC 321 Population and Society

Frequency: Every year

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.

Prerequisite(s): SOC 116

Credits: 3

SOC 331 Anthropology of American Utopias

Frequency: Every other year

An examination of the background conditions producing utopias and an ethnographic/historical analysis of selected utopian ventures (e.g. Amish, Shakers, Counterculture Communes).

Prerequisite(s): SOC 116

Credits: 3

SOC 335 Sociology of Sport

Frequency: Every year

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.

Prerequisite(s): SOC 116

Credits: 3

SOC 337 Sociology of Aging

Frequency: Offered on occasion

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.

Prerequisite(s): SOC 116

Credits: 3

SOC 338 Sociology of Death and Dying

Frequency: Offered on occasion

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.

Prerequisite(s): SOC 116

Credits: 3

SOC 345 Women, Health and Society

Frequency: Every year

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.

Prerequisite(s): SOC 116

Credits: 3

SOC 350 Special Topics

Frequency: Offered on occasion

Special topics in sociology not covered in detail by regular courses and not offered on a regular basis.

Prerequisite(s): SOC 116

Credits: 1-3

SOC 361 Law in the World

Frequency: Every other year

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.

Prerequisite(s): SOC 116

Credits: 3

SOC 363 Victimology

Frequency: Every other year

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.

Prerequisite(s): SOC 116

Credits: 3

SOC 364 Juvenile Delinquency

Frequency: Every other year

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.

Prerequisite(s): SOC 116

Credits: 3

SOC 365 Family Violence

Frequency: Offered on occasion

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.

Prerequisite(s): SOC 116

Credits: 3

SOC 380 Sociological Theory

Frequency: Every year

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.

Prerequisite(s): SOC 116 and SOC 202

Credits: 3

SOC 400 Senior Seminar

Frequency: Every year

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.

Prerequisite(s): SOC 116

Credits: 3

SOC 415 Seminar in Public Health

Frequency: Every year

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

SOC 470 Directed Study

Frequency: Every semester

One to 3 credit hours of credit for individualized study under guidance of a member of the faculty. Permission of instructor.

Credits: 1-6

SOC 472 Sociology Internship

Frequency: Every semester

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.

Prerequisite(s): SOC 116

Credits: 1-15

Social Work

SOCW 249 Social Welfare Institutions

Frequency: Every year

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.

Prerequisite(s): SOC 116 or SOC 218 or POLI 120

Credits: 3

SOCW 315 Child Welfare

Frequency: Every other year

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.

Prerequisite(s): SOC 116 or SOC 218

Credits: 3

SOCW 325 Foundations of Generalist Practice

Frequency: Every year

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

SOCW 340 Human Behavior in Social Environment I

Frequency: Every year

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.

* Indicates that the course can be taken in the same semester

Prerequisite(s): BIOL 110*

Corequisite(s): SOCW 325

Credits: 3

SOCW 341 Human Behavior in Social Environment II

Frequency: Every year

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.

Prerequisite(s): SOCW 340

Credits: 3

SOCW 370 Generalist Practice Skills

Frequency: Every year

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.

Prerequisite(s): SOCW 325

Credits: 3

SOCW 390 Practice with Individuals, Families and Small Groups

Frequency: Every year

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.

Prerequisite(s): SOCW 340 and SOCW 341 and SOCW 370

Corequisite(s): SOCW 480 or SOCW 485

Credits: 3

SOCW 399 Selected Topics

Frequency: Every semester

Variable-content course; topic will be announced in the online Course Offerings each semester offered.

Credits: 3

SOCW 400 Practice with Organizations and Larger Social Systems

Frequency: Every year

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.

Prerequisite(s): SOCW 390

Corequisite(s): SOCW 490 or SOCW 495

Credits: 3

SOCW 470 Directed Study

Frequency: Every semester

Individualized study with a social work faculty member.

Permission of instructor required.

Credits: 1-3

SOCW 480 Field Practicum I

Frequency: Every year

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.

Prerequisite(s): SOCW 325 and SOCW 340 and SOCW 341 and SOCW 370 and SOC 300 and POLI 382

Corequisite(s): SOCW 390 or SOCW 485

Credits: 3

SOCW 485 Field Practicum I with Seminar

Frequency: Every year

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).

Prerequisite(s): SOCW 325 and SOCW 370 and SOC 300 and POLI 382

Corequisite(s): SOCW 390 or SOCW 480

Credits: 3

SOCW 490 Field Practicum II

Frequency: Every year

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.

Prerequisite(s): SOCW 480 and SOCW 485 and SOCW 390

Corequisite(s): SOCW 495

Credits: 3

SOCW 495 Field Practicum II with Seminar

Frequency: Every year

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.

Prerequisite(s): SOCW 480 and SOCW 485

Corequisite(s): SOCW 490

Credits: 3

Spanish

SPAN 115 Introduction to Spanish

Frequency: Every semester

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

SPAN 116 Elementary Spanish II

Frequency: Every semester

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.

Prerequisite(s): SPAN 115 or NY Regents Spanish Exam Score of an 80 or better

Credits: 3

SPAN 120 Spanish in Action: Online Component

Frequency: Every year

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.

Corequisite(s): SPAN 121

Credits: 2

SPAN 121 Spanish in Action: In-Class Component

Frequency: Every year

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.

Corequisite(s): SPAN 120

Credits: 3

SPAN 215 Intermediate Spanish I

Frequency: Every semester

Increases proficiency in listening, speaking, reading and writing skills in Spanish. Further development of vocabulary and grammar. Selected cultural and literary readings.

Prerequisite(s): SPAN 116 or (SPAN 120 and SPAN 121) or NY Regents Spanish Exam Score of an 85 or better

Credits: 3

SPAN 216 Intermediate Spanish II

Frequency: Every semester

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.

Prerequisite(s): SPAN 215

Credits: 3

SPAN 280 Topics in Spanish Grammar

Frequency: Every year

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.

Prerequisite(s): SPAN 216

Credits: 1

SPAN 301 Intensive Spanish Grammar

Frequency: Offered on occasion

An in-depth examination and review of grammar categories in Spanish. It will provide extensive oral and written practice.

Prerequisite(s): SPAN 216

Credits: 3

SPAN 307 Special Topics

Frequency: Offered on occasion

Topics in Spanish language and literature.

Prerequisite(s): SPAN 216

Credits: 3

SPAN 308 Advanced Spanish Phonetics and Diction

Frequency: Every year

Detailed study of rules of pronunciation and transcription into International Phonetic Alphabet (IPA). Pronunciation drills, exercises in sound discrimination and intonation.

Prerequisite(s): SPAN 216

Credits: 3

SPAN 313 Spanish Conversation

Frequency: Every semester

Oral-aural drills, conversational exercises to provide practice in understanding and speaking Spanish. Emphasis on improving pronunciation and fluency.

Prerequisite(s): SPAN 216

Credits: 3

SPAN 314 Spanish Composition

Frequency: Every year

Writing colloquial and formal Spanish. Translations and free compositions.

Prerequisite(s): SPAN 216

Credits: 3

SPAN 315 Introduction to Readings in Hispanic Literature

Frequency: Every year

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.

Prerequisite(s): SPAN 313 or SPAN 314 or SPAN 317

Credits: 3

SPAN 319 Survey of Spanish Literature I

Frequency: Every year

Principal literary movements and writers studied against historical, social, and cultural backgrounds. Selected masterpieces through the 17th century. Outside readings.

Prerequisite(s): SPAN 315

Credits: 3

SPAN 320 Survey of Spanish Literature II

Frequency: Every year

Principal literary movements and writers studied against historical, social, and cultural backgrounds. Selected masterpieces from the 18th century to the present. Outside readings.

Prerequisite(s): SPAN 315

Credits: 3

SPAN 325 Survey of Spanish-American Literature

Frequency: Every year

Principal literary movements in Spanish America from Colonial period. with emphasis on post-Independence literature.

Prerequisite(s): SPAN 315

Credits: 3

SPAN 329 Introduction to Spanish Linguistics

Frequency: Every other year

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.

Prerequisite(s): SPAN 314 and SPAN 315

Credits: 3

SPAN 340 Cultural Issues in the Hispanic World

Frequency: Every other year

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.

Prerequisite(s): SPAN 314 and SPAN 315

Credits: 3

SPAN 375 Themes in Hispanic Literature

Frequency: Every other year

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.

Prerequisite(s): SPAN 314 and SPAN 315

Credits: 3

SPAN 377 Special Topics

Frequency: Offered on occasion

Topics in Spanish language and literature.

Prerequisite(s): SPAN 315

Credits: 3

SPAN 388 Spanish Civilization and Culture

Frequency: Offered on occasion

A comprehensive introduction to aspects of Spanish civilization and culture: geography, history, social customs, political movements, literature and art.

Prerequisite(s): SPAN 313 or SPAN 314 or SPAN 317

Credits: 3

SPAN 400 Special Topics in Spanish

Frequency: Offered on occasion

Special areas in Spanish language, literature, or culture and civilization not covered by regular courses.

Prerequisite(s): SPAN 313 or SPAN 314 or SPAN 317

Credits: 1-3

SPAN 401 Imperial Spain

Frequency: Offered on occasion

Analysis of main currents of Spanish culture in Siglo de Oro through readings in history, sociology, and literature.

Prerequisite(s): SPAN 319

Credits: 3

SPAN 407 Special Topics

Frequency: Every year

Special areas in Spanish not covered by regular courses.

Credits: 3

SPAN 410 Directed Study

Frequency: Offered on occasion

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

SPAN 413 Advanced Communication in Spanish

Frequency: Every year

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.

Prerequisite(s): SPAN 313 and SPAN 314

Credits: 3

SPAN 423 Senior Seminar

Frequency: Every year

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.

Prerequisite(s): (SPAN 319 and SPAN 320) or (SPAN 319 and SPAN 325) or (SPAN 320 and SPAN 325)

Credits: 3

SPAN 424 Spanish Creative Writing

Frequency: Every year

Study of literary techniques. Direct composition in Spanish to encourage incorporation of these devices into student's own writing.

Prerequisite(s): SPAN 315 and (SPAN 318 or SPAN 314)

Credits: 3

SPAN 425 Spanish-American Fiction

Frequency: Offered on occasion

Prose fiction in Spanish America with special emphasis on 20th century authors.

Prerequisite(s): SPAN 325

Credits: 3

SPAN 427 The Art and Craft of Translation

Frequency: Every year

Discussions of translation theory and problems of translation, followed by translation from Spanish to English, ending with translation from English to Spanish.

Prerequisite(s): SPAN 315 and (SPAN 318 or SPAN 314) and (SPAN 320 or SPAN 325)

Credits: 3

SPAN 478 Great Moments in Hispanic Literature

Frequency: Every other year

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.

Prerequisite(s): 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

Credits: 3

SPAN 480 Internship in Spanish

Frequency: Offered on occasion

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

SPAN 500 Special Topics

Frequency: Offered on occasion

Special areas in Spanish not covered by regular courses. Permission of department required.

Credits: 3

SPAN 507 Special Topics in Spanish

Frequency: Every year

Special areas in Spanish not covered by regular courses.

Credits: 1-3

SPAN 510 Directed Study in Spanish

Frequency: Offered on occasion

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

Sport Management

SPMG 210 Principles of Sports Management

Frequency: Every semester

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

SPMG 211 Facility Management

Frequency: Every year

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

SPMG 212 Event Management

Frequency: Every year

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

SPMG 218 Technology in Sports

Frequency: Every semester

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.

Prerequisite(s): CSIT 120 or CSIT 121

Credits: 3

SPMG 230 Sport in American Culture

Frequency: Every year

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.

* Indicates that the course can be taken in the same semester

Prerequisite(s): PHIL 115 and SOC 116*

Credits: 3

SPMG 298 Pre-Internship

Frequency: Every semester

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

SPMG 300 Sport Law and Risk Management

Frequency: Every year

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.

Prerequisite(s): SPMG 211 or PHED 211

Credits: 2

SPMG 305 Economics of Sport

Frequency: Every year

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.

Prerequisite(s): ECON 201 and ECON 202

Credits: 3

SPMG 328 Marketing and Public Relations in Sport

Frequency: Every year

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.

Prerequisite(s): ECON 201 and ECON 202

Credits: 3

SPMG 330 Leadership and Management in Sports

Frequency: Every year

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.

Prerequisite(s): SPMG 210 or PHED 210

Credits: 3

SPMG 398 Pre-Internship

Frequency: Every semester

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

SPMG 400 Internship in Sport Management

Frequency: Every semester

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.

Prerequisite(s): SPMG 298 or PHED 298

Credits: 1-7

SPMG 410 Sport Law and Risk Management

Frequency: Every year

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.

Prerequisite(s): ENGL 100 and (BUAD 235 or COMM 235) and SPMG 211

Credits: 3

SPMG 428 Marketing and Public Relations in Sport

Frequency: Every semester

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.

Prerequisite(s): PHED 211 and PHED 212 and ENGL 100 and ECON 201 and ECON 202

Credits: 3

Special Studies

SPST 101 Biology Study Skills

Frequency: Every year

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.

Corequisite(s): BIOL 111

Credits: 1

SPST 107 Writing in the Arts and Sciences

Frequency: Offered on occasion

This course, offered by the Educational Development Program for EDP students, is a 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

SPST 114 Survey of Pre-calculus Lab

Frequency: Offered on occasion

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.

Corequisite(s): MATH 105

Credits: 1

SPST 118 Survey of Calculus Laboratory

Frequency: Offered on occasion

The purpose of the course, offered by the Educational Development Program, is to provide students enrolled in EDP with the opportunity to develop and improve the study skills necessary to successfully complete the required coursework for MATH 120.

Corequisite(s): MATH 120

Credits: 1

SPST 127 Educational Development Program Freshman Orientation I

Frequency: Every year

The purpose of this course, offered by the Educational Development Program, is to assist EDP students to 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

SPST 132 Topics in Contemporary Science Recitation

Frequency: Every semester

This course, offered by the Educational Development Program, is 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.

Corequisite(s): PHYS 101

Credits: 1

SPST 137 Reading First

Frequency: Offered on occasion

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.

Prerequisite(s): ENGL 357 or EDU 250 or EDU 275 or EDU 221 or SPA 250

Credits: 1

SPST 138 Advanced Reading First

Frequency: Offered on occasion

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

SPST 147 Educational Development Program Freshmen Orientation II

Frequency: Every year

This course, offered by the Educational Development Program, is a continuation of SPST 127 focusing on assisting EDP 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

SPST 201 Advanced Leadership Development

Frequency: Every semester

A course in the study of leadership, introducing 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

SPST 302 Exploring Leadership and Ethics

Frequency: Every Fall semester

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.

Prerequisite(s): SPST 201

Credits: 3

Sound Recording Technology

SRT 105 Recording Techniques for Music

Frequency: Every year

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

SRT 200-201 Recording Practicum

Frequency: Every year

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.

Corequisite(s): SRT 251

Credits: 2

SRT 250-251 Recording Techniques

Frequency: Every year

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

SRT 300-301 Recording Practicum

Frequency: Every year

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. Prerequisite(s): SRT 200 and SRT 201 and SRT 250 and SRT 251

Corequisite(s): SRT 351

Credits: 2

SRT 310 Studio Installation and Maintenance

Frequency: Offered on occasion

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

SRT 320 Studio Installation and Maintenance Laboratory

Frequency: Offered on occasion

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.

Prerequisite(s): MATH 121 or MATH 123 and PHYS 123

Credits: 1

SRT 350-351 Technology and Practices of the Recording Industry

Frequency: Every year

A two-semester course in multi-track recording technology, and Digital Signal Processing (DSP). Open to majors only.

Prerequisite(s): SRT 200 and SRT 201 and SRT 250 and SRT 251

Credits: 3

SRT 450-451 Senior Seminar/Project

Frequency: Every year

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.

Prerequisite(s): SRT 300 and SRT 301 and SRT 350 and SRT 351

Credits: 2

SRT 460-461 Independent Study

Frequency: Every semester

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: 1-3

SRT 470 Studio Supervision

Frequency: Offered on occasion

Students supervise recording studio inventory and use. Open to majors only. Permission of instructor required.

Credits: 2

SRT 480 Internship

Frequency: Every semester

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

Social Studies Education

SSED 204 World Regional Geography

Frequency: Every year

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

SSED 205 Economics for Social Studies Educators

Frequency: Every year

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

SSED 419 Secondary (Adolescence) Social Studies

Teaching Methods

Frequency: Every year

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

Statistics

STAT 150 Statistical Ideas

Frequency: Every other year

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

STAT 200 Statistical Methods I

Frequency: Every semester

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

STAT 250 Statistics for Scientists

Frequency: Every year

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

STAT 300 Statistical Methods II

Frequency: Offered on occasion

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.

Prerequisite(s): 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

Credits: 3

STAT 350 Probability and Statistics

Frequency: Every year

Basics of probability; descriptive statistics; discrete and continuous distributions; confidence intervals and tests of hypotheses concerning means, variances, and proportions; simple linear regression; statistical software. MATH 210 is recommended, in addition to the prerequisites listed.

Prerequisite(s): MATH 123 or MATH 124

Credits: 3

STAT 351 Applied Statistics

Frequency: Every other year

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.

Prerequisite(s): STAT 350 or STAT 200 or MATH 200 or ECON 200 or SOC 200 or PSY 200 and MATH 108 or MATH 231 and MATH 120 or MATH 122

Credits: 3

STAT 355 Mathematical Statistics

Frequency: Every other year

Moments and moment-generating functions, conditional expectations, multivariate binomial and normal distributions, functions of random variables, sampling distributions, decision theory, theory of estimation and hypothesis testing.

Prerequisite(s): STAT 350 and MATH 223

Credits: 3

STAT 400 Independent Study

Frequency: Offered on occasion

Independent study of a selected list of readings approved by the faculty advisor. Departmental approval required.

Credits: 1-3

STAT 405 Statistics Seminar

Frequency: Every Spring Semester

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.

Prerequisite(s): BUAD 300 or ECON 300 or STAT 351

Credits: 1

STAT 408 Special Topics

Frequency: Offered on occasion

Selected readings, discussions, data analysis on a topic in statistics. Permission of department required.

Credits: 1-3

STAT 451 Time Series

Frequency: Offered on occasion

Study of linear time series, moving averages and autoregressive models. Estimation, confidence intervals, forecasting and data analysis with time series models will be examined.

Corequisite(s): STAT 351

Credits: 1

STAT 460 Risk Management for Actuarial Science

Frequency: Every other year

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.

Prerequisite(s): MATH 223 and STAT 350

Corequisite(s): STAT 355

Credits: 2

Theatre Arts

THEA 100 Theatre Majors Seminar

Frequency: Every year

An introductory course for first year students declared as theatre majors. Introduction to policies, procedures and academic requirements in the theatre program.

Credits: 1

THEA 101-102 Theatre and Dance Productions

Frequency: Every year

Laboratory in performance or production involving applications of theatre techniques to the various aspects of departmental productions. Majors and minors only.

Credits: 1

THEA 110 Practicum

Frequency: Offered on occasion

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

THEA 114 Introduction to the Performing Arts

Frequency: Every semester

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

THEA 117 Script Analysis

Frequency: Every year

Explores the process in evaluating/discovering production and performance values in a playscript.

Credits: 3

THEA 121 Introduction to Technical Theatre

Frequency: Every semester

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

THEA 123 Introduction to Technical Production

Frequency: On occasion

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.

Prerequisite(s): THEA 121

Credits: 3

THEA 125 Drawing and Drafting for the Theatre

Frequency: Every year

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.

* Indicates that the course can be taken in the same semester

Prerequisite(s): THEA 123*

Credits: 3

THEA 129 Backstage Magic

Frequency: Offered on occasion

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.

Corequisite(s): THEA 229

Credits: 3

THEA 130 Acting for Non-Majors

Frequency: Every semester

Basic techniques of acting with emphasis on improvisation, script analysis and scene study. Attendance at campus theatrical events required.

Credits: 3

THEA 131 Acting Studio: Acting I

Frequency: Every year

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

THEA 132 Acting Studio: Acting II

Frequency: Every year

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.

Prerequisite(s): THEA 131

Credits: 3

THEA 133 Introduction to Acting

Frequency: Every year

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

THEA 140 Stage Dialects

Frequency: Every other year

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

THEA 201-202 Theatre and Dance Productions

Frequency: Every year

Continuation of THEA 101-102.

Credits: 1

THEA 220 Makeup

Frequency: Every year

Selection, application, and evaluation of stage makeup. Includes wiggling and facial hair techniques. Theatre majors and minors only.

Credits: 1

THEA 221 Digital Tools for the Performing Arts

Frequency: Every year

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.

Prerequisite(s): THEA 125

Co-requisite: THEA 229

Credits: 3

THEA 222 Stagecraft I

Frequency: Every year

Drafting and construction of soft goods, platforms and wagons, framed scenery, stairs, cornice and trim. Further refinement of shop skills. Practical work on productions

may be required. Lab fee required. B.F.A. Theatrical Production and Design majors only.

Prerequisite(s): THEA 123 or THEA 125

Credits: 3

THEA 223 Stage Lighting I

Frequency: Every year

Mechanics of stage lighting, involving basic electricity, color theory, instrumentation, distribution and control. Possibility of practical application on departmental productions.

Prerequisite(s): THEA 125 and THEA 315

Credits: 3

THEA 226 Scene Painting I

Frequency: Every year

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.

Prerequisite(s): THEA 123 or THEA 125

Credits: 3

THEA 228 Costume Construction I

Frequency: Every year

Laboratory exploration of basic costume construction techniques. Majors only.

Credits: 3

THEA 229 Computer Aided Drafting Lab

Frequency: Every semester

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

THEA 230 Introduction to Scene Study

Frequency: Every year

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.

Prerequisite(s): THEA 133 and THEA 117

Credits: 3

THEA 231 Acting Studio: Scene Study I

Frequency: Every year

Skills and techniques for role analysis and performance in realistic plays. B.F.A. Acting and Musical Theatre majors only.

Prerequisite(s): THEA 132

Credits: 3

THEA 232 Acting Studio: Scene Study II

Frequency: Every year

Skills and techniques for role analysis and performance in realistic plays. B.F.A. Acting and Musical Theatre majors only.

Prerequisite(s): THEA 231

Credits: 3

THEA 233 Acting Lab I

Frequency: Every year

A laboratory for exploration and development of scene study technique. Taken in conjunction with THEA 231,

Acting Studio, Scene Study I. B.F.A. Acting and Musical Theatre students only.

Prerequisite(s): THEA 132

Corequisite(s): THEA 231

Credits: 1

THEA 234 Acting Lab II

Frequency: Every year

A laboratory for exploration and development of scene study technique. Taken in conjunction with THEA 232, Acting Studio: Scene Study II. B.F.A. Acting and Musical Theatre students only.

Prerequisite(s): THEA 231

Credits: 1

THEA 242 Acting Studio: Introduction to Voice and Movement I

Frequency: Every year

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.

Prerequisite(s): THEA 132

Credits: 3

THEA 243 Acting Studio: Introduction to Voice and Movement II

Frequency: Every year

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.

Prerequisite(s): THEA 242

Credits: 3

THEA 245 Sound for the Theatre

Frequency: Every other year

Study of the artistic elements of sound for the theatre. The course will 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.

Prerequisite(s): THEA 223, THEA 315

Credits: 3

THEA 246 Voice and Movement Lab I

Frequency: Every year

Students will explore physical and vocal performance projects to better facilitate creative response and imagination. Taken in conjunction with THEA 242 Introduction to Voice and Movement I.

Prerequisite(s): THEA 132

Corequisite(s): THEA 242

Credits: 1

THEA 247 Voice and Movement Lab II

Frequency: Every year

Students will explore physical and vocal performance projects to better facilitate creative response and imagination. Taken in conjunction with THEA 243 Introduction to Voice and Movement II.

Prerequisite(s): THEA 242 and THEA 246

Credits: 1

THEA 301-302 Theatre and Dance Productions

Frequency: Every year

Continuation of THEA 201-202.

Credits: 1

THEA 303 Rendering Technique I

Frequency: Every year

Explores the graphic media and drawing techniques used by the designer in preparing drawings for the theatre.

Prerequisite(s): THEA 123, THEA 125

Credits: 3

THEA 304 Rendering Technique II

Frequency: Every year

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, guache, acrylic and marker.

Prerequisite(s): THEA 303

Credits: 3

THEA 305 Rendering Technique III

Frequency: On occasion

Continuation of THEA 304. Explores the graphic media and drawing techniques used by the designer in preparing drawings for the theatre.

Prerequisite(s):

Credits: 0

THEA 315 The Dramatic Imagination

Frequency: Every year

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.

Prerequisite(s): THEA 123

Corequisite(s): THEA 229

Credits: 3

THEA 319 Costume Construction II

Frequency: Every year

Intensive laboratory exploration of advanced costume construction techniques. Focus on growth of stitching skills.

Prerequisite(s): THEA 228

Credits: 3

THEA 320 Advanced Makeup

Frequency: Offered on occasion

Design and application of special effects, 3-D prosthetics, and appliances. Majors only.

Prerequisite(s): THEA 220

Credits: 3

THEA 321 Costume Crafts, Dyeing and Painting

Frequency: Every year

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

THEA 322 Stagecraft II

Frequency: Every year

Drafting and construction of dimensional scenery. Planning, drafting and mounting the full production. Moving the multi-set show. Practical work on productions may be required. Lab fee required. B.F.A. Theatrical Production and Design majors only.

Prerequisite(s): THEA 222

Credits: 3

THEA 324 Lighting Design I

Frequency: Every year

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.

Prerequisite(s): THEA 223, THEA 315, and THEA 125

Credits: 3

THEA 325 History of Costume

Frequency: Every year

Chronological survey of clothing and fashion; their sociological and artistic implications from the Egyptians to the 20th century.

Credits: 3

THEA 326 Scene Design I

Frequency: Every year

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.

Prerequisite(s): THEA 315

Credits: 3

THEA 327 Costume Design I

Frequency: Every year

Costume design methods and concepts. Students must enroll in THEA 303, 304 or 305 simultaneously. B.F.A. Theatrical Production and Design majors only.

Prerequisite(s): THEA 325

Credits: 3

THEA 328 Costume Design II

Frequency: Every year

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.

Prerequisite(s): THEA 327

Credits: 3

THEA 329 Flat Patterning

Frequency: Every year

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.

Prerequisite(s): THEA 228

Credits: 3

THEA 330 Introduction to Styles

Frequency: Offered on occasion

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).

Prerequisite(s): THEA 230

Credits: 3

THEA 331 Acting Studio: Styles

Frequency: Offered on occasion

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.

Prerequisite(s): THEA 232

Credits: 3

THEA 334 Digital Tools for the Performing Arts II

Frequency: Once a year

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.

Prerequisite(s): THEA 221, THEA 304

Co-requisite: THEA 229

Credits: 3

THEA 337 Properties for the Stage

Frequency: Every other year

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.

Prerequisite(s): THEA 121, THEA 125

Credits: 3

THEA 338 Special Topics

Frequency: Offered on occasion

Study of selected areas of theatre arts not covered in regular curricular program. May be repeated for credit. Permission of instructor.

Credits: .5-3

THEA 339 Stage Management

Frequency: Every other year

This class will serve as a comprehensive guide to the particulars of being a stage manager. Standard practices will be introduced in order to better communication and organizational skills. This class will often require self-motivation and is largely based on participation as stage management is one of the most active roles on the production team.

Prerequisite(s): THEA 121, THEA 101, THEA 102; THEA 130 or 133

Credits: 3

THEA 341 Acting Studio: Shakespeare

Frequency: Every year

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.

Prerequisite(s): THEA 230 or THEA 232

Credits: 3

THEA 345 Acting Studio: Voice and Movement III

Frequency: Every year

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.

Prerequisite(s): THEA 243

Credits: 3

THEA 346 Acting Studio: Voice and Movement IV

Frequency: Every year

Explores additional methods to increase precision and range of movement with an emphasis on unarmed and armed stage combat.

Prerequisite(s): THEA 242 and THEA 243

Credits: 3

THEA 350 Introduction to Musical Theatre

Frequency: Every other year

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.

Prerequisite(s): THEA 131 and THEA 133

Credits: 3

THEA 353 History of Musical Theatre

Frequency: Every other year

Development of the theatrical genre known as musical theatre. Special emphasis on musical comedy roots in 19th century America to the present.

Credits: 3

THEA 359 Commedia dell'Arte

Frequency: Every year

A performance based course exploring the masks, characters, movement, scenarios, and history of the Italian commedia dell'arte.

Prerequisite(s): THEA 232 and THEA 243

Credits: 3

THEA 363 Voice and Movement Lab III

Frequency: Every year

Further exploration of physical and vocal performance projects to better facilitate creative response and imagination. Taken in conjunction with THEA 345 Voice and Movement III.

Prerequisite(s): THEA 232 and THEA 243

Corequisite(s): THEA 345

Credits: 1

THEA 364 Voice and Movement Lab IV

Frequency: Every year

Further exploration of physical and vocal performance projects to better facilitate creative response and imagination. Taken in conjunction with THEA 346 Voice and Movement IV.

Prerequisite(s): THEA 232 and THEA 243

Corequisite(s): THEA 346

Credits: 1

THEA 381 Technical Theatre Seminar

Frequency: Every semester

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

THEA 382 Musical Theatre Styles I

Frequency: Every year

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.

Prerequisite(s): THEA 232 and MUS 236

Credits: 3

THEA 383 Acting Studio: Theatre Games

Frequency: Every other year

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.

Prerequisite(s): THEA 232

Credits: 3

THEA 384 History of Architecture and Decor for Theatre

Frequency: Every year

This course is a study of architectural and decorative arts throughout history as it impacts design for theatre. This

course will look at periods of design from ancient Egypt to the early Twentieth Century.

Prerequisite(s): THEA 121, THEA 125, THEA 303, THEA 315

Credits: 3

THEA 401-402 Theatre and Dance Productions

Frequency: Every year

Continuation of THEA 301-302.

Credits: 1

THEA 420 Special Studies: Stagecraft

Frequency: Every year

This class is an introduction to AutoCAD, a drafting program required of technicians to use in both academic and professional settings. It also proposes to touch on topics including but not limited to: scenic math, technical design, and advanced construction methods. Because the class is offered every other year it is not required to have Stagecraft 2 but it is recommended.

Prerequisites: THEA 101, THEA 102, THEA 222, THEA 125

Credits: 3

THEA 423 Acting Studio: Alternative Acting Styles

Frequency: Every year

An exploration of alternative acting techniques such as non-realistic and non-western styles of acting. B.F.A.

Acting/Musical Theatre majors only.

Prerequisite(s): THEA 232

Credits: 3

THEA 424 Acting Studio: Audition Techniques

Frequency: Every other year

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.

Prerequisite(s): THEA 232

Credits: 3

THEA 426 Scene Design II

Frequency: Every year

Continuation of Scene Design I with specific emphasis on artistic requirements of the production. B.F.A. Production and Design majors only.

Prerequisite(s): THEA 326

Credits: 3

THEA 427 Scene Painting II

Frequency: Every year

An intensive laboratory experience exploring advanced techniques in painting, dimensional texture and surface treatments. May require practical work on productions. B.F.A. Theatrical Production and Design majors only.

Prerequisite(s): THEA 226

Credits: 3

THEA 429 Lighting Design II

Frequency: Every year

This course will build upon both Lighting Design I and Lighting and Sound Technologies. This course will expose the student to designing in many different venues and genres as well as explore concert lighting.

Prerequisite(s): THEA 224

Credits: 3

THEA 432 Musical Theatre Styles

Frequency: Every year

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.

Prerequisite(s): THEA 232

Corequisite(s): THEA 434

Credits: 3

THEA 434 Musical Theatre Styles Lab

Frequency: Every year

A co-requisite for THEA 432, the laboratory allows for exploration, musical coaching and preparation for the Musical Theatre Styles acting class.

Prerequisite(s): THEA 232

Credits: 1

THEA 435 Rehearsal and Performance

Frequency: Every semester

Application of advanced techniques in preparation for studio and major productions.

Credits: 0

THEA 436 Design/Technical Production

Frequency: Every semester

Application of advanced techniques in preparation for studio and major productions.

Credits: 0

THEA 441 Directing I

Frequency: Every semester

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

THEA 442 Directing II

Frequency: Offered on occasion

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.

Prerequisite(s): THEA 441

Credits: 3

THEA 445 Voice and Movement Lab V

Frequency: Offered on occasion

Further exploration of physical and vocal performance projects to better facilitate creative response and imagination.

Prerequisite(s): THEA 346

Credits: 1

THEA 446 Voice and Movement Lab VI

Frequency: Every year

Further exploration of physical and vocal performance projects to better facilitate creative response and imagination.

Prerequisite(s): THEA 346

Credits: 1

THEA 451 History of the Theatre I

Frequency: Every year

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

THEA 452 History of the Theatre II

Frequency: Every year

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

THEA 460 Theatre Organization and Management

Frequency: Every year

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

THEA 468 Devising Theatre

Frequency: Every year

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

THEA 481 Senior Projects Seminar

Frequency: Every year

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

THEA 482 Directed Study

Frequency: Every semester

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

THEA 490 Professional Theatre Intern

Frequency: Every semester

Approved and supervised work-training experience in professional theatre company. Permission of department required.

Credits: 1-15

THEA 498 Senior Project

Frequency: Every semester

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.

Prerequisite(s): THEA 481

Credits: 3

THEA 499 Performance/Production Seminar

Frequency: Every semester

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

THEA 530-531 Selected Studies in Theatre Arts

Frequency: Offered on occasion

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

Women's Studies**WOST 201 Introduction to Women's Studies**

Frequency: Every year

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

WOST 203 Chicana Writers/Visual Artists

Frequency: Offered on occasion

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

WOST 205 Women in Art

Frequency: Every other year

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.

Prerequisite(s): ART 115 or ARTH 101 or ART 116 or ARTH 102 or WOST 201

Credits: 3

WOST 255 Psychology of Women

Frequency: Offered on occasion

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.

Prerequisite(s): PSY 129 or WOST 201

Credits: 3

WOST 301 Feminist Theory

Frequency: Every year

In-depth critical exploration of selected theories to explain the sources of women's roles in society. A multidisciplinary approach will be employed to account for the social, economic, political and cultural status of women in contemporary societies.

Prerequisite(s): ENGL 345 or WOST 201

Credits: 3

WOST 302 Sex and Gender

Frequency: Every year

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.

Prerequisite(s): SOC 116 or ANTH 115

Credits: 3

WOST 304 Latina Literary and Cultural Studies

Frequency: Every other year

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

WOST 314 Women Writers

Frequency: Every other year

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

WOST 335 American Women

Frequency: Offered on occasion

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.

Prerequisite(s): HIST 106

Credits: 3

WOST 336 African American Women's History

Frequency: Every other year

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.

Prerequisite(s): HIST 333 or HIST 334 or ENGL 240 or ENGL 340

Credits: 3

WOST 340 Black Women Writers

Frequency: Every other year

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

WOST 345 Women, Health and Society

Frequency: Every year

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.

Prerequisite(s): SOC 116

Credits: 3

WOST 359 Ethnicity and Race

Frequency: Every year

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

WOST 373 Gender and Communication

Frequency: Offered on occasion

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.

Prerequisite(s): COMM 101 or WOST 201

Credits: 3

WOST 377 Special Topics

Frequency: Offered on occasion

Variable content course. Topics announced in the online Course Offerings when offered.

Credits: 3

WOST 386 Women in Global Cinema

Frequency: Every other year

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

WOST 400 Portfolio Completion

Frequency: Every semester

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 WOST 401 Feminist Theory.

Corequisite(s): WOST 401

Credits: 0

WOST 401 Feminist Practice

Frequency: Every semester

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 feminist practice enrollees.

Credits: 3

WOST 405 French Women Writers

Frequency: Every year

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

WOST 406 Women in French Literature

Frequency: Every year

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

WOST 490 Independent Study

Frequency: Every semester

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

Additional Academic Information

The typical undergraduate program at SUNY Fredonia consists of four groups of courses: (1) the 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; (2) the courses required to complete a departmental or inter-departmental major; (3) supporting courses in subjects related to the major field, as well as courses which may be required for teacher certification; and (4) 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.

The basic organizational unit of the university faculty is the academic department, which brings together people with similar academic backgrounds and related interests in teaching and research. For information on academic departments and majors, students should see the first section of the catalog.

On the graduate level, the university offers certification programs and master's degrees in a variety of fields. For details about post-baccalaureate work, students should see the graduate sections of the University Catalog.

University offices generally are open from 8:30 a.m. until 5 p.m. Monday through Friday during the fall and spring semesters, and from 8 a.m. until 4 p.m. during the summer. Exceptions are extended hours for some student service offices and Reed Library.

Academic Advising

The variety of programs both in major departments and in interdisciplinary areas at SUNY 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 as stated in the University Catalog and determining that they have met degree requirements (including general education, 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://www.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 SUNY 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, Learning Center, 4th floor Reed Library, (716)673-3188 or by checking their web page at <http://www.fredonia.edu/acadadv> or by emailing advising.center@fredonia.edu.

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 Learning Center, 4th 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 Learning Center. See <http://www.fredonia.edu/acadv>.

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 SUNY 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 SUNY 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, available in the online University Catalog.
- Coordinator of Academic Advising & Liberal Arts, Learning Center, 4th floor Reed Library, (716) 673-3188.
- General Education Program, Associate Provost for Curriculum & Academic Support, 126 Reed Library, (716) 673-3717.
- Financial Aid Office, E160 Thompson 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 Arts and Sciences; Education; School of Business)
- Provost and Vice President for Academic Affairs

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, Learning Center, 4th floor Reed Library, (716) 673-3188, or by emailing advising.center@fredonia.edu. See <http://www.fredonia.edu/acadv>.

3-1-3 Program

The SUNY Fredonia 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 SUNY 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 SUNY Fredonia Admissions Office at (716) 673-3251 for more information on the 3-1-3 program.

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 Jewett Hall. 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 page 148), see those program pages.

For information on Pre-Law Advisement (see page 148), 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) (see page 76) portion of the catalog.

Maytum Lecture

The Maytum Lecture each year presents a major scholar of national reputation to the campus community. Students, faculty, staff, and community guests gather in King Concert Hall for a Convocation address on a major subject by a prominent figure 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.

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 SUNY 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 (716) 673-3808, or visit the office's web page at <http://www.fredonia.edu/oscar>.

Office of Sponsored Programs

Fredonia's Office of Sponsored Programs is a one-stop grants development and management unit. The office offers a wide range of services, from funding searches to assistance in proposal development to grant writing to budgets to campus approvals to account establishment through project close-out and required records retention support. The staff strives to be of assistance to faculty and staff in the widest range of activities. A hub of information and activity, the Office of Sponsored Programs is known for its willing staff with a propensity to never say no. The office is also the entry point for human subjects and export control. For more information, please visit <http://www.fredonia.edu/sponsoredprograms> or email sponsored.programs@fredonia.edu.

General Education

The State University of New York is charged with furthering human development and exploring and pursuing human potential in the broadest sense. In general, the university performs this function by acting as a center for the development and dissemination of knowledge, arts, and skills. In particular, it offers an opportunity for concentrated intellectual development and training. As part of the State University of New York, Fredonia pursues these goals with its own unique resources.

The university seeks to provide students with both a specialized and a general education. The specialized work prepares students in particular fields of knowledge for careers, professions, and other specific goals. But knowledge, like life, is a seamless fabric that cannot be cut into separate pieces. Any special area of knowledge requires a larger context to become fully meaningful. It is the purpose of general education to provide such a context, to help students find a sense of direction and become better able to cope with a changing world, regardless of their specializations.

The object of a general education is to further the development of a total human being who seeks to relate learning and living, ideas and actions. Seen in this way, general education seeks to provide the basis for responsible action and to develop the habit of questioning and using questioning as a creative tool.

The ability to discover and act upon their own values is a basic potential of human beings. In choosing the values by which they live, rather than having values thrust upon them, individuals create themselves. However, the freedom to choose and create comes into being only for people who have developed self-awareness, an ability to think, a minimal body of knowledge, and aesthetic sensitivity. General education seeks to help students develop all of these. General education should help students understand human society and their relationship to it. But it should also enable students to develop as individuals with a fundamental philosophy or basic world view that is consciously personal, yet based on an awareness of culture, history, and society. Consequently, general education seeks to facilitate the development of a conscious philosophy or world view and to develop the skills by which such fundamental beliefs can be articulated clearly.

Students complete the minimal general education requirements at SUNY Fredonia within the framework of the General Education Program as prescribed by the State University of New York..

General Education Program (College Core Curriculum)

The revised General Education Program at SUNY Fredonia is better aligned with the overall SUNY general education template. The categories have been renumbered and renamed to match the SUNY categories, and the former

Upper Level requirement was eliminated by Senate vote during the Spring semester of 2011. It is important to note that in the future, students will need only one Basic Communication - Oral course to meet the Basic Communication category requirements, rather than the former requirement of two Speaking Intensive courses.

Approved courses, distributed as follows. For more information on approved courses in each category, the General Education Master List can be found at the following link:
<http://www.fredonia.edu/departments/gened/masterlist.asp>.

Category	Credit Hours
1. Mathematics http://www.fredonia.edu/departments/gened/mathematics.asp	3
2. Natural Sciences http://www.fredonia.edu/departments/gened/naturalscience.asp (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 http://www.fredonia.edu/departments/gened/socialsciences.asp (Two courses from different disciplines; only one may be from Business Administration, Education, History, Communication or Communication Disorders.)	6
4. American History http://www.fredonia.edu/departments/gened/history.asp (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 http://www.fredonia.edu/departments/gened/westciv.asp	3
6. Other World Civilizations http://www.fredonia.edu/departments/gened/worldhistory.asp	3

7. Humanities 3
<http://www.fredonia.edu/departments/gened/humanities.asp>

8. Arts 3
<http://www.fredonia.edu/departments/gened/arts.asp>

9. Foreign Languages* 0-6
<http://www.fredonia.edu/departments/gened/forlang.asp>

Students enrolled in a Bachelor of Arts program must demonstrate a language proficiency at the 116 level or beyond; all other students must demonstrate a language proficiency at the 115 level. Students in professional programs should consult their Advisors for program specific details. To demonstrate proficiency, all 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.
- Study abroad (and submit a Course Appeal/Substitution request to the Office of the Associate Provost for Curriculum & Academic Support.
- Successfully complete a 3-6 credit course at SUNY Fredonia in this category at the appropriate level (115 or 116 or 120/121).

10. Basic Communication (Written component) 3
<http://www.fredonia.edu/departments/gened/written.asp>

11. Speaking-Intensive Requirement (Oral component of the Basic Communication requirement for SUNY) 0-3
<http://www.fredonia.edu/departments/gened/speakingguidelines.asp>

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 General Education Category.

*With the exception of American Sign Language, the Modern Language department will use its best professional judgment in determining when students have fulfilled the learning outcomes of the foreign language requirement in ways other than those sketched above. Issues related to American Sign Language are directed to the Communications Disorders and Sciences

Department or the Chair of the General Education Committee. Moreover, under appropriate circumstances, waivers of the requirement will be taken under consideration by the Associate Provost for Curriculum & Academic Support.

Questions pertaining to the General Education Program may be directed to Dr. Melinda Karnes, Associate Provost for Curriculum & Academic Support at (716) 673-3717. More information on the General Education Program can be found on the general education web page at <http://www.fredonia.edu/department/gened> or by emailing ccc.office@fredonia.edu.

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 SUNY 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 SUNY Fredonia will be computed in the final average.

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.

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 SUNY Fredonia, including active participation in more than one area of university life. The award is named for President Emeritus Oscar Lanford.

Honors Program

Within the framework of the general education program, SUNY Fredonia has a freshman/sophomore Honors Program open to well-prepared students who enjoy intellectual challenges and are excited by ideas. The program consists of a series of four honors courses on topics that change from semester to semester. Course topics have included "Politics and the Novel," "The Dilemmas of Institutionalized Evil," and "Yuck...Chemicals!" Students take one course each semester (schedule permitting), and the four honors courses 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.

Students entering the program in the fall of 2012 must maintain at least a 3.3 GPA to remain in the program. Students will receive a one-time, one-semester grace period to meet the GPA requirement if they fall under the minimum requirements.

Opportunities in Honors are also available for students at the junior and senior levels in the form of departmental honors in a number of programs and the Honors Thesis.

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 SUNY 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

SUNY 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.

Lifelong Learning and Special Programs

Lifelong Learning and Special Programs

2148 Fenton Hall

(716) 673-3177

Eric Skowronski, Director

Email: lifelong.learning@fredonia.edu

Website: <http://www.fredonia.edu/lifelong/index.asp>

Lifelong Learning and Special Programs offers a diverse set of education and training opportunities – both credit

bearing and noncredit. There are six main program categories under this office's aegis, including the Lifelong 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 Lifelong Learning and Special Programs or visit Lifelong Learning on the web at <http://www.fredonia.edu/lifelong>.

Online Education

Credit-bearing, instructor-led, asynchronous online courses are offered by many SUNY colleges and universities across New York State, including SUNY Fredonia, in conjunction with the SUNY Learning Network, <http://www.sln.suny.edu>.

For additional information, please contact Lifelong Learning and Special Programs or visit Lifelong Learning on the web at <http://www.fredonia.edu/lifelong>.

Joining Term (J-Term) at SUNY Fredonia

Every January, SUNY Fredonia offers a select group of undergraduate and graduate courses – on campus, online and abroad. Most offerings begin and end within two weeks. For additional information about Fredonia's J-Term, please contact Lifelong Learning and Special Programs or visit J-Term on the web at <http://www.fredonia.edu/jterm>.

Summer Sessions at SUNY 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, SUNY 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 Lifelong Learning and Special Programs or visit Summer Sessions on the web at <http://www.fredonia.edu/summer>.

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 SUNY Fredonia in fundraising and development efforts, as well as alumni connections.

Reed Library

Reed Library plays a key role in the teaching and learning process at Fredonia as students and faculty make heavy use of over 18 million volumes that comprise the holdings of the SUNY libraries. Over 32,000 journals are available online along with extensive collections of microforms, videotapes and DVDs. The Music Library houses more than 17,000 sound recordings and over 30,000 musical scores and performance parts. Archives and Special Collections contain extensive holdings, including the university archives, local history materials, records of the Holland Land Company, books and manuscripts of the noted Austrian author Stefan Zweig, the Sigurd Rascher Saxophone Collection, and the archives of the West Valley Nuclear Coalition.

Reference librarians provide in-depth instruction in the use of information sources for all academic disciplines and are able to answer specific questions and to advise students on research strategies. One-on-one research consultations are available by appointment, but patrons can have reference questions answered at all times by using the *Ask Us 24/7* Instant Messaging service. The Archivist is available by appointment for research consultation regarding the holdings of the Archives and Special Collections. The Reed Library web pages contain extensive guides on the use of library resources.

A wide variety of resources including encyclopedias, indexes, full text articles, e-books and online journals and online reference services are available to the campus community 24 hours a day.

Reed Library is open at the following times during the academic year: Monday through Thursday, 7:30 a.m. to 1:00 a.m. (next day); Friday, 7:30 a.m. to 8:00 p.m.; Saturday, 12:00 p.m. to 8:00 p.m.; and Sunday, 12:00 p.m. to 1 a.m. Hours are extended during exam periods, and are reduced during inter-session and Summer

Sessions. For more detailed information, patrons should go to the library website at <http://www.fredonia.edu/library> or telephone (716) 672-1234 (library hours) or (716) 673-3222 (Reference Desk). For General Information, please call Reed Library Circulation at (716) 673-3184. With seating for over 700 in many different areas, there is always a place to study in Reed Library.

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://www.fredonia.edu/ait/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 <http://www.fredonia.edu/ait/Labs/PrintingQuota.asp>.

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 SUNY 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>.

International Education Center

6 LoGrasso Hall
(716) 673-3451

Mary Sasso, Director

Mary Hills, Assistant Director

Email: international.education@fredonia.edu

Website: <http://www.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 International Education Center (IEC) provides international-education opportunities from a variety of international perspectives, both on campus and abroad, and encourages faculty to include an international point of view in course work and curriculum across the disciplines. IEC also 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 SUNY Fredonia. International students can find information about a variety of subjects including: admissions requirements, housing, working in the US, orientation and more at: <http://www.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 International Education Center. 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 SUNY Fredonia's International Education Center web page at: <http://www.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://www.fredonia.edu/international/education/study abroad/healthandsafety.asp>.

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 financial support services program administered by the State University of New York. It is designed to provide a college education for talented students who have not had an opportunity to realize their 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 can 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. Freshman 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 are given to program students who excel academically and are involved in leadership and community service are: Chi Alpha Epsilon National Honor Society, the Arthur O. Eve Scholarship, the Director's Award, the Gregory Antonio Fund Award, and the Ralph Wilson, Jr. EDP Book Award.

Students interested in the program should look for 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 a link between the campus and the world of work. The professional staff helps freshmen through alumni to:

- explore options and make career/major/job choices
- plan strategies to gain experience and identify 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. Computer assessments, career information, and information 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 Information. Students can explore careers by viewing over 2,000 online video interviews from professionals in a wide variety of careers and browsing the Careers/Majors section of the CDO website. Books, magazines, pamphlets, articles, and videotapes about careers are organized for easy browsing on shelves in the resource area. They contain information about work tasks, desired academic background, personal qualities and experiences, salary, hiring organizations, and the job market. These materials are also available for sign-out.

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 business, sound recording technology 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 SUNY 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 and DVDs 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. Quest is a web-based system that each enrolled student has a personal account in. It provides access to internship, summer, and professional job listings; an employer database; a mentor database of Fredonia alumni; and a listing of special events. Search agents provide e-mail 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 information for the GRE, GMAT and LSAT are available in the resource area. Test preparation software, books and videos are also available.

Workshops. The counselors make presentations to student clubs, classes and residence halls about career options, internships, summer jobs, resume writing, job searching, interviewing, and graduate or professional school application issues.

Career Resource Area. The library of almost 400 books, videotapes, magazines and brochures includes information 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, job search, resumes and cover letters is also available.

Recruitment Events. Each year organizations visit the campus to interview students about to complete a degree program. In addition, students can participate in special annual programs such as Teacher Recruitment Days, Job & Internship Expo, and JobQuest. Professionals also visit the campus to make presentations about career fields, internship programs and job opportunities through the CDO Spotlight program.

Credentials File. Students about to complete a degree program are eligible to establish a file which includes a resume, course list, transcript, and letters of recommendation to be sent to prospective employers or graduate admissions personnel to support an application.

Follow-up Study on Graduates. 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/department/maffairs>.

Professional Development Center

The SUNY Fredonia Professional Development Center in Reed Library strives to meet the professional development needs of all SUNY 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

Center for Regional Advancement

The Center for Regional Advancement promotes the university's service to the region through economic development and government efficiency projects.

The center sponsors analytical research reports to assist government decision-makers in moving toward more cost-effective and efficient service delivery in the region. Center Fellows, SUNY Fredonia faculty, and student researchers provide the expertise for these research projects. The center sponsored the development and building of a new SUNY Fredonia Technology Incubator located in the city of Dunkirk's central business district. The incubator is a one-stop facility providing business development mentoring space for new start-up high tech companies. The incubator's goal is to provide job growth and business development opportunities for community entrepreneurs and existing businesses, as well as SUNY Fredonia graduates. Fredonia's degree programs in computer science, media arts, music, communication, business and natural sciences will provide a broad pool of talent for tech startup businesses that determine to locate within Northern Chautauqua County and Western New York.

The center also sponsors a federal Department of Housing and Urban Development (HUD)-funded Community Outreach Partnership Centers (COPC) program. SUNY Fredonia's COPC program, SUNY Fredonia/Dunkirk Community Partnerships, forms partnership with Dunkirk-area government offices, neighborhood organizations, civic groups, churches, and non-profit organizations to revitalize the city of Dunkirk's economy and quality of life.

For more information about the center, interested persons should contact the Office of Graduate Studies and Research, 2142 Fenton Hall, or call (716) 673-3808 or email graduate.studies@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://www.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.

Native American SUNY: Western Consortium

SUNY Fredonia continues to support the endeavors of the Native American SUNY: Western Consortium, which focuses upon educational access, opportunity, and development for Native American students and communities. The consortium is comprised of representatives of five Native Nations and 11 SUNY campuses in the Western and Central New York area. For more information, students and interested persons should contact the office at (716) 673-3170 or 1-800-851-5020 or email native.consortium@fredonia.edu or visit their website at <http://www.fredonia.edu/na>.

Office of Lifelong Learning and Special Projects

The Office of Lifelong Learning and Special Projects, headquartered in the Williams Center, brings together a unique combination of university and community support services.

Sponsored and Non-Sponsored Credit-free Conferences, Institutes, and Workshops

The office works with representatives from community groups and industrial organizations to identify and provide for the specialized educational needs of their memberships.

Lifelong Learning

The university, through this program, makes educational opportunities available to working adults and non-traditional students who wish to explore university study on a part-time basis. Students seeking admission through the Lifelong Learning program may apply using a

simplified application procedure. No university entrance examinations are required; however, applicants must submit a high school transcript or GED score report.

Applications for admission are available in the Lifelong Learning and Special Projects office, 2148 Fenton Hall, or the Office of Admissions, 178 Central Ave. (Fenner House), Fredonia, NY 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 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. Students will be assigned an academic advisor to assist 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 experience who is seeking degree study on a full-time or part-time basis should pursue admission as a transfer applicant (see Transfer Admissions).

Visiting Student Program

Students presently enrolled at another college or university who wish to pursue academic study at SUNY 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, or email lifelong.learning@fredonia.edu, or visit the Office of Lifelong Learning in 2148 Fenton Hall.

J-Term, Summer Session Courses

Many community members take advantage of the summer and J-Term offerings, which include arts, education and study abroad courses. The Office of Lifelong Learning and Special Projects coordinates the schedules for the inter-sessions. More information can be obtained on the web regarding these opportunities to explore and enhance one's education.

Student Life on Campus

Residence Life

<http://www.fredonia.edu/reslife>

On Campus. Because the university realizes that an important part of a student's total educational development is the housing unit in which they live during their stay in Fredonia, the Office of Residence Life attempts to provide students with facilities conducive to adequate study. Through the learning experience of group living, resident students acquire a greater awareness and understanding of themselves and their ideas, as well as a greater concern for and consideration of the other members of the community.

Although on-campus housing is reserved for full-time matriculated undergraduate students, the university will accommodate single graduate students if space is available.

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.

There are 14 residence halls on the SUNY Fredonia campus, including corridor and suite-style buildings; some with kitchen suites. Residence hall activities attempt to integrate resident living experiences with the total educational program of the university. The residence halls are modern, comfortable, and convenient and allow a student the opportunity to establish independence and experiment with a variety of activities and experiences. Through hall council, students have opportunities to participate with other students in programs of their own choosing, to work on projects of interest to themselves and of service to others, and to communicate students' needs and concerns to the university. Although much of the responsibility for governing the halls lies with the students, an experienced and professionally trained staff member is in charge of each residence hall. The Residence Director, whose major concern is student welfare, is assisted by a staff of undergraduate resident assistants. They work with and advise students within the residence halls to develop broadly based educational and social programs that serve to offer opportunities for growth and involvement within the living situation.

The Office of Residence Life continually reviews the interests and objectives of students in an effort to provide facilities that will assist them in the educational process. There is an Aerobics Center in Hemingway Hall, a Wellness Center in Schulz Hall, and a Craft Room in Disney Hall. Each residence hall room provides access to local phone service, cable television, and the wired Resnet online network. The residence halls and rooms can also access the secure wireless network. See the Resnet website for more detailed information, www.fredonia.edu/resnet.

SUNY Fredonia's residential complex was expanded in 2006 with a \$23 million renovation and two-story addition to Cranston Hall. The University Commons includes the Cranston Marche dining facility, convenience store, bookstore and Starbucks Coffee. The residence hall accommodates 119 students in "premium" air-conditioned rooms with a bathroom for every two bedrooms.

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 section of the catalog on University Expenses.

Off Campus. Off-campus housing information is maintained in the Student Association Office located in the Williams Center. An online search for available off-campus housing is available at <http://www.fredonia.edu/sa>.

ResNet Office. (www.fredonia.edu/resnet) The ResNet Office is an Information Technology help desk that provides services and support for students, staff and guests living in the residence halls. The staff works closely as a team to facilitate information technology support calls as well as other projects throughout the year. ResNet employs 8 to 10 students every semester as ResNet Technicians. The staff works closely as a team to facilitate information technology support calls as well as other projects throughout the year. The ResNet office is located on the first floor of Nixon Hall and is open from 8:30 a.m. until 5:00 p.m. during the fall and spring semesters. 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
- SUNY 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.

Counseling Center

The SUNY Fredonia Counseling Center (SFCC) offers free, confidential, and individualized services by licensed mental health professionals to all registered students. All SFCC staff members have a minimum of a master's degree in Counseling Psychology, are licensed by the State of New York to practice as a Mental Health Counselor, have extensive experience working with the college population, and regularly participate in continuing education to stay up-to-date with the best practices within the counseling field.

Psychiatric evaluation and medication monitoring services are available on site. In addition, consultation with primary care physicians or other outside health care providers is regularly conducted to provide the most effective care and coordination of treatment services. For more information about SFCC services and staff, please visit <http://www.fredonia.edu/counseling>.

The Substance Abuse and Violence Prevention (SAVP) program coordinated through the 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 problems among SUNY Fredonia students. This comprehensive program provides training, advocacy, intervention, and educational opportunities in the following areas: alcohol and other drugs; rape and sexual assault; dating and domestic violence; stalking and harassment; and sexual health.

The Counseling Center is located in LoGrasso Hall. Appointments can be made in person at the reception desk or by telephone at (716) 673-3424. Information about services being offered for the current semester including groups, workshops, and wellness ideas and links can be accessed through the center's website at www.fredonia.edu/counseling.

Student Health Center

The Student Health Center is located in LoGrasso Hall. The Health Center is staffed by a board-certified physician, two nurse practitioners, registered nurses, a lab technologist and a secretary. The staff at the health center strives to provide quality health care for the

student population in an outpatient clinic setting. The treatment of illnesses and injuries, as well as preventive health services and health education, are provided in a confidential, caring atmosphere. The Health Center has a lab and can perform some simple diagnostic tests on site.

Health services are funded by the mandatory health fee paid each semester. Most services at the health center and many medications are provided without any additional charge to the student. Maintenance allergy injections, vaccinations and PPD tests are provided for an additional charge to the student.

The Health Center is open from 8:00 a.m. to 5:00 p.m., Monday through Friday, and Saturday from 10:00 a.m. until 1:00 p.m. When necessary, referrals can be made to private physicians or specialists in the local area. For more information, please call (716) 673-3131 or email health.center@fredonia.edu.

Emergency coverage is available at Brooks Memorial Hospital.

Birth Control Information Center - The Birth Control Information Center or "BCIC" is located in LoGrasso Hall and is staffed by trained student volunteers. All students, male or female, may use the BCIC to learn more about contraceptives and other sexual health issues. Gynecological clinics are staffed by a nurse practitioner or a physician assistant and a registered nurse. These clinics are held in the evening at the health center. A modest fee for gynecological care at the BCIC is charged.

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 three lieutenants and 10 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://www.fredonia.edu/upd> or email university.police@fredonia.edu or call (716) 673-3333.

Office of Veterans Affairs

Office: 151 Nixon Hall
(716) 673-3423

Benjamin Hartung, Systems Administrator
<http://www.fredonia.edu/veteransaffairs>

SUNY 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 Veterans Affairs Office, (716) 673-3423, 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 Veterans Affairs Office Coordinator and is open for business Monday through Friday; however, hours of operation will vary and be posted on the office door. The Office of Veterans Affairs can also be reached by emailing veteran.affairs@fredonia.edu.

Please note that SUNY 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 SUNY Fredonia Veterans Affairs Office participates in the GI Bill Tutorial Assistance Program.
- VA Work-Study Program - The SUNY Fredonia Veterans Affairs Office participates in the federal VA Work-Study Program.
- Counseling Services - Trained staff with in the Counseling Center provide confidential counseling services.
- On-Campus Housing Residency - While SUNY 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 - SUNY 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.

SUNY 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 SUNY Fredonia. It operates under a contract with SUNY Fredonia in conformance with guidelines established for all SUNY 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 and food services offices are located in Gregory Hall. For general information, students should call (716) 680-6228 or visit the FSA website at <http://fsa.fredonia.edu> or email fsa.office@fredonia.edu.

Dining Services Operations

The *Marketplace* at Erie Dining Center portrays a market atmosphere featuring a multitude of concept stations focusing on healthier foods and preparations – all a person cares to eat.

Cranston Marche – a patron can let their senses Feast in Marche where the focus on display cooking leaves nothing to the imagination. Chef's Creations and personal made-to-order selections are prepared and plated for enjoyment at four platforms – Pantry, Pizza and Pasta, Grill, and Ice Cream – all a person cares to eat. It is located on the second floor of University Commons.

Centre Pointe features a variety of grab-and-go fast food selections, in addition to sushi, organic salads, fresh fruit, and more. Trendz presents fresh and contemporary favorites, including real fruit smoothies, soup, paninis, salads and David's gourmet cookies. Both facilities are located in the Centre Pointe Lounge on the lower level of the Williams Center.

Cafes and Concessions, located across campus, serving coffee, pastries, soup, salads, and sandwiches.

Starbucks Coffee, located on the ground floor of the University Commons, offers rich-brewed coffee, espresso and blended beverages, Tazo teas, pastries, sandwiches, salads and a variety of giftware.

The Horizon Room, in the Centre Pointe Lounge on the lower level of the Williams Center, the College Lodge, and the Alumni House and Conference Center, are among the popular locations offering full catering services ranging from coffee breaks to banquets.

Customers should contact the FSA office at (716) 680-6228 for further information, or email fsa.office@fredonia.edu, or visit the FSA catering website at <http://fsa.fredonia.edu/diningservices/catering> or email the catering office at fsa.catering@fredonia.edu.

Other FSA Services

ID Cards - A university ID card is required of all enrolled SUNY 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 and debit plans.

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. 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 **SUNY 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 SUNY 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 SUNY 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.

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 can be obtained at <http://www.MyFREDCard.com>.

The FSA provides **check-cashing** services on campus. Students who possess a valid SUNY 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 parties, cross-country ski outings, and other events. The camp also has a sleeping lodge that will accommodate up to 90 people. More information can be obtained at <http://www.collegelodge.com>.

Student Employment - The FSA provides jobs ranging from 10 to 20 hours per week for approximately 300 students. A variety of student jobs are available, with the majority being in the food service areas. 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 portal for Student Organizations (FSU4U) to recruit, communicate with members and list organization events.
- 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 SUNY Fredonia 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 SUNY Fredonia students. For additional information about the Interdisciplinary Studies - Leadership Studies minor, please call (716) 673-3679 or email leadership.studies@fredonia.edu.

SUNY Fredonia Ticket Office

<http://www.fredonia.edu/tickets>

The SUNY 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 as well as an authorized money receiving agent for Western Union. 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 SUNY 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. Student Relations, Community Relations, and Environmental Affairs offer

students a way to assist each other and to get practical experience in fields in which they are interested.

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 25 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. Some of the organization's annual events include the People of Color Concerns Conference, the Black Achievement Awards Dinner, a fashion show, and Kwanzaa, an African American celebration that is an 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 SUNY 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 SUNY 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, Hanging of the Greens, and Fredonia Fest. 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 SUNY 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 an intense professional experience in television production, and fosters a real esprit de corps as a fun, hard working campus group. The station cablecasts a variety of award-winning 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 website is <http://www.wnyftv.org>.

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 SUNY Fredonia. The organization shall not limit membership to members in good standing of USITT or to the SUNY Fredonia Department of Theatre and Dance.

Writers' Ring

The Writers' Ring unites SUNY 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. Nationally and internationally renowned writers who have given readings recently include Naomi Shihab Nye, Steve Almond, Oliver de la Paz, Allison Joseph, Lisa Jarnot, Patrick Rosal, Ilya Kaminsky and Eric Gansworth.

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
 Birth Control Information Center
 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
 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 of Mind
 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.

Art Exhibitions

Each season, many art exhibits are presented on campus. The 2,000 square-foot Michael C. Rockefeller Arts Center Gallery hosts several traveling contemporary art exhibits. The emphasis of the shows is on contemporary work in painting, printmaking, photography, sculpture and graphic design. The gallery also hosts exhibits by the visual arts department faculty and 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, SUNY 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 SUNY 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 SUNY 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, Coordinator

Email: recreational.sports@fredonia.edu

Website: <http://intramurals.fredonia.edu/>

The Intramural and Recreational Activities 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, gymnasias, fitness center, dance studio, and racquetball courts, and Steele Hall, which contains an ice skating 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.

The program offers a variety of sports and recreational activities to meet the needs of interested students, faculty and staff. The Recreation Office strives to provide a safe, wholesome environment in which students can enjoy the physical, mental, and social benefits of recreational activities, making participation part of a well-balanced and healthy lifestyle. The university employs 60 students to serve as field supervisors as well as referees.

It also offers one- and two-day tournaments, and leagues that run from four to seven weeks. Women's, men's, and co-ed leagues are available for each sport offered. In the fall, program offerings contain volleyball, flag football, broomball, indoor volleyball, and indoor soccer. The spring semester usually includes basketball, floor hockey, outdoor soccer, tennis, softball, racquetball, and broomball.

The program also oversees a strong club sport offering which includes Club Ice Hockey, Blackhorse Rugby, Ultimate Frisbee, Extreme Sports, Field Hockey, Soccer, Ballroom Dance, Figure Skating, Fencing, Dance, Volleyball, and Lacrosse.

Blue Devils Fitness Center

The Blue Devils Fitness Center is located in Dods Hall and consists of 5,200 square feet of activity space. The center offers strength training equipment, power lifting equipment, progressive resistance equipment and cardiovascular training equipment which meets the exercise needs of a variety of recreational as well as highly trained students and athletes. In May of 2012, construction began on a new 7,000 sq. ft. state-of-the-art fitness center. Expected date of completion is March 2013.

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 Bartlett Theatre, and two art galleries.

Over 165 public events are presented each season for the benefit of campus and community audiences.

SUNY 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 Dave Brubeck, the Three Irish Tenors, the Four Freshmen, the Moscow Boys Choir, and the Boston Brass. Also appearing on this series has been the Western New York Chamber Orchestra with programs spotlighting students and vocalists from the School of Music and musical theatre program.

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

Student Accounts webpage
www.fredonia.edu/admin/studentaccounts

Undergraduate Admissions

<http://www.fredonia.edu/admissions/index.asp>

Submitting the Application

The State University of New York at Fredonia accepts the SUNY application and is a proud member of the Common Application. If you are a resident of New York State you may obtain a copy of the SUNY application form from any high school guidance office or SUNY campus. As a transfer student or out-of-state resident, please contact the Office of Admissions at (800) 252-1212 or (716) 673-3251 or email admissions@fredonia.edu to make your request for an application. We encourage you to apply online at <http://www.fredonia.edu/admissions/applying.asp>.

If you choose, you can mail your completed SUNY application to the Application Services Center (ASC) in Albany in the envelope included with the application packet. (Freshman applicants turn applications in at the guidance office.) ASC processes your application and forwards it to Fredonia for review. Your request for admission will be reviewed individually by our Admissions Committee. 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. Students applying through the Common Application should submit their application and supporting materials directly to the Office of Admissions, Fenner House, 178 Central Avenue, Fredonia, NY 14063. All applicants are required to submit at least one letter of reference.

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://www.fredonia.edu/admissions/visiting.asp> 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 Two-Year Transfer Applicants

SUNY Fredonia is committed to providing an opportunity for further study to SUNY two-year college graduates. We have established articulation agreements and joint admissions programs with many two-year schools. For further information, contact our Office of Admissions. If you are admitted to Fredonia and complete an Associate in Arts or Associate in Science degree prior to transfer you will enter Fredonia with a minimum of 60 semester hours of transfer credit and junior standing.

Transfer Admission

SUNY 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 2.75 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. All transfers students must submit an official final high school transcript for verification purposes.

You may transfer up to 75 hours of college credit from your 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. Our university consistently attains one of the highest graduation rates of transfer students in the SUNY system. An official review of transfer credit occurs when we receive your final transcript showing all course work completed. It is most helpful if this information arrives prior to our summer orientation and advising program for transfer students in June.

Fredonia awards transfer credit for academic courses successfully completed at a fully accredited college or university, reserving the right to determine what constitutes academic credit. Your grade point average does not transfer; only credit hours are awarded. You must fulfill all university and departmental requirements for the baccalaureate degree, including a residency requirement of 45 semester hours of credit at Fredonia. Visit our course equivalencies website at https://connect.fredonia.edu/yourconnection/FRD_TransArt.P_TransArt for detailed information on the transferability of specific classes. 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.

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: SUNY 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 SUNY 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 (see page 386).

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

SUNY 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://www.fredonia.edu/admissions/international.asp>) 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://www.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 Admissions or the Office of Student Affairs. Requests are reviewed by the appropriate Dean (readmission) or the Vice President for Student Affairs (reinstatement). Students who withdrew in good standing are generally eligible for reinstatement if space is available in the requested major. Individuals who were required to withdraw for academic reasons are not eligible for consideration until at least one academic semester has elapsed, and should present evidence of successful achievement at another college. The Dean's office evaluates current academic achievement, potential for academic success, and work experience when reviewing applications for readmission.

Students with a cumulative quality point average of less than 2.00 who have been readmitted to the university may return with their original cumulative academic record or with a readmission petition.

Under the readmission petition, a new quality point average is established from the time of readmission to graduation. The total academic record achieved from the time of initial enrollment at SUNY Fredonia will be entered on the transcript, but no credit will be awarded for "D" grades earned prior to readmission. The cumulative quality point average will reflect only the average since readmission, and a minimum of 45 additional credit hours of graded work must be completed at SUNY Fredonia prior to graduation and after readmission.

Undergraduate Expenses

This section presents an estimate of the cost of attending SUNY 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.

Note: For the 2012-2013 academic year, the Financial Aid Office and the Office of Student Accounts are located in E148 Thompson Hall.

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	\$5,570
Out-of-State	\$14,820
College Fee	\$25
Student Services and Programs Charge	\$1,463

New students who have paid a \$50 Advance Admission Deposit will have this amount deducted from the tuition charge for their initial semester at SUNY Fredonia.

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.

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 transportation expenses	\$1,500-\$2,000
---	-----------------

Additional Charges for Residents in Residence Halls

Room Rent	\$6,550 - 9,200
Board (Food Service)	\$3,930 - 4,550

Student Service and Program 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
Birth Control Information Center
Blue Devil Fitness Center
Campus Community Bus
Campus Internet Access
Campus Microcomputer Labs
Campus Fine Arts
SUNY 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.

Room Charge

The standard rate when two students are assigned to a room is \$3,275 per semester. Single rooms are primarily for seniors and, if requested and available, are \$4,300 per semester. Kitchen suites (double occupancy), where available, are \$3,625 per semester. Single and double rooms in University Commons are \$4,600 and \$3,500 per semester, respectively. Inquiries as to charges and accommodations should be addressed to the Office of Residence Life, Gregory Hall. (Figures reflect 2012-2013 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 and commuter students are not required to maintain a meal plan, however, they may choose any plan.

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 \$1,965 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 *Course Offerings* 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), orientation (\$65), 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 infirmity equipment. All fees are subject to change.

Part-Time Study

* In-State Tuition	\$207 per credit hour
* Out-of-State Tuition	\$558 per credit hour
College Fee	\$.85 per credit hour
Student Services and Programs Charge	\$55.75 per credit hour
* <i>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 Office of Student Accounts for complete information governing residency requirements.</i>	

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 Group Health Insurance

All students are advised to obtain the Student Health Insurance offered by the university unless covered by comparable insurance. The health insurance covers a major portion of hospitalization costs not provided under the student health program. For additional information regarding Student Health Insurance, please contact the Office of Student Affairs at (716) 673-3271 or email student.affairs@fredonia.edu. International students must consult with the Office of International Education for more information regarding specific insurance needs by calling (716) 673-3251 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 SUNY 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.) 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, E148 Thompson 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 2142 Fenton 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 SUNY 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 Associate Vice President for Graduate Studies and Research 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 Associate Provost for Graduate Studies and Research.

Submission of official transcripts is required from all institutions attended (except SUNY 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 Associate Provost for Graduate Studies and Research.

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	\$4,685.00
Out-of-State Resident Tuition	\$8,340.00
College Fee	\$ 12.50
Student Services and Programs Charge	\$731.50

Part-time, per credit hour:

*New York State Resident Tuition	\$ 390.00
Out-of-State Resident Tuition	\$ 695.00
College Fee	\$.85
Student Services and Programs Charge	\$ 61.00

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
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 Office of Student Accounts 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 SUNY Fredonia email address in addition to any authorized users email address. 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 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, 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
 Veterans benefits
 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 and MasterCard 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 SUNY Fredonia email address 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) 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 Office of Student Accounts 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 Office of Student Accounts

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 his/her diploma at graduation, be permitted to register for additional semesters at SUNY Fredonia or receive a copy of his/her 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

SUNY Fredonia offers approximately \$2 million in merit- and need-based scholarships to academically qualified students each year. For scholarship application procedures, go to www.fredonia.edu/finaid/ScholarshipLandingPage.asp. Scholarship recipients will be notified on a rolling basis beginning February 15, 2012 with a response date of May 1, 2012. 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, Second Floor, Gregory 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 9/10)

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.

Arts and Sciences

Arts and Sciences Fund

Athletics

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 '33, '33, respectively)
 The Gregory Fund
 Sandra Haight Memorial Scholarship
 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
 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)
 Adele Maytum Hunter Scholarship
 Medical Technology Program Fund*
 Molecular Genetics and Recombinant Gene Technology Scholarship
 Alice M. Sam Biology Scholarship
 Willard Stanley Memorial Scholarship
 Dr. Robert Wettingfeld Undergraduate Research Award
 Yunghans-Dietter Research Award (formerly Merlin Biology Fund)

** Department Funds*

Business

Donald C. Brandt Memorial Scholarship
 Business and Accounting Fund*
 Business Administration Alumni Fund
 Dr. James Hurtgen Endowment
 Franklin B. Krohn Memorial Scholarship Endowment
 Raymond Lai Professional Development Fund for International Business (alumnus '75)
 M.R. Poummit Achievement Award (alumnus '33)
 School of Business Fund*
 Students in Free Enterprise (SIFE) Endowment
 Students in Free Enterprise (SIFE) Music Business Award
 Gary M. Tripp Memorial Scholarship
 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)
 Chemistry Department Fund*
 Frank J. Costanza's Greenhouse Memorial Fund
 Dennis R. and Kathryn L. Costello Scholarship (alumnus '72)
 David Dingley Memorial Scholarship
 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*

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
 Arthur R. Maytum Scholarship
 Arlie Muller Parks Award (alumna '58)
 A.J. Pierce Scholarship

** Department Funds*

Communication Disorders and Sciences

Constantine Barker Fund
 Mitchell R. Burkowsky Memorial Award
 Friends Forever - Class of 1958 Scholarship
 Kristen M. Luther Memorial Scholarship (alumna 2001, 2002)
 Alan Nichter, '69, and Annmarie Woloszyn, '70, Nichter Scholarship in Communication Disorders and Sciences
 Esau A. and Susan S. Sam Family Scholarship
 Schaffer Family Scholarship
 Rebecca Snyder Memorial Scholarship (alumna '83)
 Speech Pathology Department Fund*
 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. Croglio Endowment (alumnus '97)
 Charles H. Patrick Jr. Memorial Scholarship

Economics

Dennis R. and Kathryn L. Costello Scholarship (alumnus '72)
 Economics Department Fund*
 Hart-Gorman Economics Fund
 Arthur R. Maytum Scholarship

* Department Funds

Education

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
 James D. Burdick Memorial Fund
 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 Fund*
 College of Education Endowment Scholarship
 Dr. Estelle M. Crino Educational Leadership Scholarship
 Anthony M. Deiulio Scholarship
 Charles R. and Shirley Miller Erbsmehl Scholarship (alumna '58)
 Friends Forever – Class of 1958 Scholarship
 Heichberger Family and Scholars of Leadership Endowment
 Dr. Arthur L. Kaiser, '44 and Katherine Kaiser Burch, '53 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
 Dr. Daniel Roselle - Class of 1956-1957 Scholarship
 Margaret Sawkins-Hastie Award (alumna, '44)
 Marjorie E. Woods Scholarship
 Sanford and Lillian Zeman Award

* Department Funds

Educational Development Program

Educational Development Program*
 The Gregory Fund
 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
 Albert A. Dunn Memorial Scholarship/Book Grant Endowment
 Crescence Ehmke Graham Scholarship
 English Department*
 Howard Herkimer and Hildegard Maytum Strong Scholarship (alumni 1911)
 Henry F. Salerno Scholarship
 Dr. Robert and Joanne L. Schweik Scholarship
 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

Award for Spatial Studies
 Walther M. Barnard Scholarship
 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)

** Department Funds*

History

David H. Carnahan Scholarship
 William and Helen Chazanof Award
 Dr. Kenneth E. Cutler Scholarship
 History Department*
 History Department Cultural Fund
 History Department Endowment
 Kim Korhummel Scholarship
 MacPhee Scholarship
 John J. and Helen Mancuso Scholarship
 Robert and Marilyn Maytum Scholarship

** Department Funds*

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
 Schaffer Family Library Fund
 Zweig Collection*

** Department Funds*

Mathematical Sciences

John Beck Memorial Scholarship
 Mark Buckenmeyer Scholarship
 Feng Chiang Scholarship
 Myron T. Dana Scholarship
 Santa A.B. DiPasquale Memorial Scholarship
 Mathematics Department*
 Mathematics Endowment
 Earl G. Mathewson Scholarship
 Frank R. Olson Scholarship

** Department Funds*

Modern Languages and Literatures

Myron T. Dana Scholarship
 Thomas Goetz-Robert Rie Scholarship for Excellence
 in the Modern Languages
 Modern Languages and Literatures*

** 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
 David H. Carnahan Scholarship
 Class of 1953 Award for Excellence
 Class of 1954 Scholarship
 Class of 1955 Scholarship
 Class of 1965 Scholarship
 Max and Anne Davis Piano Scholarship
 John C. Dubnicki Jr. Scholarship
 John C. Dubnicki Sr. Scholarship
 Charles C. Eikenburg Scholarship in Opera/Vocal Performance
 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)
 Grainger '66 Percussion Graduate Award
 Lois V. and Herbert W. Harp Scholarship
 Dr. Robert Hesse Violin Scholarship Endowment
 Hillman Memorial Music Association Endowment
 Hillman Opera Fund*
 Iannuzzi-Pidherny Family Endowment (alumna '90)
 Mamie and Ira Jordan Minority Scholarship
 Robert Jordan Piano Scholarship
 Kilduff Voice Scholarship
 Harry A. King Scholarship
 Lyric Arts International*
 John A. Maier Scholarship
 Elizabeth Marsh Memorial Scholarship
 Howard Marsh Memorial Scholarship
 Robert W. Marvel Fund
 Virginia Whipple Maytum Music Scholarship
 Harry Milgram-David Luterman Scholarship in Music Therapy
 Lauren Miller Memorial Scholarship
 Monroe-Poummit Big Band Award (alumni '34, '33)
 Vincent Morette Memorial Scholarship (alumnus '58)
 New York State Federation of Home Bureaus/Elizabeth Marsh Scholarship
 Oasis Guitar Jury Award
 Sid Olshein Memorial Scholarship
 Frank A. and Maureen Pagano Scholarship
 Percussion 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
 Juliet J. Rosch School of Music Endowment (alumna

'30)
Lawrence Schauffler Scholarship
School of Music*
School of Music Scholarship
Greg Snow Music Technology Award
Claudette Sorel Piano Scholarship Endowment
Isaac Stern String Scholarship
Anthony S. Strychalski Memorial Scholarship
A.L. Van Keuren Music Scholarship
Francella Pattyson Widmer Endowment
Constance Willeford Award for Music Therapy
George L. Wurtz String Bass Memorial Scholarship
Margaret Shuler Wyckoff Scholarship (alumna '30)
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 Costello Scholarship (alumnus '72)
Dr. Robert Maytum Scholarship
Pendyala I
Pendyala II
Physics Department Endowment
Physics Development Fund*
Physics Research Fund

** Department Funds*

Political Science

Erna G. and J. Murdoch Dawley Memorial Scholarship
Morgan Dowd Pre-Law Fund
Fredonia Alumni Lawyers Scholarship
Michael J. Livingston Memorial Scholarship
Robert and Marilyn Maytum Scholarship
Political Science Alumni Endowment
Political Science Department Fund*
Political Science Faculty Endowment
John R. Quatroche Jr. Endowed Scholarship in Political Science
J.R. Soukup Pi Sigma Alpha Scholarship
Special Foundation Scholarship

** Department Funds*

Psychology

Donald John Lehr Endowment
Psychology Department Fund*
Psychology Endowment

** Department Funds*

Science

David H. Carnahan Research Endowment
Dr. Robert Maytum Scholarship
Lawrence A. Patrie Science Scholarship

Sons of Karen West

Social Work

Social Work 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 Award in Musical Theatre (alumnus '77)
Jack L. Cogdill Scholarship
Keith Cronin Memorial Scholarship
Robert L. Gloor Endowment in Theatre and Dance (alumnus '96)
Walter Gloor Scholarship
Trent Illig Memorial Scholarship
Tim Douglas Jensen Class of 1990 Scholarship Fund (alumnus '90)
Robert W. Marvel Fund
Gertrude Prushaw Maytum Scholarship
Midtown Realty Musical Theatre Endowment
John S. Mintun Scholarship
New York State Federation of Home Bureaus/Sally Bulger Scholarship
President's Award
Carol Prevet Dance Scholarship
Mary and Steve Rees Rising Junior Award for Technical Production
Mary Joyce Schaefer Scholarship
Theatre and Dance Department Fund*
Bea Ullman Scholarship
Dr. Georgiana von Tornow Endowment
Bruce K. Walford Scholarship (alumnus '76)

** Department Funds*

Visual Arts and New Media

Art Gallery Fund
Alford Bjurlin Art Scholarship
George Booth Visual Arts Scholarship
Chautauqua Craft Alliance Award for Excellence in Art
Colonel David Correll Imaging Scholarship
Fredonia Potter's Co-op Scholarship
Graphic Arts Account*
Graphic Computer 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
 Florence and Cynthia Norton Scholarship Endowment
 Fund for the Arts
 Dr. Daniel D. Reiff Art History Scholarship
 Visual Arts Department Fund*
 Rodney W. Welling Memorial Scholarship
 Wendel Duchscherer Scholarship

* Department Funds

Women's Studies

Jeanette McVicker Scholarship for Women's Studies
 Women's History/Studies Fund*

* 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
 Dallas K. and Elizabeth W. Beal Award
 Jessica Mary Beal Scholarship
 Beaver Club Scholarship
 Bennett Endowment
 Borzilleri-Gugino Scholarship (alumni '14, '26, '28)
 Dr. Roland C. Burton Scholarship
 The Buster Brown Bean Company Scholarship Fund
 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
 Laura B. Cole Scholarship
 Evelyn Lawson Coleman President's Scholarship (alumna '29)
 Robert E. Coon Recognition Award (alumnus '50)
 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
 Kelly Early Scholarship
 Robert and Edith B. Eck 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)
 Foundation Freshman Scholarships
 Fredonia Rotary Scholarship
 Malcolm J. French Memorial Scholarship
 Maureen Fries Scholarship
 Joseph T. Gallagher Memorial Scholarship
 Steve, Sandra 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
 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 from the Oscar and Esther Lanford Endowment
 Horace O. Lanza Scholarship (alumnus 1899)
 Michael J. Livingston Memorial Scholarship
 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
 Stephen Morse Memorial Fund (alumnus '92)
 Nabta Scholarship
 Jenny Crecraft Olsen Award
 Anthony Patti Memorial Scholarship
 Patton/Kirkland Memorial Fund
 Xylia Peterson '85 Memorial Fund (alumna '85)
 Morris, '33, and Marian Poummit Scholarship (alumnus '33)
 Robert R. Rie Fund
 Barbara Rose Memorial Scholarship
 Patricia M. Rushboldt Credit Union Scholarship
 Betty Norr Saveth Scholarship
 Kurt and Sibylla Sonnenfeld Scholarship
 Lawrence M. Silvio Memorial Scholarship
 Steele Family Scholarships
 Thomas Stocky Memorial Scholarship
 T.J. Summers Scholarship
 John R. Symans Memorial Endowment

Undergraduate Alumni Council
 Waring Family Work Ethic Scholarship
 Wilma E. Watson Memorial Scholarship (alumna '19)
 Welch's/National Scholarship
 Wendel Duchscherer 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
 Dr. Nelson C. Wood Scholarship
 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
 Dorothy L. Anderson Memorial Endowment
 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
 DFT Communications Technology Endowment Fund
 Amy Elizabeth Everett Memorial Award
 European Union Institute Fund
 Excelco Developments, Inc. and Newbrook Machine Corporation Scholarship
 William T. Hagan Young Scholar/Artist Award
 Hahn Family Freedonia 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
 Rick and Michele Johnson Family Endowment (alumna '73)
 Leadership Program
 Lodge Fund
 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)
 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

Leslie J. and Ethel H. Shaw Community Fund
 Roger C. Seager Presidential Scholarship
 Senior Challenge Endowments
 John L. Stroub Scholarship Fund
 Student Affairs Fund
 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 University President or Fredonia College Foundation Board of Directors:

Gertrude Maytum Garland Endowment
 Walter Gotowka Family Endowment (alumni '81, '80, respectively)
 Kathryn Hakes Endowment
 Arthur R. Johnson Endowment (alumnus '56)
 Johnson Family Endowment Fund
 Mintun Family Fund
 Al Newman Fund
 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 SUNY Fredonia's financial aid website at <http://www.fredonia.edu/finaid> for current information.

Note: During the 2012-2013 academic year, the Financial Aid Office is located in E160 Thompson Hall.

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 2012-13 FAFSA as soon after January 1, 2012 as possible. Follow these seven steps outlined below:

Step 1: Apply for a PIN (Personal Identification Number). A PIN lets you apply, "sign" your online FAFSA, make corrections to your application information and more – all online. Go to www.pin.ed.gov 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 2012-13 FAFSA by January 31, 2012 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 2011 Federal tax return data via the FAFSA-IRS Data Retrieval process.

Step 5: Review your Student Aid Report (SAR).

Step 6: If you are selected for verification, the Financial Aid Office will ask you to submit tax return transcripts (if applicable) and W-2 copies 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. Applications cannot be submitted before January 1 prior to the award year, but you should be applying in January in order to meet SUNY Fredonia's FAFSA filing deadline. Since funds are limited, early applications are given first consideration.

When Will I Hear About My Financial Aid?

1. 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 Aid 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

FAFSA Verification Process

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:

- 2012-2013 Federal Verification worksheet

- Proof of Food Stamps – Supplemental Nutrition Assistance Program (SNAP) in 2010 or 2011 (if applicable)
- Parent/Student tax filer income information either by the IRS Data Retrieval Process, 2011 IRS Federal Tax Transcript, or if you did not file, a signed statement saying so
- Parent/Student 2011 W-2(s)

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 "Order a Transcript," 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 4 to 6 weeks, so it is highly recommended that students file their 2012-13 FAFSA by January 31, 2012 and turn in all requested Verification paperwork by June 1, 2012.

Updating FAFSA Through The Mandated IRS Data Retrieval Process

Beginning in January 2012, all 2012-2013 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 2012-13 FAFSA by January 31, 2012 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 2011 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 SUNY Fredonia evaluates student aid academic progress according to state requirements for TAP, SUSTA and APTS 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, SUSTA, APTS)

Before receiving this TAP payment you must meet all 3 criteria below	1	2	3	4	5	6	7	8	9*
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
Must have accrued at least this many total credits	0	6	15	27	39	51	66	81	96
Maintain at least this Grade Point Average	0	1.5	1.8	1.8	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, SUSTA, APTS)

Before receiving this TAP payment you must meet all 3 criteria below	1	2	3	4	5	6	7	8	9*
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
Must have accrued at least this many total credits	0	3	9	21	33	45	60	75	90
Maintain at least this Grade Point Average	0	1.10	1.20	1.30	2.00	2.00	2.00	2.00	2.00

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.

Examples of requirements at different TAP payment levels follow:

1. A student who has received seven payments of TAP must complete at least 12 credit hours during the fall semester, maintain at least a 2.00 cumulative GPA, and have accrued at least 75 total credit hours to receive his/her eighth TAP payment in the spring semester.
2. A student who has received four TAP payments must complete at least 9 credit hours during the fall semester, maintain at least a 2.00 cumulative GPA and have accrued at least 33 total credit hours to receive his/her fifth TAP payment in the spring semester.
3. A student who has received three TAP payments must complete at least 9 credit hours during the fall semester, maintain at least a 1.30 cumulative GPA, and accrue at least 21 total credit hours to receive his/her fourth TAP payment in the spring semester.

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 SUNY 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 SUNY 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.

* *Example:* A first semester sophomore this fall semester, must have completed a total of at least 12 credit hours during his/her first two semesters and have a total of at least 12 hours and have at least a 1.00 cumulative GPA to receive federal aid this semester. The student must also complete a total of 18 credit hours and have at least a 1.60 cumulative GPA at the end of the spring semester to continue receiving federal aid for the next fall semester.

Students should be aware that course repeats do not count as a completion in determining Good Academic Standing.

Example: Two years ago a student received a failing grade for a course and during the current semester repeated it as a junior. To meet progress standards, the student must complete 12 new credit hours during the current semester in addition to the repeated course credit hours.

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. SUNY 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.

2012-2013 University Costs

	N.Y.S. Resident	Out-of-State Resident
Tuition	\$5,570	\$14,820
Fees	\$1,488	1,488
Room	\$6,550	6,550
Food	\$4,240	\$4,240
Totals	\$17,848	\$27,098

Although every effort is made to keep university costs as low as possible, the costs can change during the year. The above figures 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 \$1,500 to \$2,000 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	3 rd	5 th	7 th
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 SUNY 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 Graduate Studies Office, 2144 Fenton 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 Veteran 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

Federal 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	\$400 to \$5,550	Complete the FAFSA. Expected Family Contribution (EFC) must be \$4,995 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://www.fredonia.edu/finaid	\$500 - \$4,000, depending on enrollment status	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.	\$75 to \$4,995	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 per year	Complete the FAFSA and the SUNY Fredonia APTS 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 N.Y.S. 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 6.8% 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 6.8%	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 7.9%	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://www.fredonia.edu/finaid/plus.asp . Apply online.
Grad PLUS Loan	Loan: Must be repaid Interest rate: fixed 7.9%	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://www.fredonia.edu/finaid/gradplus.asp . 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 will 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://www.fredonia.edu/finaid/alt.asp . 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.
Scholarships		Refer to Scholarship section (see page 418).		

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 SUNY Fredonia Veterans Affairs Office which is located in 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*.

Academic Policies

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 SUNY 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.

SUNY 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://www.fredonia.edu/tlc/DDS/dss.htm>.

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 The Learning Center, Fourth 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 or Geophysics 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.

75-hour Audit

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.

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 obtain the necessary card from their advisors, who must approve the courses selected. Students will then register according to published guidelines.

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.

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 Friday of Early Registration advising for the following semester. 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 seventh day of classes. Transactions involving a switch from one section of a course to another will be charged one \$20 fee.

Beginning with the second week 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.

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 Associate Provost for Graduate Studies and Research.

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 and Research. The forms for this purpose may be found in the Registrar's office. Students may use such graduate courses either to meet undergraduate degree requirements or to meet degree

requirements in a SUNY 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.

Unit of Academic Credit

The semester hour is the unit of academic credit and represents one hour of lecture or recitation or a minimum of three hours of laboratory work each week for one semester.

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 and Academic Support, 125 Reed Library.

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 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.

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 health 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. The instructor may make that determination based on discussion with the student or may request appropriate documentation. 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.

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.

Assessment Examinations or Questionnaires

SUNY 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.

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).

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 SUNY 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 SUNY 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.

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.

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.

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 SUNY 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.

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

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.

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 (see page 184)" in the Graduate Studies section of the catalog.

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. SUNY Fredonia strongly condemns plagiarism and takes severe action against those who plagiarize.

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.

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.)

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 & Academic Support, the Associate Provost for Graduate Studies and Research, 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.

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, Second Floor, Gregory 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.

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 (Nixon Hall) of their withdrawal.

A student withdrawing during a term may be eligible for certain refunds. Please check the *Admissions & Financial Aid* section of the catalog for more information.

Freshmen Forgiveness

This option is designed primarily for students who get off to a bad start as freshmen, perhaps because they begin in a major for which they are ill suited. A student applies for this option after changing his or her major and improving academically, but before the completion of 50 credits. The option allows up to 18 credits of "D" or "F" grades to be excluded from the student's grade point average, although the student will lose credit when a "D" grade is forgiven. In the application for Freshmen Forgiveness, the applicant must indicate why other options (such as the Course Repeat option, or the later course withdrawal deadline for freshmen) were or are not being exercised. Typically, Freshmen Forgiveness will be applied to courses that were taken to satisfy program requirements that no longer apply, due to a change in major. In particular, courses that were taken solely to satisfy General Education Program requirements, or as electives, should generally be repeated rather than forgiven. The application form for Freshmen Forgiveness is available through the Registrar's web page, under "Academic Policies."

Academic Bankruptcy

This option is intended for the student who normally maintains satisfactory academic standards, but whose grades suffer for one semester due to unusual or unfortunate circumstances. To apply for this option, the student must be in good academic standing (excluding the semester for which bankruptcy is sought) and must have reestablished the pattern of satisfactory academic progress that existed prior to the semester for which bankruptcy is sought. If the petition to bankrupt a semester is granted, the student's grades for the chosen semester will be preceded by a "Y" for grades of C- or better, and by a "Z" for D+ through F grades. 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). 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."

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 SUNY 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 SUNY Fredonia prior to graduation. Information on applying for the Restart Option may be obtained at the SUNY 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.

Registered Degree Programs

Listed below are SUNY Fredonia's registered degree programs as of July 15, 2010. 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	0502	B.S.
Accounting 150 CPA (see page 24)	0502	B.S.
Applied Mathematics (see page 116)	1703	B.S.
Biochemistry (see page 16)	0414	B.S.
Biology (see page 18)	0401	B.S.
Business Administration:	0506	B.S.
Business Admin.: Finance (see	0506	B.S.

page 24)			119)		
Business Admin.: Management (see page 23)	0506	B.S.	Middle Childhood Specialist-Mathematics (see page 117)	0804	B.S.
Business Admin.: Marketing (see page 24)	0506	B.S.	Molecular Genetics (see page 123)	0499	B.S.
Cooperative M.B.A. (see page 27)	0506				
Chemistry (see page 30)	1905	B.S.	Music:		
Childhood Education 1-6, 7-9 Extension (see page 61)	0802	B.S.Ed.	Music-Applied (see page 126)	1004	B.A.
Childhood Inclusive Education 1-6, 7-9 Extension (see page 61)	0808	B.S. Ed.	Music: Composition (see page 128)	1004	Mus.B.
Communication:			Music: Performance (see page 128)	1004	Mus.B.
Communication: Audio/Radio Production (see page 33)	0603	B.S.	Music Education (see page 126)	0832	Mus.B.
Communication:			Music Therapy (see page 129)	1099	B.S.
Communication Studies (see page 33)	0601	B.S.	Musical Theatre (see page 164)	1004	B.F.A.
Communication: Media Management (see page 33)	0699	B.S.	Philosophy (see page 138)	1509	B.A.
Communication: Public Relations (see page 33)	0604	B.S.	Physics (see page 139)	1902	B.S.
Communication: Video Production (see page 33)	0605	B.S.	Political Science (see page 144)	2207	B.A.
Communication Disorders and Sciences (see page 37)	1220	B.S.	Psychology (see page 150)	2001	B.A./B.S.
Computer Science (see page 42)	0701	B.S.	Social Work (see page 153)	2104	B.S.
Computer Information Systems (see page 43)	0702	B.S.	Sociology (see page 156)	2208	B.A.
Cooperative Engineering (see page 76)			Sound Recording Technology (see page 156)	1099	B.S.
Criminal Justice (see page 46)	2105	B.A.	Spanish (see page 121)	1105	B.A.
Dance (see page 165)	1008	B.F.A.	Sport Management (see page 158)	0599	B.S.
Early Childhood Education (Birth-2)	0823	B.S.Ed.			
Early Childhood-Childhood Education	0802	B.S.Ed.	Teacher Certification Areas in Adolescence Education:		
Earth Science (see page 86)	1917	B.A.	Biology (see page 19)	0401.01	B.S.
Economics (see page 48)	2204	B.A.	Chemistry (see page 29)	1905.01	B.S.
English (see page 79)	1501	B.A.	Earth Science (see page 86)	1917.01	B.S.
French (see page 121)	1102	B.A.	English (see page 79)	1501.01	B.A.
Geochemistry (see page 85)	1915	B.S.	French (see page 122)	1102.01	B.A.
Geology (see page 84)	1914	B.S.	Mathematics (see page 116)	1701.01	B.S.
Geophysics (see page 85)	1916	B.S.	Mathematics Middle Childhood 5-9 (see page 117)	0804.03	B.S.
History (see page 88)	2205	B.A.	Physics (see page 139)	1902.01	B.S.
Industrial Management (see page 90)	0599	B.S.	Social Studies (see page 89)	2201.01	B.A.
Interdisciplinary Studies	4901	B.A./B.S.	Spanish (see page 121)	1105.01	B.A.
Journalism (see page 33)	0602	B.A.			
Mathematics (see page 115)	1701	B.S.	Theatre Arts:		
Mathematics-Physics (see page 141)	1799	B.S.	Theatre Arts (see page 163)	1007	B.A.
Medical Technology (see page 119)	1223	B.S.	Acting (see page 164)	1007	B.F.A.
			Theatrical Production and Design (see page 166)	1007	B.F.A.
			Visual Arts and New Media:		
			Visual Arts and New Media (see page 169)	1002	B.A.
			Animation and Illustration (see page 171)	1009	B.F.A.
			Ceramics (see page 171)	1009	B.F.A.
			Drawing and Painting (see page 171)	1002	B.F.A.
			Graphic Design (see page 171)	1009	B.F.A.

Media Arts (see page 171)	1099	B.F.A.
Photography (see page 171)	1011	B.F.A.
Sculpture (see page 171)	1002	B.F.A.
Visual Arts: Art History (see page 170)	1003	B.A.

Graduate Programs	HEGIS Code	Degree
Adolescence Science Education (see page 152)	0834	M.A.T.
Bilingual ITI (see page 74)	0899.60	Adv.Cert.
Biology (see page 21)	0401	M.S.
Chemistry (see page 32)	1905	M.S.
Curriculum & Instruction in Inclusive Education	0829	M.S.Ed.
English (see page 81)	1501	M.A.
English 7-12 (see page 81)	1501.01	M.S. Ed.
Interdisciplinary Studies	4901	M.A./M.S.
Literacy Education (B-Grade 6) (see page 69)	0830	M.S. Ed.
Literacy Education (Grades 5-12) (see page 70)	0830	M.S. Ed.
Mathematics 7-12 (see page 118)	1701.01	M.S. Ed.
Music Education K-12 (see page 134)	0832	M.M.
Music Performance (see page 134)	1004	M.M.
Music Theory-Composition (see page 134)	1004.10	M.M.
School Building Leadership (see page 75)	0828	Adv.Cert.
School District Leadership (see page 75)	0827	Adv.Cert.
Speech Language Pathology (see page 39)	1220	M.S.
TESOL (see page 71)	1508	M.S.Ed.
TESOL	1508	Adv.Cert.
TESOL ITI (see page 73)	0899.60	Adv.Cert.

Deactivated Programs*	HEGIS Code	Degree
Accounting	0502	M.S.
Adolescence Social Studies	2201.01	M.S.Ed.
Anthropology	2202	B.A.
Biology 7-12	0401.01	M.S.Ed.
Business Administration: Management Info. Systems	0506	B.S.
Chemistry 7-12	1905.01	M.S.Ed.
Elementary Education N-6	08002	M.S.Ed.
German	1103	B.A.
Health Services Admin.	1202	B.S.
Mathematics	1701	M.A.
Media Arts	1099	B.A.
Music History and Literature	1006	B.A.
Music Theory	1004.10	B.A.
School Administrator and Supervisor	0828	Adv.Cert.
Speech & Hearing Handicapped	0815	M.S.Ed.

**Deactivated programs are defined as programs that SUNY 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.*

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 SUNY 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 SUNY 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 SUNY 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.

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. SUNY 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. SUNY 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 SUNY

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.

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 SUNY 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 SUNY Fredonia will be computed in the final average.

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 (see page 440).)

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 beginning on this page.

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.

Student Retention

It is important to recognize that students withdraw from the university for various reasons; academic, medical, personal, social and financial problems are among those reasons.

Completion of degree requirements in more than four years does not necessarily mean continuous enrollment during this interval, but rather reflects the time span measured from the student's initial entering date to graduation and, where appropriate, includes interruptions in attendance. SUNY Fredonia has undertaken retention studies to determine entering freshmen cohort retention and graduation rates. At the end of the first year, 87 percent of the freshmen remained enrolled for the second year. Most recent data reflect the proportion of freshmen completing their baccalaureate degree at SUNY Fredonia to be 46 percent within four years, 61 percent within five years, and 63 percent within six years from initial date of entrance.

Approximately 33 percent of transfer students entering the university at the upper division level (junior year) completed their bachelor's degree requirements on time, within two years after entering.

These percentages are accurate as of publication date. Detailed outcomes are available from the Office of Institutional Research and Planning, First Floor, Fenton Hall.

Program Registration

SUNY 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.

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 this university 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 his/her staff. The term student or students include all persons taking or auditing classes at SUNY 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 insure 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 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 his/her 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 Coordinator 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 SUNY 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 SUNY Fredonia. Students should be aware that SUNY Fredonia reserves the right to review and take disciplinary actions based on conduct occurring off campus and/or between academic periods.

A student's action 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 SUNY Fredonia student and as a student of the host institution. SUNY Fredonia's Rights and Responsibilities are applicable while the student is studying abroad.

Students who witness serious violations of SUNY Fredonia policy, procedures, or Rights and Responsibilities that are potentially harmful to the safety and well-being of other students 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

Demonstration of Other Groups or Individual Action.
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 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.

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 dismissal.

The following conduct is prohibited:

- (a) Failing to comply with directions of university or town officials (this includes, but is not limited to, faculty, staff, Residence Director, Resident Assistant, security, safety or fire officials 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, or harassment and 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 or threatens to engage in behavior which poses imminent danger of causing substantial harm to self or others.
- 3) Obstructing or disrupting 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 the mental or physical health of a member of the university or local community.
 - 2) Creating a situation that results in harassment of a member of the university or local community.
- 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 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 is more particularly described in the *University Policy on Sexual Assault*.
- (g) Possessing firearms, explosives (including firecrackers), weapons, BB guns, knives (4 inches or longer or switchblade), paintball guns, potato guns, or blow 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*.
- (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) Use of speakers or other sound amplifying equipment without clearance as to time and place from the Office of Student Affairs.
- (k)
 - (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 or any kind is not permitted on campus or in residence halls, unless permission is given by the Office of Residence Life and the Office of Campus Life.

- (l) Smoking in non-smoking areas so designated by the University President or his/her designee.
- (m) Ignoring reasonable standards of appropriate behavior, including disorderly conduct.
- (n) 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*.
- (o) 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 his/her obligations to the university.)
- (p) Viewing, possessing, or distributing child pornography.
- (q) Counterfeiting or violating copyright laws.
- (r) Illegal or inappropriate use of SUNY Fredonia's network or computers. This is more particularly described in the *Computer and Network Usage Policy*.
- (s) 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, 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.

4. Demonstration of Other Groups or Individual Action

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 expected 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 his or her 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

It is a State University of New York at Fredonia policy mandate to 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. Hate/bias crimes have received renewed attention in recent years, particularly since the passage of the Federal Hate/Bias Crime Reporting Act of 1990 and the New York State Hate Crimes Act of 2000 (Penal Law Article 485). Copies of the New York law are available from the Office of University Police.

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 dismissal are possible.

In addition to preventing and prosecuting hate/bias crimes, State University of New York at Fredonia 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 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 conduct code. Bias incidents can be reported to University Police as well as to the Office of Student Affairs.

Anyone who is a victim of, or witness to, a hate/bias crime on campus should report it to the University Police by calling 911 in an emergency, using a Blue Light or other campus emergency telephone, calling (716) 673-3333, or stopping by the University Police Office located on the second 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 (716) 673-3271
Affirmative Action (716) 673-3358
Counseling Center (716) 673-3424
Multicultural Affairs (716) 673-3398

For general information on Fredonia security procedures, see the University Police website at

<http://www.fredonia.edu/UPD/upd.htm> 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://www.fredonia.edu/UPD/upd.htm>.

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://www.fredonia.edu/upd/campussafety.htm>.

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:

(a) Educating the campus community, including security personnel and those persons who advise or supervise students, about sexual assault.

- (b) Educating the campus community about personal safety and crime prevention.
- (c) Reporting sexual assaults and dealing with victims during investigations.
- (d) Referring complaints to appropriate authorities.
- (e) Counseling victims.
- (f) 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 or Other Serious Violations)

Students that are found responsible and suspended or expelled for serious violations of the Students Rights and Responsibilities will receive a permanent notation on his/her 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 shall not receive credit for the semester in which they are suspended or expelled. 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.

- (a) "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.
- (b) "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:

- (a) *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.

- (b) *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, 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) Disfigurement 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) Any other activities that are not consistent with fraternal law, ritual or policy, or the policies and regulations of SUNY Fredonia.

SUNY 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 Coordinator 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.

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 dismissal from the university.

A student charged with sexual assault 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 SUNY Fredonia works to ensure fairness and to provide support for all persons involved, especially the victims. 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 Counseling Center and Health Center for further assistance.

SUNY Fredonia recognizes the following definition of consent: voluntary, non-coerced and clear communication indicating a willingness to engage in a particular act. Consent is defined in the following manner; consent or lack of consent may be expressed or

implied. Acquiescence does not necessarily constitute consent, further consent cannot be construed if: (1) It is given by a person who is legally incompetent to authorize the conduct charged to constitute the offense and such incompetence is manifest or known to the actor; or (2) It is given by a person who by reason of youth, mental disease or defect, or intoxication, is manifestly unable or known to the actor to be unable to make a reasonable judgment as to the nature or harmfulness of the conduct charged to constitute the offense; or (3) It is induced by force, duress or deception.

Good Samaritan Policy

The welfare of students is the highest importance to SUNY Fredonia. There will be times when individual students, both on and off campus, may be in critical need of assistance from medical or other professional personnel. SUNY Fredonia expects that these students will seek help and that other students will respond to obtain the help that their fellow student needs. SUNY Fredonia wants to minimize any hesitation that students might have in obtaining help due to concern that their own behavior might be a violation of university policy.

While policy violations cannot be overlooked, the Office of Judicial Affairs will take into consideration the positive impact of reporting an incident on the welfare of students when determining the appropriate response for policy violations by the reporter of the incident. Any possible negative consequences for the reporter of the problem should be weighed against the possible negative consequences for the student who needs intervention. At minimum, SUNY Fredonia expects that a student would make a report that would put the student in need in touch with professional helpers.

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. 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. The use, possession, sale, or distribution of illegal drugs, controlled substances, and 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 offense 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 C.A.R.E.S. program, a Counseling Center initiative designed to address alcohol and other drug (AOD) concerns on our campus. The student will be charged a fee to offset some of the cost of the 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 deemed minor, the Residence Director or Coordinator 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. The 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 and provides detailed information about the effects of marijuana on the body and the mind. A fee will be charged to cover the cost of the program.

Fredonia C.A.R.E.S.

[Choice, Acceptance, Responsibility, Experience, Success]

Fredonia CARES is a Counseling Center initiative designed to address alcohol and other drug (AOD) concerns on our campus. The program responds to the individual needs of students who have been charged with

a violation of the SUNY 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 participate in a private and confidential consultation regarding their substance use and will be referred to one of two unique, researched based, experiential workshops focusing on self-assessment to help better understand the risks and impacts substance use plays in one's life; and/or individual counseling services. The program respects an individuals' values and personal choices regarding substance use, while recognizing that with new information, time to process it, and support for change, most people benefit from considering behavior change 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. This is more particularly described in the Administrative Policy 057.1 section 1. (B) 2.

Disciplinary Expulsion - 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 of any alcohol or drug violation involving students under 21.

University Judicial System

The *University Standard 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 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 any administrative action in which a student chooses to plead guilty to the charges and waives the right to a hearing. 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, SUNY 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 two weeks 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 from 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 Coordinator 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 his/her right to another hearing and to the right to appeal the decision.

Administrative Hearing

The Administrative Hearing body consists of three university faculty/administrators. 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 twelve (12) members. Approximately six students and six faculty/staff members are appointed for a term of one year. Members are nominated by the Student Affairs Committee or a subcommittee of the Student Affairs Committee and appointed by the University President. 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 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. To proceed with a hearing, a minimum of five Judicial Board members must be present. If less than five members are present the accused must agree in writing in order to have the hearing.

Procedures for the University Judicial Board

Step 1: A charge for 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 charges 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 Coordinator 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, in writing, the requirement of a hearing. In such cases, the hearing body will consider the evidence. If the student does not waive the requirements of a hearing and does not appear for such a hearing, his/her case will be considered by the hearing body and decision will be rendered in his/her absence.

Step 3: The Office of Student Affairs shall insure 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. SUNY 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 him/her 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 his/her choice. The advisor or attorney may not participate in the hearing.

Step 6: All student 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 notify the student in writing of its final decision.

Should the final decision of a Judicial Board involve Disciplinary Warning or Disciplinary Probation, the decision made by the Judicial Board shall be final unless a timely appeal has been made to the University President or his/her designee. The student shall have the right to appeal to the University President or his/her designee in writing within five (5) days from the mailing of such notification. 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.

In cases involving suspension or dismissal, the Judicial Board shall recommend such action to the President of the university or his/her designee, in which case the University President's decision shall be final.

Policies of the Judicial Board

- (a) The Judicial Board shall not discuss or review matters under consideration outside of the hearing. Failure of a Judicial Board member to uphold this provision renders such member subject to impeachment procedures by the Student Affairs Committee. Impeachment shall be by a two-thirds vote of that committee. Any violation of this section shall not affect the proceedings of the Judicial Board in a determination of the case.
- (b) No member of the Judicial Board shall be either a witness before the court or a person previously engaged in formulating the charge or in presenting materials relating to the case.

- (c) Judicial Board records shall be filed with the Office of Student Affairs and released only with the permission of the Judicial Board, the Coordinator of Judicial Affairs or the alleged violator. Records shall be kept for seven years.
- (d) The Judicial Board may adopt bylaws not inconsistent with these rules and regulations upon the affirmative vote of not less than five members.
- (e) The Judicial Board shall be composed of twelve (12) members. Approximately six students and six faculty/staff members are appointed for a term of one year. Members are nominated by the Student Affairs Committee or a subcommittee of the Student Affairs Committee and appointed by the University President.
- (f) In order to be nominated, a student must have attained sophomore status (24 credit hours). All members of the Judicial Board must have been a member of the university community for at least one semester before taking office. No student may serve if he or she is on probation at the time of the appointment. No member of the Judicial Board may be a voting member of the Student Association, University Senate, or the Student Affairs Committee.

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 his/her 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 period of time. If the student is required to leave, it is expected that in that time, the student will seek a psychological evaluation. This evaluation will be shared with the Office of Student Affairs and the Director of Counseling.
- (b) In order to return and/or remain in school the student must be evaluated by the Director of Counseling or his/her designee. The student will need to meet with the Vice President of Student Affairs or his/her designee. The Vice President of Student Affairs or his/her designee, in consultation with the Director of Counseling or his/her designee, the Chief of University

Police or his/her designee, and, if applicable, the Director of Residence Life or his/her designee, will decide if the student is cleared to return to school. If cleared to return to school, a contract will be developed which prescribes responsibilities of the student. These responsibilities may include: ongoing counseling, removal from or relocation within residence life, refraining from alcohol and/or drug use, etc. Failure to comply with this contract would result in immediate suspension from the university.

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 university (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, Second Floor, Gregory Hall, (716) 673-3271 or the Office of Academic Affairs, 119 Reed Library, (716) 673-3335.

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 SUNY 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. SUNY 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

Violations of academic integrity are described within four broad, overlapping categories: Fraud, Plagiarism, Cheating, and Collusion. Examples of violations of academic integrity include, but are not limited to, those described herein:

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 are at fault for the student's inability to complete academic course work (e.g., inability to complete assignments due to problems with ANGEL 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 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. 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.

D. Collusion

Most colleges and universities support some opportunities for collaborative learning, but unauthorized collaboration is considered collusion. Unless collaboration is expressly permitted by the instructor, students should work alone. Even when an instructor authorizes collaboration, collusion may still occur. In all cases, work submitted should reflect an individual's own effort. Examples of collusion include, but are not limited to, the following situations:

1. A pair or larger group of students studies a problem, one of the students 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 part 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. Judicial Procedures for Violations of Academic Integrity

A. Stage One: Departmental Level

1. An instructor who suspects a violation of the academic integrity policy will collect all information and materials related to the offense.
2. The instructor will meet with the student to present his/her charge, 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. If, however, the instructor finds that a violation has occurred, whether the student admits or does not admit guilt, the matter must be communicated to the department chairperson (see No. 3 directly following). A student will not be allowed to drop a course to avoid a course sanction or to suspend judicial procedures.

3. 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 briefly summarize the offense in writing to his/her departmental chairperson. Copies of all information and materials related to the offense shall accompany this correspondence.
4. After appropriate consultation, the chairperson and the instructor will jointly notify the student in writing about the charge and the resulting sanctions. At this stage, some possible departmental sanctions include but are not limited to the following: a formal warning, a grade of zero being assigned to the particular performance, and/or a failing grade being given for the course. The letter from the chairperson and the instructor may also recommend that the Academic Integrity Review Board hear the case and consider, among several options, placing the student on disciplinary probation, temporarily suspending the student, or permanently expelling the student from the university.
5. Because a student may plagiarize and/or violate provisions of academic integrity in more than one department, the chairperson is required to submit a copy of all correspondence and relevant materials to the appropriate dean of the department in which the offense occurred. For undergraduate students, these materials will be delivered to the Dean of the College of Arts and Sciences, Dean of the School of Business, or the Dean of the College of Education; for graduate students, materials will be delivered to the Associate Provost for Graduate Studies and Research. The dean/associate provost will then prepare a full packet of copies for the Vice President for Student Affairs in whose office the packet will be filed as part of the required maintenance of student disciplinary records.

B. Stage Two: Appeal

1. Within 14 calendar days after the chairperson has mailed the letter, the student may decide to appeal the departmental decision. If so, she/he must send a letter of intent to the Provost and Vice President for Academic Affairs, with copies sent at the same time to the chairperson in whose department the charge originated, the appropriate dean/associate vice president, and the Vice President for Student Affairs. Upon receipt of such communication and in a timely manner, the Provost and Vice President for Academic Affairs will contact the Chair of the Academic Integrity Review Board who will call together the members of the board for a formal hearing. Throughout the appeal process, the charged student is assumed not guilty, and in most circumstances, she/he has the right to remain in class.
2. After the same 14 days, if the student has not appealed, the university will act upon the assumption that the student has accepted the departmental decisions and any sanctions therein. Enforcement of these sanctions hereafter rests with the Office of the Vice President for Student Affairs.
3. If the department has recommended additional sanctions outside its academic purview (probation, suspension, etc.), the Academic Integrity Review Board will be convened to determine if a hearing should be held. If a hearing is scheduled, the Chair of the Academic Integrity Review Board will contact the accused student at least five (5) days in advance.
4. Even if a student does not file a formal appeal within the above time limit, the Vice President for Student Affairs must notify the Chair of the Academic Integrity Review Board whenever a second or subsequent violation is submitted to a student's disciplinary record. The Academic Integrity Review Board will then be convened to review all charges filed and may impose additional sanctions. The Academic Integrity Review Board will consider repeated violations of any or all of the provisions in the *Academic Integrity Policy* as grievous.

C. Stage Three: Academic Integrity Review Board

1. Whether the student who has been charged decides to appeal the departmental decision, or the Academic Integrity Review Board votes to initiate formal proceedings as the result of other circumstances (see above), the Academic Integrity Review Board will hear and rule on the case. 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. This non-legal adviser must be a current member of the SUNY Fredonia community (faculty, staff, student), and the adviser may accompany the charged student and advise him/her at any meetings. To avoid conflicts of interest, this adviser may not be selected from the members of the Academic Integrity Review Board.

2. At least one member from each category below is required. A quorum of six members including at least one student representative will be selected from the following categories:
 - (a) The Chair of the Academic Integrity Review Board who is a full-time tenured faculty member jointly appointed by the President of the university and the Provost and Vice President for Academic Affairs and subsequently approved by the University Senate. The chair's term will be two years with the option of renewal, pending reappointment and re-approval.
 - (b) Either the Vice President for Student Affairs or the Associate Vice President for Student Affairs will provide board access to pertinent Student Disciplinary records and will participate as an *ex officio* member (see No. 4 below). Before witnesses speak or before questions are asked, this representative of Student Affairs will present a summary of the case.
 - (c) At least one, but preferably two, undergraduate (or graduate, if pertinent) student representatives selected by the university deans/associate vice president and after nominations by the Dean's Councils of Chairs and Directors (which includes directors and chairpersons of all schools and departments). No two students majoring in a single department will be invited to serve concurrently. To insure that perspectives from a diverse student population are fairly and freely heard, one student will major in an Arts and Humanities department and one will major in a Natural and Social Sciences department, and/or one in Education or Business.
 - (d) The appropriate dean/associate provost preferred, but one of the other four deans/associate provost may act in his/her stead whenever necessary.
 - (e) Chairs of departments: one from Arts and Humanities, one from Natural and Social Sciences, designee from Business, and a designee from the College of Education.
 - (f) An additional faculty member from a department not represented by individuals in (a) and (e) above.
3. The Chair of the Academic Integrity Review Board, after prior consultation with the assembled board, may call witnesses, and the student who has been charged may also call witnesses. At the conclusion, the charged student will be asked to address the allegation by pleading guilty or not guilty, and she/he then has the right to speak on his or her behalf. All participants in this hearing will be informed that deliberations are to remain strictly confidential. Hearings of the judicial review board will be tape recorded to provide a record of the proceedings.
 4. After the hearing, the Academic Integrity Review Board will deliberate and make a formal decision. In the final determination, each of the members of the board, including the Chair of the board, 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 the results will be disclosed to board members. Board members are not to disclose either the board's determination or any specifics related to the voting.
 5. In a timely manner, the Chair of the Academic Integrity Review Board will complete the hearing report and will deliver copies to the chairperson in whose department the charge originated, the Provost and Vice President for Academic Affairs, and the Vice President for Student Affairs. The final report of the Academic Integrity Review Board will include the following:
 - (a) A determination of Not Guilty (no violation of academic integrity has been found) or Guilty (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 had been found guilty of violating the *Academic Integrity Policy*, the penalty must also be identified. Sanctions or penalties imposed should be commensurate with the offense and will take into account the student disciplinary records on file.
 6. On the same day the board's decision is delivered to the three individuals above (No. 5), the student will be informed of the board's decision in a meeting with the Vice President for Student Affairs and the Chair of the Academic Integrity Review Board. The student will then be given a copy of the hearing report prepared by the Chair of the Academic Integrity Review Board.

7. 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 evidence is discovered).

IV. Maintenance of Student Disciplinary Records

Individual files on all students who are formally charged with violations of the *Academic Integrity Policy* will be prepared at the time of the student's initial offense and maintained for 10 years thereafter in the Office of the Vice President for Student Affairs. Instructors and chairpersons will initiate this process by submitting, to their dean/associate vice president, a copy of the information and materials related to the offense and a copy of the departmental letter which identifies the charge and which has been mailed to the student. All subsequent materials related to the charge will be copied in the dean's/associate vice president's office and delivered to the Vice President for Student Affairs for the student's disciplinary file.

Statement Regarding SUNY Fredonia's Celebration of Diversity

The university welcomes the experience, talent, and surge of energy that comes from a culturally diverse campus. It has pledged to ensure that everyone is treated fairly, without degradation of race, religion, ethnicity, gender, affection orientation, physical/mental challenge, or any other characteristic not germane to a person's rights or human worth. Campus specifically prohibits:

- Fighting and threats to, physical abuse of, or harassment that threatens to or does endanger the health, safety, or welfare of a member of the university.
- Engaging in any action or situation that which recklessly or intentionally dangers the mental or physical health of a member of the university community; creating in a situation that results in the discomfort of, or harassment or excessive ridicule of a member of the university community.

All members of the campus community are expected to live, learn and work with a foundation of understanding and appreciation of differences. Faculty and staff, as mentors and educators, are encouraged to support this policy through personal interactions with students, classroom discussion, and careful selection of curricular materials and content.

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 he/she is unable, because of his/her 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 his/her 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 his/her religious beliefs, an equivalent opportunity to make up any examination, study, or work requirements which he/she 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 his/her availing himself/herself 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 his/her 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 his or her religious beliefs, must be given an equivalent opportunity to register for classes or make up any examination, study or work requirements for which he or she 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://www.fredonia.edu/UPD/parkingregulations.htm>. 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 SUNY 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, SUNY 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 SUNY 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 - SUNY Fredonia terminology relating to electronic services such as e-mail, ANGEL Learning Management System, and electronic library resources.

Internet - All networks external to SUNY Fredonia.

Intranet - All networks internal to SUNY 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 SUNY Fredonia's administrative network through a non-SUNY 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 SUNY Fredonia computing facilities. Most users are students, faculty and staff members of SUNY 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

SUNY Fredonia computer facilities are a resource for members of the campus community (faculty, staff, students and other affiliated individuals or

organizations authorized by SUNY Fredonia), to be utilized for work consistent with the instructional, research, and administrative goals of the university as defined in the SUNY 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 SUNY 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 SUNY 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

SUNY 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 SUNY Fredonia' 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). SUNY Fredonia computing and network resources are designed to protect user privacy; users shall not attempt to circumvent these protections.

SUNY 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 SUNY 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 SUNY Fredonia. Users shall not make copies of any licensed or copyrighted computer program found

on any SUNY 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:

- Complete withdrawal by student from university courses
- Current students, 90 days after graduation
- 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.

SUNY 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 SUNY 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:

- Campus-owned Macintosh, Linux, and UNIX-based machines
- Non-campus owned computers
- 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 SUNY 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. SUNY 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 SUNY 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 SUNY 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 SUNY 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 SUNY 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 SUNY 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://www.fredonia.edu/its/Networking/Wireless/>.

B. Electronic Mail

1. University Use of Electronic Mail

Electronic mail (email) is a mechanism for official communication for SUNY 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

SUNY 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 SUNY 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 SUNY 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 SUNY 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, SUNY 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 SUNY 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/Webservices/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, SUNY Fredonia

Example: <TITLE>Electronic Journals, Daniel A. Reed Library, SUNY Fredonia</TITLE>

- All web pages must include the university name "SUNY 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 SUNY 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., SUNY 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 SUNY 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 SUNY Fredonia's Website

SUNY 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 SUNY Fredonia."
- SUNY 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, SUNY Fredonia reserves the right to remove such content or the blog or forum itself. SUNY 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 SUNY 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

SUNY 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 SUNY Fredonia from damages, which may result from unauthorized use of SUNY Fredonia resources. Damages include the loss of sensitive or university confidential data, intellectual property, damage to public image, damage to critical SUNY 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 SUNY Fredonia internal networks via their VPN.
- VPN use is controlled using password authentication.
- VPN gateways will be set up and managed by SUNY 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 SUNY Fredonia's network, and as such are subject to the same rules and regulations that apply to SUNY Fredonia-owned equipment, i.e., their machines must be configured to comply with all SUNY 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 SUNY 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 University Policy

Sexual discrimination in the form of sexual harassment, defined as the use of one's authority and power to coerce another individual into sexual acts or relations or to punish the other for his/her refusal, shall be a violation of the policy of SUNY Fredonia.

What Is Sexual Discrimination?

"No person in the United States shall on the basis of sex be excluded from participation in, be denied the benefits of, or be subject to discrimination under any education program or activity receiving Federal financial assistance." Title IX of the Educational Amendments of 1972.

What Is Sexual Harassment?

Sexual harassment may include repeated unwelcome sexual advances, requests for sexual favors and other verbal or physical conduct of a sexual nature carried out by someone in the workplace or educational setting. Such behavior may offend the recipient, cause discomfort or humiliation and interfere with job or school performance.

Peer Harassment - Students have a right to an environment free from sexual harassment, not only by persons in positions of power, but by any member of the university community. Sexual harassment constitutes a serious threat to the free interaction and exchange necessary for educational and personal development.

Sexual harassment may range from inappropriate sexual innuendos to coerced sexual relations. It can happen to both men and women, but a woman is more often the victim.

What Can Be Done About Sexual Discrimination/Harassment?

What can a student do when he/she believes that. . .

- course material ignores or depreciates a student because of his/her sex?
- an adviser does not take a student's career and educational goals seriously because she/he appears to believe them inappropriate for members of his/her sex?
- a student is denied resources, such as financial aid, teaching assistantships, or admission to a program for sexist reasons?
- a student is pressured by a professor or staff person to participate with him/her in social and/or sexual activities?

Students often feel powerless in such situations but there are people on campus who are willing to talk to them about those problems without any obligation on the part of either party. Such situations as those described above are not condoned by SUNY Fredonia or the teaching profession. In some instances they occur out of ignorance and misunderstanding and need only to be

brought to the attention of the professor. In other instances they can be considered unethical and subject to professional reprimand.

Actions a Student Can Take

(In suggested order)

1. The student can talk to the professor or staff person, carefully explaining why he/she views the particular comment, joke, course reading, action taken, etc. as sexist. The student should regard the meeting as a kind of consciousness-raising session where he/she can help him/her understand how he/she feels. Sometimes people aren't aware of how their remarks or actions affect someone else, and communicating their feelings to the professor might be the most helpful to him/her in avoiding such actions in the future. The student is to be sure to prepare for the meeting ahead of time with documentation (e.g., class notes, tapes, specific comments he/she made and a logical presentation). Sometimes people don't understand how sexist remarks can hurt; it might help the student to draw the analogy of racist or anti-ethnic remarks - "Would you make fun of a person's skin color or ethnic background? Then why do so with sex?" To get support the student should consider going to see the professor with several other people from class. If he/she can't find others in the class (and discussing the issues with other students in itself may help raise consciousness), he/she should take friends along who aren't in the class. The student might also seek help from those listed below.
2. The student should contact university people and groups who are concerned about sexual discrimination. These people are willing to listen, discuss specific incidents, and provide help and advice if wanted:
 - Sandra A. Lewis, Affirmative Action, (716) 673-3358
 - Ann McCarron Burns, University Police, (716) 673-3465
 - David E. Herman, Student Affairs, (716) 673-3271
 - Leanna White, Counseling Center, (716) 673-3424
 - Monica White, Student Affairs, (716) 673-3271
 - Averl Otis, Multicultural Affairs, (716) 673-3398
3. If a student has talked to the professor or staff person and sexual discrimination continues, the student should write a letter to him/her documenting the incidents and explaining why they are offensive. The student should state that he/she has not obtained results from previous discussion(s) and note the date(s) of the discussion(s). The student should send a carbon copy to the head of his/her department or unit and to one of the above-listed people. Students, who fail to receive a satisfactory answer from the staff members and/or head, should request a meeting with the two of them and take along an objective third party (another professor or perhaps one of the people in the above list).

4. Students should not enroll in classes that are sexually discriminatory, and should let the professor know why they haven't enrolled. In filling out course evaluation forms, a student should make it known why he/she has been offended by such discriminatory comments or actions. If the professor has responded to earlier complaints and has made efforts to change, support those efforts in the evaluation. Students are asked to remember to always give full support to professors who are fair and who treat students as human beings regardless of sex.
5. It may be necessary to file a formal grievance or complaint. This is a very serious step and should not be undertaken without discussion and counsel with a staff member who understands established grievance procedures at SUNY Fredonia. Once again, students are asked to consult with one of the people on the above list.

Credit for the above is readily given to the Project on the Status and Education of Women, Association of American Colleges, 1818 R Street, N.W., Washington, D.C., and the Utah State University Committee on the Status of Women.

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 he/she is in attendance shall be heard and determined at the institution in which he/she is 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 he/she has a lawful right to do or to do any act which he/she has a lawful right not to do;
- (b) physically restrain or detain any other person, nor remove such person from any place where he/she is 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 his/her views, including invited speakers;
- (j) knowingly have in his/her 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 his/her 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 he/she is a licensee or invitee, have his/her authorization to remain upon the campus or other property withdrawn and shall be directed to leave the premises. In the event of his/her failure to do so he/she shall be subject to ejection.
- (b) If he/she is a trespasser or visitor without specific license or invitation, be subject to ejection.
- (c) If he/she is 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 he/she is a faculty member having a term or continuing appointment, be guilty of misconduct and be subject to dismissal or termination of his/her employment or such lesser disciplinary action as the facts may warrant including suspension without pay or censure.
- (e) If he/she is 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 he/she is 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 his/her 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 his/her license or invitation is withdrawn and shall direct him/her to leave the campus or other property of the institution. In the event of his/her failure or refusal to do so such officer shall cause his/her 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 his/her designee shall inform him/her that he/she is not authorized to remain on the campus or other property of the institution and direct him/her to leave such premises. In the event of his/her failure or refusal to do so such officer shall cause his/her 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 his/her 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 his/her 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 his/her designee shall cause the ejection of the violator from any premises which he/she occupies in such violation and shall initiate disciplinary action as hereinbefore provided.
- (d) The chief administrative officer or his/her designee may apply to the public authorities for any aid which he/she deems 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 he/she 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 he/she has knowledge that such a violation may have occurred, he/she 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 he/she is satisfied from such investigation and statements that there is reasonable ground to believe that there has been such a violation, he/she 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 him/her or them personally, if possible, or, if not, by mailing a copy of such charges by registered mail to such student or students at his/her or their usual place or places of abode while attending college and also to his/her 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 his/her 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 his/her judgment, the continued presence of such student would constitute a clear danger to himself/herself 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 his/her successor or replacement has been designated. No member of the committee shall serve in any case where he/she is a witness or is or has 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 his/her 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, he/she 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 him/her and of six students who shall be designated by the members so designated by him/her. 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 his/her choice. He/she may confront and examine witnesses against him/her and may produce witnesses and documentary evidence in his/her own behalf. There may be present at the hearing: the student charged and his/her 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 his/her representative. Within 10 days thereafter the chief administrative officer shall make his/her 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 he/she shall reject the findings of the hearing committee in whole or in part, he/she shall make new findings which must be based on substantial evidence in the record and shall

include them in the notice of his/her 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, 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 SUNY Fredonia compliance policy and the Family Educational Rights and Privacy Act are available at the Office of Student Affairs.

Personnel

State University of New York Board of Trustees

H. Carl McCall, B.A., Chair	New York City
Joseph W. Belluck, Esq. B.A., J.D.	New York
	City/Woodstock
Henrik N. Dullea, B.A., Ph.D.	Ithaca
Ronald G. Ehrenberg, B.A., M.A., Ph.D.	Ithaca
Angelo Fatta, B.S., Ph.D.	Buffalo
Tina Good, B.A., M.A., Ph.D.	Selden
Stephen J. Hunt, B.A., M.B.A.	Katonah
Eunice A. Lewin, B.A., M.A., Ed.M.	Buffalo
Marshall Lichtman, B.A., M.B.A., M.D.	Pittsford
John L. Murad Jr., Esq., B.A., J.D.	Jamesville
Kenneth P. O'Brien, A.B., Ph.D.	Brockport
Kevin Rea, B.S., Student Trustee	Plainview/Maritime
Linda S. Sanford, B.S., M.S.	Chappaqua
Richard Socarides, B.A., J.D.	New York City
Carl Spielvogel, B.B.A.	New York City
Cary F. Staller, B.A., J.D.	Old Field
Gerri Warren-Merrick, B.A.	New York City

Chancellor

Nancy L. Zimpher, B.A., M.A., Ph.D.

Executive Vice Chancellor and Provost

David K. Lavallee, B.S., M.S., Ph.D.

Senior Vice Chancellor for Community Colleges and the Education Pipeline

Johanna Duncan-Poitier, B.A., M.A.

Senior Vice Chancellor and General Counsel, Secretary of the University

William F. Howard, B.A., J.D.

Senior Vice Chancellor for Research, President of the SUNY Research Foundation

Timothy Killeen, B.S.,Ph.D.

Vice Chancellor for Academic Programs and Planning, and Vice Provost

Elizabeth L. Bringsjord, B.S., M.S., Ph.D.

Vice Chancellor for Capital Facilities and General Manager of the Construction Fund

Robert Haelen, B.S., M.S., CPA

Vice Chancellor for Financial Services and Chief Financial Officer

Brian Hutzley, B.A., M.B.A.

Vice Chancellor for Global Affairs

Mitch Leventhal, B.A., M.A., Ph.D.

Vice Chancellor for Human Resources

Curtis L. Lloyd, B.S., M.B.A.

Associate Vice Chancellor for Health Affairs

Kathleen Preston, B.A., M.P.A.

State University of New York at Fredonia

College Council

The Honorable Frank Pagano, <i>Chair</i>	Fredonia, N.Y.
Cynthia A. Ahlstrom, A.A.S., B.S.N.	Dunkirk, N.Y.
Angelo P. Bennice, B.S.	Dunkirk, N.Y.

Michael Cerrie, Esq., B.S., J.D.
 Russell E. Diethrick Jr.
 Robert L. Heichberger, B.S., Ed.M., Ed.D.
 Jordan Nicholson, Student Member
 JoAnn Niebel, B.A., C.S.W., M.S.W.
 Carla L. Westerlund, B.A., M.S.Ed.
 Denise M. Szalkowski, *Secretary to the Council*

Fredonia, N.Y.
 Jamestown, N.Y.
 Gowanda, N.Y.
 Mayville, N.Y.
 Dunkirk, N.Y.
 Greenhurst, N.Y.

Fredonia College Foundation Board of Directors

Debra Horn Stachura, '75, *Chair*
 Richard C. Johnson, CPA, *Vice Chair*
 Jean M. Malinoski, '68, '81, *Secretary*
 Thomas H. Waring Jr., '80, *Treasurer*
 Michael Schiavone, J.D., '78, *Immediate Past Chair*
 Meagan Allers, Student Member
 Phillip Belena, '92
 David H. Carnahan
 Terry W. Clifton, '66
 Robert E. Coon, '50
 Dennis Costello, '72
 Jeffrey L. Fancher, '82
 Carla Giambrone, '92
 Greg Gibbs, Ph.D., '71 (Alumni Representative, ex-officio)
 Amos Goodwine Jr., '72
 Walter J. Gotowka, '81
 Virginia S. Horvath, Ph.D. (ex-officio)
 Deborah Kathman
 Jeffery W. Kelly, Ph.D., '82
 David Mancuso
 Cathy Marion, '79
 Michael A. Marletta, Ph.D., '73
 Kurt W. Maytum
 Judy Metzger
 Michael L. Petsky, '85
 Daniel Reininga
 Susan O. Schall, Ph.D., '81
 James J. Stroud, '82
 Carol Ward, CPA, '81
 David M. Tiffany, Ph.D. (ex-officio), *Vice President for University Advancement and Executive Director*
 Betty Catania Gossett, '76 (ex-officio), *Associate Vice President for University Development and Assistant Executive Director*

West Seneca, N.Y.
 Fredonia, N.Y.
 Forestville, N.Y.
 Hamburg, N.Y.
 Clarence, N.Y.
 Williamsville, N.Y.
 New York, N.Y.
 Mayville, N.Y.
 Dunkirk, N.Y.
 Fredonia, N.Y.
 Wellesley, Mass.
 Fredonia, N.Y.
 Rochester, N.Y.
 Hamburg, N.Y.
 North East, Pa.
 Dunkirk, N.Y.
 Fredonia, N.Y.
 Jamestown, N.Y.
 LaJolla, Calif.
 Dunkirk, N.Y.
 Houston, Texas
 LaJolla, Calif.
 Fredonia, N.Y.
 Fredonia, N.Y.
 Manorville, N.Y.
 Fredonia, N.Y.
 Front Royal, Va.
 Hudson, Ohio
 Calabash, N.C.
 Fredonia, N.Y.
 Fredonia, N.Y.

Honorary Members

Rocco R. Doino, Ed.D., '52
 Gileen W. French
 Richard A. Gilman, Ph.D.
 Stan Lundine, J.D.
 Douglas H. Manly
 Robert A. Maytum
 James H. Mintun Jr.

Fredonia, N.Y.
 Dunkirk, N.Y.
 Fredonia, N.Y.
 Ashville, N.Y.
 Fredonia, N.Y.
 Dunkirk, N.Y.
 Fredonia, N.Y.

J. Brien Murphy, Ed.D., '53, '56
 Edward C. Steele
 Kenneth W. Strickler
 Nancy L. Yocum, CPA, '90
 Jeffrey J. Wallace Sr., Ph.D.
 Henry K. (Mike) Williams IV

Fredonia, N.Y.
 Hobe Sound, Fla.
 Jamestown, N.Y.
 Fredonia, N.Y.
 Fairlawn, Ohio
 Fredonia, N.Y.

Fredonia Alumni Association Board of Directors

Greg Gibbs, Ph.D., '71, *President*
 Betsy Dixon-Lang, '84, *Vice President*
 Patrick Newell, '08, *Secretary*
 Tammy Wilson Prior, '00, '03 *Treasurer*
 Eileen Star Batrouny, '67
 Diane Rzepkowski Chodan, '71
 April Diodato, '09
 David Fountaine, Ph.D., '79
 Virginia S. Horvath, Ph.D., *President*, SUNY Fredonia
 Emma Sharp McFayden, '76
 Dennis McGrath, Esq., '79
 Daniel D. Parker, '86
 Darrin Paschke, '92
 Kevin Porteus, '85
 Christopher P. Reybrouck, '08
 Robert J. Smith, '71
 Carol A.J. Stanley
 James Sturm, '88
 David M. Tiffany, Ph.D., *Vice President for University Advancement*, SUNY Fredonia
 Clifton C. Turner, '84
 Sherryl Weems, Ed.D. '76
 Laura Bonomo Wrubel, '71
 Patricia A. Feraldi, '77, *Director of Alumni Affairs*.
 Joanne Pagano Bohn, *Secretary to the Board*

Hamburg, N.Y.
 Dunkirk, N.Y.
 Fredonia, N.Y.
 Williamsville, N.Y.
 Fredonia, N.Y.
 Dunkirk, N.Y.
 Fredonia, N.Y.
 Hamburg, N.Y.
 Fredonia, N.Y.
 Williamsville, N.Y.
 Hamburg, N.Y.
 Fredonia, N.Y.
 Fredonia, N.Y.
 West Seneca, N.Y.
 Niagara Falls, N.Y.
 Hamburg, N.Y.
 Charlottesville, Va.
 Lake View, N.Y.
 Fredonia, N.Y.
 White Plains, N.Y.
 Buffalo, N.Y.
 Geneseo, N.Y.
 Buffalo, N.Y.
 Fredonia, N.Y.

Fredonia Campus Administration

VIRGINIA SHAEFER HORVATH, *President*
Kent State University, Ph.D.

SAUNDRA LIGGINS, *Interim Director of Affirmative Action*
University of California, San Diego, Ph.D.

DENISE M. SZALKOWSKI, *Assistant to the President*
SUNY Empire State College, B.S.
President's Award for Excellence 2012

Academic Affairs

KEVIN P. KEARNS, *Interim Provost and Vice President for Academic Affairs*
University of Kansas, Ph.D.

RUSSELL P. BOISJOLY, *Dean of the School of Business*
Indiana University, D.B.A.

CHRISTINE C. GIVNER, *Dean of the College of Education*
University of Pittsburgh, Ph.D.

MELINDA A. KARNES, *Associate Provost for Curriculum and Academic Support*
Saint Louis University, Ph.D.

JOHN L. KIJINSKI, *Dean of the College of Arts and Sciences*
University of Wisconsin-Madison, Ph.D.

KAREN S. KLOSE, *Associate Provost for Information Technology*
SUNY Fredonia, M.S.Ed.

ERIC L. SKOWRONSKI, *Director of Lifelong Learning and Special Programs*
Syracuse University, M.B.A.

RANDOLPH GADIKIAN, *Director of Reed Library*
SUNY Buffalo, M.L.S.

Administration

ANN ALDRICH, *Interim Director of Budget*
SUNY Fredonia, B.S.

ANGELICA ASTRY, *Revenue Accountant*
University of Phoenix, M.B.A.

AMY BEERS, *Director of Internal Control*
SUNY Fredonia, B.A.

LYNN BOWERS, *Director of Student Accounts*
SUNY Fredonia, B.S.

KEVIN CLOOS, *Director of Facilities Services*
Rochester Institute of Technology, B.S.
The State University Chancellor's Award for Excellence in Professional Service

RACHAEL COON, *Financial Analyst*
SUNY Fredonia, B.S.

SUSAN CORTES, *Director of University Payroll Services*
SUNY Fredonia, B.A.

JENNIFER J. COSTA, *Coordinator of Classified/RF Benefits, and Immigration*
SUNY Empire, M.B.A.

MICHAEL DALEY, *Director of Human Resources*
University of New Haven, M.B.A.

MARK DELCAMP, *Assistant Director of Facilities Services/Custodial Services*
Jamestown Community College, A.S.

LAURIE ENSIGN, *Assistant Director of Human Resources, Employee Benefits*
Bryant & Stratton, A.O.S.

GRETCHEN A. FRONCZAK, *Capital Project Assistant*
SUNY Fredonia, B.S.

MICHAEL J. JACKINO, *Assistant Director of Facilities Services/Technical Services*
Alfred State College, A.O.S.

MARKUS KESSLER, *Director of Facilities Planning*
SUNY Buffalo, M.ARCH.

JUDY L. LANGWORTHY, *Interim Associate Vice President for Administration*
Warren National University, D.B.A.

SARAH E. LAURIE, *Environmental Safety & Sustainability Specialist*
SUNY Fredonia, M.S.

ROBERT G. LAWSON, *Assistant Director of Facilities Services Capital Projects/Energy & HVAC*
SUNY Fredonia, B.A.

LISA MARRANO, *Associate Director of Student Accounts*
SUNY Fredonia, B.S.
President's Award for Excellence, 2006

SHARI MILLER, *Director of Purchasing*
SUNY Fredonia, B.S.

SHANNON L. MOORE, *Assistant Director of Facilities Planning/Contract Administration*
SUNY Empire, M.B.A.

SANDRA NOBLE, *Director of University Accounting*
SUNY Empire College, B.S.

ANNE PODOLAK, *Director of Environmental Health and Safety*
SUNY Brockport, M.A.

KAREN R. PORPIGLIA, *Interim Vice President for Administration*
Niagara University, B.S.

JODI RZEPKA, *Associate Director of Human Resources*
SUNY Buffalo, M.B.A.

DARIN R.A. SCHULZ, *Executive Director of Faculty Student Association*
SUNY College at Buffalo, M.A.

SOTERIS TZITZIS, *Director of University Services*
Erie Community College, A.S.

Admissions

CHRISTOPHER DEARTH, *Director*
Duquesne University, M.A.

ELIZABETH A. CURTIN-O'BRIEN, *Associate Director*
SUNY 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 College, M.S.

CORY BEZEK, *Assistant Director*
Vanderbilt University, M.Ed.

JESSICA GATTO, *Assistant Director*
Canisius College, M.A.

ERICA ARLEQUIN, *Admissions Counselor*
Alfred University, M.A.

Athletics and Recreation

ERIK BARKLEY, *ATC*
Southeast Missouri State University, M.S.

JOSEPH BAUDO, *Assistant Athletic Director*
Hamilton College, B.A.

GEOFF BRAUN, *Volleyball Coach*
SUNY Cortland, B.S.

JOSEPH CALARCO, *Tennis Coach*
SUNY Fredonia, M.A.

CHRISTOPHER CASE, *Women's Soccer and Lacrosse Coach*
SUNY Fredonia, B.S.

PATRICK J. GONDEK, *Men's Soccer Coach*
SUNY Cortland, M.S.

NICOLE LOUDIN, *Women's Softball Coach*
Baldwin-Wallace College, B.S.

JEFFREY S. MEREDITH, *Hockey Coach*
The Ohio State University, M.A.

KEVIN MOORE, *Men's Basketball Coach*
Mansfield University, M.A.

MATT PALISIN, *Men's Baseball Coach*
Penn State-Behrend, B.S.

GREGORY D. PRECHTL, *Director of Athletics*
SUNY Fredonia, M.A.
The State University Chancellor's Award for Excellence in Professional Service
President's Award for Excellence, 2006

JEROME REILLY, *Sports Information Director*
St. Bonaventure University, B.A.

KATIE PUCCI-SCHAEFER, *Cheerleading Coach*
SUNY Fredonia, M.S.Ed.

ALICIA SIMMONDS, *Assistant ATC*
California University of Pennsylvania, M.S.

MEGAN VALENTINE, *Assistant Athletic Director*
Bowling Green State University, M.Ed.

ARTHUR A. WANG, *Men's and Women's Swim Coach*
SUNY Cortland, M.Ed.

DESHAYA WILLIAMS, *Assistant Coach, Track & Field*
Penn State University, M.Ed.

THOMAS A. WILSON, *Coach, Men's and Women's Cross-Country and Track*
SUNY Fredonia, B.A.

DONNA WISE, *Women's Basketball Coach*
Millersville University, M.Ed.

Career Development

TRACY COLLINGWOOD, *Director*
SUNY Buffalo, Ed.M.

MARJORIE MALONEY PLAISTER, *Assistant Director*
SUNY College at Buffalo, M.S.

CHRISTOPHER LaGROW, *Assistant Director*
SUNY College at Buffalo, M.S.

JENNIFER CINQUE, *Internship Coordinator and Career Counselor*
SUNY Fredonia, M.S.

Counseling Center

SALLY TURNER, *Director*
University of South Dakota, Ed.D.
President's Award for Excellence, 2008

TRACY STENGER, *Assistant Director*
SUNY Buffalo, Ph.D.

LEANNA WHITE, *Senior Counselor*
University of Missouri-Columbia, Ph.D.
President's Award for Excellence, 2011

JEFF JANICKI, *Professional Counselor*
Gannon University, M.S.

JULIE BEZEK, *Substance Abuse and Violence Prevention Coordinator*
Bowling Green State University, M.A.

Disability (Academic) Support for Students

(see Learning Center)

Educational Development Program

JANET A. KNAPP, *Senior Counselor*
Canisius College, M.S.

RACHEL SKEMER, *Counselor*
SUNY College at Buffalo, M.S.

DAVID M. WHITE, *Director*
SUNY College at Buffalo, M.S.

Faculty Student Association

DARIN R. A. SCHULZ, *FSA Executive Director*
Pennsylvania State University, B.S.
SUNY College at Buffalo M.A.

KAREN BARNETT, *Executive Assistant*
Jamestown Community College, A.S.

MICHELLE KOWALSKI, *Director of Human Resources*

Canisius College, B.S.

ERIC JOHNSON, *Director of Information Technology*
Jamestown Community College, A.A.S.

MICHAEL PROFFER, *Director of Dining Services*
University of Missouri at Columbia, M.A.
SUNY Fredonia, M.A.

MATTHEW SNYDER, *Controller*
SUNY Oswego, B.S.

KATIE THIES, *Special Programs Manager*
St. Bonaventure University, B.B.A.

RONALD WASIK, *Director of Support Services*
SUNY Fredonia, B.S.

CHRISTOPHER ZENNS, *Director of Retail Operations*
SUNY Fredonia, B.A.

Field Experiences

ANN MARIE LOUGHLIN, *Director*
Adelphi University, M.A.

DEBRA KARPINSKE-KEYSER, *Assistant Director*
Mercyhurst University, M.S. S.Ed.

Financial Aid

DANIEL M. TRAMUTA, *Associate Vice President for Enrollment Services*
SUNY Fredonia, M.S.Ed.

JEREMY CORRENTE, *Assistant Director of Financial Aid*
SUNY College at Buffalo, M.S.

MEGAN A. MACKOWIAK, *Assistant Director of Financial Aid*
SUNY College at Buffalo, M.S.

SARAH A. MILLER, *Financial Aid Counselor*
SUNY College at Buffalo, M.S.

Graduate Studies & Research

KEVIN P. KEARNS, *Interim Provost and Vice President for Academic Affairs*
University of Kansas, Ph.D.

LAUREN KICAK, *Graduate Admissions Assistant*
SUNY Fredonia, M.S.

Health Center

PATRICIA BORIS, N.P., *Nurse Practitioner, Director of Health Center*
SUNY Buffalo, M.S.

DEBORAH DIBBLE, N.P., *Nurse Practitioner*
Syracuse University, M.S.

CAROL CALARCO, R.N., *Registered Nurse I*
Jamestown Community College, A.A.S.

TERI SEIBERT, R.N.C., *Registered Nurse II*
SUNY Buffalo, B.S.N.

SHERRY SMALL, R.N., *Registered Nurse I*
SUNY Brockport, B.S.N.

MARY PRICE, R.N., *Registered Nurse II*
Millard Fillmore Hospital School of Nursing

FRANCES POLITO, M.T. (ASCP), *Medical Technologist*
SUNY Fredonia, B.S.

Information Technology Services

KAREN S. KLOSE, *Associate Provost*
SUNY Fredonia, M.S. Ed.

SANDRA A. LEWIS, *Instructional Support Specialist*
Marquette University, M.S.

Data Communications Team

BRUCE WILGER, *Data Communications Team Leader*
SUNY Fredonia, B.S.

JOSEPH BAXTER, *Network Security Administrator*
SUNY Fredonia, B.S.
Certified Information Systems Security Professional (CISSP)
Cisco Certified Networking Associate (CCNA)

JOSEPH J. NOCEK, *Network Technician*
SUNY Environmental Science and Forestry, B.S.

Help Desk Team

CATHERINE ZAKRZEWSKI, *Help Desk Team Leader*
University of Phoenix, B.A.

LUCAS FOUNTAIN, *Macintosh Help Desk Consultant/Technician*
SUNY Fredonia, B.S.

AMY MUSCATO, *Help Desk Consultant/Technician*
SUNY Fredonia, B.S.

NICHOLAS NOWAKOWSKI, *Windows Help Desk Consultant/Technician*
SUNY Brockport, B.S.

DAVID TORRES, *Help Desk Support Specialist*
Microsoft Certified Professional
Apple Certified Support Professional
ComTIA Network+CompTIA Server+
CompTIA Linux+
CompTIA iNet+

ITS Multimedia Team

T. JOHN McCUNE, *Multimedia Team Leader*
Colorado Technical University, M.S.
Apple Certified Support Professional

DOUG JOHNSON, *Multimedia Specialist*
Jamestown Community College, A.A.S.

DENISE MAZE, *Instructional Support Assistant*
Jamestown Community College, A.A.S.

SALLY MORAN, *Instructional Support Assistant*

CHARLOTTE MORSE, *Graphic Artist*
Rochester Institute of Technology, B.F.A.
President's Award for Excellence, 2010

GREG SNOW, *Audio Systems Engineer*
CompTIA A+

ANDREA WASIURA, *Instructional Support Assistant*
SUNY Fredonia, B.S.

Production Team

KEVIN LANE, *Production Team Leader*
SUNY Fredonia, B.S.

RICHARD P. BARTKOWIAK, *Database Administrator*
University of Rochester, M.B.A.

GARY VANDE VELDE, *System Support Specialist*

Programming Team

CHRISTOPHER E. LEWIS, *Programming Team Leader*
Marquette University, Ph.D.

SALLY CRIST, *Lead Programmer Analyst*
SUNY Fredonia, B.S.

LINDA IPPOLITO, *Lead Programmer Analyst*
SUNY Fredonia, M.S.

DARIN YOHE, *Programmer Analyst*
SUNY Fredonia, B.S.

Systems Team

FREDERICK D. ULLMAN, *Systems Team Leader*
Clarkson University, Ph.D.

MICHAEL GERHOLDT, *DBA and Senior Programmer Analyst*
Luther Theological Seminary, M.Div.

SCOTT GRIEN, *Systems Administrator*
SUNY College at Alfred, A.A.S.

IDALIA TORRES, *Lead Programmer Analyst Systems Administration*
University of Puerto Rico, B.S.

Project Management

JANET MAYER, *Project Manager*
Ohio University, M.A.
San Diego State University, Instructional Technology Certificate

JULIE SCHAEFFER, *Applications Specialist*
SUNY College at Buffalo, M.S.

Institutional Research and Planning

XIAO YING ZHANG, *Director*
Mississippi State University, Ph.D.

International Education Center

MARY S. SASSO, *Director*
SUNY College at Buffalo, M.S.

ANDREW PLATT, *Assistant Director*
SUNY Fredonia, M.A.

Learning Center

LIZA N. SMITH, *Director and 3-1-3 Program Director*
SUNY College at Buffalo, M.S.

ADAM HINO, *Coordinator, Disability (Academic) Services for Students*
St. Bonaventure University, M.S.Ed.

AMY LECLAIR, *Coordinator of Academic Advising & Liberal Arts*
SUNY Institute of Technology, M.S.

KIMBERLY MEAD-COLEGROVE, *Full Opportunity Program Director and Learning Center Counselor*
Michigan State, M.A.

VICTORIA WEST, *Assistant Director*
SUNY Fredonia, M.A.

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

PATRICK L. ROCHELEAU, *Assistant Director*
New York University, M.F.A.

ERIC C. HADLEY, *Operations Manager/Technical Director*
SUNY Fredonia, B.F.A.

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

AVERL R. OTIS, *Director of Multicultural Affairs*
Central Connecticut State University, 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.

CHRISTOPHER TAVERNA, *Coordinator of Technology Training*
SUNY Fredonia, B.S.
Microsoft Certified Desktop Support Technician and Systems Engineer (MCDST)
Microsoft Certified Systems Administrator (MCSA)
Microsoft Certified Systems Engineer (MCSE)

CHERYL DEARTH, *Instructional Support Assistant*
Richard Stockton College, B.S.

Registrar

SCOTT D. SAUNDERS, *Registrar*
SUNY Cortland, B.S.

KRISTIN A. DOBMEIER, *Assistant Registrar*
Canisius College, B.S.

HELEN LEYSATH, *Transfer Coordinator*
SUNY College at Buffalo, M.S.

Residence Life

GARY L. BICE JR., *Director*
Ball State University, M.A.

AMY C. MURROCK, *Associate Director*
SUNY College at Buffalo, M.S.

KATHY ANN FORSTER, *Associate Director*
SUNY College at Buffalo, M.S.

BENJAMIN HARTUNG, *Systems Administrator*
SUNY Institute of Technology at Utica/Rome, M.B.A.
Certified Information Systems Security Professional
(CISSP)
Project Management Professional (PMP)

VACANT, *ResNet Coordinator*

Sponsored Programs

MAGGIE BRYAN-PETERSON, CRA, *Director*
Purdue University, M.A.
The State University Chancellor's Award for Excellence in Professional Service

CATHERINE KILPATRICK, CRA, *Associate Director*
University of Wisconsin at Madison, B.A.
SUNY Fredonia, B.S.

HEIDI MOLDENHAUER, *Grants Management Specialist*
St. Bonaventure University, M.B.A.

AMY CUHEL-SCHUCKERS, *Grants Development Specialist*
Unification Theological Seminary, Diploma

Student Accounts

ANGELICA ASTRY, *Revenue Accountant*
University of Phoenix, M.B.A.

LYNN BOWERS, *Director of Student Accounts*
SUNY Fredonia, B.S.

LISA MARRANO, *Associate Director of Student Accounts*
SUNY Fredonia, B.S.
President's Award for Excellence, 2006

Student Affairs

DAVID E. HERMAN, *Vice President for Student Affairs*
Kent State University, Ph.D.

DANIEL M. TRAMUTA, *Associate Vice President for Enrollment Services*
SUNY Fredonia, M.S.Ed.

MONICA J. WHITE, *Assistant Vice President for Student Affairs*

SUNY College at Buffalo, M.S.

LISA M. NEWELL, *Coordinator of Judicial Affairs*
SUNY Buffalo, M.S.

Student Services for the College of Education

NICOLE HOHENSTEIN, *Coordinator*
SUNY Fredonia, M.A.

University Advancement

DAVID M. TIFFANY, *Vice President for University Advancement*
SUNY Binghamton, Ph.D.

BETTY CATANIA GOSSETT, *Associate Vice President for University Development*
SUNY Fredonia, B.A.

MICHAEL R. BARONE, *Director of Public Relations*
SUNY Buffalo, M.B.A.

JEAN BLACKMORE, *Foundation Controller*
SUNY Fredonia, M.S.

PATRICIA A. FERALDI, *Director of Alumni Affairs*
SUNY College at Buffalo, M.S.

TIMOTHY L. MURPHY, *Director of Development*
SUNY Buffalo, Ed.M.

KAREN WEST, *Senior Director of Development*
SUNY Empire State College, M.A.

HEATHER McKEEVER, *Associate Director of Development*
SUNY Fredonia, B.S.

JUNE MILLER-SPANN, *Associate Director of Development*
SUNY Fredonia, M.A.

RICHARD J. RYAN, *Associate Director of Development*
SUNY Fredonia, B.S.

LISA G. EIKENBURG, APR, *Associate Director of Public Relations*
SUNY Fredonia, B.A.
President's Award for Excellence, 2004

NICHOLAS GUNNER, *Assistant Webmaster/Social Media Director*
SUNY Fredonia, B.S.

PATRICIA A. HERKEY, *Communications Designer*
SUNY College at Buffalo, B.S.

PAULA S. WARREN, *Publications Production Coordinator*

JONATHAN H. WOOLSON, *Assistant Director for Web Communications/Webmaster*
New York State College of Ceramics at Alfred University, B.F.A.

University Police

ANN McCARRON BURNS, *Chief*
Loras College, B.A., F.B.I. National Academy

ANDREW HUSUL, *Patrolman*

MICHAEL KARLSON, *Lieutenant*

SUNY Buffalo, B.S.

RICKY LAURITO, *Patrolman*

TAD K. MACKEY, *Patrolman*
SUNY Fredonia, B.A.

JOCELYN MARTIN, *Patrolman*
SUNY Fredonia, B.A.

SCOTT MARTIN, *Patrolman*
Erie Community College, A.A.S.

BENJAMIN A. MILLER, *Patrolman*
SUNY Fredonia, B.A.

RANDALL M. MOORE, *Lieutenant*
Utica College of Syracuse University, B.A.
President's Award for Excellence, 2011

AARON PARKHURST, *Patrolman*
SUNY Fredonia, B.A.

JOHN RAYNOR, *Patrolman*
Mercyhurst University, M.S.

NATHAN SMITH, *Patrolman*
SUNY Fredonia, B.A.

BRIAN STUDLEY, *Lieutenant*
Erie Community College, A.A.

LOUIS SZCZUKOWSKI, *Patrolman*
SUNY Fredonia, B.A.

CLIFTON B. WHEELER, *Lieutenant*
The SUNY Chancellor's Award in Excellence for Classified Service

Veterans Affairs

BENJAMIN D. HARTUNG, *Veterans Affairs Administrator*
SUNY Institute of Technology at Utica/Rome, M.B.A.
Certified Information Systems Security Professional
(CISSP)
Project Management Professional (PMP)

Williams Center/Campus Life

MICHAEL C. LEMIEUX, *Director of Campus Life and Williams Center*
SUNY Buffalo, Ed.M.
The State University Chancellor's Award for Excellence in Professional Service

ERIN MROCZKA, *Assistant Director*
SUNY Fredonia, B.A.

MARK SUIDA, *Assistant Director*
SUNY College at Buffalo, M.S.

JOYCE H. SMITH, *Coordinator of Volunteer and Community Services*
West Virginia University, M.S.

VINCE GUGINO, *General Manager, Student Association*
SUNY Fredonia, B.S.

Faculty

Distinguished Professor

JAMES P. PIORKOWSKI, *Music*
ALBERTO REY, *Visual Arts and New Media*
RICHARD M. WEIST, *Psychology*

Distinguished Teaching Professors

RAYMOND ANGELO BELLIO, *Philosophy*
ROBERT BOOTH, *Visual Arts and New Media*
JAMES HURTGEN, *Political Science*
THOMAS LOUGHLIN, *Theatre and Dance*
JULIE NEWELL, *Music*
THEODORE L. STEINBERG, *English*
CLARK M. ZLOTCH, *Modern Languages and Literatures*

Distinguished Service Professors

JACK CROXTON, *Psychology*
TED SCHWALBE, *Communication*
H. JOSEPH STRAIGHT, *Mathematical Sciences*

Emeritus Faculty and Staff

RONALD AMBROSETTI, *English*
MINDA RAE AMIRAN, *English*
PAUL ANDREWS, *Counseling*
JOHN J. BANKOSH JR., *Business Administration*
GARY BARBER, *Library*
CARRIE M. BARR, *Library*
MARILYN A. BARRESI, *Education*
JEAN G. BENNETT, *Counseling Center*
TRACY S. BENNETT, *Administration*
ALLEN H. BENTON, *Biology*
DANIEL BERGGREN, *Communication*
JOHN L. BERKLEY, *Geosciences*
SUSAN BESEMER, *Library*
MARVIN BJURLIN, *Visual Arts and New Media*
CAROL BLANCHARD-ROCHELEAU, *Theatre and Dance*
DONALD BOHLEN, *Music*
J. DENIS BOLTON, *Admissions*
PAUL BOWERS, *Visual Arts and New Media*
NANCY BOWSER, *Registrar*
LEE BRAUDE, *Sociology/Anthropology*
CAROLYN BRIGGS, *Development/College Relations*
GEORGE BROWDER, *History*
DAVID BURDETTE, *Administration*
JOAN A. BURKE, *English*
FREDERICK BYHAM, *Mathematics*
DIANA CARPUS, *ITS Administration*
THOMAS CASTELLANA, *Theatre and Dance*
TAT HUNG CHAN, *Computer and Information Sciences*
MARY CHARBONNET, *Theatre and Dance*
JOSEPH CHILBERG, *Communication*
BRUCE CHILTON, *Mathematics*
OSVALDO CHINCHON, *Foreign Languages and Literatures*
JOSEPH J. CHOUINARD, *Library*
WILLIAM S. CLARK, *Admissions*
SYLVIA CLARKE, *Environmental Health and Safety*
SANDRA COLVENBACK, *Administration*
CHARLES R. COLVIN, *Education*
MICHAEL J. CONLEY, *Learning Center*

JOHN E. CONNELLY, *Education*
ROBERT E. COON, *Administration*
VINCENT COURTNEY, *Library*
PATRICK L. COURTS, *English*
PATRICK R. DAMORE, *Health, Physical Education and Athletics*
ARTHUR E. DANESE, *Mathematics*
DONNA M. DANIELSEN, *Field Experiences*
ELIZABETH DARLING, *Physical Education*
PAUL O. DAVEY, *Physics*
CHRISTINE DAVIS MANTAI, *Media Relations*
PENNY DEAKIN, *English/Learning Center*
ROBERT DEMING, *English*
L. MICHAEL DIMITRI, *Administration*
THERESA DISPENZA, *Administration*
DANIEL DOBEY, *Curriculum and Instruction*
ANDREA S. DOMST, *Chemistry*
MORGAN D. DOWD, *Political Science*
RICHARD DOWDS, *Mathematics*
JAMES EAST, *Music*
PHYLLIS EAST, *Music*
GARY ECKHART, *Theatre and Dance*
MARIANNE EIMER, *Library*
JUDITH ELWINGER, *Career Development*
JACK ERICSON, *Library*
DAVID EVANS, *Music*
MARIO FALCAO, *Music*
LEONARD FAULK JR., *Political Science, Administration*
CARL FERRARO, *Visual Arts and New Media*
WILLIAM FOELLER, *Economics*
KEVIN FOX, *Biology*
THEODORE C. FRAZEUR, *Music*
VIVIAN GARCIA, *Advising Center*
GIL GAUDIA, *Education*
H. BERNARD GERLING, *Human Resources*
JOHN GILLETTE, *Music*
LINDA GILLETTE, *Music*
RICHARD A. GILMAN, *Geosciences*
JOAN L. GLENZER, *Administration*
JOHN A. GLENZER, *Education*
THOMAS GOETZ, *Modern Languages and Literatures*
RICHARD J. GOODMAN, *Lifelong Learning/International Programs/Economic Development*
WILLIAM GRAEBNER, *History*
MICHAEL GRASSO, *Physics/Cooperative Engineering*
JULIUS GREENSTEIN, *Biology*
DARWIN C. GUSTAVSON, *I.T.S. Academic Information Technology*
GREGORY HARPER, *Language, Learning and Leadership*
WALTER S. HARTLEY, *Music*
WILLIAM B. HARTLEY, *Business Administration*
DENNIS L. HEFNER, *Economics*
ROBERT L. HEICHBERGER, *Education*
DAVID HESS, *Administration*
FREEMAN L. HOCKENBERGER, *Instructional Resources Center*
JOHN T. HOFMANN, *Music*
JAMES HUFFMAN, *English*
JOHN HUGHSON, *Visual Arts and New Media*
ROBERT JORDAN, *Music*
CHARLES JOSEPH, *Music*
WILLIAM J. JUNGELS, *Communication*
DAVID KASPER, *Campus Life*
JO ANN KAUFMAN, *Reed Library*
TESFAI KFLU, *Library*
ROBERT KLASSEN, *Theatre and Dance*
MARVIN KOHL, *Philosophy*

PETER KOMADA, *Computing Services*
 JON KRAUS, *Political Science*
 PHILIP KUMLER, *Chemistry*
 HAROLD KWASNIEWSKI, *University Advancement*
 DONALD P. LANG, *Music*
 DAVID L. LARSON, *Business Administration, Sociology*
 RICHARD LARSON, *Music*
 EDWIN D. LAWSON, *Psychology*
 PATRICIA LEFFERTS, *Purchasing*
 WILLIAM LESLIE, *Mathematics/Computer and Information Sciences*
 RICHARD LEVA, *Psychology*
 THEROLD LINDQUIST, *Art*
 LEONORE LOFT, *Modern Languages and Literatures*
 PAULA LUCAS, *College Services*
 KENNETH LUCEY, *Philosophy*
 MATTHEW LUDS, *Education*
 DAVID LUDLAM, *Education*
 DAVID LUNDE, *English*
 MARY LEE LUNDE, *Visual Arts and New Media*
 RICHARD O. LUNDQUIST, *Business Administration*
 MARVIN LUNENFELD, *History*
 MYRON LUNTZ, *Physics*
 DONALD A. MacPHEE, *Administration*
 HEIDI L. MAHONEY, *Planning*
 JOHN MALCOLM, *Communication*
 JEAN M. MALINOSKI, *Administration*
 BARBARA MALLETT, *Language, Learning and Leadership*
 KENNETH E. MANTAI, *Biology*
 ROBERT MANZELLA, *Speech Pathology and Audiology*
 JOANNE MARTONIS, *Academic Advising*
 W. STEPHEN MAYO, *School of Music*
 DONALD McFARLAND, *Education*
 JAMES E. McKENNA, *Mathematical Sciences*
 RAYMOND McLAIN, *Sociology/Anthropology*
 PATRICK T. McMULLEN, *Music*
 JULIAN McQUISTON, *History*
 KAREN MILLS-COURTS, *English*
 JOHN F. MORAN, *Library*
 ALVIN H. MORRISON, *Anthropology*
 THOMAS MORRISSEY, *History*
 PHILIP S. MORSE, *Education*
 WILLIAM MULLER, *Political Science*
 RAYMOND MUNSON, *Physical Facilities*
 J. BRIEN MURPHY, *Education*
 JOSEPH MUSCARELLA, *Health Services*
 MALCOLM NELSON, *English*
 MICHELE NOTTE, *Speech Pathology and Audiology*
 RICHARD NOTTE, *Institutional Studies*
 JOHN A. ONUFRACK, *Speech Pathology and Audiology*
 MAX OPPENHEIMER, JR., *Foreign Languages and Literatures*
 DANIEL C. O'ROURKE, *Human Resources*
 MARGARET PABST, *Library*
 R. DAVID PALMER, *Philosophy*
 JO ANN PARLA, *Education*
 SUBRA PENDYALA, *Physics*
 ANDREE PENOT, *Foreign Languages and Literatures*
 DENNIS PEREZ, *Speech Pathology and Audiology*
 JANNIS PETERSON, *Music*
 KEITH PETERSON, *Music*
 EVERETT J. PHILLIPS, *Health, Physical Education, Athletics and Dance*
 ALBERT POLIMENI, *Mathematics*
 COLIN PLAISTER, *I.T.S. Academic Information Technology*
 CAROL PREVET, *Theatre and Dance*

THOMAS PREVET, *Health, Wellness and Recreation*
 WILLIAM PROWELLER, *Art*
 FRANK L. PULLANO, *Music*
 W. DIRK RAAT, *History*
 JOHN RAMSEY, *English*
 REGINA B. REED, *English*
 STEPHEN REES, *Theatre and Dance*
 THOMAS REGELSKI, *Music*
 DANIEL REIFF, *Visual Arts and New Media*
 ROS RITCHIE, *Music*
 SISTER FRANCES ROBERTS, *Music*
 PAULA B. RODEN, *Education*
 HAROLD ROEDER, *Education*
 JERRY D. ROSE, *Sociology/Anthropology*
 DANIEL ROSELLE, *History*
 J. CARTER ROWLAND, *English*
 DAVID RUSCH, *I.T.S. Academic Information Technology*
 THOMAS RYWICK, *Psychology*
 FRANCISKA SAFRAN, *Library*
 MARGARET W. SAWKINS-HASTIE, *Education*
 ELIZABETH SCARBOROUGH, *Psychology*
 MORTON SCHAGRIN, *Philosophy*
 WILLIAM SCHALL, *Education*
 PETER SCHOENBACH, *Music*
 PAUL SCHONHART, *College Services*
 L. WALTER SCHULTZE, *Institutional Studies*
 GEORGE SEBOUHIAN, *English*
 NAIM A. SEFEIN, *Education*
 BARBARA SERVATIUS, *Student Accounts*
 ALFRED SHALKOWSKI, *Physical Facilities*
 MOTI L. SHARMA, *Biology*
 RICHARD F. SHEIL, *Music*
 DOUGLAS H. SHEPARD, *English*
 WINIFRED O. SHEPARD, *Psychology*
 JAMES SHOKOFF, *English*
 RUTH SHOKOFF, *Visual Arts*
 A. CUTLER SILLIMAN, *Music*
 PETER SINDEN, *Sociology*
 ANTHONY SIRAGUSO, *Physical Facilities*
 JOHN S. SLAUGHTER, *Psychology*
 MARTHA SMITH, *Student Accounts*
 RODNEY F. SMITH, *Business Administration*
 B. JOYCE STEPHENS, *Sociology/Anthropology*
 JOHN STINSON, *English*
 LAURA STONEFOOT, *Student Affairs*
 JAMES SYMULA, *English*
 VALERE THADEN, *Creative Support Services*
 HARRY W. THOMAS, *ITS, Academic Information Technology*
 JACQUELINE TRACE, *English*
 JAMES ULRICH, *Health, Physical Education, Athletics and Dance*
 MICHAEL VANDE VELDE, *ITS-Computing Services*
 ARTHUR WALKER, *ITS-Academic Information Technology*
 STEPHEN WARNER, *English*
 HARRY WATTERS, *Residence Life*
 RICHARD M. WEIST, *Psychology*
 TERRY L. WEAVER, *Biology*
 ALPHONSE E. WEDZIK, *Registrar*
 RICHARD WEIST, *Psychology*
 HOWARD WESCOTT, *Modern Languages and Literatures*
 ALAN H. WHEELER, *Educational Studies*
 YVONNE WILENSKY, *Library*
 CONSTANCE WILLEFORD, *Music*
 RONALD WINKLER, *Facilities Management*
 KENNETH G. WOOD, *Biology*

LAURENCE WYMAN, *Music*
 JERE WYSONG, *Sociology/Anthropology*
 FAWZI YAQUB, *Mathematics*
 WAYNE N. YUNGHANS, *Biology*
 SHARON ZABLOTNEY, *Biology*
 MARVIN ZASTROW, *Mathematics/Computer Science*
 SANFORD J. ZEMAN, *Administration*

Biology

PATRICIA SMITH ASTRY, *Assistant Professor*
 SUNY Fredonia, M.S., M.T. (ASCP)
President's Award for Excellence, 2001

WILLIAM D. BROWN, *Professor*
 University of Toronto, Ph.D.

ROGER A. BYRNE, *Professor*
 Louisiana State University, Ph.D.

SCOTT B. FERGUSON, *Assistant Professor*
 The University of Pennsylvania School of Medicine, Ph.D.

MATTHEW FOUNTAIN, *Associate Professor*
 University of Rochester, Ph.D.

FREDERICK HARRINGTON, *Visiting Assistant Professor*
 Michigan State University, Ph.D.

W. THEODORE LEE, *Professor*
 Syracuse University, Ph.D.

KARRY A. KAZIAL, *Associate Professor*
 The Ohio State University, Ph.D.

EDWARD J. McCARRICK, *Instructional Support Assistant*
 SUNY Fredonia, B.S.

SCOTT A. MEDLER, *Assistant Professor*
 Louisiana State University, Ph.D.

JONATHAN H. TITUS, *Associate Professor*
 University of Washington, Ph.D.

BRUCE TOMLINSON, *Associate Professor*
 University of Waterloo, Ph.D.
The State University Chancellor's Award for Excellence in Teaching
President's Award for Excellence, 1995

Business Administration

SEYED-MAHMOUD AGHAZADEH, *Professor*
 University of Nebraska, Ph.D.

SHAM D. BAHGAT, *Lecturer*
 SUNY Fredonia, B.S.; C.P.A.

DEBORA K. BECERRA, *Lecturer*
 Case Western Reserve University, L.L.M.

RUSSELL P. BOISJOLY, *Professor*
 Indiana University, D.B.A.

JENNIFER A. CAMERON, *Lecturer*
 George Washington University, M.B.A.

JULIE FITZPATRICK, *Assistant Professor*
 SUNY Buffalo, Ph.D.

GRACE E. M. GERRITY, *Lecturer*
 Hofstra University, M.B.A.

LINDA A. HALL, *Associate Professor*
 SUNY Buffalo, Ph.D.; C.P.A.
 The SUNY Chancellor's Award for Excellence in Teaching

FREDERICK A. LARSON, *Lecturer*
 Yale University, J.D.

LOUANN LAURITO-BAHGAT, *Lecturer*
 SUNY Fredonia, B.S.; C.P.A.

SUSAN F. McNAMARA, *Assistant Professor*
 Purdue University, Ph.D.

PATRICK E. MINER, *Lecturer*
 Canisius College, M.B.A.

SHAZAD M. MOHAMMED, *Assistant Professor*
 Florida International University, Ph.D.

CHERYL A. MOORE, *Lecturer*
 DeVry University, M.B.A.

LAURA NAPOLI, *Lecturer*
 SUNY Fredonia, B.S.; C.P.A.

JOHN OLSAVSKY, *Assistant Professor*
 Robert Morris College, M.S.; C.P.A.

ARMAND J. PETRI, *Visiting Assistant Professor*
 SUNY Buffalo, M.A.

KENNETH J. PLUCINSKI, *Associate Professor*
 University of Pittsburgh, M.B.A.; C.P.A.

RICHARD M. ROBINSON, *Professor*
 University of Oregon, Ph.D.

TIMOTHY P. ROWE, *Lecturer*
 Gannon University, M.P.A.

MOJTABA SEYEDIAN, *Professor*
 SUNY Binghamton, Ph.D.

STUART B. SHAPIRO, *Lecturer*
 SUNY Buffalo, J.D.

ERIC L. SKOWRONSKI, *Lecturer*
 Syracuse University, M.B.A.

CHARLES S. V. TELLY, *Professor*
 University of Washington, Ph.D.;
 SUNY Buffalo, J.D.; Columbia University, J.S.D.

LISA M. WALTERS, *Visiting Assistant Professor*
 California Coast University, Ph.D.

TAIHYEUP YI, *Assistant Professor*
 Temple University, Ph.D.

Chemistry and Biochemistry

JAMES BOWSER, *Professor*
 Duke University, Ph.D.

MATTHEW FOUNTAIN, *Associate Professor*
 University of Rochester, Ph.D.

MATTHEW GRONQUIST, *Associate Professor*
 Cornell University, Ph.D.

MARK JANIK, *Associate Professor*
 SUNY Binghamton, Ph.D.

THOMAS JANIK, *Professor*
 SUNY Buffalo, Ph.D.

HOLLY LAWSON, Associate Professor
SUNY Buffalo, Ph.D.
President's Award for Excellence, 2009

SHERRI A. MASON, Associate Professor
University of Montana, Ph.D.

MICHAEL MILLIGAN, Professor
Rensselaer Polytechnic Institute, Ph.D.

Communication

JESSICA AKEY, Assistant Professor
SUNY Buffalo, Ph.D.

BOND BENTON, Assistant Professor
University of Vienna, Ph.D.

LINDA C. BRIGANCE, Professor
University of Iowa, Ph.D.

ANN CARDEN, Associate Professor
SUNY College at Buffalo, M.S.

NEFIN DINC, Associate Professor
University of North Texas, M.F.A.

JANE JACKSON, Associate Professor
Humbolt State University, M.A.

LAURA JOHNSON, Associate Professor
University of Florida, Ph.D.

MARK KIYAK, Assistant Professor
University of Miami, M.F.A.

TRACY MARAFIOTE, Assistant Professor
University of Utah, Ph.D.

KATHLEEN McDONOUGH, Associate Professor
San Francisco State University, M.F.A.

ELMER PLOETZ, Assistant Professor
SUNY Buffalo, M.A.

TED SCHWALBE, Distinguished Service Professor
University of Southern California, Ph.D.
The State University Chancellor's Award for Excellence in Teaching

Communication Disorders and Sciences

ANNY P. CASTILLA, Assistant Professor
University of Toronto, Ph.D.

CHRISTINE G. GERBER, CCC-SLP, Clinic Supervisor
Colorado State University, M.S.

KEVIN P. KEARNS, CCC-SLP, Professor
University of Kansas, Ph.D.

TIMOTHY F. OVERBECK, CCC-SLP, Clinic Supervisor
SUNY Fredonia, M.S.

NICOLE A. PIAZZA, CCC-SLP, Clinic Supervisor
SUNY Fredonia, M.S.

BRIDGET A. RUSSELL, CCC-SLP, Associate Professor
SUNY Buffalo, Ph.D.

MELISSA A. SIDOR, CCC-SLP, Clinic Director/Placement Coordinator, Youngerman Center
SUNY Fredonia, M.S.

KIM L. TILLERY, CCC-A, Professor
SUNY Buffalo, Ph.D.
The State University Chancellor's Award for Excellence in Teaching

MARC L. WILCOX, CCC-A, Clinic Supervisor
SUNY Fredonia, M.S.Ed.

JULIE L. WILLIAMS, CCC-SLP, Clinic Supervisor
SUNY Fredonia, M.S.
The State University Chancellor's Award for Excellence in Professional Service

Computer and Information Sciences

ZIYA ARNAVUT, Professor
University of Nebraska, Ph.D.

RENETA BARNEVA, Professor
University of Sofia (Bulgaria), Ph.D.
The State University Chancellor's Award for Excellence in Scholarship and Creative Activities
Kasling Lecturer

TAT-HUNG CHAN, Associate Professor Emeritus
Cornell University, Ph.D.

JOHN A. HANSEN, Professor
Yale University, Ph.D.
William T. Hagan Young Scholar/Artist Award

NATALIE NAZARENKO, Visiting Assistant Professor
Ukrainian Academy of Sciences, Ph.D.

ROBERT OLSON, Visiting Instructor
SUNY Fredonia, M.S.

KHALID J. SIDDIQUI, Professor
Concordia University, Ph.D.
Kasling Lecturer
President's Award for Excellence, 2007

GURMUKH SINGH, Visiting Assistant Professor
Punjab University, India, Ph.D.
Kasling Lecturer

MICHAEL SZOCKI, Systems Administrator/Lecturer
SUNY Fredonia, B.S.
Hilbert College, B.S.

JUNAID ZUBAIRI, Professor
Syracuse University, Ph.D.

Curriculum and Instruction

MIRA BERKLEY, Associate Professor
SUNY Buffalo, Ph.D.

ROBERT DAHLGREN, Assistant Professor
University of Florida, Ph.D.

LAURA GERACI, Assistant Professor
SUNY Buffalo, Ph.D.

CHRISTINE GIVNER, Professor
University of Pittsburgh, Ph.D.

MICHAEL JABOT, Professor
Syracuse University, Ph.D.
The State University Chancellor's Award for Excellence in Scholarship and Creative Activities
William T. Hagan Young Scholar/Artist Award

MELINDA KARNES, *Associate Professor*
Saint Louis University, Ph.D.

ANA MARIA KLEIN, *Associate Professor*
McGill University, Quebec, Ph.D.

KATHLEEN LESNIAK, *Associate Professor*
SUNY Buffalo, Ph.D.

KAREN LINDEMAN, *Assistant Professor*
SUNY Buffalo, Ph.D.

KATHLEEN MAGIERA, *Associate Professor*
University of Pittsburgh, Ed.D.

LAWRENCE MAHEADY, *Professor*
University of Pittsburgh, Ph.D.
*The State University Chancellor's Award for Excellence in
Scholarship and Creative Activities*
William T. Hagan Young Scholar/Artist Award

JILL MARSHALL, *Associate Professor*
SUNY Buffalo, Ph.D.

JAMAR PICKREIGN, *Associate Professor*
University of Kansas, Ph.D.

CYNTHIA SMITH, *Associate Professor*
The Ohio State University, Ph.D.

GUANGYU TAN, *Assistant Professor*
Kent State University, Ph.D.

Economics

GARY BENNETT, *Lecturer*
SUNY Buffalo, M.A.

ANDY BURR, *Lecturer*
SUNY Buffalo, M.A.

MARWAN M. EI NASSER, *Professor*
The Ohio State University, Ph.D.

PAUL HOLMES, *Assistant Professor*
University of Illinois, Ph.D.

AMAR K. PARAI, *Professor*
Southern Methodist University, Ph.D.

PAUL RATKA, *Lecturer*
SUNY Buffalo, M.A.

PETER REINELT, *Assistant Professor*
University of California at Berkeley, Ph.D.

XUGUANG (SIMON) SHENG, *Assistant Professor*
SUNY Albany, Ph.D.

English

BETTY BARNARD, *Lecturer*
SUNY Fredonia, M.S.Ed.

KENTON BROWN, *Lecturer*
SUNY Fredonia, M.A.

KIM-MARIE COLE, *Associate Professor*
University of Wisconsin, Madison, Ph.D.

C. THOMAS CRAIG, *Lecturer*
SUNY Fredonia, M.A.

ANNE FEARMAN, *Lecturer*

SUNY Fredonia, M.A.

NATALIE GERBER, *Associate Professor*
University of California, Berkeley, Ph.D.

SARAH GERKENSMEYER, *Lecturer*
Cornell University, M.F.A.

JOHN GLOVACK, *Lecturer*
SUNY Buffalo, Ph.D.

KATRINA HAMILTON-KRAFT, *Lecturer*
SUNY Stony Brook, M.A.

KIRSTIN COLLINS HANLEY, *Assistant Professor*
University of Pittsburgh, Ph.D.

VIRGINIA S. HORVATH, *Professor*
Kent State University, Ph.D.

JEFFRY IOVANNONE, *Lecturer*
SUNY Buffalo, M.A.

CHRISTINA JARVIS, *Professor*
Pennsylvania State University, Ph.D.
*The State University Chancellor's Award for Excellence in
Teaching*

DOUGLAS JOHNSTON, *Lecturer*
SUNY Buffalo, Ed.M.

SCOTT JOHNSTON, *Associate Professor*
University of Nevada, Ph.D.

DAVID KAPLIN, *Assistant Professor*
Indiana University, Ph.D.

JOHN KIJINSKI, *Professor*
University of Wisconsin-Madison, Ph.D.

DANIEL LAURIE, *Lecturer*
SUNY Fredonia, M.A.

SAUNDRA LIGGINS, *Associate Professor*
University of California, San Diego, Ph.D.

SUSAN LORD, *Lecturer*
SUNY Fredonia, M.A.

ADRIENNE McCORMICK, *Professor*
University of Maryland, Ph.D.
*The State University Chancellor's Award for Excellence in
Faculty Service*

HEATHER McENTARFER, *Visiting Assistant Professor*
University of Pittsburgh, M.F.A.

SUSAN McGee, *Lecturer*
SUNY Fredonia, M.A.

SHANNON McRAE, *Associate Professor*
University of Washington, Ph.D.

JEANETTE McVICKER, *Professor*
SUNY Binghamton, Ph.D.
President's Award for Excellence, 2008

JULIA MINEEVA-BRAUN, *Lecturer*
Perm State University, M.A.

KATHRYN MOORE, *Lecturer*
SUNY Buffalo, M.A.

AIMEE NEZHUKUMATATHIL, *Associate Professor*
The Ohio State University, M.F.A.

The State University Chancellor's Award for Excellence in Scholarship and Creative Activities
William T. Hagan Young Scholar/Artist Award

DUSTIN PARSONS, *Assistant Professor*
 Kansas State University, M.A.
 Bowling Green State University, M.F.A.

ANN SIEGLE DREGE, *Associate Professor*
 University of North Dakota, Ph.D.

BRUCE SIMON, *Associate Professor*
 Princeton University, Ph.D.

SUSAN BLOOME SPANGLER, *Associate Professor*
 Illinois State University, Ph.D.

THEODORE L. STEINBERG, *Distinguished Teaching Professor*
 University of Illinois, Ph.D.
The State University Chancellor's Award for Excellence in Teaching
President's Award for Excellence, 1987

EMILY VANDETTE, *Assistant Professor*
 Pennsylvania State University, Ph.D.

BIRGER VANWESENBEECK, *Associate Professor*
 SUNY Buffalo, Ph.D.

ICLAL VANWESENBEECK, *Associate Professor*
 SUNY Buffalo, Ph.D.

LAN WANG, *Visiting Assistant Professor*
 Indiana University of Pennsylvania, Ph.D.

MELINDA WENDELL, *Visiting Assistant Professor*
 SUNY Fredonia, M.A.

Geosciences

GORDON C. BAIRD, *Professor*
 University of Rochester, Ph.D.

ANN K. DEAKIN, *Associate Professor*
 SUNY Buffalo, Ph.D.

GARY G. LASH, *Professor*
 Lehigh University, Ph.D.
William T. Hagan Young Scholar/Artist Award
Kasling Lecturer

MICHAEL P. WILSON, *Professor*
 Syracuse University, Ph.D.

History

NAJIA AARIM-HERIOT, *Associate Professor*
 Temple University, Ph.D.

TIMOTHY R. ALLAN, *Visiting Professor*
 SUNY Buffalo, Ph.D.

JOHN ARNOLD, *Assistant Professor*
 University of Arkansas, Ph.D.

PERRY BEARDSLEY, *Visiting Instructor*
 SUNY Buffalo, Ph.D.

JONI CIEHOMSKI, *Visiting Instructor*
 SUNY Buffalo, M.A.

JOHN CRAWFORD, *Lecturer*

SUNY Fredonia, M.A.

STEVEN FABIAN, *Assistant Professor*
 Dalhousie University, Ph.D.

JEFFREY GLODZIK, *Visiting Instructor*
 SUNY Buffalo, Ph.D.

NANCY HAGEDORN, *Associate Professor*
 The College of William and Mary, Ph.D.

JENNIFER HILDEBRAND, *Associate Professor*
 University of California, Riverside, Ph.D.

JEFFRY IOVANNONE, *Visiting Instructor*
 SUNY Buffalo, M.A.

DAVID KINKELA, *Associate Professor*
 New York University, Ph.D.
William T. Hagan Young Scholar/Artist Award

JANET LARKIN, *Visiting Instructor*
 SUNY Buffalo, Ph.D.

ELLEN LITWICKI, *Professor*
 University of Virginia, Ph.D.

EILEEN GROTH LYON, *Professor*
 University of Cambridge, Ph.D.

PETER McCORD, *Visiting Assistant Professor*
 University of California, Riverside, Ph.D.

ERIC MERINGER, *Assistant Professor*
 Arizona State University, Ph.D.

MARY BETH SIEVENS, *Associate Professor*
 Boston University, Ph.D.

JOHN STAPLES, *Associate Professor*
 University of Toronto, Ph.D.

EMILY STRAUS, *Assistant Professor*
 Brandeis University, Ph.D.

A. JACQUELINE SWANSINGER, *Professor*
 Rutgers University, Ph.D.
The State University Chancellor's Award for Excellence in Teaching

MARKUS P.M. VINK, *Professor*
 University of Minnesota, Ph.D.
William T. Hagan Young Scholar/Artist Award

Language, Learning and Leadership

CLARA BEIER, *Associate Professor*
 University of Arizona, Ph.D.

CINDY BIRD, *Associate Professor*
 University of Toronto, Ph.D.

XIAONING CHEN, *Assistant Professor*
 Purdue University, Ph.D.

CARRIE FITZGERALD, *Assistant Professor*
 SUNY Buffalo, Ph.D.

KATHLEEN GRADEL, *Professor*
 University of Virginia, Ed.D.
The SUNY Chancellor's Award for Excellence in Teaching

KAREN LILLIE, *Assistant Professor*
 Arizona State University, Ph.D.

KATE MAHONEY, *Associate Professor*
Arizona State University, Ph.D.
William T. Hagan Young Scholar/Artist Award

JANEIL REY, *Assistant Professor*
SUNY Buffalo, Ph.D.

JENNIFER MOON RO, *Associate Professor*
The University of Georgia, Ph.D.

RHEA SIMMONS, *Associate Professor*
University of Pittsburgh, Ph.D.

CHARLES STODDART, *Associate Professor*
University of Northern Colorado, Ed.D.

ANNA THIBODEAU, *Associate Professor*
SUNY Buffalo, Ph.D.

Library Services

RANDOLPH L. GADIKIAN, *Director of Library Services*
SUNY Buffalo, M.L.S.

DARRYL COLEMAN, *Cataloging and Reference Librarian*
SUNY Buffalo, M.L.S.

BARBARA L. KITTLE, *Librarian*
SUNY Geneseo, M.L.S.

KATHLEEN L. SACCO, *Coordinator of Systems Technology/Assistant to the Director*
Clarion University, M.L.S.
The State University Chancellor's Award for Excellence in Librarianship

KEVIN MICHKI, *Music Librarian*
SUNY Buffalo, M.L.S., M.A.

GERDA MORRISSEY, *Reference Librarian*
State University Library School (Munich, Germany), M.L.S.

SCOTT RICHMOND, *Librarian/Reference and Instruction*
SUNY Buffalo, M.L.S.

KERRIE WILKES, *Coordinator of Research Services and Campus Partnerships*
SUNY Buffalo, M.L.S.
The State University Chancellor's Award for Excellence in Librarianship

CYNTHIA YOCHYM, *Reference Librarian*
SUNY Albany, M.L.S.

Mathematical Sciences

MERAL ARNAVUT, *Associate Professor*
University of Nebraska, Ph.D.

NANCY BOYNTON, *Professor*
Western Michigan University, Ph.D.

LAN CHENG, *Associate Professor*
University of Pittsburgh, Ph.D.

KIMBERLY CONTI, *Lecturer*
SUNY Fredonia, M.S.

REBECCA A. CONTI, *Lecturer*
SUNY Fredonia, M.S.

JONATHAN COX, *Associate Professor*
Oklahoma State University, Ph.D.

TEODORA COX, *Associate Professor*
University of Illinois, Ph.D.

KEARY HOWARD, *Professor*
Cornell University, Ph.D.
The State University Chancellor's Award for Excellence in Teaching

Y.H. HARRIS KWONG, *Professor*
University of Pennsylvania, Ph.D.

ROBERT R. ROGERS, *Professor*
SUNY Buffalo, Ph.D.
President's Award for Excellence, 1997

H. JOSEPH STRAIGHT, *Distinguished Service Professor*
Western Michigan University, Ph.D.
The State University Chancellor's Award for Excellence in Faculty Service

JULIA WILSON, *Associate Professor*
University of Wisconsin, Milwaukee, Ph.D.

Modern Languages and Literatures

RUTH B. ANTOSH, *Professor (French)*
Indiana University, Ph.D.

JUAN A. DE URDA ANGUITA, *Assistant Professor (Spanish)*
University of Missouri, Ph.D.

CHIARA DE SANTI, *Visiting Lecturer (Italian)*
University of Wisconsin-Madison, Ph.D.
European University Institute, Ph.D.

KATE DOUGLASS, *Assistant Professor (French and Language Acquisition)*
The Pennsylvania State University, Ph.D.

BETH HUERTA, *Visiting Assistant Professor (Spanish)*
SUNY Buffalo, Ph.D.

CARMEN S. RIVERA, *Professor (Spanish)*
University of South Carolina, Ph.D.

CLARK M. ZLOTCHER, *Distinguished Teaching Professor (Spanish)*
SUNY Binghamton, Ph.D.
President's Award for Excellence, 1988
Kasling Lecturer

Music

JOHN BACON, *Lecturer*
SUNY Fredonia, M.M.

CHRISTIAN BERNHARD, *Assistant Professor*
University of North Carolina, Greensboro, Ph.D.

THOMAS BINGHAM, *Lecturer*
SUNY Fredonia, M.A.

KARL BOELTER, *Professor*
University of Michigan, D.M.A.

BRIAN BOGEY, *Lecturer*
SUNY Fredonia, M.M.

JUDITH BRADY, *Lecturer*
University of Colorado, M.A.

BARBARA A. BRINSON, *Associate Professor*
Florida State University, Ph.D.

JOHN CARUSO, *Instructional Support Specialist*
SUNY Fredonia, B.S.

I-FEI CHEN, *Staff Accompanist*
West Virginia University, M.M.

AMRON CHODOS, *Lecturer*
SUNY Buffalo, M.F.A.

MARY MARDEN COBB, *Lecturer*
The Manhattan School of Music, M.M.

PAUL COLEMAN, *Lecturer*
University of Northern Colorado, M.M.

DAVID COLWELL, *Assistant Professor*
Yale University, D.M.A.

PATRICIA J. CORRON, *Associate Professor*
The University of Cincinnati College-Conservatory of Music,
D.M.A.

JENNIFER DARRELL-STERBAK, *Community Relations
Assistant*
SUNY Buffalo, M.A.

JAMES A. DAVIS, *Professor*
Boston University, Ph.D.

JEFFREY DEE, *Lecturer*
Julliard School, M.M.

LORI DEEMER, *Media Production Assistant*
University of Texas at Austin, B.F.A.

ROBERT DEEMER, *Assistant Professor*
University of Texas at Austin, Ph.D.

LAURA DORNBERGER, *Lecturer*
SUNY Fredonia, M.M.

SEAN DOYLE, *Lecturer*
SUNY Fredonia, M.M.

EVAN DRUMMOND, *Lecturer*
Yale University, M.M.

MARK DuBOIS, *Lecturer*
SUNY Buffalo, Ed.M.

SEAN DUGGAN, *Associate Professor*
Carnegie Mellon University, M.F.A.

NATASHA FARNY, *Assistant Professor*
The Juilliard School, D.M.A.

DAVID FRIDMANN, *Lecturer*

RODNEY GARRISON, *Lecturer*
East Carolina University, M.M.

THOMAS GESTWICKI, *Lecturer*
SUNY Fredonia, A.B.

BERND GOTTINGER, *Associate Professor*
New York University, Ph.D.

GERALD T. GRAY, *Associate Professor*
University of Iowa, D.M.A.

MARC J. GUY, *Associate Professor*
SUNY Stony Brook, D.M.A.

ANGELA HAAS, *Assistant Professor*

Florida State University, D.M.A.

SARAH HAMILTON, *Associate Professor*
The Ohio State University, D.M.A.

ANNE KISSEL HARPER, *Lecturer*

JOE DAN HARPER, *Visiting Assistant Professor*
New England Conservatory, M.M.

PAULA HOLCOMB, *Professor*
Northwestern University, D.M.A.

GRAHAM HOWES, *Instruction Support Associate*

DIANE HUNGER, *Lecturer*
SUNY Fredonia, M.M.

ALEXANDER HURD, *Lecturer*
University of Cincinnati College Conservatory of Music,
D.M.A.

DANIEL IHASZ, *Professor*
Eastman School of Music, M.M.

SONJA INGLEFIELD, *Lecturer*
Peabody Conservatory, M.M.

HARRY P. JACOBSON, *Associate Professor*
North Texas State University, D.M.A.

BRUCE JOHNSTONE, *Lecturer*

ALEX JOKIPII, *Lecturer*
The Juilliard School, D.M.A.

DONALD KEDDIE, *Lecturer*
SUNY Fredonia, M.M.

BARRY M. KILPATRICK, *Professor*
University of Wisconsin, M.M.
President's Award for Excellence, 2010

JIYONG KIM, *Lecturer*
SUNY Fredonia, M.M.

LAURA KOEPKE, *Assistant Professor*
Yale University, M.M.

JAMES KONTRABECKI, *Lecturer*

JOYCE KRINER, *Lecturer*
SUNY Fredonia, B.M.

KATHERINE M. LEVY, *Associate Professor*
University of Iowa, Ph.D.

PETER LINDBLOM, *Lecturer*
Arizona State University, M.M.

J. RODERICK MacDONALD, *Associate Professor*
New England Conservatory, M.M.

JOHN MAGUDA, *Lecturer*
SUNY Fredonia, M.M.

KIM MANCINO, *Instructor*
SUNY Fredonia, M.M.

MICHAEL MARKHAM, *Assistant Professor*
University of California, Berkeley, Ph.D.

CARL MAZZIO, *Lecturer*
The Juilliard School, M.M.

MARGARET McMURTRY, *Visiting Assistant Professor*
Royal Scottish Academy, M.M.

NICOLE McPHERSON, *Lecturer*
Michigan State, D.M.A.

DAVID MEYER, *Lecturer*
Eastman School of Music, M.M.

KEVIN L. MICHKI, *Senior Assistant Librarian, Music*
SUNY Buffalo, M.L.S., M.A.

JONI MILGRAM-LUTERMAN, *Associate Professor*
Michigan State University, Ph.D.

PAUL MURPHY, *Associate Professor*
University of Texas-Austin, Ph.D.

JULIE NEWELL, *Distinguished Teaching Professor*
Syracuse University, M.M.
*The State University Chancellor's Award for Excellence in
Scholarship and Creative Activities*
William T. Hagan Young Scholar/Artist Award

TIFFANY NICELY, *Lecturer*
SUNY Buffalo, M.M.

DMITRI NOVGORODSKY, *Assistant Professor*

LINDA N. PHILLIPS, *Professor*
The Ohio State University, D.M.A.

JAMES PIORKOWSKI, *Distinguished Professor*
SUNY Fredonia, M.M.
President's Award for Excellence, 2006
William T. Hagan Young Scholar/Artist Award
Kasling Lecturer

JILL REESE, *Assistant Professor*
Temple University, Ph.D.

MICHAEL RIED, *Lecturer*
SUNY Fredonia, M.M.

LAUREL R. RIVERS, RPT, *Instructional Support Assistant*
SUNY Fredonia, B.A.

GORDON ROOT, *Assistant Professor*
University of California, Santa Barbara, Ph.D.

DAVID ROSE, *Assistant Professor*
Indiana University, M.M.

SUSAN ROYAL, *Professor*
SUNY Stony Brook, D.M.A.
President's Award for Excellence, 2004

DAVID RUDGE, *Associate Professor*
University of South Carolina, D.M.A.

JEREMY SAGALA, *Lecturer*
Brandeis University, Ph.D.

ANDREW SEIGEL, *Assistant Professor*
Michigan State University, D.M.A.

RAYMOND STEWART, *Professor*
The Manhattan School of Music, M.M.

KAY STONEFELT, *Associate Professor*
Indiana University, D.M.A.
*The State University Chancellor's Award for Excellence in
Teaching*

ROBERT STRAUSS, *Lecturer*
West Virginia University, D.M.A.

SHINOBU TAKAGI, *Visiting Assistant Professor*
Boston University, M.M.

LAURIE TRAMUTA, *Lecturer*
University of North Carolina, Greensboro, M.M.

JAMES WELCH, *Lecturer*
East Carolina University, M.M.

ELIZABETH WIDZINSKI, *Lecturer*
Wichita State University, M.M.

MATTHEW WILSON, *Lecturer*
SUNY Fredonia, M.M.

JIHUN WOO, *Lecturer*
SUNY Buffalo, Ph.D.

MAUREEN YUEN, *Lecturer*
University of British Columbia, M.M.

WILDY ZUMWALT, *Associate Professor*
Florida State University, D.M.A.
Florida State University, D.M.A.

Philosophy

ANDREW CULLISON, *Associate Professor*
University of Rochester, Ph.D.

RAYMOND ANGELO BELLIOOTTI, *Distinguished Teaching
Professor*
University of Miami, Ph.D.; Harvard Law School, J.D.
*The State University Chancellor's Award for Excellence in
Teaching*
William T. Hagan Young Scholar/Artist Award
Kasling Lecturer

NEIL FEIT, *Professor*
University of Massachusetts, Ph.D.
*The State University Chancellor's Award for Excellence in
Teaching*
William T. Hagan Young Scholar/Artist Award
Kasling Lecturer

STEPHEN KERSHNAR, *Professor*
University of Nebraska, Ph.D.; University of Pennsylvania,
J.D.
*The State University Chancellor's Award for Excellence in
Teaching*
*The State University Chancellor's Award for Excellence in
Scholarship and Creative Activities*
William T. Hagan Young Scholar/Artist Award
Kasling Lecturer

DALE TUGGY, *Professor*
Brown University, Ph.D.

Physics

JUSTIN CONROY, *Assistant Professor*
The College of William and Mary, Ph.D.

MICHAEL GRADY, *Professor*
Rockefeller University, Ph.D.
William T. Hagan Young Scholar/Artist Award

PETER MATTOCKS, *Associate Professor*
University of Southampton (England), Ph.D.

ERICA SNOW, *Assistant Professor*
Colorado State University, Ph.D.

Political Science

- ALEXANDER CAVIEDES, *Assistant Professor*
University of Wisconsin-Madison, Ph.D.
University of Florida, J.D.
University of the Saarland (Germany), LL.M.eur
- JONATHAN CHAUSOVSKY, *Assistant Professor*
University of Texas-Austin, Ph.D.
- JAMES R. HURTGEN, *Distinguished Teaching Professor*
SUNY Buffalo, Ph.D.
The State University Chancellor's Award for Excellence in Teaching
- RICHARD JANKOWSKI, *Professor*
University of Chicago, Ph.D.
- DAVID RANKIN, *Professor*
University of California, Santa Barbara, Ph.D.
The State University Chancellor's Award for Excellence in Teaching
President's Award for Excellence, 2011
- IVANI VASSOLER-FROELICH, *Associate Professor*
University of Maryland, Ph.D.

Psychology

- JACK S. CROXTON, *Distinguished Service Professor*
Miami University, Ph.D.
The State University Chancellor's Award for Excellence in Faculty Service
President's Award for Excellence, 1991
- CHERYL E. DROUT, *Professor*
University of Delaware, Ph.D.
President's Award for Excellence, 2012
- JENNIFER L. DYCK, *Associate Professor*
University of California, Santa Barbara, Ph.D.
- NANCY R. GEE, *Associate Professor*
University of South Florida, Ph.D.
William T. Hagan Young Scholar/Artist Award
- BRUCE G. KLONSKY, *Professor*
Fordham University, Ph.D.
- JOSEPH P. McFALL, *Assistant Professor*
West Virginia University, Ph.D.
- VANESA M. MCKINNEY, *Assistant Professor*
University of South Florida, Ph.D.
- SUTHAKARAN VEERASAMY, *Assistant Professor*
University of Maryland-College Park, Ph.D.
- ANDREA ANGELL ZEVENBERGEN, *Associate Professor*
SUNY Stony Brook, Ph.D.

Sociology/Anthropology/Social Work/Criminal Justice

- JOSH ADAMS, *Assistant Professor (Sociology)*
The Ohio State University, Ph.D.
- JOY A. BILHARZ, *Professor (Anthropology-Sociology)*
Bryn Mawr College, Ph.D.
- MARY B. CARNEY, *Associate Professor (Social Work)*

University of Illinois, Ph.D.

- LINDA E. DORSTEN, *Professor (Sociology)*
The Ohio State University, Ph.D.
- ALAN LaFLAMME, *Professor (Anthropology-Sociology)*
SUNY Buffalo, Ph.D.
- BRIAN MASCIADRELLI, *Assistant Professor (Social Work)*
University of Illinois, Ph.D.
- MELANIE PALLONE, *Assistant Professor (Criminal Justice)*
Indiana University of Pennsylvania, Ph.D.
- DANIELA PETERKA-BENTON, *Assistant Professor (Criminal Justice)*
University of Vienna, Ph.D.
- RICHARD REDDY, *Professor (Sociology)*
Boston College, Ph.D.
The State University Chancellor's Award for Excellence in Faculty Service
- ROLANDA WARD, *Assistant Professor (Social Work)*
Boston University, Ph.D.

Sport Management and Exercise Science

- TODD BACKES, *Visiting Assistant Professor*
SUNY Buffalo, M.S.
- PENNY HITE, *Lecturer*
SUNY Fredonia, M.S.
- TIMOTHY MANASTERSKY, *Visiting Assistant Professor*
Canisius College, M.A.

Theatre and Dance

- JESSICA HILLMAN-McCORD, *Assistant Professor*
University of Colorado at Boulder, Ph.D.
- JAMES PAUL IVEY, *Professor*
Texas Tech University, Ph.D.
- SAMANTHA KENNEY, *Assistant Professor*
Smith College, M.F.A.
- THOMAS LOUGHLIN, *Distinguished Teaching Professor*
University of Nebraska, M.F.A.
- PAUL W. MOCKOVAK II, *Professor*
University of Miami, M.F.A.
- HELEN MYERS, *Professor*
The Ohio State University, M.F.A.
- TODD PROFFITT, *Associate Professor*
Texas Tech University, M.F.A.
- DIXON REYNOLDS, *Assistant Professor*
Indiana University, M.F.A.
- EDWARD SHARON, *Associate Professor*
Boston University, M.F.A.
- DAVID STELLHORN, *Assistant Professor*
University of Illinois Urbana-Champaign, M.F.A.
- ANGELIKA SUMMERTON, *Instructor*

Academy of Music and Theatre (Hanover, Germany), M.A.

LAUREL WALFORD, *Costume Shop Supervisor*
SUNY Fredonia, B.A.

MAXIMILLIAN ZORN, *Scene Shop Supervisor*
SUNY Purchase, B.F.A.

Visual Arts and New Media

MICHELE BERNATZ, *Assistant Professor*
University of Texas at Austin, Ph.D.

ROBERT A. BOOTH, *Distinguished Teaching Professor*
Syracuse University, M.F.A.

TIMOTHY FRERICHS, *Associate Professor*
University of Iowa, M.F.A.

PHIL HASTINGS, *Assistant Professor*
Southern Illinois University Carbondale, M.F.A.

JILL JOHNSON-PRICE, *Assistant Professor*
University of South Florida, M.F.A.

STEPHEN KOMP, *Associate Professor*
Savannah College of Art and Design, M.F.A.

LIZ LEE, *Professor*
Savannah College of Art and Design, M.F.A.

ALBERTO REY, *Distinguished Professor*
SUNY Buffalo, M.F.A.
*The State University Chancellor's Award for Excellence in
Scholarship and Creative Activities*
William T. Hagan Young Scholar/Artist Award
Kasling Lecturer

LEESA RITTELMANN, *Assistant Professor*
University of Pittsburgh, Ph.D.

HIDE SADOHARA, *Assistant Professor*
Kent State University, M.F.A.

PETER TUCKER, *Assistant Professor*
University of Texas at Austin, M.F.A.

MEGAN URBAN, *Assistant Professor*
Virginia Commonwealth University, M.F.A.

SUNY History and General Statement

The nation's largest and most comprehensive state university system, 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. The campuses are divided into four categories, based on educational mission, types of academic opportunities available, and degrees offered. 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. The university provides access to almost every field of academic or professional study within the system via 7,000 degree and certificate programs.

SUNY students represent the society that surrounds them. In December 2010, 21.4 percent of all enrolled students were minorities. While SUNY students are predominantly New York State residents, representing every one of the state's 62 counties, they also hail from every other state in the U.S., the District of Columbia, four U.S. territories, and 160 nations. Total enrollment is over 467,000. Nearly 40 percent of New York State high school graduates choose SUNY and 99.8 percent of New York residents live within 30 miles of a SUNY campus. SUNY alumni number over 2.8 million graduates who reside in New York State and throughout the world.

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. SUNY colleges and universities range from world-renowned community colleges, such as the Fashion Institute of Technology, to first-rate graduate schools and the nation's top veterinary school. 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 the SUNY Learning Network, which provides educational opportunities to more than 100,000 students through courses and degree and certificate programs.

The State University of New York is committed to providing quality education at an affordable price to New Yorkers and students from across the country and the world.

SUNY List of Units

University Centers/Doctoral Granting Institutions

Albany
Binghamton
University at Buffalo
Stony Brook
N.Y.S. College of Ceramics at Alfred University
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

Environmental Science and Forestry (Syracuse)

Downstate Medical Center

Upstate Medical University

University Colleges

Brockport

Buffalo State College

Cortland

Empire State College

Fredonia

Geneseo

New Paltz

Old Westbury

Oneonta

Oswego

Plattsburgh

Potsdam

Purchase

Technology Colleges

Alfred State

Cobleskill

Canton

Delhi

Farmingdale State

Maritime College

Morrisville State College

SUNYIT

Community Colleges

Adirondack

Broome

Cayuga

Clinton

Columbia-Greene

Corning

Dutchess

Erie

Fashion Institute of Technology

Finger Lakes

Fulton-Montgomery

Genesee

Herkimer County

Hudson Valley

Jamestown

Jefferson

Mohawk Valley

Monroe

Nassau

Niagara County

North Country

Onondaga

Orange County

Rockland

Schenectady County

Suffolk County

Sullivan County

Tompkins Cortland

Ulster County

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, First Floor, Reed Library (716) 673-3335
- Office of the Vice President for Student Affairs, Second Floor, Gregory Hall (716) 673-3271
- Office of the Vice President for Administration, Administration Office Complex (716) 673-3109
- Office of Human Resources, Administration Office Complex (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>.

Index

2

2012-2013 University Costs • 428

3

3-1-3 Program • 386, 412

7

75-hour Audit • 435

A

A Fredonia Timeline • 5
 Academic Advising • 383
 A Manifesto • 384
 Academic Affairs • 481
 Academic and Student Support Services • 392
 Academic Bankruptcy • 442
 Academic Calendar • 8
 Academic Credit and Course Load • 181
 Academic Integrity Policy • 456
 Academic Leave of Absence • 182
 Academic Organization of the Campus • 12
 Academic Policies • 434
 Academic Policy and Procedures with Regard to Students with Disabilities • 434
 Academic Program and Course Selection • 13
 Academic Programs and Area Specializations • 10
 Academic Standing • 184
 Academic Standing and Probation • 441
 Accelerated Master of Business Administration Degree • 13, 27, 443
 Accounting • 16, 188
 Accounting Bachelor of Science degree • 24
 Accounting Minor • 12, 27
 Accreditation • 7
 Acting • 16
 Acting Bachelor of Fine Arts degree • 10, 11, 14, 164, 443
 Actions a Student Can Take • 472
 Additional Academic Information • 383
 Additional Programs • 142
 Administration • 481
 Administrative Hearing • 454
 Administrative Sanction Hearing • 454
 Admission Requirements • 175
 Admissions • 481
 Admissions and Financial Aid • 410
 Adolescence Education French or Spanish Bachelor of Arts degree • 10, 11, 14, 52, 122, 443
 Adolescence Science Education Master of Arts in Teaching degree • 12, 29, 152, 186, 444
 Advanced Standing Credit • 413
 Advisement and Registration • 181
 Affirmative Action Information • 7
 African American Studies minor • 10, 11, 12, 103
 Alcohol • 452
 Alcohol and Drug Policy • 452
 Alcohol Education Course • 452
 All Programs • 13
 Alma Mater • 8
 Alumni Association • 406
 Alumni Scholarships • 418
 American Indian Studies minor • 10, 11, 12, 104
 American Studies • 16, 190
 American Studies minor • 103
 Anthropology • 191

Anthropology Minor • 11, 12, 156
 Application Deadlines • 176
 Application Requirements • 176
 Applied Mathematics Bachelor of Science degree • 11, 13, 116, 442
 Applied Mathematics Minor • 12, 118
 Arabic • 192
 Areas of Concentration for Childhood, Childhood Inclusive, Early Childhood and Early Childhood/Childhood Majors • 54
 Art • 16, 193
 Art - Studio • 196
 Art Exhibitions • 406
 Art Forum • 403
 Art History • 193
 Art History Bachelor of Arts degree • 10, 15, 170, 444
 Art History Minor • 12, 172
 Arts Administration • 16, 188
 Arts and Sciences • 418
 Assessment Examinations or Questionnaires • 437
 Assistantships/Fellowships • 180, 429
 Athletic Coaching Minor • 158
 Athletics • 406, 419
 Athletics and Recreation • 482

B

Bachelor of Fine Arts degree • 10, 11, 14, 15, 171, 443, 444
 Bias Crimes Prevention • 449
 Billing Procedures • 417
 Billing Procedures and Payment Requirements • 417
 Biochemistry • 10, 13, 16, 419, 442
 Biology • 10, 18, 202, 419, 442, 489
 Biology Adolescence Education Bachelor of Science degree • 10, 14, 19, 52, 443
 Biology Bachelor of Science degree • 13, 18
 Biology Graduate Program • 12, 21
 Biology Master of Science degree • 21, 186, 444
 Biology Minor • 12, 20
 Black Student Union (BSU) • 403
 Business • 10, 13, 22, 419
 Business Administration • 10, 23, 212, 443, 489
 (Music Industry Concentration) Bachelor of Science degree • 10, 11, 26
 Finance Bachelor of Science degree • 10, 24, 442, 443
 Management Bachelor of Science degree • 10, 13, 25
 Marketing Bachelor of Science degree • 10, 13, 25
 Business Administration Minor • 12, 27

C

Campus Life Office • 402
 Campus Visit • 410
 Career Development • 482
 Career Development Office • 394
 Center for Multicultural Affairs • 396
 Certificate in Entrepreneurial Studies • 27
 Certificate of Advanced Study (CAS) in TESOL • 71, 73
 Certification Information • 187
 Chemistry • 221, 419
 Chemistry and Biochemistry • 10, 14, 29, 52, 83, 443, 489
 Chemistry Bachelor of Science degree • 13, 30, 443
 Chemistry Graduate Program • 12, 15, 32, 186, 444
 Chemistry Minor • 12, 31
 Childhood Education • 61
 Childhood Education Bachelor of Science in Education degree • 10, 13, 51, 61, 443

Childhood Inclusive Education Bachelor of Science in Education degree • 10, 13, 51, 61, 443
 Chinese • 227
 Class Attendance • 436
 College Council • 478
 College Fee • 178, 415
 College of Education - Professional Education Unit Information • 50
 College of Education Honors and Awards • 59
 Comm Disorders & Sciences • 216
 Communication • 10, 13, 14, 33, 227, 419, 443, 490
 Communication Disorders and Sciences • 37, 419, 443, 490
 Communication Disorders and Sciences Bachelor of Science degree • 10, 14, 37
 Communication Disorders and Sciences Graduate Program • 12, 15, 39, 52, 66, 186, 444
 Communication Minor • 12, 36
 Community Outreach • 396
 Complaints • 453
 Completion of a Degree Program • 183
 Composition Bachelor of Music degree • 11, 14, 128, 443
 Computer & Info Sciences • 235
 Computer and Information Sciences • 41, 420, 490
 Computer and Information Sciences Programs • 42, 113
 Computer and Network Usage Policy • 461
 Computer Information Systems Bachelor of Science degree • 10, 14, 43, 443
 Computer Information Systems Minor • 12, 44
 Computer Science Bachelor of Science degree • 10, 14, 42, 443
 Computer Science Minor • 12, 44
 Consensual Relationships (Faculty/Staff and Students) • 456
 Cooperative Engineering • 420
 Counseling Center • 399, 482
 Course Auditing • 436
 Course Challenge Option • 438
 Course Descriptions • 188
 Course Load • 436
 Course Prerequisites and Corequisites • 436
 Course Repeat Policy • 438
 Course Withdrawal • 182
 Courses for Majors and Non-Majors • 132
 Credit by Examination • 438
 Crime Statistics • 450
 Criminal Justice • 46, 156, 234, 420
 Criminal Justice Bachelor of Arts degree • 10, 11, 14, 46, 156, 443
 Criminal Justice Minor • 12, 46
 Curriculum & Instruction in Inclusive Education Master of Science in Education degree • 67
 Curriculum and Instruction • 490

D

Dance • 47, 243
 Dance Bachelor of Fine Arts degree • 10, 11, 14, 47, 165, 443
 Dance Minor • 12, 167
 Dance Studio Administration minor • 10, 12, 104
 Dean's List • 389, 441
 Decision Process • 410
 Declaration of a Major Program • 434
 Declaration of a Minor • 434
 Declaration of an Additional Major • 434
 Deferment Policy • 417
 Dining Services Operations • 400

Disability (Academic) Support for Students • 482
 Distance Learning • 245
 Distinguished Professor • 487
 Distinguished Service Professors • 487
 Distinguished Teaching Professors • 487
 Drug Education Course • 452
 Drugs • 452

E

Early Childhood Education • 63
 Early Childhood Education Bachelor of Science in Education degree • 63
 Early Childhood-Childhood Education Bachelor of Science in Education degree • 10, 14, 51, 63
 Early Registration • 435
 Earth Science • 47
 Earth Science Adolescence Education Bachelor of Science degree • 10, 11, 14, 47, 52, 86, 443
 Earth Science Bachelor of Arts degree • 11, 14, 86, 443
 Earth Science Minor • 12, 87
 Economics • 28, 48, 245, 420, 491
 Economics Bachelor of Arts degree • 10, 14, 48, 443
 Economics Minor • 12, 48
 Education • 10, 19, 29, 50, 80, 87, 90, 117, 118, 123, 141, 143, 248, 420
 Education Graduate Programs • 12, 52, 65
 Education Grants and Partnerships • 59
 Educational Development Program • 394, 420, 482
 Electronic Funds Transfer • 179
 Eligibility for Methods & Student Teaching • 53
 Emeritus Faculty and Staff • 487
 Engineering (Cooperative) • 10, 11, 14, 29, 42, 76, 139, 142, 147, 150, 387, 443
 English • 78, 266, 420, 491
 English Adolescence Education Bachelor of Arts degree • 10, 14, 52, 79, 443
 English Bachelor of Arts degree • 10, 14, 79, 443
 English Education • 264
 English Graduate Programs • 12, 15, 66, 81, 186, 444
 English Minor • 12, 80
 Environmental Sciences • 83, 275, 420
 Ethos • 403
 Ex-Offenders Review Board • 456

F

Faculty • 487
 Faculty Student Association • 400, 482
 Failure to Pay University Charges • 418
 Family Educational Rights and Privacy Act of 1974 • 477
 Federal Direct Graduate PLUS Loan • 179
 Federal Stafford Student Loan Program • 179
 Field Experiences • 483
 Film Studies • 276
 Film Studies minor • 10, 105
 Final Examinations • 437
 Financial Aid • 179, 483
 Foreign Languages • 301
 Forensics • 11, 83
 Fredonia Alumni Association Board of Directors • 480
 Fredonia C.A.R.E.S. • 452
 Fredonia Campus Administration • 481
 Fredonia College Foundation • 418
 Fredonia College Foundation Board of Directors • 479
 Fredonia in 4 • 386, 411
 Fredonia Jazz Workshop • 403
 Fredonia Organizations and Activities • 402
 Fredonia Radio Systems • 404

Fredonia/Hamburg Connection • 54
 French • 277
 French Bachelor of Arts degree • 11, 14, 121, 443
 French or Spanish Minor • 12, 123
 Freshmen Forgiveness • 442
 Full and Part-time Status • 181

G

General Admission Information • 175
 General Education • 13, 387
 General Education Program (College Core Curriculum) • 387
 General Information For Graduate Students • 186
 General Policy • 447
 Geochemistry Bachelor of Science degree • 10, 11, 14, 85, 443
 Geographic Info Systems • 283
 Geographic Information Systems • 87, 144
 Geographic Information Systems minor • 11, 105
 Geological Sciences Minor • 87
 Geology Bachelor of Science degree • 11, 14, 84, 443
 Geophysics Bachelor of Science degree • 11, 14, 85, 141, 443
 Geosciences • 11, 12, 29, 84, 278, 420, 492
 Geosciences Honors Track • 85
 German • 283
 Good Academic Standing and Receipt of Undergraduate Financial Aid • 426
 Good Academic Standing Requirements and Receipt of Graduate Financial Aid • 179, 429
 Good Samaritan Policy • 452
 Governance and Policy • 174
 Grade Appeals • 440, 445
 Grading System • 184, 439
 Graduate Academic Policies • 184
 Graduate Academic Programs • 12
 Graduate Admissions • 416
 Graduate Course Numbers • 181
 Graduate Course Repeat Policy • 185
 Graduate Degree Requirements • 183
 Graduate Degree Tuition and Fees • 178, 417
 Graduate Diversity Fellowship Program • 180, 429
 Graduate Financial Aid • 428
 Graduate Grade Appeals • 184, 440
 Graduate Mission Statement • 174
 Graduate Opportunity Tuition Waiver • 180, 429
 Graduate Programs Leading to New York State Certification • 65
 Graduate Requirements for all Master's degree Programs in English • 82
 Graduate Studies & Research • 483
 Graduate Studies and Student Services • 174
 Graduate Tuition and Fees • 178, 417
 Graduation with Honors • 445
 Graduation With Honors • 389

H

Health Center • 483
 Health Education • 294
 History • 88, 143, 284, 421, 492
 History Bachelor of Arts degree • 11, 14, 88, 443
 History Minor • 12, 90
 History of the State University of New York at Fredonia • 4
 History/Social Studies Adolescence Education Double Major • 90
 Honorary Members • 479
 Honors • 295, 389

Honors Program • 389
 How Do I Apply for Financial Aid? • 424
 How is Aid Awarded? • 425

I

Industrial Management Bachelor of Science degree • 11, 14, 90, 142, 443
 Information Technology Services • 392, 483
 Institutional Research and Planning • 484
 Intensive Teacher Institute Bilingual Extension (ITI Bilingual Extension) Certificate of Advanced Study (CAS) • 15, 66, 71, 74, 186, 444
 Intensive Teacher Institute Special Education TESOL (ITI Special Education TESOL) Certificate of Advanced Study (CAS) • 15, 71, 73
 Intensive Teacher Institute TESOL (ITI TESOL) Certificate of Advanced Study (CAS) • 15, 66, 71, 73, 186, 444
 Interdisciplinary Studies • 92, 295
 American Studies Bachelor of Arts degree • 10, 11, 12, 98
 Arts Administration Bachelor of Arts degree • 10, 11, 99
 Environmental Science Bachelor of Science degree • 10, 11, 30, 100
 Environmental Sciences Bachelor of Science degree • 100
 Exercise Science Bachelor of Science degree • 100
 International Studies Bachelor of Science degree • 11, 101, 143, 144, 147
 International Studies minor • 12, 147
 Self-Design Bachelor of Science or Bachelor of Arts degree • 101
 Sport & Exercise Science/Sport Administration minors • 160
 Sport and Exercise Psychology Bachelor of Science degree • 11, 100
 Women's Studies Bachelor of Arts degree • 11, 101
 Interdisciplinary Studies Bachelor of Science - Sport & Exercise Psychology • 159
 Interdisciplinary Studies Bachelor of Science degree - Exercise Science • 10, 11, 100, 159
 Interdisciplinary Studies Major and Minor Coordinator List • 11, 93
 Interdisciplinary Studies Major Programs • 98
 Interdisciplinary Studies Minor Programs • 103, 160
 International Economic Studies Certificate • 10, 49
 International Education • 299
 International Education Center • 393, 484
 International Students • 413
 International Studies • 114, 300
 International Studies minor • 106
 Intramural and Recreational Activities • 406
 Introduction • 4
 Introduction to Graduate Interdisciplinary Studies Programs • 12, 15, 97, 186
 Introduction to Undergraduate Interdisciplinary Studies Programs • 95
 Investigation of Violent Felony Offenses/Missing Students • 450
 Italian • 301
 Italian Studies minor • 11, 106

J

Joining Term (J-Term) at SUNY Fredonia • 391
 Judicial Board Hearing • 454

L

Lanford Prize • 389
 Language, Learning and Leadership • 492

Latino Studies minor • 11, 12, 107
 Leadership Program • 402
 Leadership Studies minor • 11, 12, 107
 Learning Center • 484
 Learning Center/Disability Support Services • 393
 Leave of Absence Policy and Continuing Enrollment • 441
 Legal Studies minor • 108
 Letter from the President • 2
 Liability • 446
 Liberal Arts • 114, 302, 383
 Liberal Arts Freshman Seminars • 114
 Library • 421
 Library Services • 493
 Lifelong Learning and Special Programs • 391, 484
 Links to the Various Education Programs • 51
 Literacy
 Birth-Grade 6 Master of Science in Education degree • 15, 66, 69, 186, 444
 Grades 5-12 Master of Science in Education degree • 15, 66, 70, 186, 444

M

Mathematical Sciences • 11, 113, 115, 421, 443, 493
 Mathematical Sciences Graduate Program • 12, 15, 118, 186, 444
 Mathematics • 306
 Mathematics - Middle Childhood Specialist Bachelor of Science degree • 10, 11, 14, 51, 117, 443
 Mathematics Adolescence Education Bachelor of Science Degree • 10, 11, 14, 52, 116, 443
 Mathematics Bachelor of Science degree • 11, 14, 115
 Mathematics Education • 302
 Mathematics Minor • 12, 118
 Mathematics-Physics Bachelor of Science degree • 11, 14, 141, 443
 Maytum Lecture • 387
 Medical Technology • 310
 Medical Technology Bachelor of Science degree • 20
 Medical Technology/Biomedical Research Technology • 10, 11, 14, 18, 20, 119, 443
 Michael C. Rockefeller Arts Center • 484
 Michael C. Rockefeller Arts Center and Visiting Artists, Ensembles and Speakers • 407
 Middle School Extensions • 10, 55
 Minor in Communication Disorders and Sciences • 12, 38
 Minors • 12
 Miscellaneous Fees, Fines or Deposits • 178
 Modern Languages and Literatures • 11, 121, 421, 493
 Molecular Genetics Bachelor of Science degree • 10, 11, 14, 18, 20, 123, 443
 Multicultural Affairs • 484
 Multi-Ethnic Studies minor • 11, 12, 108
 Museum Studies minor • 11, 12, 109
 Music • 11, 125, 161, 317, 421, 493
 Music Bachelor of Arts degree • 14, 126, 443
 Music Business • 331
 Music Education • 310
 Music Education Bachelor of Music degree • 10, 11, 14, 51, 126, 443
 Music Education Master of Music degree • 15, 134
 Music Faculty Performances • 407
 Music Graduate Programs • 12, 52, 66, 134, 186, 444
 Music Therapy • 332
 Music Therapy Bachelor of Science degree • 11, 14, 129, 443
 Music Therapy Master of Music degree • 12, 15, 135, 186

Musical Theatre Bachelor of Fine Arts degree • 11, 14, 130, 164, 443

N

Name Changes • 445
 New York State Education Department Complaint Notice • 499
 Non-degree Study • 175

O

Observance of Regulations and Standards • 446
 Office of Sponsored Programs • 387
 Office of Veterans Affairs • 399
 Online Education • 391
 Online Learning • 484
 Orchestral • 403
 Other Academic Honors • 391
 Other Campus Activities • 406
 Other FSA Services • 400
 Other Programs • 11, 131
 Other Scholarships and Awards • 423
 Other Sources of Aid • 433
 Other Student Clubs and Interest Groups • 404
 Other Types of Sanctions • 453
 Overview of Adolescence Education Course Requirements • 10, 57

P

Parental Notification Policy • 453
 Part-Time Study • 415
 Pass-Fail Option • 437
 Payment Requirements and Distribution of Financial Aid • 418
 Performance Bachelor of Music degree • 11, 14, 128, 443
 Performance Master of Music degree • 15, 135
 Performing Arts Company (PAC) • 403
 Permanent Transcript Notation (Hazing or Other Serious Violations) • 450
 Permission to Take Graduate Courses While an Undergraduate • 435
 Personal Safety and Campus Security Committee • 450
 Personnel • 478
 Philosophy • 11, 14, 138, 339, 422, 443, 495
 Philosophy Departmental Honors • 138
 Philosophy Minor • 12, 138
 Physical Education • 335
 Physics • 11, 52, 139, 343, 422, 495
 Physics Bachelor of Science degree • 10, 11, 14, 139, 443
 Physics Minor • 12, 142
 Plagiarism • 440
 Policies of the Judicial Board • 455
 Policies on Motor Vehicles • 461
 Policy and program information in this catalog • 9
 Policy for Involuntary Leave for Medical/Psychological Reasons • 455
 Policy on Continuous Enrollment • 185
 Policy on Hazing and Initiation or Affiliation with any Organization • 451
 Policy on Sexual Assault • 451
 Policy Statement on Religious Absences • 460
 Political Science • 101, 106, 114, 143, 347, 422, 496
 Political Science Bachelor of Arts degree • 11, 14, 144, 443
 Political Science Minor • 12, 144
 Political Science Special Programs • 147
 Pre-Law Advisement • 11, 96, 148, 387
 Pre-Medicine and Allied Areas • 10, 11, 18, 148, 386

Pre-Professional Programs • 386
 Pre-Student Teaching Field Experiences • 53
 Procedure for Leave • 455
 Procedures for the University Judicial Board • 454
 Professional Development Center • 396, 484
 Program Registration • 446
 Psychology • 11, 14, 150, 355, 422, 496
 Psychology Bachelor of Arts degree • 150, 443
 Psychology Bachelor of Science degree • 150
 Psychology Minor • 12, 151
 Public Accountancy (Accounting 150-Hour Program) • 10, 16, 24, 442
 Public Health minor • 11, 12, 110

Q

Quality Point Average • 440

R

Readmission and Reinstatement • 442
 Readmission/Reinstatement • 413
 Reed Library • 392
 Refund/Repayment of Financial Aid Due to Discontinuance of Study • 179, 416
 Registered Degree Programs • 442
 Registered Graduate Degree Programs • 186
 Registrar • 485
 Registration • 435
 Regulations Governing Student Conduct and Community Standards of Behavior • 447
 Reinstatement • 182
 Religious Studies minor • 11, 12, 111
 Requirements for a Second Baccalaureate Degree • 445
 Requirements for the Bachelor's Degree • 444
 Residence Life • 398, 485
 Residency Requirement • 184
 Response and Investigation: • 450
 Rules and Regulations for Maintenance of Public Order on Campus • 472
 Russian • 359
 Russian, East-European and Eurasian Studies minor • 11, 12, 111

S

Schedule Changes • 182
 Scholarship Opportunities • 418, 432
 School Building Leadership Certificate of Advanced Study • 15, 66, 75, 186, 444
 School District Leadership Program Certificate of Advanced Study (C.A.S.) • 15, 66, 75, 186, 444
 Science • 362, 422
 Science Education • 360
 Science Education Graduate Program • 152
 Self-Design minor • 112
 Seneca • 362
 Sexual Discrimination and Sexual Harassment • 471
 Significance of Course Numbers • 435
 Social Studies Adolescence Education Bachelor of Arts degree • 10, 11, 14, 52, 89, 443
 Social Studies Education • 373
 Social Work • 156, 365, 422
 Social Work Bachelor of Science degree • 11, 14, 153, 156, 443
 Societies • 389
 Sociology • 362, 422
 Sociology Bachelor of Arts degree • 11, 14, 156, 443
 Sociology Minor • 12, 156
 Sociology, Anthropology, Social Work and Criminal Justice • 156

Sociology/Anthropology/Social Work/Criminal Justice • 496
 Sound Recording Technology • 372
 Sound Recording Technology Bachelor of Science degree • 11, 14, 156, 443
 Spanish • 367
 Spanish Bachelor of Arts degree • 11, 14, 52, 121, 443
 Special Admissions Programs • 411
 Special Funds • 424
 Special Studies • 371
 Specific Standards of Behavior (Code of Conduct) • 447
 Spectrum Entertainment Board • 404
 Sponsored Programs • 485
 Sport & Exercise Science minor • 112
 Sport Administration minor • 11, 12, 112
 Sport Management • 369
 Sport Management and Exercise Science • 11, 12, 158, 422, 496
 Sport Management Bachelor of Science degree • 11, 14, 158, 443
 Standards for Involuntary Leave • 455
 State Aid to Native Americans • 433
 State University of New York at Fredonia • 478
 State University of New York Board of Trustees • 478
 State University Refund Policies • 415
 State University Refund Policy • 178
 Statement of Jurisdiction • 447
 Statement Regarding SUNY Fredonia's Celebration of Diversity • 460
 Statistics • 373
 Statistics minor • 113
 Statistics Minor • 11, 12, 118
 Statute of Limitations Policy • 186
 Student Accounts • 485
 Student Affairs • 485
 Student Association • 402
 Student Classification • 439
 Student Creative Activity and Research • 387
 Student Financial Aid Summary Chart • 431
 Student Group Health Insurance • 415
 Student Health Center • 399
 Student Life on Campus • 398
 Student Music Activities • 408
 Student Opera Theatre Association (SOTA) • 403
 Student Retention • 446
 Student Rights and Responsibilities • 447
 Student Schedule Changes • 435
 Student Services and Programs Charge • 178
 Student Services for the College of Education • 485
 Student Theatre Activities • 409
 Submitting the Application • 410
 Summer Sessions at SUNY Fredonia • 391
 SUNY Fredonia Ideals • 7
 SUNY Fredonia Mission Statement • 6
 SUNY Fredonia Ticket Office • 402
 SUNY History and General Statement • 497
 SUNY List of Units • 497
 SUNY Two-Year Transfer Applicants • 411
 SUNY Urban Teacher Education Center (SUTEC) • 54

T

Teacher Certification Information and Education Advisement • 52
 Teacher Education Certification • 32, 52, 82, 119, 135, 187
 Teaching English to Speakers of Other Languages (TESOL)/Bilingual Education (BE) • 70

Teaching English to Speakers of Other Languages (TESOL)/Bilingual Education (BE) Program Options • 71
 TESOL Master of Science in Education degree (Option 1) • 15, 66, 71, 186, 444
 TESOL Master of Science in Education degree (Option 2) • 71, 72
 The Faculty • 175
 The Graduate Council • 174
 The Leader • 403
 Theatre and Dance • 11, 16, 161, 422, 496
 Theatre Arts • 374
 Theatre Arts Bachelor of Arts degree • 14, 163, 443
 Theatre Minor • 12, 167
 Theatrical Production and Design Bachelor of Fine Arts degree • 11, 14, 166, 443
 Theory-Composition Master of Music degree • 15, 136
 Time Shortened Degree • 362
 Transcripts of Record • 445
 Transfer Admission • 411
 Transfer Credit • 184, 438
 Tuition Assistance Program (TAP) • 179
 Types of Aid • 431
 Typical Alcohol/Drug Sanction(s) • 452

U

Undergraduate Academic Programs and Area Specializations • 10
 Undergraduate Admissions • 410
 Undergraduate Expenses • 413
 Undergraduate Financial Aid • 424
 Unit of Academic Credit • 436
 United States Department of Interior - Bureau of Indian Education (BIE) • 433
 United States Institute for Theatre Technology Student Chapter (FUSITT) • 404
 University Advancement • 485
 University Calendar 2012-2013 • 8
 University Catalog 2012 - 2013 • 1
 University Judicial System • 454
 University Police • 485
 University Police Department • 399
 University Policies • 449
 University Policy • 471
 Unrestricted Endowments • 424

V

Verification • 425
 Veterans Administration Educational Benefits • 180, 433
 Veteran's Administration Educational Benefits • 429
 Veterans Affairs • 486
 Visual Arts and New Media Bachelor of Arts degree • 11, 14, 171
 Visual Arts and New Media Minor • 12, 173
 Visual Arts and New Media • 10, 11, 16, 169, 422, 443, 497
 Vocational and Educational Services for Individuals with Disabilities (VESID) • 180, 429
 Volunteer and Community Services • 402

W

Web Programming minor • 11, 12, 45, 113
 What Can Be Done About Sexual Discrimination/Harassment? • 471
 What Is Sexual Discrimination? • 471
 What Is Sexual Harassment? • 471
 When Will I Hear About My Financial Aid? • 425
 Williams Center/Campus Life • 486
 Withdrawal and Honorable Dismissal • 441

Withdrawal from Program • 182
 WNYF-TV • 404
 Women's Studies • 11, 173
 Women's Studies • 380, 423
 Women's Studies minor • 113
 Writers' Ring • 404
 Writing Minor • 10, 11, 12, 80

Z

Zero Tolerance Policy • 453