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LETTER FROM THE PRESIDENT

It is my pleasure to welcome you to the State University of New York at Fredonia.

Consistently ranked and nationally accredited, Fredonia is one of the finest public universities in the North. As a prospective student, you are invited to experience the challenging and rewarding educational and preprofessional opportunities offered at this four-year residential college.

Founded in 1867, Fredonia is well known for its rigorous, comprehensive academic programs. Class sizes are small. In fact, student-to-faculty ratio is 14:1. Dedicated and prestigious faculty and staff will educate, challenge, and inspire you to become a skilled, connected, creative, and responsible global citizen and professional. You will have the opportunity to explore more than 80 undergraduate and graduate programs designed to help you reach your full potential.

As a student, you will have many opportunities to sharpen your communication skills and to learn in state-of-the art and dynamic learning environments such as Fredonia’s Science Complex which collectively houses Science, Technology, Engineering and Mathematics (STEM) programs. We want you to be comfortable on campus, so you’ll find welcoming residence halls and numerous dining locations including a renovated, high-tech Willy C’s food court.

We offer open educational resources (OER) to help individualize student learning while also saving you money by replacing and/or supplementing costly textbooks with free, low-cost, predominantly digital learning materials accessible through your laptop, desktop, smartphone or tablet.

In addition to your academic classes, you can participate in over 150 student clubs and organizations, and you can take advantage of internships and other experiential-learning opportunities. We offer study-abroad programs, site-based learning, undergraduate research experiences, and a full array of student support services including career counseling. You will discover endless opportunities to perform or attend in musical or theatrical productions. We offer a rich and diverse musical environment with conservatory-quality training at an affordable price. You will want to be sure to make time to cheer for your fellow Blue Devils at an intramural or intercollegiate sporting event, or volunteer on campus or in the community. These ample activities will allow you the opportunity to build friendships that will last a lifetime. We hope to include you with our over 64,000 graduates, who are proud to call SUNY Fredonia their alma mater.

This guidebook was developed for you. Please use it as a roadmap to success.

Stephen H. Kolison Jr., Ph.D.
President
INTRODUCTION

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

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

Community and Region

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

Your Educational Experience

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

In Support of Your Education

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

Your Life on Campus

A combination of strong educational options combined with a high quality of student life is the right formula for success. Participation in student activities, campus governance, and sports can contribute to a heightened sense of self-awareness and self-assurance. Fredonia’s residence halls provide you with a comfortable and secure atmosphere with activities planned by residents. Our University Commons combines a residence hall with the college bookstore, a convenience store, and a Starbucks Coffee shop. In addition to our student newspaper, radio and television stations, music, dance and theatre activities are open to all students, regardless of major. There are Greek organizations, a Leadership development program, and many intramural and intercollegiate sports teams.

History of the State University of New York at Fredonia

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

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

There are 14 residence halls on campus, including high quality corridor, suite-style and independent living, as well as kitchen suites in some halls. In addition, several lifestyle options are available including residence halls with smart classrooms, a Wellness Center, an Aerobic Center and a Crafts Room. There is high speed Internet access in every room and all residence halls have electronic entry access for added safety and security. Hendrix Hall is also the site of the student-operated television station, WNYF-TV.

Residence life offers the added advantage of activities planned by students. The new University Village Townhouses opened in Fall 2014.

Cranston Marché is the main dining facility, supplemented by the Williams Center food services including the Tim Hortons Café & Bake Shop, Willy C’s and the Blue Devil Grill, and cafes in selected buildings including FREDExpress, TeaRex Café and Sprout Café. University Commons combines Cranston Marché with a residence hall, bookstore, Starbucks coffee shop, and convenience store. Gregory Hall, the first residence hall on the present campus, was named in honor of former university president Dr. Leslie R. Gregory, and also is the home of the Office of Residence Life, the Office of Marketing and Communications, 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 Intercultural Center, the Student Association,
and several major student organizations including the student newspaper, *The Leader*. It also contains a variety of dining options, meeting, activity and recreation spaces, and the Fredonia Ticket Office. Dods Hall, one of two athletic facilities, contains classrooms, gymnasium, the Blue Devil Fitness Center, a dance studio and racquetball courts. Outside are lighted tennis and basketball courts. Adjacent to Dods is Steele Hall, which contains an indoor ice skating rink, track/basketball arena, and the university’s natatorium/swimming and diving facility. A soccer/lacrosse stadium with both natural and artificial turf fields opened in 2007.

Enhancing student and community life is the Michael C. Rockefeller Arts Center, a magnificent performing and visual arts facility. In addition to classrooms, the facility contains the 1,200-seat King Concert Hall, the 400-seat Marvel Theatre, Bartlett Theatre, and two art galleries. Construction began in 2014 on a 40,000-square-foot studio complex addition and renovation to the arts center. The studio complex was dedicated in Fall 2016 and includes among other items a multipurpose community room, large art studios and three dance studios. Rockefeller is also the home to the departments of Theatre and Dance, and Visual Arts and New Media.

LoGrasso Hall is the home of the Student Health Center and the Counseling Center. McEwen Hall includes lecture halls, classrooms, a television studio and the student-run Fredonia Radio Systems. Reed Library, named in honor of Daniel A. Reed of Sheridan, plays a key role in the teaching and learning process at Fredonia by providing a wide array of materials, services and spaces needed for collegiate study. Through the library, thousands of books, millions of articles, and various media area available in electronic and print forms. Interlibrary Loan gives students and staff access to additional resources from around the world. Reed Library houses strong specialized collections in Music, the Holland Land Company, the Coalition on West Valley Nuclear Wastes, saxophonist Sigurd Rascher and noted Austrian author Stefan Zweig. Online resources and reference help is available 24/7. Reed Library is also the home of College Tutoring Services, the Office of Disability Support Services, the Office of Academic Advising Services, the Professional Development Center, the Office of Grants and Sponsored Programs, the Office of Online Learning and the Office of the Registrar. With seating for 500-plus in many different areas, robust wi-fi throughout the building, a computer lab and study rooms, there is always a place to study in Reed Library.

Maytum Hall is the home of administrative and business offices as well as Academic Affairs; Advancement, Engagement and Economic Development; Admissions, Graduate Studies, Financial Aid, Finance and Administration, including Student Accounts, and Administrative Information Technology (AIT).

Fenton Hall, named in honor of Reuben Fenton, governor of New York State from 1865 to 1868, former congressman and U.S. Senator, who attended the Fredonia Academy, is the main humanities, and mathematics and computer science office and classroom building. The University President’s office is located in this building as well as the offices of Enrollment and Student Services, Extended Learning, and Institutional Research, Planning and Assessment. Jewett Hall is home to the International Pathway Program. The new $60 million Science Center, which opened in 2014, and Houghton Hall, are natural and physical sciences buildings containing classrooms and laboratories. A planned renovation of Houghton Hall, initiated in 2018, will create the Fredonia Science Complex to house Science, Technology, Engineering and Mathematics (STEM) programs. The new Science Center is home to the departments of Chemistry and Biochemistry, Biology and other sciences, including Exercise Science. 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 International Education and the Henry C. Youngerman Center for Communication Disorders, are all housed in this building.

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

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

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

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

Hours when academic buildings are open are published separately.
A Fredonia Timeline

1826  The Fredonia Academy opens on October 4 with 15 students
1827  The academy enrolls 81 gentlemen and 55 ladies for the fall term.
1829  Fredonia is incorporated as a village.
1867  The academy closes and the Fredonia Normal School opens.
1868  The Fredonia Normal School officially enrolls students in primary, junior and academic departments.
1887  Music as a specialty area begins with the appointment of Miss Jessie Hillman to the Fredonia faculty.
1900  A tragic fire on December 14 kills six students and a janitor, destroying most of the building.
1903  The new building, Old Main (now One Temple Square senior citizen housing), is completed.
1909  Fredonia is authorized to award teacher certificates in music and art.
1931  A four-year course in music is first offered.
1933  The state purchases property on Central Avenue to be used for future expansion.
1938  A four-year program in elementary education is offered.
1939  Construction begins at the new campus.
1941  Mason Hall is completed.
1942  First baccalaureate in elementary education awarded. Fredonia is now known as Fredonia State Teachers College.
1948  SUNY is created. Fredonia is now one of 11 colleges of education in the SUNY system.
1951  Gregory Hall, the first dormitory/student union building, is occupied.
1953  Fenton Hall is completed.
1958  Alumni Hall becomes the second dormitory building on campus.
1961  McGinnies dormitory and the first Mason Hall addition completed.
1962  I.M. Pei and Partners develops master plan for a new campus.
1963  Dods, Nixon, Chautauqua and Jewett halls are completed.
1968  Groundbreaking for Williams (Campus) Center.
1966-1976  The college experiences rapid growth in programs, academic departments, faculty and students.
1967-1971  Maytum Hall and Michael C. Rockefeller Arts Center constructed.
1975  Thompson Hall opens.
1976-1986  The college initiates programs in cooperative engineering, recombinant gene technology and sound recording technology.
1983  Steele Hall is completed.
1991  Reed Library addition completed.
1998  Enrollment now exceeds 4,500 students.
2001  Lake Shore Savings Clock Tower and Carillon dedicated. Swimming and diving complex completed.
2003  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. Groundbreaking is held for the university’s Technology Incubator.
2009  The Fredonia Technology Incubator dedicated and opened on Central Avenue in Dunkirk, N.Y.
2010  Dedication of new Robert and Marilyn Maytum Music Rehearsal Halls.
2011  Groundbreaking is held for the university's new Science Center. Williams Center renovation begins.
2012  Williams Center and Maytum Hall renovations completed; construction continues on new Science Center.
2013  New Blue Devil Fitness Center opens in Dods Hall. Ground broken for new University Village Townhouse complex. Construction continues on new Science Center.
<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>Science Center and University Village Townhouse complex open. Ground broken for addition to the Michael C. Rockefeller Arts Center.</td>
</tr>
<tr>
<td>2015</td>
<td>Fredonia earns the Community Engagement Classification from the Carnegie Foundation for the Advancement of Teaching.</td>
</tr>
<tr>
<td>2016</td>
<td>Rockefeller Arts Center Studio Complex dedicated</td>
</tr>
<tr>
<td>2018</td>
<td>Houghton Hall renovation initiated</td>
</tr>
</tbody>
</table>
Fredonia Mission Statement
The State University of New York at Fredonia, a comprehensive institution of higher education, declares as its mission:

Fredonia educates, challenges, and inspires students to become skilled, connected, creative, and responsible global citizens and professionals. The university enriches the world through scholarship, artistic expression, community engagement, and entrepreneurship.
Authorization and Accreditation

The State University of New York at Fredonia is authorized and approved by the Board of Regents to operate as a college/university. All of Fredonia’s baccalaureate and graduate programs are registered by the New York State Education Department. A list of authorized institutions and degree programs can be found using the Inventory of Registered Programs.

Institutional Accreditation
Middle States Commission on Higher Education
First Accredited: 1952
Reaccredited: 2020

Statement of Accreditation Status
<table>
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<tr>
<th>Unit</th>
<th>Degree Award(s) and Degree Title(s)</th>
<th>Accrediting Agency</th>
<th>Most Recent Accreditation Date</th>
<th>Next Accreditation Review</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visual Arts &amp; New Media</td>
<td>BA-Art History, BA-Studio Art, BFA Animation &amp; Illustration, BFA-Ceramics, BFA-Drawing &amp; Painting, BFA-Film &amp; Video Arts, BFA-Graphic Design, BFA-Photography, BFA-Sculpture</td>
<td>NASAD - National Association of Schools of Art and Design</td>
<td>2015</td>
<td>2021</td>
</tr>
<tr>
<td>Program</td>
<td>Degree(s)</td>
<td>Accreditation/Approval</td>
<td>Year Approved</td>
<td>Effective Date</td>
</tr>
<tr>
<td>----------------------------------------------</td>
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</tr>
<tr>
<td>Communication Disorders and Sciences</td>
<td>M.S. in Speech-Language Pathology</td>
<td>CAA - Council on Academic Accreditation for the ASHA - American Speech, Language, Hearing Association</td>
<td>2013</td>
<td>2021</td>
</tr>
<tr>
<td>Chemistry - ACS approved track</td>
<td>B.S. in Chemistry (Track II only is ACS certified)</td>
<td>ACS - American Chemical Society Committee on Professional Training (ACS-CPT)</td>
<td>June 2015</td>
<td>2021</td>
</tr>
<tr>
<td>Sociocultural and Justice Sciences</td>
<td>B.S. in Social Work</td>
<td>CSWE Council on Social Work Education</td>
<td>2015</td>
<td>2023</td>
</tr>
</tbody>
</table>
Fredonia Ideals
Fredonia is a community of students, faculty and staff dedicated to the pursuit of excellence through education. In order to accomplish such goals, the campus community must work together to maintain the high standards, values and ideals expected in a community of scholars.

Fredonia Strives to Be:
An Educational Community sharing academic goals, with students, faculty and staff working together to strengthen teaching and learning;
An Ethical Community reflecting honesty, integrity and fairness in both academic and extracurricular pursuits;
An Open Community welcoming new ideas and protecting freedom of thought, belief and expression;
A Safe Community respecting each other’s rights, personal safety, privacy and property;
A Civil Community expressing disagreements in rational and non-threatening ways and treating all individuals with consideration, decency and respect;
A Responsible Community accepting obligations under clearly articulated principles designed to support the common good;
A Just Community seeking to resolve conflict and violations of conduct standards fairly and equitably;
A Healthy Community respecting and promoting physical and emotional wellness and avoiding alcohol and drug abuse;
A Diverse Community celebrating diversity and learning from differences;
A Socially Conscious Community seeking to contribute to the betterment of society through service;
A Watchful Community remaining alert and taking steps to eliminate threats posed by hatred, intolerance, racism, sexism, ageism and other injustices.


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

Affirmative Action Information
Fredonia fully subscribes to the Non-discrimination Policy of the State University of New York. The State University of New York, in accordance with applicable federal and state laws, does not discriminate on the basis of race, color, national origin, religion, creed, age, disability, sex, gender identity, sexual orientation, familial status, pregnancy, predisposing genetic characteristics, military status, domestic violence victim status, or conviction conviction.

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

A SUNY–wide grievance procedure is available to all students and employees in cases of discrimination. A person, who feels they have been a victim of discrimination for any of the above reasons, should feel free to contact the Chief Diversity Officer. Persons who wish to initiate such a grievance or complaint should also feel free to bring a friend or advisor with them.

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

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

Information in the Fredonia catalog is accurate as of October 7, 2020. However, some information is subject to change per federal, state or SUNY guidelines. Updated information may be obtained from the Office of Curriculum, Assessment, and Academic Support.
Listed below are Fredonia's registered degree programs as of June 1, 2020. 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. Fredonia has 79 baccalaureate degree programs, 14 master's degree programs, 4 multi-award degree programs, and 3 advanced certificates.
<table>
<thead>
<tr>
<th>Undergraduate Programs</th>
<th>HEGIS Code</th>
<th>Degree</th>
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<tr>
<td>Accounting (p. 21)</td>
<td>0502</td>
<td>B.S.</td>
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<tr>
<td>Acting (p. 21)</td>
<td>1007</td>
<td>B.F.A.</td>
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<td>Applied Mathematics (p. 32)</td>
<td>1703</td>
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<tr>
<td>Biochemistry (p. 33)</td>
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<tr>
<td>Biology (p. 35)</td>
<td>0401</td>
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<tr>
<td>Business Administration (p. 41)</td>
<td>0506</td>
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<tr>
<td>Business Admin.: Finance (p. 41)</td>
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<tr>
<td>Business Admin.: Management (p. 42)</td>
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<tr>
<td>Business Admin.: Marketing (p. 43)</td>
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<tr>
<td>Chemistry (p. 44)</td>
<td>1905</td>
<td>B.S.</td>
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<tr>
<td>Childhood Education 1-6, 7-9 Extension (p. 45)</td>
<td>0802</td>
<td>B.S.Ed.</td>
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<tr>
<td>Childhood Inclusive Education 1-6, 7-9 Extension (p. 47)</td>
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<td>Communication: Audio/Radio Production (p. 51)</td>
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<tr>
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<td>B.A.</td>
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<td>B.S.</td>
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<td>0604</td>
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<td>1220</td>
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<td>B.F.A.</td>
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<td>Early Childhood-Childhood Education (p. 65)</td>
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<td>Earth Science (p. 66)</td>
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<td>Exercise Science (p. 103)</td>
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<td>Middle Childhood Specialist- Mathematics</td>
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<td>Molecular Genetics (p. 118)</td>
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<td>Music Industry (p. 138)</td>
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<td>Music (p. 121)</td>
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<td>Music Composition</td>
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<td>Public Accountancy</td>
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<td>Theatre Arts</td>
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<tr>
<td>Theatrical Production and Design</td>
<td>166</td>
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<td>Visual Arts and New Media</td>
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<tr>
<td>Visual Arts and New Media: Animation and Illustration</td>
<td>171</td>
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<td>Visual Arts and New Media: Ceramics</td>
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<td>Visual Arts and New Media: Drawing and Painting</td>
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<td>Visual Arts and New Media: Graphic Design</td>
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</table>
Visual Arts and New Media: Film & Video Arts (p. 174) 1099 B.F.A.
Visual Arts and New Media: Photography (p. 175) 1011 B.F.A.
Visual Arts and New Media: Sculpture (p. 176) 1002 B.F.A.
Visual Arts: Art History (p. 170) 1003 B.A.

**Teacher Certification Areas in Adolescence Education**

<table>
<thead>
<tr>
<th>Area</th>
<th>HEGIS Code</th>
<th>Degree</th>
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<tbody>
<tr>
<td>Adolescence Education: Biology (p. 22)</td>
<td>0401.01</td>
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<td>Adolescence Education: Chemistry (p. 23)</td>
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<td>Adolescence Education: Earth Science (p. 24)</td>
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<td>Adolescence Education: French (p. 28)</td>
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<td>Adolescence Education: Mathematics (p. 29)</td>
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<td>Middle Childhood Specialist-Mathematics (p. 117)</td>
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**Graduate Programs**

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<tr>
<td>Biology (p. 38)</td>
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<td>Curriculum &amp; Instruction in Inclusive Education (p. 85)</td>
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<td>Interdisciplinary Studies (p. 109)</td>
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<td>Language and Learning (p. 87)</td>
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<td>Literacy Education (Birth-Grade 12) (p. 89)</td>
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<td>Literacy Education (Grades 5-12) (p. 90)</td>
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<tr>
<td>Mathematics 7-12 (p. 113)</td>
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<td>Music Performance (p. 140)</td>
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<td>Music Theory-Composition (p. 141)</td>
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<tr>
<td>Bilingual Education (p. 83)</td>
<td>0899.60</td>
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<td>Educational Leadership (p. 91)</td>
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<td>TESOL (p. 96)</td>
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<td>Adolescence Education: English Multi-Award (p. 26)</td>
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<tr>
<td>Biology (p. 35)</td>
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<td>Childhood Inclusive Education &amp; Literacy Education: B-12 (p. 48)</td>
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<td>Music Education Multi-Award (p. 129)</td>
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<td>Mus.B./M.M.</td>
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ACCOUNTING - B.S. DEGREE

School of Business
Office: W307 Thompson Hall
(716) 673-3402
Dr. Julie Fitzpatrick, Program Coordinator

Email: business.administration@fredonia.edu
Website: http://home.fredonia.edu/businessadministration

MAJOR REQUIREMENTS

Supporting Courses:

<table>
<thead>
<tr>
<th>Course</th>
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<tr>
<td>MATH 120</td>
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<td>CSIT 104</td>
<td>Introduction to Microcomputer Software</td>
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<td>CSIT 151</td>
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<td>CSIT 251</td>
<td>Information Systems Structures</td>
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Subtotal: 9

Lower Level Business Core Courses:

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<td>ECON 200</td>
<td>Fundamentals of Statistics for Business Administration and Economics</td>
<td>3</td>
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<tr>
<td>ACCT 201</td>
<td>Principles of Financial Accounting</td>
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<tr>
<td>ACCT 202</td>
<td>Principles of Managerial Accounting</td>
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<tr>
<td>ECON 205</td>
<td>Principles of Microeconomics</td>
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<td>ECON 210</td>
<td>Principles of Macroeconomics</td>
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Subtotal: 15

Upper Level Business Core Courses:

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<td>BUAD 300</td>
<td>Statistical Analysis</td>
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<tr>
<td>ACCT 311</td>
<td>Business Law I</td>
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<tr>
<td>BUAD 320</td>
<td>Managerial Finance</td>
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<td>BUAD 323</td>
<td>Organizational Behavior</td>
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<td>BUAD 327</td>
<td>Operations Management</td>
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<td>BUAD 328</td>
<td>Marketing Foundations</td>
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Subtotal: 21

Accounting Courses:

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<td>Intermediate Accounting I</td>
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<td>ACCT 302</td>
<td>Intermediate Accounting II</td>
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<td>ACCT 303</td>
<td>Cost Management</td>
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<td>ACCT 304</td>
<td>Taxation I</td>
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<td>ACCT 305</td>
<td>Taxation II</td>
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<tr>
<td>ACCT 307</td>
<td>Accounting Information Systems I</td>
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<tr>
<td>ACCT 405</td>
<td>Auditing</td>
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<td>ACCT 407</td>
<td>Accounting Information Systems II</td>
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<tr>
<td>ACCT 480</td>
<td>Internship</td>
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Subtotal: 25

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

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

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

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

Subtotal: 70
Total Credit Hours: 70

ACTING - B.F.A DEGREE

Department of Theatre and Dance
Office: 212 Rockefeller Arts Center
(716) 673-3596
Sam Kenney, Chairperson
Email: theatre.dance@fredonia.edu
Website: http://home.fredonia.edu/theatredance/

MAJOR REQUIREMENTS

Core Courses:

<table>
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<td>Theatre and Dance Productions</td>
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<td>THEA 102</td>
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<td>THEA 121</td>
<td>Introduction to Technical Theatre</td>
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<td>THEA 131</td>
<td>Acting Studio: Acting I</td>
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<td>THEA 132</td>
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<td>THEA 202</td>
<td>Theatre and Dance Productions</td>
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<td>THEA 220</td>
<td>Makeup</td>
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<td>THEA 231</td>
<td>Acting Studio: Scene Study I</td>
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<td>THEA 232</td>
<td>Acting Studio: Scene Study II</td>
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<td>Acting Lab I</td>
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<td>Acting Lab II</td>
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<td>THEA 242</td>
<td>Acting Studio: Introduction to Voice and Movement I</td>
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<td>THEA 243</td>
<td>Acting Studio: Introduction to Voice and Movement II</td>
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<td>THEA 301</td>
<td>Theatre and Dance Productions</td>
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<td>THEA 302</td>
<td>Theatre and Dance Productions</td>
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<td>THEA 341</td>
<td>Acting Studio: Shakespeare</td>
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<td>THEA 345</td>
<td>Acting Studio: Voice and Movement III</td>
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<td>THEA 346</td>
<td>Acting Studio: Voice and Movement IV</td>
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<td>Commedia dell’Arte</td>
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<td>THEA 410</td>
<td>Acting for Media I</td>
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<td>THEA 423</td>
<td>Acting Studio: Alternative Acting Styles</td>
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<td>THEA 424</td>
<td>The Business of Acting</td>
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<td>THEA 441</td>
<td>Directing I</td>
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<td>THEA 451</td>
<td>History of the Theatre I</td>
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<td>THEA 452</td>
<td>History of the Theatre II</td>
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<td>THEA 467</td>
<td>Meisner Technique</td>
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<td>THEA 468</td>
<td>Devising Theatre</td>
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<td>THEA 499</td>
<td>Performance/Production Seminar</td>
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Subtotal: 70

Elective Courses:

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<td>ARTH 102</td>
<td>Art in Culture from 1400 to the Present</td>
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<td>DANC 100</td>
<td>Introduction to Dance</td>
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<td>DANC 111</td>
<td>Contemporary Technique I</td>
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<td>DANC 112</td>
<td>Ballet I</td>
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<td>DANC 113</td>
<td>Jazz Dance I</td>
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<td>DANC 114</td>
<td>Tap Dance I</td>
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<td>DANC 211</td>
<td>Contemporary Technique II</td>
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<td>DANC 212</td>
<td>Ballet II</td>
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<td>DANC 213</td>
<td>Jazz Dance II</td>
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<td>DANC 214</td>
<td>Tap Dance II</td>
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<td>DANC 241</td>
<td>Dance Improvisation</td>
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<td>DANC 311</td>
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<td>DANC 312</td>
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<td>DANC 313</td>
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<td>ENGL 131</td>
<td>Word and Image</td>
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<td>Introduction to Film</td>
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<td>Contemporary Drama</td>
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<td>ENGL 412</td>
<td>Early Shakespeare</td>
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<td>ENGL 414</td>
<td>Later Shakespeare</td>
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<td>ENGL 416</td>
<td>Elizabethan Drama</td>
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<td>Music History in Western Civilization I</td>
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<td>History of Musical Theatre</td>
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<td>THEA 382</td>
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Subtotal: 20

*Please note that students may choose any 20 non-repeated credits from the above.

All Fredonia students must complete a minimum of 120 credits hours and a minimum of 45 credits at the 300/400 level.

All majors in the Department of Theatre and Dance are expected to carry a minimum GPA of 3.0 in their major program, and a cumulative GPA of 2.0.

Subtotal: 90

Total Credit Hours: 90

ADOLESCENCE EDUCATION: BIOLOGY - B.S.

DEGREE

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

Ted Lee, Chairperson
William D. Brown, Program Coordinator
Email: biology@fredonia.edu
Website: http://home.fredonia.edu/biology

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

MAJOR REQUIREMENTS

Core Program:

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<td>BIOL 133</td>
<td>Introductory Cell and Molecular Biology</td>
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<td>BIOL 237</td>
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<td>BIOL 330</td>
<td>Ecology</td>
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Subtotal: 36

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<td>CHEM 125</td>
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<tr>
<td>CHEM 116</td>
<td>General Chemistry Lecture II</td>
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<td>CHEM 215</td>
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<td>CHEM 225</td>
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<td>CHEM 216</td>
<td>Organic Chemistry Lecture II</td>
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<tr>
<td>CHEM 226</td>
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<td>STAT 250</td>
<td>Statistics for Scientists</td>
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<tr>
<td>PHYS 121</td>
<td>College Physics I</td>
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<td>PHYS 123</td>
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<td>PHYS 124</td>
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<td>PHYS 230</td>
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<td>PHYS 231</td>
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<td>PHYS 232</td>
<td>University Physics I Lab</td>
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<tr>
<td>PHYS 233</td>
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Subtotal: 27-29

Education Course Work:

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<td>SCED 105</td>
<td>Nature of Science and Science Education</td>
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<td>SCED 106</td>
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<td>EDU 224</td>
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</table>
EDU 250 Introduction to the Exceptional Learner and 3
EDU 251 Practicum in Inclusive Education II 1
SCED 276 Literacy and Technology for Science and Mathematics 3
EDU 303 Safe Schools/Healthy Students-DASA: Safety Education/Fire and Arson/School Violence 1
EDU 304 Safe Schools & Healthy Students 1
SCED 303 Assessment for Inquiry-Based Science 3
SCED 305 Diversity in the Teaching of Science and Mathematics and 3
SCED 313 Diversity in Teaching Math and Science Field Experience 0
EDU 349 Educational Psychology 3
SCED 419 Adolescence Science Methods 3
EDU 430 Student Teaching Grades 7-12 15

Subtotal: 42

Subtotal: 105-107

Total Credit Hours: 105-107

Students should refer to the Education (p. 72) section of this catalog for a description of the certification requirements for this degree. Students must also maintain a minimum 3.0 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.

A candidate who receives a Satisfactory standing in the Student Teaching placement must also receive a passing grade in their co-requisite Seminar/Methods course to advance.

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. Proficiency requirement met by the following:

• Fredonia Placement Exam determination of Fredonia Foundations courses 100 and 110 in the same World Language or course 110 (or higher) in World Language.

• Proficiency may also be fulfilled by qualifying AP, IB, CLEP Exam scores or transferred courses of Elem I and Elem II of same language, as verified by Registrar’s Office.

The General Education foreign language requirement (p. Error! Bookmark not defined.) differs from the certification requirement and must be satisfied for degree conferral.

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

ADOLESCENCE EDUCATION: CHEMISTRY - B.S. DEGREE

Department of Chemistry and Biochemistry
Office: 221 Science Center
(716) 673-3281
Matthew A. Fountain, Chairperson
Email: chemistry.department@fredonia.edu
Website: http://home.fredonia.edu/chemistry

MAJOR REQUIREMENTS

Chemistry Core:

CHEM 115 General Chemistry Lecture I 3
CHEM 116 General Chemistry Lecture II 3
CHEM 125 General Chemistry Laboratory I 1
CHEM 126 General Chemistry Laboratory II 1
CHEM 130 Honors General Chemistry Laboratory 1
CHEM 215 Organic Chemistry Lecture I 3
CHEM 216 Organic Chemistry Lecture II 3
CHEM 225 Organic Chemistry Laboratory I 1
CHEM 226 Organic Chemistry Laboratory II 1
CHEM 230 Advanced Organic Laboratory 1
CHEM 315 Introduction to Physical Chemistry 3
CHEM 316 Advanced Physical Chemistry 3
CHEM 325 Physical Chemistry Laboratory I 1
CHEM 326 Physical Chemistry Laboratory II 1
CHEM 317 Analytical Chemistry, Quantitative Analysis 3
CHEM 318 Analytical Chemistry, Instrumental Analysis 3
CHEM 327 Analytical Chemistry I Laboratory 1
CHEM 328 Analytical Chemistry II Laboratory 2
CHEM 495 Seminar: Advances in Chemistry 1
CHEM 496 Seminar: Advances in Chemistry 1
CHEM 391 Independent Lab Research 1-3
CHEM 392 Independent Lab Research 1-3
CHEM 491 Independent Laboratory Research 1-3
CHEM 492 Independent Laboratory Research or Chemistry Elective 3

Subtotal: 41

Cognates:

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

Subtotal: 21
Education Foundations:
- EDU 224 Adolescent Development 3
- EDU 250 Introduction to the Exceptional Learner 3
- EDU 251 Practicum in Inclusive Education II 1
- EDU 303 Safe Schools/Healthy Students-DASA: Safety Education/Fire and Arson/School Violence 1
- EDU 304 Safe Schools & Healthy Students 1
- EDU 349 Educational Psychology 3
- EDU 430 Student Teaching Grades 7-12 15

Subtotal: 27

NOTE: EDU 251 is a field course.

Science Education:
- SCED 105 Nature of Science and Science Education 3
- SCED 106 Nature of Science Education Field Experience 0
- SCED 276 Literacy and Technology for Science and Mathematics 3
- SCED 303 Assessment for Inquiry-Based Science 3
- SCED 305 Diversity in the Teaching of Science and Mathematics 3
- SCED 313 Diversity in Teaching Math and Science Field Experience 0
- SCED 419 Adolescence Science Methods 3

Subtotal: 15

NOTE: SCED 106 and SCED 313 are field courses.

Total Credit Hours: 104

Teacher Certification
Students wishing to teach chemistry in the secondary schools can obtain provisional certification by completing the requirements below. The procedure to be followed for admission to the professional sequence of courses is described in the Education section of the catalog. Candidates in all education programs are required to demonstrate competence in a foreign language. Proficiency requirement met by the following:

- Fredonia Placement Exam determination of Fredonia Foundations courses 100 and 110 in the same World Language or course 110 (or higher) in World Language.
- Proficiency may also be fulfilled by qualifying AP, IB, CLEP Exam scores or transferred courses of Elem I and Elem II of same language, as verified by Registrar’s Office.

The General Education foreign language requirement (p. Error! Bookmark not defined.) differs from the certification requirement and must be satisfied for degree conferral.

A candidate who receives a Satisfactory standing in the Student Teaching placement must also receive a passing grade in their co-requisite Seminar/Methods course to advance.

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

ADOLESCENCE EDUCATION: EARTH SCIENCE - B.S. DEGREE

Department of Geology and Environmental Sciences
Office: 112 Jewett Hall
(716) 673-3302
Justin Conroy, Chairperson
Email: geosciences@fredonia.edu
Website: http://home.fredonia.edu/earth

MAJOR REQUIREMENTS

Core Program:
- GEO 102 Freshman Seminar 1
- GEO 150 Moons and Planets 3
- PHYS 118 Introduction to Astronomy 3
- GEO 160 Blue Planet 3
- GEO 165 Planet Earth 3
- GEO 169 Planet Earth Lab 1
- GEO 210 Earth History 3
- GEO 211 Earth History Lab 1
- GEO 215 Earth Materials 4
- GEO 311 Global Climate 3
- GEO 330 Geomorphology 4
- One GEO 300/400 level elective course with lab 4

Subtotal: 30

Education Coursework:
- SCED 105 Nature of Science and Science Education 3
- SCED 106 Nature of Science Education Field Experience 0
- EDU 224 Adolescent Development Experience 3
- EDU 250 Introduction to the Exceptional Learner 3
- EDU 251 Practicum in Inclusive Education II 1
- SCED 276 Literacy and Technology for Science and Mathematics 3
- SCED 303 Assessment for Inquiry-Based Science 3
- SCED 305 Diversity in the Teaching of Science and Mathematics 3
- SCED 313 Diversity in Teaching Math and Science Field Experience 0
- EDU 349 Educational Psychology 3
- SCED 419 Adolescence Science Methods 3
- EDU 430 Student Teaching Grades 7-12 15
- EDU 303 Safe Schools/Healthy Students-DASA: Safety Education/Fire and Arson/School Violence 1
- EDU 304 Safe Schools & Healthy Students 1

Subtotal: 42

Additional Coursework in Related Disciplines:
- CHEM 115 General Chemistry Lecture I 3
- CHEM 116 General Chemistry Lecture II 3
PHYS 121 College Physics I 3
PHYS 122 College Physics II 3
PHYS 230 University Physics I and 4
PHYS 231 University Physics II 4
MATH 120 Survey of Calculus I 3
MATH 122 University Calculus I or 4

A course in Statistics at the 200-level or higher 3

Subtotal: 18-21

Subtotal: 90-93

Total Credit Hours: 90-93

B.S. Earth Science Adolescence Education students must attain a minimum grade of C in all Geosciences courses, and attain a 3.0 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. Proficiency requirement met by the following:

- Fredonia Placement Exam determination of Fredonia Foundations courses 100 and 110 in the same World Language or course 110 (or higher) in World Language.
- Proficiency may also be fulfilled by qualifying AP, IB, CLEP Exam scores or transferred courses of Elem I and Elem II of same language, as verified by Registrar’s Office.

The General Education foreign language requirement (p. Error! Bookmark not defined.) differs from the certification requirement and must be satisfied for degree conferral.

A candidate who receives a Satisfactory standing in the Student Teaching placement must also receive a passing grade in their co-requisite Seminar/Methods course to advance.

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

For certification requirements, please refer to the Education section (p. 69) of the catalog.

ADOLESCENCE EDUCATION: ENGLISH - B.A. DEGREE

Department of English
Office: 278 Fenton Hall
(716) 673-3125
Bruce Simon, Chairperson
Email: english.department@fredonia.edu
Website: https://www.fredonia.edu/academics/colleges-schools/college-liberal-arts-sciences/english

MAJOR REQUIREMENTS

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

English Adolescence Education majors are required to earn at least a C+ in each required English course, and to maintain an overall GPA of 3.0. In addition to the English courses listed below, Adolescence Education majors must also take the following courses, achieving an average of 2.50: EDU 224, EDU 250, EDU 251, EDU 303, EDU 304, and EDU 349.

English Adolescence Education majors are required to demonstrate competence in a foreign language. Proficiency requirement met by the following:

- Fredonia Placement Exam determination of Fredonia Foundations courses 100 and 110 in the same World Language or course 110 (or higher) in World Language.
- Proficiency may also be fulfilled by qualifying AP, IB, CLEP Exam scores or transferred courses of Elem I and Elem II of same language, as verified by Registrar’s Office.

The General Education foreign language requirement (p. Error! Bookmark not defined.) differs from the certification requirement and must be satisfied for degree conferral.

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

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

Students will be notified in writing within two weeks after their screening whether they passed or failed. Those who pass become "candidates" and are eligible to enroll in ENED 450 Senior Seminar and ENED 451 Methods for English Education during fall of their senior year, and ENED 452 Inquiries in Student Teaching, ENED 454 Student Teaching in the Secondary School - English High School (Student Teaching), and ENED 455 Student Teaching in the Secondary School - English Middle School (Student Teaching) during the spring of their senior year. Students who do not pass screening are given several options that may allow them to attempt
Candidates in all education programs will complete training under the Dignity for All Students Act (DASA). Candidates in English Adolescence Education must complete at least 66 credit hours outside the major in order to graduate. Credits earned for ENGL 100 (Craft of Writing) 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. Beginning in the Fall 2013 semester, the training required under the Dignity for All Students Act (DASA) will be included in EDU 303 at Fredonia. Undergraduate candidates planning to graduate after Fall 2013 who have already completed EDU 303 on campus or taken a workshop as a substitution for EDU 303 must also complete the EDU DASA workshop prior to graduation.

NOTE: New York State Regents’ revisions of programs in Adolescence Education may result in changes in requirements, and these changes may affect current as well as future English Adolescence Education majors. See Education (p. 72) for certification information.

**English Pedagogy Courses:**

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

- **ENED 101** Introduction to English Adolescence Education: 1 credit
- **ENED 201** Engaged Teaching in English Adolescence Education: 1 credit
- **ENED 250** Literacy and Technology: 3 credits
- **ENED 301** Reflective Teaching in English Adolescence Education: 1 credit
- **ENED 355** Adolescent Literature: 3 credits
- **ENED 356** Teaching Writing in the Secondary School: 3 credits
- **ENED 357** Literacy/Language/Learning Theory: 3 credits
- **ENED 450** Seminar for Teachers of English: 3 credits
- **ENED 451** Methods in English Education: 3 credits
- **ENED 452** Inquiries in Student Teaching: 3 credits
- **ENED 454** Student Teaching in the Secondary School-English High School: 6 credits
- **ENED 455** Student Teaching in the Secondary School-English Middle School: 6 credits

**Subtotal:** 36 credits

**NOTE:**
- ENED 450: Seniors only, e-Portfolio added;
- ENED 454 and ENED 455: Capstone experiences.
student's third year. Upon successful completion of screening and requisite coursework, 90 earned credit hours, and a minimum GPA of 3.0, students will become "candidates" in the fourth year and enroll in undergraduate and graduate English/English Adolescence Education courses. Students will be considered undergraduates through the fourth year for tuition, academic requirements, and financial aid purposes. In the fifth year, students are full-time graduate students, completing the remaining English/English Adolescence Education graduate courses and their capstone student teaching experiences. They will pay graduate tuition and will be eligible for graduate financial aid. Earning both B.A. and M.A. degrees in five years with graduate coursework in the fourth year at the undergraduate tuition rate saves students time and money.

As Undergraduates: Students in the program are required to earn at least a C+ in each required English and English Education undergraduate course. In addition to the English courses listed below, Adolescence Education majors must also take the following courses, achieving an average of 2.50: EDU 224, EDU 250, EDU 251, EDU 303, EDU 304, and EDU 349. Candidates must complete at least 66 undergraduate credit hours outside the major in order to graduate. Credits earned for ENGL 100 (Craft of Writing) 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.

Screening: Becoming an English Adolescence Education candidate and beginning graduate coursework in the fourth year is contingent upon meeting program requirements and a successful screening interview given by a panel of English Adolescence Education faculty. Screening interviews allow students to demonstrate their mastery of key pedagogical, content, and disposition issues related to English Adolescence Education. To be eligible for screening, a student must have at least junior-level standing (approximately 75 earned credit hours); an overall GPA of 3.0; successful completion (C+ or higher) in at least two of the following courses: ENED 250, EDU 224, EDU 250, EDU 251, EDU 303, EDU 304, and EDU 349.

As Graduate Students: Students will earn at least a B in each graduate course to successfully meet requirements.

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

NOTE: New York State Regents’ revisions of programs in Adolescence Education may result in changes in requirements, and these changes may affect current as well as future English Adolescence Education multi-award students.

See Education (p. 69) for certification information.

English Content Courses:

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<tr>
<th>Course</th>
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<td>ENGL 106</td>
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<tr>
<td>ENGL 204</td>
<td>Survey of English Literature</td>
<td>3</td>
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</table>

English Pedagogy Courses:

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

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENED 101</td>
<td>Introduction to English Adolescence Education</td>
<td>1</td>
</tr>
<tr>
<td>ENED 201</td>
<td>Engaged Teaching in English Adolescence Education</td>
<td>1</td>
</tr>
<tr>
<td>ENED 250</td>
<td>Literacy and Technology</td>
<td>3</td>
</tr>
<tr>
<td>ENED 301</td>
<td>Reflective Teaching in English Adolescence Education</td>
<td>1</td>
</tr>
<tr>
<td>ENED 355</td>
<td>Adolescent Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENED 356</td>
<td>Teaching Writing in the Secondary School</td>
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</tr>
<tr>
<td>ENED 357</td>
<td>Literacy/Language/Learning Theory</td>
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</tr>
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<td>ENED 452</td>
<td>Inquiries in Student Teaching</td>
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Subtotal: 18

Education Courses:

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<td>EDU 224</td>
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<tr>
<td>EDU 250</td>
<td>Introduction to the Exceptional Learner</td>
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</tr>
<tr>
<td>EDU 251</td>
<td>Practicum in Inclusive Education II</td>
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<td>EDU 303</td>
<td>Safe Schools/Healthy Students-DASA: Safety Education/Fire and Arson/School Violence</td>
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</tr>
<tr>
<td>EDU 304</td>
<td>Safe Schools &amp; Healthy Students</td>
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<tr>
<td>EDU 349</td>
<td>Educational Psychology</td>
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Subtotal: 12

NOTE:

- A candidate who receives a Satisfactory standing in the Student Teaching placement must also receive a passing grade in their co-requisite Seminar/Methods course to advance.

Graduate Coursework:

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<tr>
<th>Course</th>
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<tr>
<td>ENED 530</td>
<td>Topics in Teaching Language</td>
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</tr>
<tr>
<td>ENED 535</td>
<td>Topics in Teaching Diversity</td>
<td>3</td>
</tr>
</tbody>
</table>

NOTE:

- Literature and Indentity, Literary History II and World Literature courses: for lists of courses in these categories, please see the English BA catalog page (p. 101)
Students who desire to teach French or Spanish at the MA level must have an overall GPA of 3.0 or better and must continue to have an overall GPA of 3.0 in their major. Candidates wishing to continue in the program must attend a departmental orientation and complete a departmental screening process, usually in February of the year before student teaching. Admission is limited to those candidates who have been accepted into the program after the screening process and who plan to follow the course with a semester of student teaching. In order to continue in the program, candidates must earn a minimum grade of "B" in Secondary School (Adolescence) Methods and must continue to have an overall GPA of 3.0 in all language courses.

A candidate who receives a Satisfactory standing in the Student Teaching placement must also receive a passing grade in their co-requisite Seminar/Methods course to advance.

Total Credit Hours: 39

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

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

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

The Secondary School (Adolescence) Methods course will be taken in the Fall semester immediately preceding student teaching. Admission is limited to those candidates who have been accepted into the program after the screening process and who plan to follow the course with a semester of student teaching.

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

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

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

As of December 31, 2013, candidates in all education programs are required to complete training under the Dignity for All Students Act (DASA). Beginning in the Fall 2013 semester, the training required under the Dignity for All Student Act (DASA) will be included in EDU 303 at Fredonia. Undergraduate candidates planning to graduate after Fall 2013 Student Teaching placement must also receive a passing grade on their co-operative Seminar/Methods course to advance. A candidate who receives a Satisfactory standing in the requirement and must be satisfied for degree conferral.

For certification information, please see the Education (p. 69) section of the catalog.

ADOLESCENCE EDUCATION: MATHEMATICS - B.S. DEGREE

Department of Mathematical Sciences
Office: 223 Fenton Hall
(716) 673-3243
Julia Wilson, Chairperson
Keary Howard, Mathematics Education Coordinator
Email: mathematics.department@fredonia.edu
Website: http://www.fredonia.edu/department/math/

**MAJOR REQUIREMENTS**

<table>
<thead>
<tr>
<th>Core Courses:</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>MATH 122 University Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>MATH 123 University Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>MATH 210 Mathematical Structures and Proof</td>
<td>4</td>
</tr>
<tr>
<td>MATH 223 University Calculus III</td>
<td>4</td>
</tr>
<tr>
<td>MATH 231 Linear Algebra</td>
<td>4</td>
</tr>
<tr>
<td>MAED 310 Reading and Writing Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>MATH 323 Introductory Real Analysis</td>
<td>3</td>
</tr>
<tr>
<td>MATH 331 Abstract Algebra I</td>
<td>3</td>
</tr>
<tr>
<td>MATH 341 Geometry</td>
<td>3</td>
</tr>
<tr>
<td>MATH 381 History of Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>MATH 405 Senior Seminar</td>
<td>1</td>
</tr>
<tr>
<td>or MAED 410 Seminar: Mathematics for High School Teachers</td>
<td>3</td>
</tr>
<tr>
<td>STAT 350 Probability and Statistics</td>
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</tr>
<tr>
<td>One additional MATH or STAT course numbered 311 or higher</td>
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</tr>
<tr>
<td>MAED 105 Introduction to Contemporary Mathematics Education</td>
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</tr>
<tr>
<td>MAED 106 Contemporary Mathematics Education - Field Experience</td>
<td>0</td>
</tr>
<tr>
<td>CHEM 115 General Chemistry Lecture I</td>
<td>3</td>
</tr>
</tbody>
</table>

and

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 125 General Chemistry Laboratory I</td>
<td>1</td>
</tr>
<tr>
<td>PHYS 230 University Physics I</td>
<td>4</td>
</tr>
<tr>
<td>and PHYS 232 University Physics I Lab</td>
<td>1</td>
</tr>
<tr>
<td>EDU 224 Adolescent Development</td>
<td>3</td>
</tr>
<tr>
<td>EDU 250 Introduction to the Exceptional Learner</td>
<td>3</td>
</tr>
<tr>
<td>and EDU 251 Practicum in Inclusive Education II</td>
<td>1</td>
</tr>
<tr>
<td>MAED 276 Literacy and Technology for Science</td>
<td>3</td>
</tr>
<tr>
<td>and Mathematics MAED 303 Safe Schools/Healthy Students-</td>
<td>1</td>
</tr>
<tr>
<td>DASA: Safety Education/Fire and Arson/School Violence</td>
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</tr>
<tr>
<td>EDU 304 Safe Schools &amp; Healthy Students</td>
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</tr>
<tr>
<td>MAED 305 Diversity in the Teaching of Science</td>
<td>3</td>
</tr>
<tr>
<td>and Mathematics MAED 313 Diversity in the Teaching of Science</td>
<td>0</td>
</tr>
<tr>
<td>and Mathematics MAED 314 Diversity in the Teaching of Science</td>
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</tr>
<tr>
<td>EDU 349 Educational Psychology</td>
<td>3</td>
</tr>
<tr>
<td>MAED 419 Secondary School (Grades 7-12)</td>
<td>3</td>
</tr>
<tr>
<td>Methods in Mathematics MAED 416 Math Student Teaching Seminar</td>
<td>3</td>
</tr>
<tr>
<td>MAED 430 Student Teaching for Mathematics/Adolescence Education: Grades 7-9 Placement</td>
<td>6</td>
</tr>
<tr>
<td>MAED 431 Student Teaching for Mathematics/Adolescence Education: Grades 10-12 Placement</td>
<td>6</td>
</tr>
</tbody>
</table>

Subtotal: 85-88

**Total Credit Hours: 85-88**

Candidates in all education programs are required to demonstrate competence in a foreign language. Proficiency requirement met by the following:

- Fredonia Placement Exam determination of Fredonia Foundations courses 100 and 110 in the same World Language or course 110 (or higher) in World Language.
- Proficiency may also be fulfilled by qualifying AP, IB, CLEP Exam scores or transferred courses of Elem I and Elem II of same language, as verified by Registrar’s Office.

The General Education foreign language requirement (p. Error! Bookmark not defined.) differs from the certification requirement and must be satisfied for degree conferral.

A candidate who receives a Satisfactory standing in the Student Teaching placement must also receive a passing grade in their co-requisite Seminar/Methods course to advance. As of December 31, 2013, candidates in all education programs are required to complete training under the Dignity for All Students Act (DASA). Beginning in the Fall 2013 semester, the training required under the Dignity for All Student Act (DASA) will be included in EDU 303 at Fredonia.
Undergraduate candidates planning to graduate after Fall 2013 who have already completed EDU 303 on campus or taken a workshop as a substitution for EDU 303 must also complete the EDU DASA workshop prior to graduation.

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

For more information on the education requirements, please consult the Education (p. 69) section of the catalog.

### ADOLESCENCE EDUCATION: PHYSICS - B.S. DEGREE

**Department of Physics**  
Office: 112 Jewett Hall  
(716) 673-3301  
Justin Conroy, Chairperson  
Email: physics.department@fredonia.edu  
Website: [http://home.fredonia.edu/physics](http://home.fredonia.edu/physics)

#### MAJOR REQUIREMENTS

<table>
<thead>
<tr>
<th>Core Physics Courses:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 230 University Physics I</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 232 University Physics I Lab</td>
<td>1</td>
</tr>
<tr>
<td>PHYS 231 University Physics II</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 233 University Physics II Lab</td>
<td>1</td>
</tr>
<tr>
<td>PHYS 234 Modern Physics</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 330 Thermodynamics</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 331 Theoretical Mechanics</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 333 Electricity and Magnetism</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 340 Optics</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 341 Optics Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>PHYS 400 Undergraduate Seminar</td>
<td>1</td>
</tr>
<tr>
<td>PHYS 425 Mathematical Physics I</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 431 Introduction to Quantum Mechanics</td>
<td>3</td>
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**Subtotal: 31**

<table>
<thead>
<tr>
<th>Supporting MATH/CSIT Courses:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 122 University Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>MATH 123 University Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>MATH 223 University Calculus III</td>
<td>4</td>
</tr>
<tr>
<td>MATH 224 Differential Equations</td>
<td>3</td>
</tr>
<tr>
<td>CSIT 106 Scientific Programming Using C/C++</td>
<td>3</td>
</tr>
<tr>
<td>CSIT 121 Computer Science I</td>
<td>3</td>
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</table>

**Subtotal: 18**

<table>
<thead>
<tr>
<th>Plus the following courses:</th>
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</tr>
</thead>
<tbody>
<tr>
<td>CHEM 115 General Chemistry Lecture I</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 125 General Chemistry Laboratory I</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 116 General Chemistry Lecture II</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 126 General Chemistry Laboratory II</td>
<td>1</td>
</tr>
<tr>
<td>SCED 105 Nature of Science and Science Education</td>
<td>3</td>
</tr>
<tr>
<td>SCED 106 Nature of Science Education Field Experience</td>
<td>0</td>
</tr>
<tr>
<td>EDU 224 Adolescent Development</td>
<td>3</td>
</tr>
</tbody>
</table>

**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 for Inquiry-Based Science**  
**SCED 305 Diversity in the Teaching of Science and Mathematics**  
**SCED 313 Diversity in Teaching Math and Science Field Experience**  
**EDU 349 Educational Psychology**  
**SCED 419 Adolescence Science Methods**  
**EDU 303 Safe Schools/Healthy Students-DASA: Safety Education/Fire and Arson/School Violence**  
**EDU 304 Safe Schools & Healthy Students**  
**EDU 430 Student Teaching Grades 7-12**

**Subtotal: 50**

**NOTE:**  
- A candidate who receives a Satisfactory standing in the Student Teaching placement must also receive a passing grade in their co-requisite Seminar/Methods course to advance.

**Physics Electives:**  
- Six (6) credit hours of Physics at the upper level (upon advisement)

**Subtotal: 6**

**Total Credit Hours: 105**

### ADOLESCENCE EDUCATION: SOCIAL STUDIES - B.A. DEGREE

**Department of History**  
Office: E332A Thompson Hall  
(716) 673-3277  
David Kinkela, Chairperson  
Email: history.department@fredonia.edu  
Website: [http://home.fredonia.edu/history](http://home.fredonia.edu/history)

#### MAJOR REQUIREMENTS

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 Fredonia Foundations general education curriculum include:

**Professional Education Courses:**

<p>| EDU 105 Introduction to Contemporary Inclusive Education and | 3 |
| EDU 106 Practicum in Inclusive Education I | 1 |
| EDU 224 Adolescent Development | 3 |
| EDU 250 Introduction to the Exceptional Learner | 3 |</p>
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDU 251</td>
<td>Practicum in Inclusive Education II</td>
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</tr>
<tr>
<td>EDU 276</td>
<td>Literacy and Technology in Inclusive Education</td>
<td>3</td>
</tr>
<tr>
<td>EDU 303</td>
<td>Safe Schools/Healthy Students-DASA: Safety</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Education/Fire and Arson/School Violence</td>
<td></td>
</tr>
<tr>
<td>EDU 304</td>
<td>Safe Schools &amp; Healthy Students</td>
<td>1</td>
</tr>
<tr>
<td>EDU 305</td>
<td>Cultural &amp; Linguistic Diversity of Students</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>and Families</td>
<td></td>
</tr>
<tr>
<td>EDU 313</td>
<td>Practicum in Inclusive Education III</td>
<td>1</td>
</tr>
<tr>
<td>EDU 349</td>
<td>Educational Psychology</td>
<td>3</td>
</tr>
<tr>
<td>SSED 419</td>
<td>Secondary (Adolescence) Social Studies</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Teaching Methods</td>
<td></td>
</tr>
<tr>
<td>SSED 420</td>
<td>Student Teaching Colloquium</td>
<td>3</td>
</tr>
<tr>
<td>SSED 430</td>
<td>Student Teaching for Social</td>
<td>6</td>
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<tr>
<td></td>
<td>Studies/Adolescence Education - Grades 7-9</td>
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</tr>
<tr>
<td></td>
<td>Placement</td>
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</tr>
<tr>
<td>SSED 431</td>
<td>Student Teaching for Social</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Studies/Adolescence Education: Grades 10-12</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Placement</td>
<td></td>
</tr>
</tbody>
</table>

**Subtotal: 41**

**NOTE:**
- EDU 105: recommended for first-year students.
- EDU 250: recommended for sophomores.
- EDU 305 and EDU 349: recommended for juniors.
- SSED 419: senior year/offered fall semester only.
- SSED 420, SSED 430, SSED 431: senior year/generally offered Spring semester only (Capstone experience).
- A candidate who receives a Satisfactory standing in the Student Teaching placement must also receive a passing grade in their co-requisite Seminar/Methods course to advance.

**HISTORICAL KNOWLEDGE**

**Historical Methods:**
- HIST 100: Decoding History
- HIST 201: Doing History

**Subtotal: 6**

**Global History:**
- HIST 243: Pre-Modern Global History
- Two (2) World Regional Civilizations courses
- One (1) 300-level course (chosen in consultation with advisor)

**Subtotal: 12**

**NOTE:**
- World Regional Civilization courses are numbered HIST 250-288.

**European History:**
- HIST 232: Survey of Pre-Modern European History
- or
- HIST 233: Survey of Modern European History

**Subtotal: 31**

<table>
<thead>
<tr>
<th>All Programs</th>
<th>Subtotal: 31</th>
</tr>
</thead>
<tbody>
<tr>
<td>One (1) 300-level course (chosen in consultation with advisor)</td>
<td>3</td>
</tr>
</tbody>
</table>

**US History:**
- HIST 171: American Patterns
- and
- HIST 222: Survey of Early U.S. History
- or
- HIST 223: Survey of Modern U.S. History
- and
- One (1) 300-level course focused on pre-1877 US History
- and
- One (1) 300-level course focused on post-1877 US History
- and
- One (1) American Diversity course

**Subtotal: 15**

**NOTE:**
- HIST 222 or HIST 223 should be taken after HIST 171.
- Your advisor will tell you whether or not you should take 222 or 223 based on the subject of your HIST 171.
- American Diversity courses can be found in Degree Works Subtotal: 39

**Total Credit Hours: 98**

**Foreign Language (0-6 credit hours)**

Candidates in all education programs are required to demonstrate competence in a foreign language. Proficiency requirement met by the following:

- Fredonia Placement Exam determination of Fredonia Foundations courses 100 and 110 in the same World Language or course 110 (or higher) in World Language.
- Proficiency may also be fulfilled by qualifying AP, IB, CLEP Exam scores or transferred courses of Elem I and Elem II of same language, as verified by Registrar’s Office.

The General Education foreign language requirement (p. Error! Bookmark not defined.) differs from the certification requirement and must be satisfied for degree conferral.

**Other Requirements**

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

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

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

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

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

For certification information, please consult the Education (p. 69) section of the catalog.

APPLIED MATHEMATICS - B.S. DEGREE

Department of Mathematical Sciences
Office: Fenton Hall 223
(716) 673-3243
Julia Wilson, Chairperson
Email: mathematics.department@fredonia.edu
Website: https://home.fredonia.edu/math

MAJOR REQUIREMENTS

Applied Mathematics requires the Applied Mathematics Core, a science course and laboratory as noted below, and a declared and competed minor (or major) from the list below. Upon declaring the major, students are advised to create an Academic Plan with the Department Chair or designated advisor to identify post-graduate goals, an appropriate minor (or major), and any additional recommended coursework.

Applied Mathematics Core:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>CSIT 121</td>
<td>Computer Science I</td>
<td>3</td>
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<tr>
<td>MATH 122</td>
<td>University Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>MATH 123</td>
<td>University Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>MATH 210</td>
<td>Mathematical Structures and Proof</td>
<td>4</td>
</tr>
<tr>
<td>MATH 223</td>
<td>University Calculus III</td>
<td>4</td>
</tr>
<tr>
<td>MATH 224</td>
<td>Differential Equations</td>
<td>3</td>
</tr>
<tr>
<td>MATH 231</td>
<td>Linear Algebra</td>
<td>4</td>
</tr>
<tr>
<td>MATH 329</td>
<td>Mathematical Modeling</td>
<td>3</td>
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<tr>
<td>MATH 406</td>
<td>Applied Math Senior Seminar</td>
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<tr>
<td>STAT 350</td>
<td>Probability and Statistics</td>
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<td>STAT 355</td>
<td>Mathematical Statistics</td>
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<td>or</td>
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<tr>
<td>MATH 369</td>
<td>Interest Theory</td>
<td>3</td>
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<tr>
<td>One additional MATH or STAT course numbered 311 or higher</td>
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</table>

Subtotal: 39

Science Core:

Select one of the following sequences:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>CHEM 115</td>
<td>General Chemistry Lecture I</td>
<td>3</td>
</tr>
<tr>
<td>and</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHEM 125</td>
<td>General Chemistry Laboratory I</td>
<td>1</td>
</tr>
<tr>
<td>or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHYS 230</td>
<td>University Physics I</td>
<td>4</td>
</tr>
<tr>
<td>and</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHYS 232</td>
<td>University Physics I Lab</td>
<td>1</td>
</tr>
</tbody>
</table>

Subtotal: 4-5

All candidates for the Applied Mathematics degree must declare and complete a minor (or major) from the following list:

Accounting (p. 181)
Biology (p. 184)
Business Administration (p. 184)
Chemistry (p. 185)
Computer Information Systems (p. 185)
Computer Science (p. 186)
Earth Science (p. 189)
Economics (p. 190)
Environmental Studies (p. 189)
Geographical Information Systems (p. 193)
Geographical Sciences (p. 193)
Physics (p. 203)
Political Science (p. 203)
Public Health (p. 204)
Psychology (p. 203)
Sociology (p. 205)
Statistics (p. 206)
Alternate minors require approval from the Department Chair.

Students may double major in Applied Mathematics (p. 32) and Mathematics (p. 113) by completing all requirements for both majors. A course required for one of the majors cannot be used to satisfy an upper-level elective requirement of the other major.

Total Credit Hours: 61-70

### BIOCHEMISTRY - B.S. DEGREE

**Department of Chemistry**
Office: 221 Science Center  
(716) 673-3287

**Matthew A. Fountain, Chairperson**
Email: biochemistry.program@fredonia.edu  
Website: http://home.fredonia.edu/biochemistry

Biochemistry is at the core of modern science, enabling fundamental advances in medicine, agriculture, industry and basic science. Indeed, biochemists conduct some of the most exciting research in science, and careers in biochemistry rank among the highest on almost every published list of “Best Careers.” Fredonia’s Bachelor of Science degree program in Biochemistry is administered jointly by the Department of Biology and the Department of Chemistry and Biochemistry. With its emphasis on mastery of technical and analytical skills in biochemistry, Fredonia’s program is designed to prepare students for graduate school, medical school, or careers in biochemical research. It also provides a broad foundation in the liberal arts, enhancing graduates’ abilities to meet challenges in a shifting social climate. Fredonia’s program offers a unique flexibility in that students can choose between two tracks: one with a chemical emphasis for studying molecular structure and function, and one which enables students to apply a biochemical perspective to physiological problems. Course requirements of the degree program are listed below. Although not required, participation in undergraduate research in either biology or chemistry is encouraged.

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

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

Program requires Core Courses and either a Chemical Emphasis or Biological Emphasis track.

### MAJOR REQUIREMENTS

<table>
<thead>
<tr>
<th>Core Courses</th>
<th></th>
<th>Subtotal: 18-38</th>
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</thead>
<tbody>
<tr>
<td>BIOL 134</td>
<td>Introductory Cell and Molecular Biology</td>
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</tr>
<tr>
<td>CHEM 115</td>
<td>General Chemistry Lecture I</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 125</td>
<td>General Chemistry Laboratory I</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 116</td>
<td>General Chemistry Lecture II</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 126</td>
<td>General Chemistry Laboratory II</td>
<td>1</td>
</tr>
<tr>
<td>or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHEM 130</td>
<td>Honors General Chemistry Laboratory</td>
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</tr>
<tr>
<td>BIOL 237</td>
<td>Genetics</td>
<td>3</td>
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<tr>
<td>BIOL 238</td>
<td>Genetics Laboratory</td>
<td>1</td>
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<tr>
<td>CHEM 215</td>
<td>Organic Chemistry Lecture I</td>
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<tr>
<td>CHEM 225</td>
<td>Organic Chemistry Laboratory I</td>
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<tr>
<td>CHEM 216</td>
<td>Organic Chemistry Lecture II</td>
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</tr>
<tr>
<td>CHEM 226</td>
<td>Organic Chemistry Laboratory II</td>
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<tr>
<td>or</td>
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<tr>
<td>CHEM 230</td>
<td>Advanced Organic Laboratory</td>
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<tr>
<td>BIOL 333</td>
<td>Biochemistry</td>
<td>3</td>
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<tr>
<td>BIOL 334</td>
<td>Biochemistry Laboratory</td>
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<tr>
<td>CHEM 317</td>
<td>Analytical Chemistry, Quantitative Analysis</td>
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<td>CHEM 327</td>
<td>Analytical Chemistry I Laboratory</td>
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<tr>
<td>BIOL 380</td>
<td>Cell and Molecular Biology</td>
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<tr>
<td>BIOL 397</td>
<td>Biochemistry Seminar I</td>
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<tr>
<td>CHEM 495</td>
<td>Seminar: Advances in Chemistry</td>
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<tr>
<td>CHEM 465</td>
<td>Advanced Experimental Biochemistry</td>
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<tr>
<td>CHEM 475</td>
<td>Advanced Biochemistry</td>
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<tr>
<td>CHEM 497</td>
<td>Biochemistry Seminar II</td>
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<tr>
<td>or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHEM 496</td>
<td>Seminar: Advances in Chemistry</td>
<td>1</td>
</tr>
</tbody>
</table>

| Subtotal: 46 |

### Track I - Chemical Emphasis:

<table>
<thead>
<tr>
<th>Course</th>
<th>credit hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 122</td>
<td>University Calculus I</td>
</tr>
<tr>
<td>MATH 123</td>
<td>University Calculus II</td>
</tr>
<tr>
<td>PHYS 230</td>
<td>University Physics I</td>
</tr>
<tr>
<td>PHYS 232</td>
<td>University Physics I Lab</td>
</tr>
<tr>
<td>PHYS 231</td>
<td>University Physics II</td>
</tr>
<tr>
<td>PHYS 233</td>
<td>University Physics II Lab</td>
</tr>
<tr>
<td>CHEM 315</td>
<td>Introduction to Physical Chemistry</td>
</tr>
<tr>
<td>CHEM 325</td>
<td>Physical Chemistry Laboratory I</td>
</tr>
<tr>
<td>CHEM 316</td>
<td>Advanced Physical Chemistry</td>
</tr>
<tr>
<td>CHEM 326</td>
<td>Physical Chemistry Laboratory II</td>
</tr>
<tr>
<td>or</td>
<td>Upper-Level Electives in Biology or Chemistry (approved by advisement)</td>
</tr>
</tbody>
</table>

### Track II - Biological Emphasis:

<table>
<thead>
<tr>
<th>Course</th>
<th>credit hours</th>
</tr>
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<tbody>
<tr>
<td>MATH 120</td>
<td>Survey of Calculus I</td>
</tr>
<tr>
<td>MATH 121</td>
<td>Survey of Calculus II</td>
</tr>
<tr>
<td>or</td>
<td></td>
</tr>
<tr>
<td>MATH 122</td>
<td>University Calculus I</td>
</tr>
<tr>
<td>MATH 123</td>
<td>University Calculus II</td>
</tr>
<tr>
<td>PHYS 121</td>
<td>College Physics I</td>
</tr>
<tr>
<td>PHYS 123</td>
<td>College Physics Lab I</td>
</tr>
<tr>
<td>or</td>
<td></td>
</tr>
<tr>
<td>PHYS 122</td>
<td>College Physics II</td>
</tr>
<tr>
<td>PHYS 124</td>
<td>College Physics II Lab</td>
</tr>
<tr>
<td>or</td>
<td></td>
</tr>
<tr>
<td>PHYS 230</td>
<td>University Physics I</td>
</tr>
</tbody>
</table>
The Department of Biology offers a strong and flexible program designed to meet the career goals of students with widely varied interests. Graduates of the program are well prepared to enter graduate school in many areas of biological science, or professional programs (such as medical, dental, veterinary, physician’s assistant, etc.), become research technicians, secondary school teachers, or enter direct employment. To meet these varied interests, the department offers a wide variety of courses ranging from the molecular or physiological aspects of biology to ecology, field and environmental biology. Students interested in pre-medicine, pre-veterinary and pre-dental programs are strongly urged to register with the Health Professions Advising Committee for individual advising about specific types of professional schools. The department is also involved with several early acceptance and combined degree programs leading to professional degrees in medicine, dentistry, optometry, and pharmacy. Further details of these programs are listed under Pre-Medicine and Allied Areas (p. 150).

Each student performs a capstone experience with a faculty sponsor. The 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 are supported by the Holmberg Foundation, Falcone Endowment, Dr. Robert Wettingfield Endowment, Constanine Barker Memorial Endowment, Biology Endowment, and the Yunghans-Dieter award. 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.

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.

SharpSAT 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 are supported by the Holmberg Foundation, Falcone Endowment, Dr. Robert Wettingfield Endowment, Constantine Barker Memorial Endowment, Biology Endowment, and the Yunghans-Dieter award. 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.

### Biology

(See also Biology Adolescence Education (p. 22), Medical Technology (p. 115), Molecular Genetics (p. 118), and Pre-Medicine (p. 150))

Office: 221 Science Center

---

**Approved Chemistry Electives:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 318</td>
<td>Analytical Chemistry, Instrumental Analysis</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 328</td>
<td>Analytical Chemistry II Laboratory</td>
<td>2</td>
</tr>
<tr>
<td>CHEM 391</td>
<td>Independent Lab Research</td>
<td>1-3</td>
</tr>
<tr>
<td>CHEM 407</td>
<td>Organometallics</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 412</td>
<td>Advanced Organic Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 417</td>
<td>Polymer Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 462</td>
<td>Inorganic Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 481</td>
<td>Special Topics in Chemistry</td>
<td>1-3</td>
</tr>
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</table>

Note: CHEM 481 must be approved by coordinator.

**Approved Biology Electives:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>BIOL 336</td>
<td>Mammalian Physiology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 338</td>
<td>Microbiology</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 419</td>
<td>Genes and Genomes</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 435</td>
<td>Developmental Biology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 440</td>
<td>Undergraduate Research</td>
<td>1-3</td>
</tr>
<tr>
<td>BIOL 443</td>
<td>Plant Physiology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 450</td>
<td>Special Topics Courses</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 451</td>
<td>Special Topics Courses</td>
<td>3</td>
</tr>
</tbody>
</table>

Subtotal: 30-34

**Total Credit Hours: 77-79**

### Biology

(See also Biology Adolescence Education (p. 22), Medical Technology (p. 115), Molecular Genetics (p. 118), and Pre-Medicine (p. 150))

Office: 221 Science Center
internship, a study abroad experience, or course, and provides significant learning experiences in problem solving and written and oral communication. These capstones experiences are extremely important in helping the student prepare for entry into professional programs, graduate school, or employment.

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

Biology Honors Program
This program provides talented Biology department majors the opportunity to perform research at the graduate level. Honors students will perform a minimum of two semesters of research, produce a formal thesis and offer a lecture to the campus and a private thesis defense to the faculty. Honors students will be recognized with a biology cord at graduation and the statement, Honors Biology Major on the student’s transcript. The program is open to Biology students of sophomore standing or higher who have maintained a 3.5 GPA in stipulated courses.

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

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

BIOLOGY - B.S. DEGREE

Department of Biology
Office: 221 Science Center
(716) 673-3282
Ted Lee, Chairperson
Email: biology@fredonia.edu
Website: http://home.fredonia.edu/biology

MAJOR REQUIREMENTS

Core Courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 131</td>
<td>Introductory Ecology and Evolution</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 132</td>
<td>Introductory Ecology and Evolution</td>
<td>1</td>
</tr>
<tr>
<td>BIOL 133</td>
<td>Introductory Cell and Molecular Biology</td>
<td></td>
</tr>
<tr>
<td>BIOL 134</td>
<td>Introductory Cell and Molecular Biology</td>
<td></td>
</tr>
<tr>
<td>BIOL 237</td>
<td>Genetics</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 238</td>
<td>Genetics Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>BIOL 243</td>
<td>Organismal Biology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 244</td>
<td>Organismal Biology Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>BIOL 330</td>
<td>Ecology</td>
<td>3</td>
</tr>
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</table>

Subtotal: 27-31

Supporting Courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>CHEM 115</td>
<td>General Chemistry Lecture I</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 125</td>
<td>General Chemistry Laboratory I</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 116</td>
<td>General Chemistry Lecture II</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 126</td>
<td>General Chemistry Laboratory II</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 215</td>
<td>Organic Chemistry Lecture I</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 225</td>
<td>Organic Chemistry Laboratory I</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 216</td>
<td>Organic Chemistry Lecture II</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 226</td>
<td>Organic Chemistry Laboratory II</td>
<td>1</td>
</tr>
<tr>
<td>STAT 250</td>
<td>Statistics for Scientists</td>
<td>3</td>
</tr>
<tr>
<td>MATH 120</td>
<td>Survey of Calculus I</td>
<td>3</td>
</tr>
<tr>
<td>MATH 122</td>
<td>University Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 121</td>
<td>College Physics I</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 123</td>
<td>College Physics Lab I</td>
<td>1</td>
</tr>
<tr>
<td>PHYS 122</td>
<td>College Physics II</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 124</td>
<td>College Physics II Lab</td>
<td>1</td>
</tr>
<tr>
<td>PHYS 230</td>
<td>University Physics I</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 232</td>
<td>University Physics I Lab</td>
<td>1</td>
</tr>
<tr>
<td>PHYS 231</td>
<td>University Physics II</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 233</td>
<td>University Physics II Lab</td>
<td>1</td>
</tr>
</tbody>
</table>

Subtotal: 39

NOTE:

- BIOL 491 and BIOL 492 are variable, 1-3 credit hour courses. Students are advised to enroll in for at least 3 credit hours to satisfy the degree requirement.

BIOLOGY MULTI-AWARD PROGRAM - B.S./M.S. DEGREE

Department of Biology
Office: 221 Science Center
(716) 673-3282
Application Criteria/Eligibility

Only students who will complete both a Bachelor’s and a Master’s in Biology at Fredonia are eligible to enroll in the program. Students need to be a current, continuing undergraduate in Biology at the time of application. Students may declare intent to enter the BS/MS program as an incoming freshman. They will do so in writing with Biology Department advisors.

Students with an overall GPA of at least 3.00 may apply to the BS/MS program after:

- Completion of the lower division core requirements: BIOL 131/132, 133/134, 237/238, 243/244, 330/331, 333/334; CHEM 115/125, 116/126, 215/225, 216/226; STAT 250 OR MATH 120 OR MATH 122
- 74 hours of academic credit have been completed or are in progress (typically Fall semester Junior year);
- Declaration of capstone BIOL 491 OR BIOL 492 OR BIOL 493

Students who are accepted into the program may be granted probation for one semester following an overall GPA below 3.00. If a student does not achieve an overall 3.00 GPA after one probation semester, a student will not be allowed to continue in this program.

Application Procedure

Students will normally apply directly to the Department of Biology for the BS/MS Biology Multi-Award program during their Fall semester of the third academic year. Students should apply when they declare their capstone during advising week.

Application requirements include:

- GPA of 3.00 or greater
- Two letters of recommendation (for MS Thesis option one letter should be from the faculty research mentor)
- For MS Thesis option agreement of a faculty member to mentor the student in their research lab if accepted

Admission decisions will be made by the Biology Department Graduate Committee and based on the student's previous academic success in the department, as indicated by GPA and grades in the core curriculum, as well as potential success in the graduate program as indicated by the letters of recommendation and the student's letter of intent.

Decisions will normally be communicated to students within four weeks of submitting a complete application to the BS/MS Biology Multi-Award Program.

Requirements During Undergraduate Studies (first 8 semesters)

All university requirements, including general education courses, must be completed before the final (graduate) year of the BS/MS Biology Multi-Award Program. In the final undergraduate year, students will take 10 credits of graduate-level courses. If any courses are dual-listed, students in the BS/MS Biology Multi-Award Program must complete all assignments expected of graduate students and they will be evaluated in the same way as graduate students.

- Students will earn 10 graduate credits during their undergraduate program.
- Students will be considered undergraduates for tuition, academic requirements and financial aid purposes until all requirements for the undergraduate degree are completed. Following this they will be considered graduate students, will pay graduate tuition, and will be eligible for graduate financial aid.
- During the undergraduate program the student will typically take BIOL 491 Capstone Research in order to enter the BS/MS program with the Thesis option. Any Capstone will be taken in order to enter the BS/MS program with the Comprehensive Exam option.

Summer between Year 4 & Year 5

- Program students are eligible to apply for the Biology Department summer research fellowship which includes a stipend and research supply funds. Interested students should look for advertisement of the application due date in Spring semester of their 4th year.
Requirements During Graduate Studies

- After successful completion of their undergraduate program, students will be eligible to take the second year of the MS curriculum. At this point students will be treated as graduate students for purposes of tuition and fees, financial aid, etc.

- Students must complete all graduate requirements. For Thesis option students this includes oral presentation and defense of a proposal and thesis. For Comprehensive Exam option students this includes a comprehensive examination.

Graduation Without Completion of the BS/MS Biology Multi-Award Program

If a student decides at some point to pursue only the undergraduate portion of the degree, the Department Biology will recognize the graduate courses taken in lieu of undergraduate courses. Credit from the undergraduate degree cannot be used toward a graduate degree at a later date.

### REQUIREMENTS FOR THE BIOLOGY MULTI-AWARD PROGRAM

#### Undergraduate Coursework:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 131</td>
<td>Introductory Ecology and Evolution</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 132</td>
<td>Introductory Ecology and Evolution Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 115</td>
<td>General Chemistry Lecture I</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 125</td>
<td>General Chemistry Laboratory I</td>
<td>1</td>
</tr>
<tr>
<td>BIOL 133</td>
<td>Introductory Cell and Molecular Biology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 134</td>
<td>Introductory Cell and Molecular Biology Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 116</td>
<td>General Chemistry Lecture II</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 126</td>
<td>General Chemistry Laboratory II</td>
<td>1</td>
</tr>
<tr>
<td>STAT 250</td>
<td>Statistics for Scientists</td>
<td>3</td>
</tr>
<tr>
<td>MATH 120</td>
<td>Survey of Calculus I</td>
<td>3</td>
</tr>
<tr>
<td>MATH 122</td>
<td>University Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 237</td>
<td>Genetics</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 238</td>
<td>Genetics Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 215</td>
<td>Organic Chemistry Lecture I</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 225</td>
<td>Organic Chemistry Laboratory I</td>
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</tr>
<tr>
<td>BIOL 243</td>
<td>Organismal Biology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 244</td>
<td>Organismal Biology Laboratory</td>
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<tr>
<td>CHEM 216</td>
<td>Organic Chemistry Lecture II</td>
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<tr>
<td>CHEM 226</td>
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<td>BIOL 330</td>
<td>Ecology</td>
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</table>

#### Graduate Coursework - Thesis Option:

<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 590</td>
<td>Graduate Seminar</td>
<td>1</td>
</tr>
<tr>
<td>BIOL 511</td>
<td>Graduate Research Methods</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 521</td>
<td>Graduate Science Communication</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Eighteen (18) Credits of Biology</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td>500/600 Level Electives</td>
<td></td>
</tr>
<tr>
<td>BIOL 690</td>
<td>Thesis Research</td>
<td>1-9</td>
</tr>
<tr>
<td></td>
<td>Written Proposal and Proposal Defense</td>
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</tr>
<tr>
<td></td>
<td>Written Thesis and Thesis Defense</td>
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</table>

**Subtotal: 30**

#### Graduate Coursework - Comprehensive Exam Option:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 590</td>
<td>Graduate Seminar</td>
<td>1</td>
</tr>
<tr>
<td>BIOL 511</td>
<td>Graduate Research Methods</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 521</td>
<td>Graduate Science Communication</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Eighteen (18) Credits of Biology</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td>500/600 Level Electives</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Graduate Elective - any department</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Final Comprehensive Exam</td>
<td></td>
</tr>
</tbody>
</table>

**Subtotal: 30**

#### Note:

- BIOL 590 Seminar is to be taken three times
- BIOL 690 needs to be taken for three (3) credits

#### Biology Graduate Program

Office: 221 Science Center
(716) 673-3282
Ted Lee, Department Chairperson
Karry Kazial, Graduate Coordinator
Email: biology@fredonia.edu
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 - M.S. DEGREE

Department of Biology
Office: 221 Science Center
(716) 673-3282
Ted Lee, Chairperson
Email: biology@fredonia.edu
Website: http://home.fredonia.edu/biology

Departmental Requirements for Admission to the Program without Deficiencies

Applicants should have completed an undergraduate degree in the Life Sciences earning a 3.0 grade point average (on a 4.0 scale) or above and demonstrate the requisite evidence of training and the motivation necessary to succeed in graduate study. Supporting science background includes physics, statistics or calculus, and organic chemistry.

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

Program Requirements

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

DEGREE REQUIREMENTS

**Thesis Option:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 590</td>
<td>Graduate Seminar</td>
<td>1</td>
</tr>
<tr>
<td>BIOL 511</td>
<td>Graduate Research Methods</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 521</td>
<td>Graduate Science Communication</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Eighteen (18) Credits of Biology</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td>500/600 Level Electives</td>
<td></td>
</tr>
<tr>
<td>BIOL 690</td>
<td>Thesis Research</td>
<td>1-9</td>
</tr>
<tr>
<td></td>
<td>Written Proposal and Proposal</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Defense</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Written Thesis and Thesis Defense</td>
<td></td>
</tr>
</tbody>
</table>

Subtotal: 30

Note:

- BIOL 690 Thesis Research is to be taken for three (3) credits

**Comprehensive Exam Option:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 590</td>
<td>Graduate Seminar</td>
<td>1</td>
</tr>
<tr>
<td>BIOL 511</td>
<td>Graduate Research Methods</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 521</td>
<td>Graduate Science Communication</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Eighteen (18) Credits of Biology</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td>500/600 Level Electives</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Graduate Elective - any department</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Final Comprehensive Exam</td>
<td></td>
</tr>
</tbody>
</table>

Subtotal: 30

Note:

- Up to 3 credits of BIOL 680 Graduate Research may be used toward the Comprehensive Exam option.
- BIOL 590 Seminar is to be taken for three semesters

Subtotal: 30

Note:

- BIOL 590 Seminar is to be taken for three semesters
School of Business
Office: E336 Thompson Hall
(716) 673-3505

Dr. Linda Hall, Director
E336B Thompson Hall
(716) 673-3505
Email: business.school@fredonia.edu
Website: http://home.fredonia.edu/business

Dr. Mojtaba Seyedian, Associate Director
E336E Thompson Hall
(716) 673-3505
business.school@fredonia.edu

Program Coordinators:

Dr. Julie Fitzpatrick, Accounting, Public Accountancy, Business Administration
W307 Thompson Hall
(716) 673-3402
julie.fitzpatrick@fredonia.edu

Dr. Reneta Barneva, Music Industry, Sport Management
E336D Thompson Hall
(716) 673-4750
Reneta.Barneva@fredonia.edu

Internship Coordinators:

Dr. Susan McNamara, Business Administration and Accounting
W315 Thompson Hall
(716) 673-3898

Armand Petri, Music Industry
W305 Thompson Hall
(716) 673-4605

Dr. Sungick Min, Sport Management
W303 Thompson Hall
(716) 673-4964

Undergraduate degree programs in Accounting, Public Accountancy, Business Administration, Business Administration - Finance, Business Administration - Management and Business Administration - Marketing are accredited by the Association to Advance Collegiate Schools of Business (AACSB). Other majors held in the School of Business include: Music Industry, Sport Management and Economics.

In consonance with the Mission (p. 9) and Baccalaureate Goals (p. 515) of the University, our mission is to integrate excellence in instruction, relevant faculty scholarship, and proactive community service to prepare students from differing backgrounds to be successful, ethical, and globally aware business professionals. We accomplish this by:

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

Business Administration
School of Business
Dr. Julie Fitzpatrick, Program Coordinator
Email: business.administration@fredonia.edu
Website: http://home.fredonia.edu/businessadministration

Business Administration, accredited by the Association to Advance Collegiate Schools of Business (AACSB)-International for its programs in Accounting, Public Accountancy, Finance, Management, and Marketing, provides its majors with a contemporary, quality education in Accounting and Business Administration. The students in the discipline gain an awareness of their individual strengths and vocational interests in order to make appropriate career decisions. The discipline offers a rigorous, up-to-date curriculum that prepares students for domestic and international leadership roles in business management. While the programs offered are career-oriented, the discipline realizes that successful business professionals must bring a broad and varied perspective to their crafts.

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

The 120-credit hour Accounting program prepares students for the Certified Management Accountant (CMA) examination. The 150-credit hour program qualifies graduates to take both the CMA and CPA (Certified Public Accountant) 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, Beta Gamma Sigma; Business Club; Financial Management Association; American Marketing Association;
Financial Management Association National Honor Society; Enactus; American Society for Quality; and Accounting Society. Moreover, students are always encouraged to actively participate in the affairs of the department through serving on various committees, being a member of the Chair’s Student Council, and attending departmental functions.

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

The Accounting Society conducts the Volunteer Income Tax Assistant 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 hold meetings with experts in the field to discuss career options. The American Marketing Association conducts various fundraising activities to finance their annual trip to the AMA International Collegiate Conference.

**Internship Opportunities**

In addition to its regular course offerings, the department has an active internship program. Internships are work experiences for which students receive academic credit. Having an internship experience is a graduation requirement for students majoring in Business Administration, Accounting, and Public Accountancy. Out of the minimum 120 credits needed for a B.S. degree, students are allowed up to 24 credits of internship. The department offers many internship opportunities with various local and regional firms and organizations such as Fredonia Technology Incubator, Chautauqua Institute, Disney World, M&T Bank, Wal-Mart, Corning Glass, Cummins, Citi Bank, Merrill Lynch, Enterprise, Frito-Lay.

**Honors and Awards**

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

- the M. R. Poumit Achievement Award to the graduating senior with the highest grade point average;
- the New York State Society of CPAs Awards, given to outstanding students in accounting;
- the Donald C. Brandt Memorial Scholarship to an outstanding sophomore;
- the Students In Free Enterprise Scholarships to outstanding Enactus members;
- the Alumni Scholarships, given to students with outstanding records of academic achievements;
- the Franklin B. Krohn Memorial Scholarship to a junior with outstanding academic and extra-curricular accomplishments;
- the Stephen and Carol (Eck) Ward Scholarship, given to a student with an outstanding record of scholastic and extra-curricular achievements;
- the Bennett Accounting Scholarship to an outstanding junior-level transfer student majoring in accounting;
- the Morris and Marian Poumitt Scholarship, given to an outstanding freshman, sophomore, or junior;
- the Gary M. Tripp Memorial Scholarship to a junior finance major with outstanding scholastics;
- the Mancuso Family Scholarship, given to an outstanding local student majoring in finance;
- the Business Club Scholarship to an outstanding Business Club member;
- the Morton and Barbara Cherney Scholarship, given to a junior with a high grade point average in the major courses;
- the Michael J. Quatroche Scholarship to a finance major in good academic standing;
- the John Richter Family Scholarship, given to graduates of Western New York high schools with active involvement in extracurricular activities;
- the Tom Reilly Scholarship to a graduating Senior majoring in Business.

**The following programs are included within Business Administration:**

- Accounting Bachelor of Science (p. 21) (120-Hour Program)
- Public Accountancy Bachelor of Science (p. 155) (150-Hour CPA Program)
- Business Administration - Bachelor of Science
- Business Administration – Finance Bachelor of Science (p. 41)
- Business Administration – Management Bachelor of Science (p. 42)
- Business Administration – Marketing Bachelor of Science (p. 43)
- Accounting minor (p. 181)
- Business Administration minor (p. 184)
- Graduate Opportunities in Business Administration (p. 40)

**GRADUATE OPPORTUNITIES IN BUSINESS ADMINISTRATION**

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

**BUSINESS ADMINISTRATION - B.S. DEGREE**

**School of Business**  
Office: W307 Thompson Hall  
(716) 673-3402  
**Dr. Julie Fitzpatrick, Program Coordinator**

Email: business.administration@fredonia.edu  
Website: http://home.fredonia.edu/businessadministration

**MAJOR REQUIREMENTS**

A minimum grade of C - or better is required for all courses in the major.

**Supporting Courses:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 120</td>
<td>Survey of Calculus I</td>
<td>3</td>
</tr>
<tr>
<td>CSIT 104</td>
<td>Introduction to Microcomputer Software</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td>CSIT 151 Introduction to Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>CSIT 251</td>
<td>Information Systems Structures</td>
<td>3</td>
</tr>
</tbody>
</table>

**Lower Level Core Courses:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 200</td>
<td>Fundamentals of Statistics for Business Administration and Economics</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 201</td>
<td>Principles of Financial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 202</td>
<td>Principles of Managerial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>ECON 205</td>
<td>Principles of Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 210</td>
<td>Principles of Macroeconomics</td>
<td>3</td>
</tr>
</tbody>
</table>

**Upper Level Core Courses:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
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<td>Statistical Analysis</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td>BUAD 310 Legal Environment of Business</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td>ACCT 311 Business Law I</td>
<td>3</td>
</tr>
<tr>
<td>BUAD 320</td>
<td>Managerial Finance</td>
<td>3</td>
</tr>
<tr>
<td>BUAD 323</td>
<td>Organizational Behavior</td>
<td>3</td>
</tr>
<tr>
<td>BUAD 327</td>
<td>Operations Management</td>
<td>3</td>
</tr>
<tr>
<td>BUAD 328</td>
<td>Marketing Foundations</td>
<td>3</td>
</tr>
<tr>
<td>BUAD 499</td>
<td>Strategic Management</td>
<td>3</td>
</tr>
</tbody>
</table>

**Electives:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Four (4) 300/400 level courses in ACCT/BUAD</td>
<td>12</td>
</tr>
<tr>
<td>BUAD 480</td>
<td>Internship</td>
<td>1-9</td>
</tr>
</tbody>
</table>

**Subtotal:** 9

**Subtotal:** 15

**Subtotal:** 21

**Subtotal:** 13

**NOTE:**

- BUAD 480 is a variable 1-9 credit hour course. Students need to complete the course for at least one credit to satisfy the degree requirements.
- All Business Administration majors are allowed to repeat a failed major course no more than two times.
- All Business Administration majors must complete at least 66 credit hours of non-ACCT/BUAD prefixed courses.

**Total Credit Hours:** 58

**BUSINESS ADMINISTRATION: FINANCE B.S. DEGREE**

**School of Business**  
Office: W307 Thompson Hall  
(716) 673-3402  
**Dr. Julie Fitzpatrick, Program Coordinator**

Email: business.administration@fredonia.edu  
Website: http://home.fredonia.edu/businessadministration

**MAJOR REQUIREMENTS**

A minimum grade of C - or better is required for all courses in the major.

**Supporting Courses:**

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<td>CSIT 251</td>
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**Lower Level Core Courses:**

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<td>ACCT 202</td>
<td>Principles of Managerial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>ECON 205</td>
<td>Principles of Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 210</td>
<td>Principles of Macroeconomics</td>
<td>3</td>
</tr>
</tbody>
</table>

**Upper Level Core Courses:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUAD 300</td>
<td>Statistical Analysis</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td>BUAD 310 Legal Environment of Business</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td>ACCT 311 Business Law I</td>
<td>3</td>
</tr>
<tr>
<td>BUAD 320</td>
<td>Managerial Finance</td>
<td>3</td>
</tr>
<tr>
<td>BUAD 323</td>
<td>Organizational Behavior</td>
<td>3</td>
</tr>
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<td>BUAD 327</td>
<td>Operations Management</td>
<td>3</td>
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<tr>
<td>BUAD 328</td>
<td>Marketing Foundations</td>
<td>3</td>
</tr>
<tr>
<td>BUAD 499</td>
<td>Strategic Management</td>
<td>3</td>
</tr>
</tbody>
</table>

**Major Course Requirements for Finance:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUAD 372</td>
<td>Financial Investments</td>
<td>3</td>
</tr>
</tbody>
</table>

**Subtotal:** 15

**Subtotal:** 21
BUAD 417 Corporate Finance I 3
BUAD 416 Portfolio Management 3
or
BUAD 418 Corporate Finance II 3
or
BUAD 474 Financial Intermediaries Management 3
BUAD 480 Internship 1-9
Subtotal: 10

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

Plus 3 credit hours from the following:
BUAD 315 Principles of Business Finance 3
ECON 315 Money/Banking/Monetary Economics 3
BUAD 374 Small Business Finance 3
BUAD 378 Business and Ethics 3
BUAD 416 Portfolio Management 3
BUAD 472 International Finance 3
Subtotal: 3

Subtotal: 58

Total Credit Hours: 58

• All Business Administration majors must complete at least 66 credit hours of non-ACCT/BUAD prefixed courses.
• All Business Administration majors are allowed to repeat a failed major course no more than two times.

BUSINESS ADMINISTRATION: MANAGEMENT
B.S. DEGREE

School of Business
Office: W307 Thompson Hall
(716) 673-3402
Dr. Julie Fitzpatrick, Program Coordinator

Email: business.administration@fredonia.edu
Website: http://home.fredonia.edu/businessadministration

MAJOR REQUIREMENTS

A minimum grade of C - or better is required for all courses in the major.

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

Lower Level Core Courses:
ECON 200 Fundamentals of Statistics for Business Administration and Economics 3
ACCT 201 Principles of Financial Accounting 3

ACCT 202 Principles of Managerial Accounting 3
ECON 205 Principles of Microeconomics 3
ECON 210 Principles of Macroeconomics 3
Subtotal: 15

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

Major Course Requirements for Management:
BUAD 330 Human Resource Management 3
BUAD 427 Applied Quality Operations 3
BUAD 480 Internship 1-9
Subtotal: 7

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

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

NOTE:
• BUAD 450 is a variable 1-3 credit hour course. Students need to complete the course for at least three credit hours to satisfy the degree requirements.
• All Business Administration majors are allowed to repeat a failed major course no more than two times.
• All Business Administration majors must complete at least 66 credit hours of non-ACCT/BUAD prefixed courses.

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 Core, the Upper Level Core, and at least five additional upper-level courses in a cohesive subject-area germane to business. Such specializations are possible and encouraged as long as they satisfy the department’s conditions for rigor and substance.

Subtotal: 58

Total Credit Hours: 58
BUSINESS ADMINISTRATION: MARKETING - B.S. DEGREE

School of Business
Office: W307 Thompson Hall
(716) 673-3402
Dr. Julie Fitzpatrick, Program Coordinator

Email: business.administration@fredonia.edu
Website: http://home.fredonia.edu/businessadministration

MAJOR REQUIREMENTS

A minimum grade of C - or better is required for all courses in the major.

Supporting Courses:
- MATH 120 Survey of Calculus I and
- CSIT 104 Introduction to Microcomputer Software or
- CSIT 151 Introduction to Information Systems and
- CSIT 251 Information Systems Structures

Subtotal: 9

Lower Level Core Courses:
- ECON 200 Fundamentals of Statistics for Business Administration and Economics
- ACCT 201 Principles of Financial Accounting
- ACCT 202 Principles of Managerial Accounting
- ECON 205 Principles of Microeconomics
- ECON 210 Principles of Macroeconomics

Subtotal: 15

Upper Level Core Courses:
- BUAD 300 Statistical Analysis and
- BUAD 310 Legal Environment of Business or
- ACCT 311 Business Law I and
- BUAD 320 Managerial Finance
- BUAD 323 Organizational Behavior
- BUAD 327 Operations Management
- BUAD 328 Marketing Foundations
- BUAD 499 Strategic Management

Subtotal: 21

Major Course Requirements for Marketing:
- BUAD 340 Marketing Research
- BUAD 342 Consumer Behavior
- BUAD 411 Marketing Management
- BUAD 445 Integrated Marketing Communications
- BUAD 480 Internship

Subtotal: 13

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

- All Business Administration majors are allowed to repeat a failed major course no more than two times.
- All Business Administration majors must complete at least 66 credit hours of non-ACCT/BUAD prefixed courses.

Total Credit Hours: 58

Chemistry and Biochemistry

Office: 221 Science Center
(716) 673-3281
Matthew A. Fountain, Chairperson
Email: chemistry.department@fredonia.edu
Website: http://home.fredonia.edu/chemistry

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

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

Prerequisites/Co-requisites for Laboratory Courses: Laboratory and lecture courses are separately enrolled and graded. As a result, there are some general requirements for laboratory courses: (1) CHEM 126 or CHEM 130 is a prerequisite for any laboratory course at a higher level; (2) for all laboratory courses the corresponding lecture course is a pre- or co-requisite; (3) if a student drops or withdraws from a lecture course, he/she may be required to withdraw from the corresponding laboratory course.

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

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
MAJOR REQUIREMENTS

Core Courses:

CHEM 115 General Chemistry Lecture I 3
CHEM 116 General Chemistry Lecture II 3
CHEM 125 General Chemistry Laboratory I 1
CHEM 126 General Chemistry Laboratory II 1
CHEM 130 Honors General Chemistry Laboratory 1
CHEM 215 Organic Chemistry Lecture I 3
CHEM 225 Organic Chemistry Laboratory I 1
CHEM 216 Organic Chemistry Lecture II 3
CHEM 226 Organic Chemistry Laboratory II 1
CHEM 230 Advanced Organic Laboratory 1
CHEM 315 Introduction to Physical Chemistry 3
CHEM 316 Advanced Physical Chemistry 3
CHEM 317 Analytical Chemistry, Quantitative Analysis 3
CHEM 318 Analytical Chemistry, Instrumental Analysis 3
CHEM 325 Physical Chemistry Laboratory I 1
CHEM 326 Physical Chemistry Laboratory II 1
CHEM 327 Analytical Chemistry I Laboratory 1
CHEM 328 Analytical Chemistry II Laboratory 2
CHEM 462 Inorganic Chemistry 3
CHEM 495 Seminar: Advances in Chemistry 1
CHEM 496 Seminar: Advances in Chemistry 1

Subtotal: 38

Supporting Courses:

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

Chemistry/Biochemistry (Chemistry Track) Honors Program

This program provides talented majors significant research experience that culminates 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 - B.S. DEGREE

Department of Chemistry
Office: 221 Science Center
(716) 673-3281
Matthew A. Fountain, Chairperson
Email: chemistry.department@fredonia.edu
Website: http://home.fredonia.edu/chemistry

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

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

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

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

Other programs of interest: Prospective students who are interested in working with environmental science-related fields should check the Interdisciplinary Studies - Environmental Science program in the catalog. Students who are interested in the interdisciplinary Environmental Studies minor should check the Interdisciplinary Studies section of the catalog.
One of the following tracks must be chosen:

**Track I (Standard Major):**
- Independent Lab research 3
- CHEM 4XX Advanced lecture elective (400 level) 3

**Subtotal: 3**

**Track II (A.C.S. Approved Major):**
- BIOL 333 Biochemistry 3
- CHEM 333 Biochemistry 3
- CHEM 391 Independent Lab Research 1-3
- CHEM 392 Independent Lab Research 1-3

**Subtotal: 6**

ACS-certified graduates must have at least one of the following lab courses:
- CHEM 472 Inorganic Chemistry Laboratory 1
- CHEM 334 Biochemistry Laboratory 1
- CHEM 465 Advanced Experimental Biochemistry 2

**Subtotal: 1-2**

**Total Credit Hours: 59-64**

---

**Childhood Education (Grades 1-6) - B.S.Ed Degree**

**Department of Education**
Office: E268 Thompson Hall  
(716) 673-3701
**Guangyu Tan, Chairperson**
Email: guangyu.tan@fredonia.edu
Website: https://home.fredonia.edu/coe/ci

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

**Major Requirements**

**Core Courses:**
- EDU 105 Introduction to Contemporary Inclusive Education 3
- EDU 106 Practicum in Inclusive Education I 1
- EDU 225 Child Development 3
- EDU 250 Introduction to the Exceptional Learner 3
- EDU 251 Practicum in Inclusive Education II 1
- EDU 276 Literacy and Technology in Inclusive Educational Settings 3
- EDU 295 Introduction to Educational Assessment 3
- EDU 303 Safe Schools/Healthy Students-DASA: Safety Education/Fire and Arson/School Violence 1
- EDU 304 Cultural & Linguistic Diversity of Students and Families 3
- EDU 313 Practicum in Inclusive Education III 1
- EDU 349 Educational Psychology 3
- MATH 201 Concepts of Foundational Mathematics: A Problem Solving Approach 3
- MATH 202 Concepts of Foundational Mathematics II 3
- Elective course, upon advising 4

**Subtotal: 36**

**Note:**
• EDU 105, EDU 250, and EDU 305: courses that have a field experience component
• *EDU 295 - Effective Fall 2014, course required for ALL incoming students.
• Grades of "B" or better in EDU 105 and EDU 225 are required for all students entering this major in Fall 2015 or later. Please note that "B-" is not an adequate grade. Click here (p. 69) for more information.
• Successful completion of EDU 416 is required to receive a "Satisfactory" standing in Student Teaching.
• A candidate who receives a Satisfactory standing in the Student Teaching placement must also receive a passing grade in their co-requisite Seminar/Methods course to advance.
• Transfer students should consult with their academic advisor regarding Natural Science requirements.

Methods Courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDU 402</td>
<td>Teaching Mathematics in Inclusive Educational Settings</td>
<td>3</td>
</tr>
<tr>
<td>EDU 403</td>
<td>Teaching Science in Inclusive Educational Settings</td>
<td>3</td>
</tr>
<tr>
<td>EDU 404</td>
<td>Teaching Social Studies in Inclusive Educational Settings</td>
<td>3</td>
</tr>
<tr>
<td>EDU 405</td>
<td>Teaching Literacy in Inclusive Educational Settings</td>
<td>3</td>
</tr>
<tr>
<td>EDU 406</td>
<td>Literacy and Assessment in Inclusive Educational Settings</td>
<td>3</td>
</tr>
</tbody>
</table>

Subtotal: 15

Capstone Experience – Student Teaching:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDU 416</td>
<td>Capstone Seminar - Advanced Study in Classroom Organization, Management, and Instruction</td>
<td>3</td>
</tr>
<tr>
<td>EDU 420</td>
<td>Student Teaching Grades 1-3</td>
<td>6</td>
</tr>
<tr>
<td>EDU 422</td>
<td>Student Teaching Childhood: Grades 4-6</td>
<td>6</td>
</tr>
</tbody>
</table>

Subtotal: 15

Subtotal: 66

Total Credit Hours: 66

Plus Foreign Language Requirement:
Candidates in all education programs are required to demonstrate competence in a foreign language. Proficiency requirement met by the following:

• Fredonia Placement Exam determination of Fredonia Foundations courses 100 and 110 in the same World Language or course 110 (or higher) in World Language.

• Proficiency may also be fulfilled by qualifying AP, IB, CLEP Exam scores or transferred courses of Elem I and Elem II of same language, as verified by Registrar's Office.

The General Education foreign language requirement (p. Error! Bookmark not defined.) differs from the certification requirement and must be satisfied for degree conferral.

Plus an area of concentration: 30-34 credit hours. Students should see Areas of Concentration in the Education section of the catalog (p. 75).

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

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

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

Department of Education
Office: E268 Thompson Hall
(716) 673-3701
Guangyu Tan, Chairperson
Email: guangyu.tan@fredonia.edu

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).

MAJOR REQUIREMENTS

Core Courses:
- EDU 105 Introduction to Contemporary Inclusive Education 3
- EDU 106 Practicum in Inclusive Education I 1
- EDU 225 Child Development 3
- EDU 250 Introduction to the Exceptional Learner 3
- EDU 251 Practicum in Inclusive Education II 1
- EDU 276 Literacy and Technology in Inclusive Educational Settings 3
- EDU 295 Introduction to Educational Assessment 3
- EDU 303 Safe Schools/Healthy Students: DASA: Safety Education/Fire and Arson/School Violence 1
- EDU 304 Safe Schools & Healthy Students 1
- EDU 305 Cultural & Linguistic Diversity of Students and Families 3
- EDU 313 Practicum in Inclusive Education III 1
- EDU 349 Educational Psychology 3
- EDU 355 Assessment & Instruction of Students with Learning & Behavior Disorders in Inclusive Educational Settings 3
- EDU 356 Practicum in Inclusive Education IV 1
- MATH 201 Concepts of Foundational Mathematics: A Problem Solving Approach 3
- MATH 202 Concepts of Foundational Mathematics II 3

Subtotal: 36

NOTE:
- EDU 105, EDU 250, EDU 305, and EDU 355: courses that have a field experience component.

- Grades of "B" or better in EDU 105 and EDU 225 are required for all students entering this major in Fall 2015 or later. Please note that "B−" is not an adequate grade. Click here (p. 69) for more information.
- Successful completion of EDU 416 is required to receive a "Satisfactory" standing in Student Teaching.
- A candidate who receives a Satisfactory standing in the Student Teaching placement must also receive a passing grade in their co-requisite Seminar/Methods course to advance.
- Transfer students should consult with their academic advisor regarding Natural Science requirements.

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

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

Subtotal: 15

Capstone Experience – Student Teaching:
- EDU 416 Capstone Seminar - Advanced Study in Classroom Organization, Management, and Instruction 3
- EDU 440 Student Teaching Inclusive/Special Education: Grades 1-3 6
- EDU 441 Student Teaching Inclusive/Special Education: Grades 4-6 6

Subtotal: 15

Total Credit Hours: 66

Plus Foreign Language Requirement:
Candidates in all education programs are required to demonstrate competence in a foreign language. Proficiency requirement met by the following:
- Fredonia Placement Exam determination of Fredonia Foundations courses 100 and 110 in the same World Language or course 110 (or higher) in World Language.
- Proficiency may also be fulfilled by qualifying AP, IB, CLEP Exam scores or transferred courses of Elem I and Elem II of same language, as verified by Registrar’s Office.
The General Education foreign language requirement (p. Error! Bookmark not defined.) differs from the certification requirement and must be satisfied for degree conferral.

Plus an area of concentration: 30-34 credit hours. Students should see Areas of Concentration (p. 75) in the Education section of the catalog.

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

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

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

CHILDHOOD INCLUSIVE EDUCATION AND LITERACY (B-12) (MULTI-AWARD) - B.S.ED / M.S.ED DEGREE:

Department of Education
Office: E268 Thompson Hall
(716) 673-3701
Guangyu Tan, Chairperson
Email: Guangyu.Tan@fredonia.edu

This multi-award program enables qualified students to complete two degrees (a Bachelor of Science in Education--BSEd and a Master of Science in Education--MSEd) in 5 years (instead of 6 if the degrees were taken separately). This 5-year program prepares teacher candidates for certification in four (4) New York State Education (NYSED) initial teaching certifications:

<table>
<thead>
<tr>
<th>Childhood Education</th>
<th>Students with Disabilities</th>
<th>Grades 1-6</th>
</tr>
</thead>
<tbody>
<tr>
<td>literacy Birth to Grade 6</td>
<td>Literacy Grades 5-12</td>
<td></td>
</tr>
</tbody>
</table>

Students planning to enter this program, should be prepared to:

- maintain full-time student status;
- not enroll in the Hamburg Student Teaching Program;
- enroll in the English Concentration; and
- register in more than 16 undergraduate credit hours per semester.

- Grades of "B" or better in EDU 105 and EDU 225 are required for all students entering this program. Once in the program, students are required to earn a passing grade of B or higher in the following courses: EDU 355, EDU 402, EDU 403, EDU 404, EDU 405, EDU 406, EDU 416, EDU 552, EDU 583, EDU 613, EDU 651, EDU 659.

**MAJOR REQUIREMENTS**

<table>
<thead>
<tr>
<th>Core Courses:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>EDU 105</td>
<td>Introduction to Contemporary Inclusive Education</td>
</tr>
<tr>
<td>EDU 106</td>
<td>Practicum in Inclusive Education I</td>
</tr>
<tr>
<td>EDU 225</td>
<td>Child Development</td>
</tr>
<tr>
<td>EDU 250</td>
<td>Introduction to the Exceptional Learner</td>
</tr>
<tr>
<td>EDU 251</td>
<td>Practicum in Inclusive Education II</td>
</tr>
<tr>
<td>EDU 276</td>
<td>Literacy and Technology in Inclusive Educational Settings</td>
</tr>
<tr>
<td>EDU 295</td>
<td>Introduction to Educational Assessment</td>
</tr>
<tr>
<td>EDU 305</td>
<td>Cultural &amp; Linguistic Diversity of Students and Families</td>
</tr>
<tr>
<td>EDU 313</td>
<td>Practicum in Inclusive Education III</td>
</tr>
<tr>
<td>EDU 349</td>
<td>Educational Psychology</td>
</tr>
<tr>
<td>EDU 355</td>
<td>Assessment &amp; Instruction of Students with Learning &amp; Behavior Disorders in Inclusive Ed Settings</td>
</tr>
<tr>
<td>EDU 356</td>
<td>Practicum in Inclusive Education IV</td>
</tr>
</tbody>
</table>

Graduate Literacy Courses:

| EDU 513 | Literacy in the Content Areas |
| EDU 552 | Introduction to Literacy |
| EDU 557 | Using Educational Research to Improve Instruction |
| EDU 574 | Multicultural Children’s Literature & Technology |
| EDU 576 | Practicum in Literacy for All Students |
| EDU 579 | Foundations of Literacy |
| EDU 583 | Literacy Interventionist Practicum I |
| EDU 613 | Literacy Interventionist Practicum II |
| EDU 623 | Advanced Literacy Assessment |
| EDU 628 | Reading Specialist Practicum |
| EDU 651 | Issues and Research in Literacy |
| EDU 659 | Master's Thesis/Project in Literacy |

**Subtotal: 28**
<table>
<thead>
<tr>
<th>Methods Courses:</th>
<th>Subtotal: 32</th>
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<tbody>
<tr>
<td>EDU 402 Teaching Mathematics in Inclusive Educational Settings</td>
<td>3</td>
</tr>
<tr>
<td>EDU 403 Teaching Science in Inclusive Educational Settings</td>
<td>3</td>
</tr>
<tr>
<td>EDU 404 Teaching Social Studies in Inclusive Educational Settings</td>
<td>3</td>
</tr>
<tr>
<td>EDU 405 Teaching Literacy in Inclusive Educational Settings</td>
<td>3</td>
</tr>
<tr>
<td>EDU 406 Literacy and Assessment in Inclusive Educational Settings</td>
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<table>
<thead>
<tr>
<th>English Concentration:</th>
<th>Subtotal: 15</th>
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<tbody>
<tr>
<td>three (3) 200-level ENGL electives</td>
<td>9</td>
</tr>
<tr>
<td>two (2) 300-400-level ENGL electives</td>
<td>6</td>
</tr>
<tr>
<td>one (1) 300-400-level ENED elective</td>
<td>3</td>
</tr>
<tr>
<td>ENED 357 Literacy/Language/Learning Theory</td>
<td>3</td>
</tr>
<tr>
<td>EDU 513 Literacy in the Content Areas</td>
<td>3</td>
</tr>
<tr>
<td>EDU 574 Multicultural Children’s Literature &amp; Technology</td>
<td>3</td>
</tr>
<tr>
<td>EDU 579 Foundations of Literacy</td>
<td>3</td>
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<table>
<thead>
<tr>
<th>Student Teaching Courses:</th>
<th>Subtotal: 30</th>
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</thead>
<tbody>
<tr>
<td>EDU 416 Capstone Seminar - Advanced Study in Classroom Organization, Management, and Instruction</td>
<td>3</td>
</tr>
<tr>
<td>EDU 440 Student Teaching Inclusive/Special Education: Grades 1-3</td>
<td>6</td>
</tr>
<tr>
<td>EDU 441 Student Teaching Inclusive/Special Education: Grades 4-6</td>
<td>6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Subtotal: 15</th>
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</thead>
<tbody>
<tr>
<td>NEW YORK STATE CERTIFICATION REQUIREMENTS</td>
</tr>
<tr>
<td>Required Courses:</td>
</tr>
<tr>
<td>EDU 303 Safe Schools/Healthy Students-</td>
</tr>
<tr>
<td>DASA: Safety Education/Fire and Arson/School Violence</td>
</tr>
<tr>
<td>EDU 304 Safe Schools &amp; Healthy Students</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>American History:</th>
<th>One Fredonia Foundations American History course fulfills this category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural Science:</td>
<td>One Fredonia Foundations Natural Science course fulfills this category except for CSIT or GIS. EDU 226 fulfills this category</td>
</tr>
<tr>
<td>Mathematics:</td>
<td>One MATH, MAED or STAT course in addition to Fredonia Foundations Mathematics requirement</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FOREIGN LANGUAGE PROFICIENCY REQUIREMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Met by the following:</td>
</tr>
<tr>
<td>• Fredonia Placement Exam determination of Fredonia Foundations courses 100 and 110 in same foreign language or course 110 (or higher) in a foreign language.</td>
</tr>
<tr>
<td>• Proficiency may also be fulfilled by qualifying AP, IB, CLEP Exam scores or transferred courses of Elem I and Elem II of same language, as verified by Registrar’s Office.</td>
</tr>
</tbody>
</table>

The General Education foreign language requirement (p. Error! Bookmark not defined.) differs from the certification requirement and must be satisfied for degree conferral.

<table>
<thead>
<tr>
<th>CAPSTONE EXPERIENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bachelor of Science in Education - Student Teaching:</td>
</tr>
<tr>
<td>EDU 416 Capstone Seminar - Advanced Study in Classroom Organization, Management, and Instruction</td>
</tr>
<tr>
<td>EDU 440 Student Teaching Inclusive/Special Education: Grades 1-3</td>
</tr>
<tr>
<td>EDU 441 Student Teaching Inclusive/Special Education: Grades 4-6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Subtotal: 15</th>
</tr>
</thead>
<tbody>
<tr>
<td>Master of Science in Education - Thesis/Project:</td>
</tr>
<tr>
<td>EDU 651 Issues and Research in Literacy</td>
</tr>
<tr>
<td>EDU 659 Master’s Thesis/Project in Literacy</td>
</tr>
</tbody>
</table>

| Subtotal: 6 |
| NOTE: |
| • EDU 651: thesis proposal; Fall |
| • EDU 659: Spring |

<table>
<thead>
<tr>
<th>Communication</th>
</tr>
</thead>
<tbody>
<tr>
<td>Office: 326 McEwen Hall</td>
</tr>
<tr>
<td>(716) 673-3410</td>
</tr>
<tr>
<td>Mark Kiyak, Chairperson</td>
</tr>
<tr>
<td>Email: <a href="mailto:communication.department@fredonia.edu">communication.department@fredonia.edu</a></td>
</tr>
<tr>
<td>Website: <a href="http://home.fredonia.edu/communication">http://home.fredonia.edu/communication</a></td>
</tr>
</tbody>
</table>

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/Radio 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 WDV1 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), the Society of Professional Journalists (SPJ), and off-campus internships.

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

Internal Transfers: Students seeking to transfer into the Department of Communication from another department must have a 2.0 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 2.0, 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:

- Communication: Audio/Radio Production – Bachelor of Science - B.S. (p. 51)
- Communication Studies – Bachelor of Science - B.S. (p. 52)
- Communication: Journalism – Bachelor of Arts - B.A. (p. 52)
- Communication: Media Management – Bachelor of Science - B.S. (p. 53)
- Communication: Public Relations – Bachelor of Science - B.S. (p. 55)
- Communication: Video Production – Bachelor of Science - B.S. (p. 55)

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 45 upper-level credit hours of course work from disciplines other than communication. This may include non-communication courses taken from other universities.

Department of Communication Minimum Standards Policy

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

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

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

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

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

In addition, the department requires all students to declare and complete a minor or a semester studying abroad. The minor must be officially recognized by the offering department and be chosen in consultation with a Communication advisor. Students electing the study
Students who have dual majors with both majors inside the Communication department are still required to have a minor outside the department or meet the criteria for the study abroad option. A second major outside the Communication department will also satisfy this requirement.

On the occasion that the requirements for an outside major are the same as the CORE courses for a major within the Department of Communication (e.g. Arts Administration), students must complete all requirements for both majors. Students may "double-dip" one course that is required for both majors. If there is more than one duplicate course required, students must take one approved elective from the Communication major per each additional course required by the outside major. One or more of the electives must be 300/400 level.

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

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

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

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

**Communication: Audio/Radio Production - B.S. Degree**

**Mark Kiyak, Chairperson**
Email: communication.department@fredonia.edu
Website: http://home.fredonia.edu/communication

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.

**MAJOR REQUIREMENTS**

**Communication Core:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMM 101</td>
<td>Fundamentals of Communication</td>
<td>3</td>
</tr>
<tr>
<td>COMM 105</td>
<td>Public Speaking</td>
<td>3</td>
</tr>
<tr>
<td>COMM 199</td>
<td>Communication Orientation</td>
<td>1</td>
</tr>
</tbody>
</table>

**Subtotal:** 7

**Major Core Courses:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMM 200</td>
<td>Electronic Media Writing (or</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>COMM 361 Script Writing Video/Film/Radio</td>
<td></td>
</tr>
<tr>
<td>COMM 102</td>
<td>Mass Media and Society</td>
<td>3</td>
</tr>
<tr>
<td>COMM 155</td>
<td>Rhetoric of Vision and Sound</td>
<td>3</td>
</tr>
<tr>
<td>COMM 251</td>
<td>Audio Production I</td>
<td>3</td>
</tr>
<tr>
<td>COMM 253</td>
<td>Digital Audio Production</td>
<td>3</td>
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<tr>
<td>COMM 351</td>
<td>Audio Production II</td>
<td>3</td>
</tr>
<tr>
<td>COMM 420</td>
<td>Communication Law and Ethics</td>
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**Subtotal:** 21

**Elective Courses:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>COMM 111</td>
<td>Web Design</td>
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</tr>
<tr>
<td>COMM 112</td>
<td>Desktop Video</td>
<td>1</td>
</tr>
<tr>
<td>COMM 113</td>
<td>Flash</td>
<td>1</td>
</tr>
<tr>
<td>COMM 114</td>
<td>Electronic Darkroom</td>
<td>1</td>
</tr>
<tr>
<td>COMM 115</td>
<td>Advanced Electronic Darkroom</td>
<td>1</td>
</tr>
<tr>
<td>COMM 116</td>
<td>Desktop Publishing</td>
<td>1</td>
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<tr>
<td>COMM 118</td>
<td>Desktop Audio</td>
<td>1</td>
</tr>
<tr>
<td>COMM 130</td>
<td>Foundations in Journalism</td>
<td>3</td>
</tr>
<tr>
<td>COMM 221</td>
<td>Interpersonal Communication</td>
<td>3</td>
</tr>
<tr>
<td>COMM 222</td>
<td>Principles of Public Relations</td>
<td>3</td>
</tr>
<tr>
<td>COMM 244</td>
<td>Introduction to Social Media</td>
<td>3</td>
</tr>
<tr>
<td>COMM 302</td>
<td>Rhetoric and Criticism</td>
<td>3</td>
</tr>
<tr>
<td>COMM 312</td>
<td>Multimedia Integration</td>
<td>3</td>
</tr>
<tr>
<td>COMM 313</td>
<td>Political Communication</td>
<td>3</td>
</tr>
<tr>
<td>COMM 350</td>
<td>Media Technology</td>
<td>3</td>
</tr>
<tr>
<td>COMM 375</td>
<td>Mass Media Theory</td>
<td>3</td>
</tr>
<tr>
<td>COMM 385</td>
<td>International Media</td>
<td>3</td>
</tr>
<tr>
<td>COMM 386</td>
<td>International Films</td>
<td>3</td>
</tr>
<tr>
<td>COMM 400</td>
<td>Media Industry Management</td>
<td>3</td>
</tr>
</tbody>
</table>

**Subtotal:** 9
Capstone:
COMM 395 Radio News and Podcasting 4
COMM 451 Audio Documentaries/Soundscapes 4
COMM 456 Radio Programming/Production 4
COMM 466 Sound Design 4
Subtotal: 4

Subtotal: 41

Total Credit Hours: 41

NOTE:
• COMM 111-116, only three credit hours may be from the one-credit mini-courses.
• At least 12 credit hours must be taken at Fredonia.

COMMUNICATION: COMMUNICATION STUDIES - B.S. DEGREE

Department of Communication
Office: 326 McEwen Hall
(716) 673-3410
Mark Kiyak, Chairperson
Email: communication.department@fredonia.edu
Website: http://home.fredonia.edu/communication

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. Please note: at least 12 credit hours must be taken at Fredonia.

MAJOR REQUIREMENTS

Communication Core:
COMM 101 Fundamentals of Communication 3
COMM 105 Public Speaking 3
COMM 199 Communication Orientation 1
Subtotal: 7

Major Core Courses:
COMM 102 Mass Media and Society 3
or
COMM 155 Rhetoric of Vision and Sound 3
COMM 221 Interpersonal Communication 3
COMM 302 Rhetoric and Criticism 3
COMM 323 Research Methods 3
COMM 430 Communication Theory 3
COMM 465 Intercultural Communication 3
Subtotal: 18

Elective Courses:
COMM 222 Principles of Public Relations 3
COMM 301 Group Communication 3
COMM 303 Health Communication 3
COMM 313 Political Communication 3
COMM 321 Environmental Communication 3
COMM 336 Introduction to Business Communication 3
COMM 342 Presidential Campaign Communication 3
COMM 362 Nonverbal Communication 3
COMM 365 Communication and Leadership 3
COMM 373 Gender and Communication 3
COMM 379 Persuasion 3
COMM 460 Organizational Communication 3
COMM 259 Special Topics in Communication 1-3
COMM 359 Special Topics in Communication 1-3
COMM 459 Special Topics in Communication 1-3
Subtotal: 15

Subtotal: 40

Total Credit Hours: 40

COMMUNICATION: JOURNALISM - B.A. DEGREE

Department of Communication
Office: 326 McEwen Hall
(716) 673-3410
Mark Kiyak, Chairperson
Email: communication.department@fredonia.edu
Website: http://home.fredonia.edu/communication

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. Please note: at least 12 credit hours must be taken at Fredonia.

MAJOR REQUIREMENTS

Communication Core:
COMM 101 Fundamentals of Communication 3
COMM 105 Public Speaking 3
COMM 199 Communication Orientation 1
Subtotal: 7
### Major Core Courses:
- COMM 130  Foundations in Journalism  3
- COMM 230  News Gathering  3
- COMM 231  Storytelling: Words, Images, Sound  3
- COMM 232  Critical Analysis of Journalism  3
- COMM 240  Communication Law and Ethics  3
- COMM 440  Journalism Convergence Capstone  3
- COMM 395  Radio News and Podcasting  4
- COMM 345  Broadcast Writing and Presentation  3
- COMM 346  Editing and Design  3
- COMM 347  Social Media Practicum  3

**Subtotal: 24-25**

**One course from each of the following three categories:**

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

**Subtotal: 1**

#### Theory Courses:
- COMM 301  Group Communication  3
- COMM 302  Rhetoric and Criticism  3
- COMM 313  Political Communication  3
- COMM 323  Research Methods  3
- COMM 359  Special Topics in Communication  1-3
- COMM 362  Nonverbal Communication  3
- COMM 385  International Media  3
- COMM 460  Organizational Communication  3
- COMM 465  Intercultural Communication  3

**Subtotal: 3**

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

**Subtotal: 3**

---

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

#### Selected Topics in Journalism:
- COMM 315  Selected Topics in Journalism  3

**Subtotal: 6**

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

**Subtotal: 44-45**

**Total Credit Hours: 44-47**

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**COMMUNICATION: MEDIA MANAGEMENT - B.S. DEGREE**

**Department of Communication**
- Office: 326 McEwen Hall
- (716) 673-3410
- **Mark Kiyak, Chairperson**
- Email: communication.department@fredonia.edu
- Website: http://home.fredonia.edu/communication

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. Please note: at least 12 credit hours must be taken at Fredonia.

### MAJOR REQUIREMENTS

#### Communication Core:
- COMM 101  Fundamentals of Communication  3
- COMM 105  Public Speaking  3
- COMM 199  Communication Orientation  1

**Subtotal: 7**

#### Supporting Courses:
- ACCT 201  Principles of Financial Accounting  3
- CSIT 151  Introduction to Information Systems  3
- ECON 210  Principles of Macroeconomics  3

**Subtotal: 9**

#### Major Core Courses:
Choose 21 credit hours from the following (15 credits must be taken at 300 or 400 level):
- COMM 102  Mass Media and Society  3
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMM 222</td>
<td>Principles of Public Relations</td>
<td>3</td>
</tr>
<tr>
<td>COMM 244</td>
<td>Introduction to Social Media</td>
<td>3</td>
</tr>
<tr>
<td>COMM 251</td>
<td>Audio Production I</td>
<td>3</td>
</tr>
<tr>
<td>COMM 254</td>
<td>Video Field Production</td>
<td>3</td>
</tr>
<tr>
<td>COMM 255</td>
<td>Studio Production</td>
<td>3</td>
</tr>
<tr>
<td>COMM 323</td>
<td>Research Methods</td>
<td>3</td>
</tr>
<tr>
<td>COMM 336</td>
<td>Introduction to Business Communication</td>
<td>3</td>
</tr>
<tr>
<td>COMM 347</td>
<td>Social Media Practicum</td>
<td>3</td>
</tr>
<tr>
<td>COMM 350</td>
<td>Media Technology</td>
<td>3</td>
</tr>
<tr>
<td>COMM 385</td>
<td>International Media</td>
<td>3</td>
</tr>
<tr>
<td>COMM 400</td>
<td>Media Industry Management</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Subtotal: 21</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Elective Courses:**

Choose 12 credit hours from the following (9 credits must be taken at 300 or 400 level):

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMM 111</td>
<td>Web Design</td>
<td>1</td>
</tr>
<tr>
<td>COMM 112</td>
<td>Desktop Video</td>
<td>1</td>
</tr>
<tr>
<td>COMM 113</td>
<td>Flash</td>
<td>1</td>
</tr>
<tr>
<td>COMM 114</td>
<td>Electronic Darkroom</td>
<td>1</td>
</tr>
<tr>
<td>COMM 115</td>
<td>Advanced Electronic Darkroom</td>
<td>1</td>
</tr>
<tr>
<td>COMM 116</td>
<td>Desktop Publishing</td>
<td>1</td>
</tr>
<tr>
<td>COMM 118</td>
<td>Desktop Audio</td>
<td>1</td>
</tr>
<tr>
<td>COMM 155</td>
<td>Rhetoric of Vision and Sound</td>
<td>3</td>
</tr>
<tr>
<td>COMM 221</td>
<td>Interpersonal Communication</td>
<td>3</td>
</tr>
<tr>
<td>COMM 301</td>
<td>Group Communication</td>
<td>3</td>
</tr>
<tr>
<td>COMM 302</td>
<td>Rhetoric and Criticism</td>
<td>3</td>
</tr>
<tr>
<td>COMM 312</td>
<td>Multimedia Integration</td>
<td>3</td>
</tr>
<tr>
<td>COMM 313</td>
<td>Political Communication</td>
<td>3</td>
</tr>
<tr>
<td>COMM 342</td>
<td>Presidential Campaign</td>
<td>3</td>
</tr>
<tr>
<td>COMM 362</td>
<td>Nonverbal Communication</td>
<td>3</td>
</tr>
<tr>
<td>COMM 365</td>
<td>Communication and Leadership</td>
<td>3</td>
</tr>
<tr>
<td>COMM 375</td>
<td>Mass Media Theory</td>
<td>3</td>
</tr>
<tr>
<td>COMM 373</td>
<td>Gender and Communication</td>
<td>3</td>
</tr>
<tr>
<td>COMM 379</td>
<td>Persuasion</td>
<td>3</td>
</tr>
<tr>
<td>COMM 420</td>
<td>Communication Law and Ethics</td>
<td>3</td>
</tr>
<tr>
<td>COMM 430</td>
<td>Communication Theory</td>
<td>3</td>
</tr>
<tr>
<td>COMM 460</td>
<td>Organizational Communication</td>
<td>3</td>
</tr>
<tr>
<td>COMM 465</td>
<td>Intercultural Communication</td>
<td>3</td>
</tr>
<tr>
<td>COMM 470</td>
<td>Fredonia Radio Systems/WNYF/Leader Practicum</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Subtotal: 12</strong></td>
<td></td>
</tr>
</tbody>
</table>

**NOTE:**

- COMM 111-118: Computer mini-courses, 1 credit hour each. Only three credit hours may be taken from the one-credit mini-courses.

Subtotal: 49

**Total Credit Hours: 49**
COMMUNICATION: PUBLIC RELATIONS - B.S. DEGREE

Department of Communication
Office: 326 McEwen Hall
(716) 673-3410
Mark Kiyak, Chairperson
Email: communication.department@fredonia.edu
Website: http://home.fredonia.edu/communication

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. Please note: at least 12 credit hours must be taken at Fredonia.

MAJOR REQUIREMENTS

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

Subtotal: 7

Major Core Courses:
- COMM 222 Principles of Public Relations 3
- COMM 244 Introduction to Social Media 3
- COMM 322 Public Relations Writing 3
- COMM 323 Research Methods 3
- COMM 344 Public Relations Case Analysis 3
- COMM 422 Public Relations Campaigns 3
- COMM 424 International Public Relations 3

Subtotal: 21

NOTE:
- COMM 422 serves as Capstone experience and must be taken at Fredonia.

Elective Courses
Choose 12 credit hours from the following (9 credit hours must be taken at 300-400 level):
- COMM 102 Mass Media and Society 3
- COMM 111 Web Design 1
- COMM 112 Desktop Video 1
- COMM 113 Flash 1
- COMM 114 Electronic Darkroom 1
- COMM 115 Advanced Electronic Darkroom 1
- COMM 116 Desktop Publishing 1
- COMM 118 Desktop Audio 1
- COMM 130 Foundations in Journalism 3
- COMM 155 Rhetoric of Vision and Sound 3
- COMM 221 Interpersonal Communication 3

Subtotal: 12

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

Subtotal: 40

Total Credit Hours: 40

COMMUNICATION: VIDEO PRODUCTION - B.S. DEGREE

Department of Communication
Office: 326 McEwen Hall
(716) 673-3410
Mark Kiyak, Chairperson
Email: communication.department@fredonia.edu
Website: http://home.fredonia.edu/communication

Focuses on the theoretical, technical, and practical issues of television and digital film production. Hands-on project-based major with emphasis on pre-production, production, post-production and distribution. Students gain experience in multi-camera studio production, electronic news gathering, field production, documentary, and narrative. Topics covered include: concept development, visualization, writing, aesthetics, ethics, shooting and editing techniques, and sound design. Please note: at least 18 credit hours and capstone classes must be taken at Fredonia.

MAJOR REQUIREMENTS

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

Subtotal: 7
### Major Core Courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMM 102</td>
<td>Mass Media and Society</td>
<td>3</td>
</tr>
<tr>
<td>COMM 155</td>
<td>Rhetoric of Vision and Sound</td>
<td>3</td>
</tr>
<tr>
<td>COMM 251</td>
<td>Audio Production I</td>
<td>3</td>
</tr>
<tr>
<td>COMM 254</td>
<td>Video Field Production</td>
<td>3</td>
</tr>
<tr>
<td>COMM 255</td>
<td>Studio Production</td>
<td>3</td>
</tr>
<tr>
<td>COMM 366</td>
<td>Postproduction</td>
<td>3</td>
</tr>
<tr>
<td>COMM 420</td>
<td>Communication Law and Ethics</td>
<td>3</td>
</tr>
</tbody>
</table>

Subtotal: 21

### Track Courses:

One of the following four-course sequences must be taken at Fredonia.

#### NARRATIVE FICTION TRACK

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>COMM 309</td>
<td>Film Analysis</td>
<td>3</td>
</tr>
<tr>
<td>COMM 361</td>
<td>Script Writing Video/Film/Radio</td>
<td>3</td>
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<tr>
<td>COMM 454</td>
<td>Fiction I</td>
<td>4</td>
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<tr>
<td>COMM 464</td>
<td>Fiction II</td>
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Subtotal: 14

#### BROADCAST TRACK

<table>
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<tbody>
<tr>
<td>COMM 200</td>
<td>Electronic Media Writing</td>
<td>3</td>
</tr>
<tr>
<td>COMM 307</td>
<td>History of Television</td>
<td>3</td>
</tr>
<tr>
<td>COMM 358</td>
<td>Television News</td>
<td>4</td>
</tr>
<tr>
<td>COMM 401</td>
<td>Television Studio Production II</td>
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</tr>
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</table>

Subtotal: 14

### Elective Courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
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<tbody>
<tr>
<td>ARTS 155</td>
<td>Introduction to Film Photography</td>
<td>3</td>
</tr>
<tr>
<td>COMM 312</td>
<td>Multimedia Integration</td>
<td>3</td>
</tr>
<tr>
<td>COMM 358</td>
<td>Television News</td>
<td>4</td>
</tr>
<tr>
<td>COMM 466</td>
<td>Sound Design</td>
<td>4</td>
</tr>
<tr>
<td>COMM 368</td>
<td>Video Camera and Lighting Techniques</td>
<td>3</td>
</tr>
<tr>
<td>THEA 130</td>
<td>Acting for Non-Majors</td>
<td>3</td>
</tr>
<tr>
<td>COMM 400</td>
<td>Media Industry Management</td>
<td>3</td>
</tr>
</tbody>
</table>

Subtotal: 3

### NOTES:

- ARTS 155 is not an elective for the Broadcast track
- COMM 400 is only for the Broadcast track

Subtotal: 45

**Total Credit Hours: 45**
Communication Disorders and Sciences
Office: W123 Thompson Hall
(716) 673-3202
Email: cds@fredonia.edu
Website: http://home.fredonia.edu/commdisorders

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

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

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

At Fredonia, the M.S. in Speech-Language Pathology (p. 162) includes clinical practice, housed in the Henry C. Youngerman Center for Communication Disorders and at 95 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.

The graduate program in Speech-Language Pathology is accredited by the Council on Academic Accreditation (CAA) of the American Speech-Language-Hearing Association (ASHA) and offers 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 Certification as a Teacher of Students with Speech 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, the Annmarie Woloszyn Nichter Scholarship and the Dr. Kim L. Tillery Scholarship.

Requirements for all Academic Majors
Students must hold a minimum GPA of 3.0 to transfer into the program. Students who are at or above 60 credit hours will be advised that a minimum 3.0 GPA is usually required for successful acceptance into a Speech-Language Pathology graduate program (p. 162).

COMMUNICATION DISORDERS AND SCIENCES - B.S. DEGREE

Department of Communication Disorders and Sciences
Office: W123 Thompson Hall
(716) 673-3202
Email: cds@fredonia.edu
Website: http://home.fredonia.edu/commdisorders

MAJOR REQUIREMENTS

<table>
<thead>
<tr>
<th>Core courses:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CDS 225 Introduction to Language</td>
<td>3</td>
</tr>
<tr>
<td>CDS 250 Speech and Language Development</td>
<td>3</td>
</tr>
<tr>
<td>CDS 268 Phonetics</td>
<td>3</td>
</tr>
<tr>
<td>CDS 280 Speech-Language Pathology I</td>
<td>3</td>
</tr>
<tr>
<td>CDS 310 Speech and Hearing Mechanism</td>
<td>3</td>
</tr>
<tr>
<td>CDS 316 Speech Science</td>
<td>3</td>
</tr>
<tr>
<td>CDS 322 Hearing Problems and Tests</td>
<td>3</td>
</tr>
<tr>
<td>CDS 323 Speech Sound and Language Disorders</td>
<td>3</td>
</tr>
<tr>
<td>CDS 398 Clinical Methods in Evaluation</td>
<td>3</td>
</tr>
<tr>
<td>CDS 399 Clinical Methods in Intervention</td>
<td>3</td>
</tr>
<tr>
<td>CDS 410 Clinical Procedures: Observation and Analysis</td>
<td>3</td>
</tr>
<tr>
<td>CDS 418 Speech-Language Pathology II</td>
<td>3</td>
</tr>
<tr>
<td>CDS 419 Aural Habilitation and Rehabilitation</td>
<td>3</td>
</tr>
</tbody>
</table>

Subtotal: 39

NOTE:
- Other course content (usually taken in an undergraduate program) required for application for ASHA certification: biology, chemistry or physics, statistics, social science or psychology.
- Other course content required for application for New York State Department of Education initial certification for TSSLD certificate: Literacy acquisition, a foreign language other than English, language acquisition, and in learning processes of motivation, communication and classroom management of students with disabilities.
Scholarships. The scholarships are awarded annually on the recommendation of the computer and information sciences faculty.

**Double Major**

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 cannot be 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 AL Tech Specialty Steel, Buffalo General Hospital, Chemical Process Corporation, Cott Beverages, Cummins Engine, General Dynamics, Lockheed-Martin, Brooks Memorial Hospital, Noyes Hospital, NASA, Paychex, and the Dunkirk and Fredonia Telephone Company. Several internships pay honoraria or wages. Every semester the department hires approximately 10 laboratory proctors to manage its Computer Science (CS) Lab. Many other opportunities exist across campus for students to earn money as tutors, work study, or computer laboratory assistants.

**Computer Laboratories and Equipment**

The department manages its own open access laboratory (CS Lab) and has classes scheduled in three other laboratories in Fenton Hall and one in Thompson Hall. The CS Lab is maintained by a systems administrator and a staff of student proctors from the Computer and Information Sciences Department. The main equipment in the lab consists of a cluster of 23 Intel-based workstations running MS-Windows. A Linux-based cluster of servers connected to a high-speed network provides access to various Linux apps and frameworks. Popular software development tools such as Alice, Blender, C, C++, Java, Python, Visual BASIC, ARTIS, Open GL and other utilities are available, in addition to standard Microsoft software packages such as Office and Visual Studio. The computers in the laboratory are accessible from various locations across the campus, including the dormitories. There is also a laboratory that is used by the department as an instructional laboratory and houses a network of workstations. 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 regularly.

**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.
work in well-known journals and proceedings. With the cooperation of the Computer Science Club, the department 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, 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. The department also participates in the Cooperative Engineering program. Many service level courses in subjects such as Microsoft Office, web programming and Java are also offered. Currently, the primary languages of computing instruction are Visual BASIC, Python, C, C# and C++ in the MS Windows, Mac OS, and Linux environments. For further details about the programs in computer and information sciences, interested persons should contact the chairperson of the Department of Computer and Information Sciences at (716) 673-4820 or email csit@fredonia.edu.

**COMPUTER INFORMATION SYSTEMS - B.S. DEGREE**

**Department of Computer and Information Sciences**
Office: 2148 Fenton Hall  
(716) 673-4820  
**Junaid Zubairi, Chairperson**  
Email: csit@fredonia.edu  
Website: http://home.fredonia.edu/cis

The common core of fundamental courses in the science of computing provide essential emphasis on theory, practice and applications. Students majoring in Computer Information System can take electives focusing on System Development or System Management. Courses in System Development prepare graduates for careers in information systems design and development of typical businesses and commercial computing sectors. Courses in System Management prepares graduates for management and utilization of information systems and technology. Students choose electives with the guidance and approval of their advisor.

**MAJOR REQUIREMENTS**

**Computer Science Core Courses:**
- CSIT 107 Web Programming I 3
- CSIT 151 Introduction to Information Systems 3
- CSIT 105 Visual BASIC I 3  
  or  
- CSIT 121 Computer Science I 3
- CSIT 205 Visual BASIC II 3  
  or  
- CSIT 221 Computer Science II 3
- CSIT 207 Web Programming II 3
- CSIT 251 Information Systems Structures 3
- CSIT 312 Computer Structures 3
- CSIT 351 Business Systems Development 3  
  15 credits CSIT 300 400 level electives by advisement

**Subtotal: 39**

**Business and Mathematics Core Courses:**
- MATH 120 Survey of Calculus I 3
- ACCT 201 Principles of Financial Accounting 3
- ECON 205 Principles of Microeconomics 3
- STAT 200 Statistical Methods I 3  
  or  
- ECON 200 Fundamentals of Statistics for Business Administration and Economics 3
- STAT 300 Statistical Methods II 3  
  or  
- ECON 300 Statistical Analysis 3
- ACCT 202 Principles of Managerial Accounting 3  
  or  
- CSIT 241 Discrete Mathematics I 3  
  or  
- CSIT 242 Discrete Mathematics for Computer Science II 3
- MATH 121 Survey of Calculus II 3

**Subtotal: 18**

**NOTE:**
- Any two BUAD courses or ECON 210 (p. 287) by advisement
- CSIT 490, CSIT 496 and CSIT 497: only one course numbered 490 or above is allowed
- CSIT 300 internship is a variable 1-12 credit hour course
- Students must complete the course for 3 credit hours to satisfy the degree requirements

**Subtotal: 57**
Total Credit Hours: 57

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 - B.S. DEGREE

Department of Computer and Information Sciences
Office: 2148 Fenton Hall
(716) 673-4820
Junaid Zubairi, Chairperson
Email: csit@fredonia.edu
Website: http://home.fredonia.edu/cis

The common core of fundamental courses in the science of computing provide essential emphasis on theory, practice and applications. In addition, the students complete two Mathematics courses and take four departmental electives with the guidance and approval of their advisor. Three of the electives must be at 300/400 level.

MAJOR REQUIREMENTS

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

Subtotal: 33-34

Note:
• CSIT 121 and CSIT 221 require a minimum grade of C- or better

Mathematics Requirements:
MATH 120 Survey of Calculus I 3
or
MATH 122 University Calculus I 4
MATH 121 Survey of Calculus II 3
or
MATH 123 University Calculus II 4
STAT 250 Statistics for Scientists 3

Subtotal: 9-11

Computer Science Electives (9 credits must be at upper level)
CSIT 291 Special Topics 0-3
CSIT 300 Internship 1-12
CSIT 307 Web and Mobile App Design 3
CSIT 333 Mobile Applications Development 3
CSIT 390 Directed Study 1-3
CSIT 400 Directed Independent Study 1-3
CSIT 411 Programming for Embedded Microcontrollers 3
CSIT 413 Computer Architecture 3
CSIT 433 Compiler Construction 3
CSIT 435 Data Communication and Networks 3
CSIT 437 Advanced Operating Systems 3
CSIT 441 Analysis and Design of Algorithms 3
CSIT 443 Theory of Computation 3
CSIT 456 Information and Decision Support Systems 3
CSIT 461 Introduction to AI and Knowledge Engineering 3
CSIT 462 Computer Graphics 3
CSIT 463 Introduction to Digital Image Processing and Computer Vision 3
CSIT 473 Data Warehousing and Mining 3
CSIT 475 Electronic Commerce 3
CSIT 490 Seminar on Selected Topics 1-3
CSIT 496 Special Topics 1-3
CSIT 497 Thesis 3
CSIT 499 Senior Project 3

Subtotal: 12

Note:
• 9 of 12 elective credits must be at the upper level (300/400)
• A Maximum of two courses are allowed from the following: CSIT 291, CSIT 300, CSIT 307, CSIT 390, CSIT 400, CSIT 490, CSIT 496, CSIT 497, CSIT 499

Subtotal: 54-57

Total Credit Hours: 54-57
# Criminal Justice - B.A. Degree

**Department of Sociocultural and Justice Sciences**  
Office: W363 Thompson Hall  
(716) 673-3205  
**Randolph Hohle, Program Director**  
Email: sociocultural.justice@fredonia.edu  
Website: http://www.fredonia.edu/criminaljustice

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

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

## Major Requirements

### Core courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRMJ 100</td>
<td>Introduction to Criminal Justice</td>
<td>3</td>
</tr>
<tr>
<td>CRMJ 230</td>
<td>Criminal Law</td>
<td>3</td>
</tr>
<tr>
<td>CRMJ 240</td>
<td>Policing</td>
<td>3</td>
</tr>
<tr>
<td>CRMJ 340</td>
<td>Introduction to Corrections</td>
<td>3</td>
</tr>
<tr>
<td>CRMJ 370</td>
<td>Criminology</td>
<td>3</td>
</tr>
<tr>
<td>CRMJ 400</td>
<td>Senior Seminar</td>
<td>3</td>
</tr>
</tbody>
</table>

**Subtotal:** 18

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

### Statistics-Research Methods Sequence:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOC 200</td>
<td>Statistics in the Real World</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>or Any other 200-level introduction to statistics course</td>
<td></td>
</tr>
<tr>
<td>SOC 300</td>
<td>Research Methods</td>
<td>3</td>
</tr>
</tbody>
</table>

**Subtotal:** 6

- **Criminal Justice Electives (chosen from the following):**
  - CRMJ 250 Transnational Crime 3
  - CRMJ 331 Criminal Procedure 3
  - CRMJ 332 Homeland Security 3
  - CRMJ 333 Criminal Investigations 3
  - CRMJ 350 Special Topics 3
  - CRMJ 355 Organized Crime 3
  - CRMJ 360 Criminal Justice Ethics 3
  - CRMJ 375 Serial and Mass Murder in the U.S. 3
  - CRMJ 440 Corrections Administration 3
  - CRMJ 441 Police Administration 3
  - CRMJ 470 Criminal Justice Internship 1-15

**Subtotal:** 9

- **Interdisciplinary Electives (chosen from the following):**
  - PHIL 303 Crime and Punishment 3
  - PHIL 362 Philosophy of Law 3
  - CSIT 201 Computer Security and Ethics 3
  - POLI 276 Law and Society 3
  - POLI 277 Understanding the Law 3
  - POLI 311 Fundamentals of Public Administration 3
  - POLI 370 American Constitutional Law 3
  - POLI 371 Civil Rights and Liberties 3
  - POLI 383 Courts and Social Policy 3
  - PSY 246 Personality 3
  - PSY 356 Abnormal Psychology 3
  - PSY 358 Psychology and the Law 3
  - SOC 201 Social Problems 3
  - SOC 218 Introduction to Social Work 3
  - SOC 275 Social Inequalities 3
  - SOC 310 Sociology of Deviant Behavior 3
  - SOC 311 Sociology of Addiction 3
  - SOC 350 Special Topics 1-3
  - SOC 363 Victimology 3
  - SOC 364 Juvenile Delinquency 3
  - SOC 365 Family Violence 3

**Subtotal:** 9

**NOTE:**
- SOC 350 (p. 470) Special Topics (as advised).
- A minimum of 27 credit hours must be taken at 300-level or above.

**Subtotal:** 42

**Total Credit Hours:** 42

## Policy on Transfer Credit into the Major

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

**Steven C. Croglio 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.
DANCE - B.F.A DEGREE

Department of Theatre and Dance
Office: 212 Rockefeller Arts Center
(716) 673-3596

Sam Kenney, Chairperson
Email: theatre.dance@fredonia.edu
Website: http://home.fredonia.edu/theatredance/

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

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

• All majors in the Department of Theatre and Dance are expected to carry a minimum GPA of 3.0 in their major program, and a minimum cumulative GPA of 2.0.

• Students must earn a grade of "C" or better in all dance technique and theory courses in order to progress to the next level.

MAJOR REQUIREMENTS

Core Technique Courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>DANC 111</td>
<td>Contemporary Technique I</td>
<td>2</td>
</tr>
<tr>
<td>DANC 111</td>
<td>Modern Technique I</td>
<td>2</td>
</tr>
<tr>
<td>DANC 112</td>
<td>Ballet I</td>
<td>2</td>
</tr>
<tr>
<td>DANC 112</td>
<td>Ballet I</td>
<td>2</td>
</tr>
<tr>
<td>DANC 113</td>
<td>Jazz Dance I</td>
<td>2</td>
</tr>
<tr>
<td>DANC 113</td>
<td>Jazz Dance I</td>
<td>2</td>
</tr>
<tr>
<td>DANC 114</td>
<td>Tap Dance I</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>or Tap Dance II</td>
<td>2</td>
</tr>
<tr>
<td>DANC 214</td>
<td>Tap Dance II</td>
<td>2</td>
</tr>
<tr>
<td>DANC 211</td>
<td>Contemporary Technique II</td>
<td>2</td>
</tr>
<tr>
<td>DANC 212</td>
<td>Ballet II</td>
<td>2</td>
</tr>
<tr>
<td>DANC 213</td>
<td>Jazz Dance II</td>
<td>2</td>
</tr>
</tbody>
</table>

Subtotal: 20

Upon completion of the courses listed above:

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

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

Supporting Courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>THEA 100</td>
<td>Theatre Majors Seminar</td>
<td>1</td>
</tr>
<tr>
<td>DANC 101</td>
<td>Theatre and Dance Productions</td>
<td>1</td>
</tr>
</tbody>
</table>

DANC 102 Theatre and Dance Productions 1
DANC 241 Dance Improvisation 2
DANC 260 Dance Kinesiology 3
DANC 264 Choreography I 3
DANC 341 Selected Topics in Dance .5-

DANC 353 Contemporary Dance History 3
DANC 364 Choreography II 3
DANC 460 Senior Project 1
DANC 460 Senior Project 1

DANC 250 Dance Ensemble 1
DANC 251 Dance Repertory 1

THEA 121 Introduction to Technical Theatre 3
THEA 130 Acting for Non-Majors 3
THEA 133 Introduction to Acting 3

MUS 101 Beginning Music Theory I 3
MUS 115 Music Appreciation 3

PHED 126 Body Sculpting (Women) 2

PHED 139 Weight Training 2

HLTH 303 Fitness and Wellness 3

Subtotal: 43-45

NOTE:

• The DANC 250/251 requirement may be satisfied by any combination of DANC 250 and DANC 251, as long as the total number of credit hours equals six (6).

• DANC 341 is a variable 1-3 credit course which students are to complete for at least one (1) credit hour to satisfy the degree requirements.

Dance Electives:

• Electives are usually satisfied through repetition of DANC 211-311 (Modern Technique II-III), DANC 212-312 (Ballet II-III), DANC 213-313 (Jazz Dance II-III), and DANC 341 (Special Topics), each of which may be taken three times for credit.

• Additional elective options include DANC 214 (Tap II - if not used as a required technique course), and DANC 370 (Dance Studio Management).

Subtotal: 10

Elective Courses:

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

Subtotal: 8

Subtotal: 91-93

Total Credit Hours: 91-93

EARLY CHILDHOOD EDUCATION - B.S.ED DEGREE

Department of Education
Office: E268 Thompson Hall
(716) 673-3701
Guangyu Tan, Chairperson
Email: Guangyu.Tan@fredonia.edu

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

MAJOR REQUIREMENTS

<table>
<thead>
<tr>
<th>Core Courses</th>
<th>Subtotal</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDU 105</td>
<td>3</td>
</tr>
<tr>
<td>EDU 106</td>
<td>1</td>
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<tr>
<td>EDU 221</td>
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<td>EDU 222</td>
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<td>EDU 225</td>
<td>3</td>
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<td>EDU 250</td>
<td>3</td>
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<tr>
<td>EDU 251</td>
<td>1</td>
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<tr>
<td>EDU 276</td>
<td>3</td>
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<tr>
<td>EDU 295</td>
<td>3</td>
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<tr>
<td>EDU 303</td>
<td>1</td>
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<tr>
<td>EDU 304</td>
<td>1</td>
</tr>
<tr>
<td>EDU 305</td>
<td>3</td>
</tr>
<tr>
<td>EDU 313</td>
<td>1</td>
</tr>
<tr>
<td>EDU 315</td>
<td>3</td>
</tr>
<tr>
<td>EDU 349</td>
<td>3</td>
</tr>
<tr>
<td>EDU 376</td>
<td>3</td>
</tr>
<tr>
<td>MATH 201</td>
<td>3</td>
</tr>
</tbody>
</table>

Subtotal: 45

NOTE:

- EDU 105, EDU 221, EDU 250, and EDU 305: courses that have a field experience component
- *EDU 295 - Effective Fall 2014, course required for ALL incoming students. Course available in Spring 2015 for education majors with sophomore level standing.
- Grades of "B" or better in EDU 105 and EDU 225 are required for all students entering this major in Fall 2015 or later. Please note that "B-" is not an adequate grade. Click here (p. 69) for more information.
- Successful completion of EDU 416 is required to receive a "Satisfactory" standing in Student Teaching.
- A candidate who receives a Satisfactory standing in the Student Teaching placement must also receive a passing grade in their co-requisite Seminar/Methods course to advance.
- Transfer students should consult with their academic advisor regarding Natural Science requirements.

Methods Courses:

<table>
<thead>
<tr>
<th>Methods Courses</th>
<th>Subtotal</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDU 402</td>
<td>3</td>
</tr>
<tr>
<td>EDU 403</td>
<td>3</td>
</tr>
<tr>
<td>EDU 404</td>
<td>3</td>
</tr>
<tr>
<td>EDU 405</td>
<td>3</td>
</tr>
</tbody>
</table>

Subtotal: 12

Capstone Experience – Student Teaching:

<table>
<thead>
<tr>
<th>Capstone Experience – Student Teaching</th>
<th>Subtotal</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDU 416</td>
<td>3</td>
</tr>
</tbody>
</table>

Subtotal: 3

Plus two of the following:

<table>
<thead>
<tr>
<th>Plus two of the following</th>
<th>Subtotal</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDU 421</td>
<td>6</td>
</tr>
<tr>
<td>EDU 423</td>
<td>6</td>
</tr>
<tr>
<td>EDU 425</td>
<td>6</td>
</tr>
</tbody>
</table>

Subtotal: 9
Subtotal: 69

Total Credit Hours: 69

Plus Foreign Language Requirement:
Candidates in all education programs are required to demonstrate competence in a foreign language. Proficiency requirement met by the following:

- Fredonia Placement Exam determination of Fredonia Foundations courses 100 and 110 in the same World Language or course 110 (or higher) in World Language.

- Proficiency may also be fulfilled by qualifying AP, IB, CLEP Exam scores or transferred courses of Elem I and Elem II of same language, as verified by Registrar’s Office.

The General Education foreign language requirement (p. Error! Bookmark not defined.) differs from the certification requirement and must be satisfied for degree conferral.

Plus an area of concentration: 30-34 credit hours. Students should see Areas of Concentration (p. 75) in the Education section of the catalog.

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

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

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

EARLY CHILDHOOD-CHILDHOOD EDUCATION - B.S.ED DEGREE

Department of Education
Office: E268 Thompson Hall
(716) 673-3701
Guangyu Tan, Chairperson
Email: Guangyu.Tan@fredonia.edu

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)

MAJOR REQUIREMENTS

| Core Courses: |  |
|---------------|  |
| EDU 105 | Introduction to Contemporary Inclusive Education | 3 |
| EDU 106 | Practicum in Inclusive Education I | 1 |
| EDU 221 | Introduction to Early Childhood Education | 3 |
| EDU 222 | Practicum in Early Childhood Education | 1 |
| EDU 225 | Child Development | 3 |
| EDU 250 | Introduction to the Exceptional Learner | 3 |
| EDU 251 | Practicum in Inclusive Education II | 1 |
| EDU 276 | Literacy and Technology in Inclusive Educational Settings | 3 |
| EDU 295 | Introduction to Educational Assessment | 3 |
| EDU 303 | Safe Schools/Healthy Students-DASA: Safety Education/Fire and Arson/School Violence | 1 |
| EDU 304 | Safe Schools & Healthy Students | 1 |
| EDU 305 | Cultural & Linguistic Diversity of Students and Families | 3 |
| EDU 313 | Practicum in Inclusive Education III | 1 |
| EDU 315 | Early Childhood Curriculum Development | 3 |
| EDU 349 | Educational Psychology | 3 |
| MATH 201 | Concepts of Foundational Mathematics: A Problem Solving Approach | 3 |
| MATH 202 | Concepts of Foundational Mathematics II | 3 |
| MUED 215 | Music, Play & Self | 3 |

Subtotal: 42

NOTE:

- EDU 105, EDU 221, EDU 250, and EDU 305: courses that have a field experience component
- EDU 295 - Effective Fall 2014, course required for ALL incoming students. Course available in Spring 2015 for education majors with sophomore level standing.
- Grades of "B" or better in EDU 105 and EDU 225 are required for all students entering this major in Fall 2015 or later. Please note that "B-" is not an adequate grade. Click here (p. 69) for more information.
- Successful completion of EDU 416 is required to receive a "Satisfactory" standing in Student Teaching.
- A candidate who receives a Satisfactory standing in the Student Teaching placement must also receive a passing grade in their co-requisite Seminar/Methods course to advance.
Transfer students should consult with their academic advisor regarding Natural Science requirements.

**Methods Courses:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDU 402</td>
<td>Teaching Mathematics in Inclusive Educational Settings</td>
<td>3</td>
</tr>
<tr>
<td>EDU 403</td>
<td>Teaching Science in Inclusive Educational Settings</td>
<td>3</td>
</tr>
<tr>
<td>EDU 404</td>
<td>Teaching Social Studies in Inclusive Educational Settings</td>
<td>3</td>
</tr>
<tr>
<td>EDU 405</td>
<td>Teaching Literacy in Inclusive Educational Settings</td>
<td>3</td>
</tr>
<tr>
<td>EDU 406</td>
<td>Literacy and Assessment in Inclusive Educational Settings</td>
<td>3</td>
</tr>
<tr>
<td>EDU 416</td>
<td>Capstone Seminar - Advanced Study in Classroom Organization, Management, and Instruction</td>
<td>3</td>
</tr>
<tr>
<td>EDU 438</td>
<td>Student Teaching: Birth-Grade 2</td>
<td>6</td>
</tr>
<tr>
<td>EDU 439</td>
<td>Student Teaching: Grades 3-6</td>
<td>6</td>
</tr>
</tbody>
</table>

Subtotal: 30

**Total Credit Hours:** 72

**Plus Foreign Language Requirement:**

Candidates in all education programs are required to demonstrate competence in a foreign language. Proficiency requirement met by the following:

- Fredonia Placement Exam determination of Fredonia Foundations courses 100 and 110 in the same World Language or course 110 (or higher) in World Language.
- Proficiency may also be fulfilled by qualifying AP, IB, CLEP Exam scores or transferred courses of Elem I and Elem II of same language, as verified by Registrar’s Office.

The General Education foreign language requirement (p. **Error! Bookmark not defined.**) differs from the certification requirement and must be satisfied for degree conferral.

Plus an area of concentration: 30-34 credit hours. Students should see Areas of Concentration (p. 75) in the Education section of the catalog.

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

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

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

**EARTH SCIENCE - B.A. DEGREE**

Department of Geology and Environmental Sciences
Office: 112 Jewett Hall
(716) 673-3302
Justin Conroy, Chairperson
Email: geosciences@fredonia.edu
Website: http://home.fredonia.edu/earth

**MAJOR REQUIREMENTS**

**Core Program:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEO 102</td>
<td>Freshman Seminar</td>
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</tr>
<tr>
<td>GEO 150</td>
<td>Moons and Planets</td>
<td>3</td>
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<tr>
<td>or</td>
<td>PHYS 118</td>
<td>Introduction to Astronomy</td>
</tr>
<tr>
<td>GEO 160</td>
<td>Blue Planet</td>
<td>3</td>
</tr>
<tr>
<td>GEO 165</td>
<td>Planet Earth</td>
<td>3</td>
</tr>
<tr>
<td>GEO 169</td>
<td>Planet Earth Lab</td>
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</tr>
<tr>
<td>GEO 210</td>
<td>Earth History</td>
<td>3</td>
</tr>
<tr>
<td>GEO 211</td>
<td>Earth History Lab</td>
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<tr>
<td>GEO 215</td>
<td>Earth Materials</td>
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<tr>
<td>GEO 370</td>
<td>Structural Geology</td>
<td>4</td>
</tr>
<tr>
<td>GEO 459</td>
<td>Seminar in Geosciences</td>
<td>1</td>
</tr>
<tr>
<td>GEO 311</td>
<td>Global Climate</td>
<td>3</td>
</tr>
<tr>
<td>GEO 330</td>
<td>Geomorphology</td>
<td>4</td>
</tr>
<tr>
<td>GEO 460</td>
<td>Senior Seminar</td>
<td>1</td>
</tr>
<tr>
<td>GEO 461</td>
<td>Field Geology</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>One GEO 300/400 level elective course</td>
<td>3-4</td>
</tr>
<tr>
<td></td>
<td>One GEO or GIS 300/400 level elective course</td>
<td>3-4</td>
</tr>
</tbody>
</table>

Subtotal: 41-43

**Supporting Courses:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 115</td>
<td>General Chemistry Lecture I</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 125</td>
<td>General Chemistry Laboratory I</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 116</td>
<td>General Chemistry Lecture II</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 126</td>
<td>General Chemistry Laboratory II</td>
<td>1</td>
</tr>
<tr>
<td>PHYS 121</td>
<td>College Physics I</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 123</td>
<td>College Physics Lab I</td>
<td>1</td>
</tr>
<tr>
<td>PHYS 122</td>
<td>College Physics II</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 124</td>
<td>College Physics II Lab</td>
<td>1</td>
</tr>
<tr>
<td>or</td>
<td>PHYS 230</td>
<td>University Physics I</td>
</tr>
<tr>
<td>PHYS 232</td>
<td>University Physics I Lab</td>
<td>1</td>
</tr>
<tr>
<td>PHYS 231</td>
<td>University Physics II</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 233</td>
<td>University Physics II Lab</td>
<td>1</td>
</tr>
<tr>
<td>MATH 120</td>
<td>Survey of Calculus I</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td>MATH 122</td>
<td>University Calculus I</td>
</tr>
</tbody>
</table>
A course in Statistics at the 200-level or higher 3

Subtotal: 22-25

Subtotal: 63-68

Total Credit Hours: 63-68

ENVIRONMENTAL SCIENCES - B.S. DEGREE

Department of Geology and Environmental Sciences
Office: 112 Jewett Hall
(716) 673-3302
Justin Conroy, Chairperson
Email: geosciences@fredonia.edu
Website: http://home.fredonia.edu/earth

The B.S. program in Environmental Sciences is intended primarily for students seeking a career in an environmentally related field such as conservation, climate change, wildlife, and forestry. The interdisciplinary nature of this program prepares students for a wide variety of possible careers including: environmental consulting, resource management, conservation scientist, aquatic and fishery research/management, wildlife management, conservation officer, and environmental and community planning.

MAJOR REQUIREMENTS

Core Program:
ESCI 105 Global Environmental Issues 3
ESCI 310 Methods in Environmental Analysis 3
ESCI 410 Environmental Assessment 3
ESCI 440 Environmental Sciences Seminar 1
ESCI 441 Environmental Sciences Senior Seminar 1
ESCI 490 Environmental Sciences Practicum 1-3
STAT 250 Statistics for Scientists 3
BIOL 131 Introductory Ecology and Evolution 3
BIOL 132 Introductory Ecology and Evolution Laboratory 1
BIOL 133 Introductory Cell and Molecular Biology 3
BIOL 134 Introductory Cell and Molecular Biology Laboratory 1
BIOL 243 Organismal Biology 3
BIOL 244 Organismal Biology Laboratory 1
BIOL 330 Ecology 3
BIOL 331 Ecology Laboratory 1
GEO 165 Planet Earth 3
GEO 169 Planet Earth Lab 1
GEO 330 Geomorphology 4
GEO 450 Hydrogeology 4
GIS 201 Geographic Information Systems I 3
GEO 311 Global Climate 3
CHEM 125 General Chemistry Laboratory I 1
CHEM 116 General Chemistry Lecture II 3
CHEM 126 General Chemistry Laboratory II 1
CHEM 215 Organic Chemistry Lecture I 3
CHEM 225 Organic Chemistry Laboratory I 1
CHEM 317 Analytical Chemistry, Quantitative Analysis 3
or
CHEM 341 Introduction to Environmental Chemistry 3

Subtotal: 66

NOTES:
- ESCI 490 must be taken for 3 credits
- BIOL 450: Global Change Biology (typically offered in Spring semesters) can be completed to replace GEO 311

Supporting Courses:

Two Environmental Perspectives from the following:
ANTH 342 Food and Culture 3
COMM 321 Environmental Communication 3
ECON 380 Environmental/Natural Resource Economics 3
ENGL 333 Environmental Literature 3
ENGL 374 Writing and Social Change 3
HIST 310 World Environmental History 3
HIST 352 Environmental History of North America 3
POLI 387 Environmental Policy 3

Subtotal: 6

Subtotal: 72

Total Credit Hours: 72

Economics

Economics is housed within the School of Business.
Office: E336 Thompson Hall
(716) 673-3505
Mojtaba Seyedian, Program Coordinator
Email: economics.department@fredonia.edu
Website: http://home.fredonia.edu/economics

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

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

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

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

**Economics Major as Pre-Law Study**

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

**MAJOR, MINOR IN ECONOMICS**

We offer 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, we offer 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:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 123</td>
<td>University Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>MATH 231</td>
<td>Linear Algebra</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td><strong>Subtotal:</strong> 15</td>
<td></td>
</tr>
</tbody>
</table>

**NOTE:** It is strongly recommended that Economics majors take additional courses in accounting, computer science and calculus.

**ECONOMICS - B.A DEGREE**

Economics is housed within the School of Business.
Office: E336 Thompson Hall
(716) 673-3505
Mojtaba Seyedian, Program Coordinator
Email: economics.department@fredonia.edu
Website: http://home.fredonia.edu/economics

**MAJOR REQUIREMENTS**

**Supporting Course:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 120</td>
<td>Survey of Calculus I</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td>MATH 122 University Calculus I</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td><strong>Subtotal:</strong> 3-4</td>
<td></td>
</tr>
</tbody>
</table>

**NOTE:**

- MATH 120 also required for accounting and business degrees.

**Lower Level Economics Core Courses:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 200</td>
<td>Fundamentals of Statistics for Business Administration and Economics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 205</td>
<td>Principles of Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 210</td>
<td>Principles of Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Subtotal:</strong> 9</td>
<td></td>
</tr>
</tbody>
</table>

**NOTE:**

- ECON 200 (p. 286), ECON 205, and ECON 210 also required for accounting and business degrees.

**Upper Level Economics Core Courses:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 300</td>
<td>Statistical Analysis</td>
<td>3</td>
</tr>
<tr>
<td>ECON 305</td>
<td>Intermediate Microeconomic Theory</td>
<td>3</td>
</tr>
<tr>
<td>ECON 310</td>
<td>Intermediate Macroeconomic Theory</td>
<td>3</td>
</tr>
<tr>
<td>ECON 450</td>
<td>Senior Seminar</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Subtotal:</strong> 12</td>
<td></td>
</tr>
</tbody>
</table>

**NOTE:**

- ECON 300 (p. 287) also required for accounting and business degrees.

**Electives:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Any four Economics courses outside the core at 300 level or above</td>
<td>12</td>
</tr>
</tbody>
</table>
Subtotal: 36-37

Total Credit Hours: 36-37

Popular courses are in the following suggested areas of study:

- Business and Financial Economics
- Public Policy and Economics
- Economic Development and Growth
- Human Resources
- International Economics
- Environmental and Natural Resource Economics

**Education**

**College of Education - Professional Education Unit**

Office: 705 Maytum Hall  
(716) 673-3311  
**Ann Thibodeau, Interim Dean and Chief Certification Officer for Fredonia**  
Email: anna.thibodeau@fredonia.edu  
Email: edu@fredonia.edu  
Website: http://home.fredonia.edu/coe

**Department of Education**

Office: E268 Thompson Hall  
(716) 673-3701  
**Guangyu Tan, Chairperson**  
Email: guangyu.tan@fredonia.edu  
Website: http://home.fredonia.edu/coe

**Office of Field Experiences**

Office: W249 Thompson Hall  
(716) 673-3443  
**Debra Karpinske-Keyser, Director**  
Email: field.experiences@fredonia.edu

**Office of Student Services**

Office: E259 Thompson Hall  
(716) 673-4768  
**Diane Sercu, Coordinator**  
Email: edu@fredonia.edu  
Website: http://home.fredonia.edu/coe/student-services

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

- education program links within catalog
- certification information
- advisement

- department office addresses
- pre-student teaching requirements
- accreditation
- areas of concentration & middle school extensions
- overview of adolescence education courses
- eligibility requirements for student teaching
- education grant programs
- education partnerships
- student teaching experiences in Houston, TX, New York City and Hamburg, N.Y.
- College of Education honors and awards

**COLLEGE OF EDUCATION - PROFESSIONAL EDUCATION UNIT INFORMATION**

**Important Notification to All Education Majors**

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

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

**New Teacher Education Admission Requirements as of Fall 2015**

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

**Undergraduate Admission Requirements**

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

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

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

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

For Freshmen interested in Adolescence Education and Music Education Programs:

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

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

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

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

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

Graduate Admission Requirements

For all Education Programs:

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

- An undergraduate minimum overall GPA of 3.0
- Unless applying to a program leading to a recommendation for a first initial teaching certificate, applicants must provide proof of an initial certificate
- A minimum combined GRE Quantitative Reasoning and Verbal Reasoning score of 272 and submission of a GRE Analytical Writing score
- Any additional program requirements

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

Council for the Accreditation of Educator Preparation (CAEP)

The State University of New York at Fredonia received full accreditation for seven years through the Council for the Accreditation of Educator Preparation (CAEP) as the first institution of higher education in the State of New York to meet all five of the 2013 Council for the Accreditation of Educator Preparation (CAEP) Standards. It is also one of the first institutions in the nation to be fully accredited through CAEP, the single specialized accreditor for educator preparation in the United States. CAEP accreditation is the seal of national approval of Fredonia’s teacher educator programs. Since 1826, Fredonia has been a destination for those with the passion to teach and make a difference in their communities. The national recognition of our programs demonstrates the effectiveness of Fredonia’s innovative curriculum used in preparing new generations of teachers for today’s diverse learners.

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. Each field-based experience is taught in conjunction with a required education course to clearly connect educational theory and practice. Each of the field experiences is highly structured, well supervised, and intended to provide multiple opportunities for candidates to Plan, Instruct, Reflect, and Respond with school children in classroom settings. Candidates also enroll in course work related to child and adolescent development, applications of psychology in the classroom, and pedagogical strategies as well as liberal arts and discipline-specific content courses. All of the courses work together to strengthen the candidates’ Four Pillars of Understanding — Knowledge, Pedagogy, Diversity, and Professionalism — which in turn support the process of...
effective planning, instructing, reflecting, and responding. Course work and instruction are rooted in a strong foundation of research-based practices and strategies, contextual factors that influence instruction, and standards for teaching and learning.

**Candidate Organizations for All Certification Programs**
Within the College of Education, a dynamic and active Teacher Education Club offers activities that provide an array of opportunities for academic, personal, and professional growth, as well as community service. The College of Education also houses the Zeta Upsilon Chapter of the International Honor Society in Education, Kappa Delta Pi. This invitation-only, service-orientated organization provides multiple opportunities for professional growth. In addition, the College of Education sponsors a chapter of the Golden Key International Honour Society.

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

**Helen L. Johnson Internship Program**
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.

**UNDERGRADUATE PROGRAMS LEADING TO NEW YORK STATE CERTIFICATION**

**Undergraduate Programs Leading to New York State Certification**
The College of Education offers opportunity for initial certification in the following areas:

**Childhood Education Bachelor of Science in Education:** Preparation to teach elementary school (B.S. in Ed. degree: Certification Grades 1 to 6). This program resides in the Department of Education. Jill Marshall, Program Coordinator. Email: jill.marshall@fredonia.edu.

**Childhood Inclusive Education Bachelor of Science in Education:** Preparation to teach elementary school and special education (B.S. Ed. degree: Certifications Grades 1-6 in general and special education). This program resides in the Department of Education. Jessica Gugino, Program Coordinator. Email: jessica.gugino@fredonia.edu.

**Childhood Inclusive Education and Literacy B-12 (multi-award) Bachelor of Science in Education and Master of Science in Education:** Preparation to teach Elementary School and Special Education (B.S.Ed. Degree: Certifications Grades 1-6 in General and Special Education and Literacy Birth - Grade 12). This 5-year program prepares teacher candidates in four New York State Education Initial Teacher Certifications: Childhood Education Grades 1-6, Students with Disabilities Grades 1-6, Literacy Birth to Grade 6, and Literacy Grades 5-12. This program resides in the Department of Education. Jessica Gugino and Abigail Gloss, program coordinators. Email: jessica.gugino@fredonia.edu, abigail.gloss@fredonia.edu.

**Early Childhood Education Bachelor of Science in Education:** Preparation to teach very young children, birth through age 8 (B.S. in Ed. degree: Certification Birth through Grade 2). This program resides in the Department of Education. Jaehee Kwon, Program Coordinator. Email: jaehee.kwon@fredonia.edu.

**Early Childhood-Childhood Education Bachelor of Science in Education:** Preparation to teach very young children through elementary school (B.S. in Ed. degree: Certification Birth through Grade 6). This program resides...
in the Department of Education. Jill Marshall and Jaehee Kwon, Program Coordinators. Email: jill.marshall@fredonia.edu, jaehee.kwon@fredonia.edu.

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

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 Education and the faculty in the various disciplines.

Music Education: The School of Music offers a Bachelor of Music in Music Education. Please see the Music Education Bachelor of Music 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 degrees are determined by the faculty in the appropriate academic department and will be assigned an academic advisor from the appropriate academic department. Students are encouraged to declare their intent in an adolescence certification curriculum upon entering the university. However, this may be done later by meeting with the department chair. It is recommended that this change be made no later than Nov. 1 of the year in which the student will have earned 60 credit hours. However, declaration of an adolescence curriculum code does not guarantee admission to methods and student teaching. For more information on Adolescence Education programs, students should refer to the appropriate academic department in the catalog:

To teach high school English, English Adolescence Education (p. 25)
To teach high school Earth Science, Earth Science Adolescence Education (p. 24)
To teach high school Biology, Biology Adolescence Education (p. 22)
To teach high school Mathematics, Mathematics Adolescence Education (p. 29)
To teach high school Chemistry, Chemistry Adolescence Education (p. 43)
To teach high school Social Studies, Social Studies Adolescence Education

To teach high school French or Spanish, French Adolescence Education (p. 28) or Spanish Adolescence Education (p. 28)
To teach high school physics, Physics Adolescence Education (p. 147)

Graduate Programs in Education: For information on graduate programs in Education, please see either the Education Graduate Program (p. 80) or the Graduate Teacher Education Certification section (p. 607) of the catalog; for graduate Music Education programs, please see the Music Graduate Program section; for Speech Language Pathology, please see the Communication Disorders & Sciences Graduate Program section (p. 162) of the catalog.

TEACHER CERTIFICATION INFORMATION AND EDUCATION ADVISEMENT

Office of Student Services
Office: E264 Thompson Hall
(716) 673-4768
Diane Sercu, Coordinator
Email: edu@fredonia.edu

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

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

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

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

NOTE: Candidates transferring into a certification program (both internally and externally) must pass through each of the aforementioned transition points regardless of the candidate’s academic standing at the time of transfer.
Professional Dispositions for All Certification Programs
Candidates in professional education are expected to demonstrate a set of values and attitudes consistent with the highest professional standards. These values and attitudes must be demonstrated in concrete ways in candidates' interactions with members of the faculty, school personnel, and with students. Information regarding the professional dispositions is available from academic advisors from the College of Education Office of Student Services, and online, through the College of Education website. Inappropriate behavior may warrant remediation, probation, or dismissal from the program.

Special Requirements for All Certification Programs
In light of the statutory requirements found in the Commissioner's Regulations subdivision 52.21(b), ALL candidates for New York State certification must complete required training in Child Abuse Detection and Reporting; Abduction Prevention; Alcohol, Tobacco and Drug Abuse Prevention; Fire Safety; Schools Against Violence in Education (SAVE); and Dignity for All Students Act (DASA) legislation. In the College of Education, candidates participate in a series of two 1-credit-hour courses (EDU 303 and EDU 304) to fulfill these New York State requirements. In addition, New York State legislation effective July 1, 2001, requires that all applicants for initial certification and all new school employees be cleared through FBI fingerprinting and criminal background check. The candidate incurs the costs for the fingerprinting and the background check. Current forms and regulations are available at http://www.highered.nysed.gov/tcert/.

Candidates for Initial teacher certification must successfully complete the following New York State Teacher Certification Examinations, the Educating All Students Test (EAS), the appropriate Content Area Specialty Test for the area of certification, and the Education Teacher Performance Assessment (edTPA) for the area of certification. These certification exams must be completed successfully in order to obtain New York State certification. Further information on New York State Teacher Examinations is available at http://www.nystce.nesinc.com and at http://www.edtpa.com.

Foreign Language requirement
Candidates in all education programs are required to demonstrate competence in a foreign language. Proficiency requirement met by the following:

- Fredonia Placement Exam determination of Fredonia Foundations courses 100 and 110 in the same World Language or course 110 (or higher) in World Language.
- Proficiency may also be fulfilled by qualifying AP, IB, CLEP Exam scores or transferred courses of Elem I and Elem II of same language, as verified by Registrar's Office.

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 Fredonia all candidates must complete at least three 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 Pre-Student Teaching placements that provide candidates with a minimum of four hours per week for approximately nine weeks in a classroom for each placement.

ELIGIBILITY FOR STUDENT TEACHING

Office of Field Experiences
Office: W249 Thompson Hall
(716) 673-3443
Debra Karpinske-Keyser, Director
Email: karpinsk@fredonia.edu

The Office of Field Experiences
The Office of Field Experiences places over 500 student teachers each academic year. This includes Childhood, Early Childhood, Childhood Inclusive Education (childhood and special education), Music, Speech Pathology and Audiology, plus those students seeking Adolescence certification in English, Social Studies, Mathematics, Biology, Earth Science, Chemistry, Physics, French and Spanish. In addition candidates participate in at least 100 pre-service clock hours of supervised Early Field Experiences. All monitoring of placements and placement requests is done in the Office of Field Experiences. For more information on the Office of Field Experiences, please consult the web page at http://home.fredonia.edu/coe/field-experiences-office.

Eligibility for 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. To be considered, applications for student teaching must be submitted by the posted deadline. A candidate who receives a Satisfactory standing in the Student Teaching
placement must also receive a passing grade in their co-
requisite Seminar/Methods course to advance. Students
should refer to the departmental Transition Points for
specific criteria regarding entrance into student teaching.

**Eligibility for Student Teaching - Adolescence
Education, Childhood, Childhood Inclusive,
Early Childhood, and Childhood/Early
Childhood Education, Math Middle
Childhood Education, and TESOL Option II**

Student Teaching is a full time, semester long experience
under the supervision of a mentor teacher and a Clinical
Field Supervisor which can take place in the fall or spring
semester. To be eligible to student teach, candidates must
successfully meet the requirements designated by the
student’s Professional Education program, maintain the
required 3.0 minimum cumulative grade point average
(GPA), successfully complete all required education
courses, and submit the Student Teaching Application
materials to the Office of Field Experiences (OFE) in a
timely manner.

Teacher candidates are responsible for attending all
mandatory pre-student teaching meetings, which are held
the fall and spring semesters preceding the student
teaching year. Applications for student teaching must be
submitted by the February deadline in order for OFE to
begin the placement process for the following academic
year. Placements are made by the Office of Field
Experiences, and candidates should not solicit their own
placements. Once placements are assigned, they are not
changed due to location and/or desire for a certain
teacher/grade/age level/school district or building.

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,
Monday through Friday involvement for the entire
semester, and prospective student teachers are advised to
plan their extracurricular schedules accordingly.

Placements for all candidates in all certification areas are at
the discretion of the Dean of the College of Education,
based upon factors including candidate’s content area
qualifications, availability of Clinical Field Supervisors,
williness of schools to host student teachers, and College
of Education’s commitment to serve schools equally. The
Dean of the College of Education reserves the right to
remove any teacher candidate 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 Houston, Texas.

Successful completion of the Student Teaching Seminar
course is required to receive a Satisfactory standing in
student teaching.

**COLLEGE OF EDUCATION HONORS AND
SCHOLARSHIPS**

**Excellence in Student Teaching Awards**

Open to all students who complete Student Teaching. 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. These values and attitudes must be
demonstrated in concrete ways in 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 students 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.

An "education major" means any student enrolled in any
first time Initial Certification, Teacher Education program
at any level (freshman, sophomore, junior, senior).

This excludes students in programs requiring an initial
certification for entrance, but includes the following
Programs as identified on the COE webpage:

- Early Childhood Education (p. 64) (ECE)
- Childhood Education (p. 45) (CE)
- Childhood Inclusive Education (p. 47) (CIE)
- Early Childhood/Childhood Education (p. 65) (EC/CH)
- Music Education K-12 (p. 134)
- Teaching English to Speakers of Other Languages
  (TESOL K-12 Option 2) (p. 92)
Adolescence Education (p. 75): Biology, Chemistry, Earth Science, English, French, Spanish, Physics, Social Studies, and Mathematics & Middle Childhood Mathematics.

NOTE: Adolescence education majors should also consult their discipline departments for discipline-specific awards.

Current Scholarships include: Please see COE Scholarships webpage for more information at http://home.fredonia.edu/coe/coe-scholarships for more information.

AREAS OF CONCENTRATION FOR CHILDHOOD, CHILDHOOD INCLUSIVE, EARLY CHILDHOOD AND EARLY CHILDHOOD/CHILDHOOD MAJORS

Department of Education
Office: E268 Thompson Hall
(716) 673-3701
Guangyu Tan, Chairperson
Email: Guangyu.Tan@fredonia.edu
Website: http://home.fredonia.edu/coe

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.

ENGLISH CONCENTRATION:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENED 357</td>
<td>Literacy/Language/Learning Theory</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td>Three 200-level ENGL elective courses</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Three 300-400-level ENGL elective courses</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Three 300-400-level ENED elective courses</td>
<td>9</td>
</tr>
</tbody>
</table>

Subtotal: 30

MATHEMATICS CONCENTRATION:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 201</td>
<td>Concepts of Foundational Mathematics: A Problem Solving Approach</td>
<td>3</td>
</tr>
<tr>
<td>MATH 202</td>
<td>Concepts of Foundational Mathematics II</td>
<td>3</td>
</tr>
<tr>
<td>MAED 303</td>
<td>Advanced Mathematics for School Teachers</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>MAED 310 Reading and Writing Mathematics</td>
<td>3</td>
</tr>
</tbody>
</table>

One of the following sequences (9 or 12 credit hours):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 120</td>
<td>Survey of Calculus I</td>
<td>3</td>
</tr>
<tr>
<td>MATH 121</td>
<td>Survey of Calculus II</td>
<td>3</td>
</tr>
<tr>
<td>MATH 124</td>
<td>Survey of Calculus III</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td>MATH 122 University Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>MATH 123</td>
<td>University Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>MATH 223</td>
<td>University Calculus III</td>
<td>4</td>
</tr>
</tbody>
</table>

One of the following (3 credit hours):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 115</td>
<td>Survey of Matrix Algebra</td>
<td>3</td>
</tr>
<tr>
<td>MATH 231</td>
<td>Linear Algebra</td>
<td>4</td>
</tr>
</tbody>
</table>

One of the following (3 credit hours):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 110</td>
<td>Mathematics in Action</td>
<td>3</td>
</tr>
<tr>
<td>MATH 117</td>
<td>Why Mathematics?</td>
<td>3</td>
</tr>
</tbody>
</table>

One of the following (3 credit hours):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>STAT 350</td>
<td>Probability and Statistics</td>
<td>3</td>
</tr>
<tr>
<td>MAED 240</td>
<td>Statistics for School Teachers</td>
<td>3</td>
</tr>
</tbody>
</table>

Subtotal: 30-34

MUSIC CONCENTRATION:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 101</td>
<td>Beginning Music Theory I</td>
<td>3</td>
</tr>
<tr>
<td>MUS 102</td>
<td>Beginning Music Theory II</td>
<td>3</td>
</tr>
<tr>
<td>MUS 113</td>
<td>Voice Class</td>
<td>1</td>
</tr>
<tr>
<td>MUED 210</td>
<td>Guitar Class</td>
<td>1</td>
</tr>
<tr>
<td>MUED 211</td>
<td>Guitar Class</td>
<td>1</td>
</tr>
<tr>
<td>MUED 215</td>
<td>Music, Play &amp; Self</td>
<td>3</td>
</tr>
<tr>
<td>MUS 450</td>
<td>Directed Studies</td>
<td>2</td>
</tr>
<tr>
<td>MUS 451</td>
<td>Directed Studies</td>
<td>2</td>
</tr>
</tbody>
</table>

Plus 8 credit hours in the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 042</td>
<td>African Drumming Ensemble</td>
<td>0.5</td>
</tr>
<tr>
<td>MUTY 115</td>
<td>Introduction to Music Therapy</td>
<td>2</td>
</tr>
<tr>
<td>MUS 262</td>
<td>American Music</td>
<td>3</td>
</tr>
<tr>
<td>MUS 263</td>
<td>Music History in Western Civilization I</td>
<td>3</td>
</tr>
<tr>
<td>MUS 264</td>
<td>Music History in Western Civilization II</td>
<td>3</td>
</tr>
<tr>
<td>MUS 265</td>
<td>History of Jazz</td>
<td>3</td>
</tr>
<tr>
<td>MUS 267</td>
<td>African American Music</td>
<td>3</td>
</tr>
<tr>
<td>MUS 270</td>
<td>The History of American Popular Music, 1900-1963</td>
<td>3</td>
</tr>
<tr>
<td>MUED 203</td>
<td>Intermediate Voice Class</td>
<td>1.5</td>
</tr>
<tr>
<td>MUED 204</td>
<td>Advanced Voice Class</td>
<td>1.5</td>
</tr>
<tr>
<td>MUED 291</td>
<td>Technology in Music I</td>
<td>2</td>
</tr>
<tr>
<td>MUED 340</td>
<td>Introduction to Early Childhood Music Pedagogy</td>
<td>1</td>
</tr>
</tbody>
</table>

Plus any two Music History or Music Theory courses at the 300- and/or 400-level, by advisement
## NATURAL SCIENCES CONCENTRATION:

<table>
<thead>
<tr>
<th>Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDU 226</td>
<td>The Earth As A System</td>
<td>3</td>
</tr>
<tr>
<td><strong>Physical Science 6 credit hours:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHEM 113</td>
<td>Chemistry in the Environment: Issues and Solutions</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 121</td>
<td>College Physics I</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 122</td>
<td>College Physics II</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 205</td>
<td>Science and Civilization</td>
<td>3</td>
</tr>
<tr>
<td><strong>Life Science 6 credit hours:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIOL 109</td>
<td>Biology, Health, and Medicine</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 110</td>
<td>Human Biology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 111</td>
<td>Foundations of Biology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 115</td>
<td>Environmental Biology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 131</td>
<td>Introductory Ecology and Evolution</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 133</td>
<td>Introductory Cell and Molecular Biology</td>
<td>3</td>
</tr>
<tr>
<td>ESCI 105</td>
<td>Global Environmental Issues</td>
<td>3</td>
</tr>
<tr>
<td><strong>Earth/Space 6 credit hours:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GEO 150</td>
<td>Moons and Planets</td>
<td>3</td>
</tr>
<tr>
<td>GEO 160</td>
<td>Blue Planet</td>
<td>3</td>
</tr>
<tr>
<td>GEO 165</td>
<td>Planet Earth</td>
<td>3</td>
</tr>
<tr>
<td>GEO 175</td>
<td>Thirsty Planet</td>
<td>3</td>
</tr>
<tr>
<td>GEO 180</td>
<td>Weather and Climate</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 118</td>
<td>Introduction to Astronomy</td>
<td>3</td>
</tr>
<tr>
<td><strong>9 elective credits at any level from Natural Science Disciplines above</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Subtotal: 30

Students must take three courses in two separate disciplines.

The final two elective courses are free electives that can be taken in any discipline:

- **Anthropology**
  - ANTH 115 | Introductory Anthropology                  | 3       |
  - ANTH 219 | Cultures of the World                      | 3       |
  - ANTH 342 | Food and Culture                           | 3       |

- **Economics**
  - ECON 205 | Principles of Microeconomics               | 3       |
  - ECON 210 | Principles of Macroeconomics               | 3       |
  - ECON 312 | Women in the Economy                       | 3       |
  - ECON 315 | Money/Banking/Monetary Economics            | 3       |
  - ECON 325 | Labor and Employment                        | 3       |
  - ECON 360 | Health Care Economics                       | 3       |
  - ECON 370 | Evolution of Economic Thought               | 3       |
  - ECON 395 | Comparative Human Resources                 | 3       |

- **Ethnic Studies**
  - ETHN 205 | Native American Studies                     | 3       |
  - ETHN 206 | African American Studies                    | 3       |
  - ETHN 225 | Introduction to Latinx History and Culture  | 3       |
  - ETHN 282 | Pre-Columbian and Colonial Latin America    | 3       |

- **History**
  - HIST 261 | Islamic Civilization                        | 3       |
  - HIST 264 | East Asian Civilizations                    | 3       |
  - HIST 265 | Pre-modern East Asia                        | 3       |
  - HIST 266 | Modern East Asia                            | 3       |
  - HIST 268 | History of South Asia                       | 3       |
  - HIST 282 | Pre-Columbian and Colonial Latin America    | 3       |
  - HIST 325 | Colonial America                            | 3       |
  - HIST 327 | Antebellum United States, 1820-1861         | 3       |
  - HIST 328 | Civil War Era                               | 3       |
  - HIST 330 | Industrial America, 1890-1920               | 3       |
  - HIST 331 | The Inter-War Years, 1919-1945              | 3       |
  - HIST 332 | United States History: 1945- Present        | 3       |
  - HIST 333 | African American History to 1877            | 3       |
  - HIST 334 | African American History Since 1877         | 3       |
  - HIST 335 | African Women                               | 3       |
  - HIST 336 | African American Black Women's History      | 3       |
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST 337</td>
<td>History of New York</td>
<td>3</td>
</tr>
<tr>
<td>HIST 338</td>
<td>19th Century American Culture</td>
<td>3</td>
</tr>
<tr>
<td>HIST 339</td>
<td>20th Century American Culture</td>
<td>3</td>
</tr>
<tr>
<td>HIST 341</td>
<td>American Revolution and Republic</td>
<td>3</td>
</tr>
<tr>
<td>HIST 343</td>
<td>Civil Rights Movement</td>
<td>3</td>
</tr>
<tr>
<td>HIST 347</td>
<td>U.S. Immigration</td>
<td>3</td>
</tr>
<tr>
<td>HIST 356</td>
<td>Native American History</td>
<td>3</td>
</tr>
<tr>
<td>HIST 357</td>
<td>Indians and Europeans in Early America</td>
<td>3</td>
</tr>
<tr>
<td>HIST 359</td>
<td>Ethnicity and Race</td>
<td>3</td>
</tr>
<tr>
<td>HIST 363</td>
<td>Chinese Culture Through Films</td>
<td>4</td>
</tr>
<tr>
<td>HIST 364</td>
<td>Historical Landscape and National Identity in Modern East Asia</td>
<td>3</td>
</tr>
<tr>
<td>HIST 366</td>
<td>Late Imperial China</td>
<td>3</td>
</tr>
<tr>
<td>HIST 367</td>
<td>20th Century China</td>
<td>3</td>
</tr>
<tr>
<td>HIST 368</td>
<td>Modern Japan</td>
<td>3</td>
</tr>
<tr>
<td>HIST 376</td>
<td>Film and American Culture</td>
<td>3</td>
</tr>
<tr>
<td>HIST 394</td>
<td>Globalization</td>
<td>3</td>
</tr>
<tr>
<td>HIST 396</td>
<td>Themes in American History</td>
<td>3</td>
</tr>
<tr>
<td>HIST 397</td>
<td>Themes in World History</td>
<td>3</td>
</tr>
<tr>
<td>HIST 398</td>
<td>Themes in European History</td>
<td>3</td>
</tr>
<tr>
<td>POLI 120</td>
<td>Politics in American Life</td>
<td>3</td>
</tr>
<tr>
<td>POLI 150</td>
<td>World Affairs</td>
<td>3</td>
</tr>
<tr>
<td>POLI 276</td>
<td>Law and Society</td>
<td>3</td>
</tr>
<tr>
<td>POLI 322</td>
<td>New York Government</td>
<td>3</td>
</tr>
<tr>
<td>POLI 323</td>
<td>Elections in America</td>
<td>3</td>
</tr>
<tr>
<td>POLI 324</td>
<td>President and Congress</td>
<td>3</td>
</tr>
<tr>
<td>POLI 326</td>
<td>Media and Politics</td>
<td>3</td>
</tr>
<tr>
<td>POLI 345</td>
<td>Film and Politics</td>
<td>4</td>
</tr>
<tr>
<td>POLI 356</td>
<td>U.S. Foreign Policy</td>
<td>3</td>
</tr>
<tr>
<td>PSY 129</td>
<td>Foundations of Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSY 246</td>
<td>Personality</td>
<td>3</td>
</tr>
<tr>
<td>PSY 328</td>
<td>Positive Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSY 345</td>
<td>Social Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSY 347</td>
<td>Organizational Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSY 355</td>
<td>Group Dynamics</td>
<td>3</td>
</tr>
<tr>
<td>PSY 358</td>
<td>Psychology and the Law</td>
<td>3</td>
</tr>
<tr>
<td>PSY 364</td>
<td>Cognitive Development</td>
<td>3</td>
</tr>
<tr>
<td>PSY 365</td>
<td>Social Development</td>
<td>3</td>
</tr>
<tr>
<td>PSY 370</td>
<td>Cross-Cultural Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSY 391</td>
<td>Multicultural Counseling</td>
<td>3</td>
</tr>
<tr>
<td>SOC 116</td>
<td>Introductory Sociology</td>
<td>3</td>
</tr>
<tr>
<td>SOC 201</td>
<td>Social Problems</td>
<td>3</td>
</tr>
<tr>
<td>SOC 215</td>
<td>Introduction to Public Health</td>
<td>3</td>
</tr>
<tr>
<td>SOC 218</td>
<td>Introduction to Social Work</td>
<td>3</td>
</tr>
<tr>
<td>SOC 275</td>
<td>Social Inequalities</td>
<td>3</td>
</tr>
<tr>
<td>SOC 306</td>
<td>Sex and Gender</td>
<td>3</td>
</tr>
<tr>
<td>SOC 320</td>
<td>Family Sociology</td>
<td>3</td>
</tr>
<tr>
<td>SOC 324</td>
<td>City and Community</td>
<td>3</td>
</tr>
</tbody>
</table>

**Subtotal: 30**

**WORLD LANGUAGES CONCENTRATION:**

Primary languages: French, Spanish

**Core courses (in Primary Language):**
- Intermediate I 215
- Intermediate II 216
- Conversation (300-level)
- Composition (300-level)
- Literature (300/400-level)

**Electives (Choose one of the following):**
- Option 1: A combination of Study Abroad Program in a non-English speaking country (recommended) and/or additional 300/400-level language courses in Literature, Civilization or Advanced Language courses in the primary language.
- Option 2: Three courses (9 credit hours) in Literature, Civilization or Advanced Language courses in the primary language plus beginning courses (115 and 116) in a secondary language.

**Subtotal: 30**

**REQUIREMENTS FOR CHILDHOOD EDUCATION (GRADES 1-6) AND CHILDHOOD INCLUSIVE EDUCATION (GRADES 1-6) PLUS MIDDLE SCHOOL EXTENSION (GRADES 7-9)**

**Department of Education**
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(716) 673-3701
Guangyu Tan, Chairperson
Email: Guangyu.Tan@fredonia.edu
Website: http://home.fredonia.edu/coe

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).

**Additional Education Course Work for Middle School Extensions:**
- EDU 224 Adolescent Development 3
- EDU 321 Teaching in the Middle School 3

**Subtotal: 6**
Enhanced Concentrations for Childhood Education with Middle School Extension (select one):

**ENGLISH MIDDLE SCHOOL EXTENSION:**

- ENGL 205 Epic and Romance 3
- ENGL 209 Novels and Tales 3
- ENGL 211 World Poetry 3
- ENGL 314 Women Writers 3
- ENGL 373 English Grammar for Everyone 3
- ENGL 377 Academic Writing 3
- ENED 355 Adolescent Literature 3
- ENED 356 Teaching Writing in the Secondary School 3
- ENED 357 Literacy/Language/Learning Theory 3

Subtotal: 27

**FRENCH MIDDLE SCHOOL EXTENSION:**

- FREN 215 Intermediate French I 3
- FREN 216 Intermediate French II 3
- FREN 315 French Masterpieces 3
- FREN 317 French Conversation 3
- FREN 318 French Composition 3
- FREN 319 Survey of French Literature I 3
- EDU 419 Secondary School (Adolescence) Methods
  - Study Abroad Experience 3
  - or
- GERM 100 Introduction to German and
- GERM 110 Essential German or
- ITAL 100 Introduction to Italian and
- ITAL 110 Essential Italian or
- RUSS 100 Introduction to Russian and
- RUSS 110 Essential Russian or
- FREN 100 Introduction to French and
- FREN 110 Essential French

300-400 Level Culture and Literature Courses (Civilization or Advanced Language)

Subtotal: 27-32

**SPANISH MIDDLE SCHOOL EXTENSION:**

- SPAN 215 Intermediate Spanish I 3
- SPAN 216 Intermediate Spanish II 3
- SPAN 313 Spanish Conversation 3
- SPAN 314 Spanish Composition 3
- SPAN 315 Readings in Spanish 3
- SPAN 319 Survey of Spanish Literature I 3
- EDU 419 Secondary School (Adolescence) Methods
  - Study Abroad Experience 3
  - or
- GERM 100 Introduction to German and
- GERM 110 Essential German or
- ITAL 100 Introduction to Italian and
- ITAL 110 Essential Italian or
- RUSS 100 Introduction to Russian and
- RUSS 110 Essential Russian or
- FREN 100 Introduction to French and
- FREN 110 Essential French

300-400 Level Culture and Literature Courses 3-6

Subtotal: 27-32

**MATHEMATICS MIDDLE SCHOOL EXTENSION:**

- MATH 115 Survey of Matrix Algebra 3
  - or
- MATH 231 Linear Algebra 4
- MATH 120 Survey of Calculus I 3
- MATH 121 Survey of Calculus II 3
- MATH 124 Survey of Calculus III 3
  - or
- MATH 122 University Calculus I 4

300-400 Level Culture and Literature Courses 3-6

Subtotal: 27-32

Note: 300/400 Level Cultural and Literature Courses (Civilization or Advanced Language) by advisement from World Languages and Culture.

Note: 300/400 Level Cultural and Literature Courses (Civilization or Advanced Language) by advisement from World Languages and Culture.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 123</td>
<td>University Calculus II</td>
<td>4</td>
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<tr>
<td>MATH 223</td>
<td>University Calculus III</td>
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<tr>
<td>MATH 201</td>
<td>Concepts of Foundational Mathematics: A Problem Solving Approach</td>
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<td>MATH 202</td>
<td>Concepts of Foundational Mathematics II</td>
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<tr>
<td>MAED 303</td>
<td>Advanced Mathematics for School Teachers</td>
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<tr>
<td>MATH 210</td>
<td>Mathematical Structures and Proof</td>
<td>4</td>
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<td>MAED 310</td>
<td>Reading and Writing Mathematics</td>
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<tr>
<td>STAT 350</td>
<td>Probability and Statistics</td>
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<tr>
<td>MAED 240</td>
<td>Statistics for School Teachers</td>
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</table>

**Subtotal: 30-34**

**SOCIAL STUDIES MIDDLE SCHOOL EXTENSION:**

<table>
<thead>
<tr>
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<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST 222</td>
<td>Survey of Early U.S. History</td>
<td>3</td>
</tr>
<tr>
<td>HIST 223</td>
<td>Survey of Modern U.S. History</td>
<td>3</td>
</tr>
<tr>
<td>HIST 243</td>
<td>Pre-Modern Global History</td>
<td>3</td>
</tr>
<tr>
<td>POLI 120</td>
<td>Politics in American Life</td>
<td>3</td>
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<tr>
<td>POLI 323</td>
<td>Elections in America</td>
<td>3</td>
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<tr>
<td>ECON 210</td>
<td>Principles of Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>PSY 129</td>
<td>Foundations of Psychology</td>
<td>3</td>
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<tr>
<td>PSY 364</td>
<td>Cognitive Development</td>
<td>3</td>
</tr>
<tr>
<td>SOC 116</td>
<td>Introductory Sociology</td>
<td>3</td>
</tr>
<tr>
<td>SOC 306</td>
<td>Sex and Gender</td>
<td>3</td>
</tr>
</tbody>
</table>

**Subtotal: 27**

**Overview of Program Requirements for Adolescence Education, Middle Childhood Education, and Music Education K-12**

Each of these education programs is housed in an appropriate academic department, where students take the various content courses for the degree. Students should check the department information in the catalog and on the web, for information on the content courses for the teaching of high school Biology, Chemistry, Earth Science, Physics, English, French, Spanish, Social Studies, and Mathematics, as well as for the teaching of Middle School Mathematics and for the teaching of K-12 Music. In addition to the content courses, students are expected to complete a series of pedagogical content courses and professional education courses as well as early field experiences and student teaching. Some of these courses will be offered through the College of Education, whereas others will be offered through the content department.

**Required Professional Education Courses Include:**

- EDU 105 (or Departmental Equivalent MAED 105, SCED 105, ENED 101, etc.) with field experience
- EDU 224 Adolescent Development
- EDU 250 Introduction to the Exceptional Learner
- EDU 251 Practicum in Inclusive Education II
- EDU 276 (or Departmental Equivalent MAED 276, SCED 276, etc.)
- EDU 303 and EDU 304
- EDU 305 (or Departmental Equivalent MAED 305, SCED 305, etc.) with field experience
- EDU 349 Educational Psychology

Methods and Student Teaching

In addition, as of December 31, 2013, candidates in all education programs are required to complete training under the Dignity for All Students Act (DASA). Beginning in the Fall 2013 semester, the training required under the Dignity for All Student Act (DASA) was included in EDU 303 at Fredonia.

**PROGRAM CONTACTS**

**Adolescence Education - Biology**
This program is housed within the Department of Biology. For more information, please contact the department:
Office: 221 Science Center
(716) 673-3282
Scott Medler, Chairperson
Email: biology@fredonia.edu
Website: http://home.fredonia.edu/biology

**Adolescence Education - Chemistry**
This program is housed within the Department of Chemistry & Biochemistry. For more information, please contact the department:
Office: 221 Science Center
(716) 673-3281
Matthew Fountain, Chairperson
Email: chemistry.department@fredonia.edu
Website: http://home.fredonia.edu/chemistry

**Adolescence Education – Earth Science**
This program is housed within the Department of Geology and Environmental Sciences. For more information, please contact the department:
Office: 340 Science Center
(716) 673-3301
Justin Conroy, Chairperson
Email: geosciences.department@fredonia.edu
Adolescence Education - Physics
This program is housed within the Department of Physics.
For more information, please contact the department:
Office: 1140 Mason Hall
(716) 673-3301
Justin Conroy, Chairperson
Email: physics.department@fredonia.edu
Website: http://home.fredonia.edu/physics

Adolescence Education – French or Spanish
These programs are housed within the Department of World Languages and Cultures (formerly Modern Languages and Literature). For more information, please contact the department:
Office: 2113 Fenton Hall
(716) 673-3380
Brian Bosivert, Chairperson
Olivia Barone, World Languages and Cultures Education Coordinator
Email: worldlang@fredonia.edu
Website: http://home.fredonia.edu/worldlanguages

Adolescence Education – Social Studies
This program is housed within the Department of History.
For more information, please contact the department:
Office: E332 Thompson Hall
(716) 673-3277
David Kinkela, Chairperson
Peter McCord, Social Studies Education Coordinator
Email: history.department@fredonia.edu
Website: http://home.fredonia.edu/history

Adolescence Education – English
This program is housed within the Department of English.
For more information, please contact the department:
Office: 277 Fenton Hall
(716) 673-3125
Bruce Simon, Chairperson
Ann Siegle Drege, English Education Coordinator
Email: english.department@fredonia.edu
Website: http://home.fredonia.edu/english

Adolescence Education – Mathematics or Middle Childhood Mathematics
These programs are housed within the Department of Mathematical Sciences. For more information, please contact the department:
Office: 223 Fenton Hall
(716) 673-3243
Julia Wilson, Chairperson
Keary Howard, Mathematics Education Coordinator
Email: mathematics.department@fredonia.edu
Website: http://home.fredonia.edu/math

Music Education
This program is housed within the School of Music. For more information, please contact the School of Music:
Office: 1140 Mason Hall
(716) 673-3151
Katherine M. Levy, Program Coordinator
Email: music@fredonia.edu
Website: http://home.fredonia.edu/music/music-education

College of Education - Professional Education Unit
Office: 705 Maytum Hall
(716) 673-3311
Anna Thibodeau, Ph.D., Interim Dean of the College of Education and Chief Certification Officer
Email: Anna.Thibodeau@fredonia.edu
Website: http://home.fredonia.edu/coe

Department of Education
Office: E268 Thompson Hall
(716) 673-3701
Guangyu Tan, Chairperson
Email: tan@fredonia.edu
Website: https://home.fredonia.edu/coe/ci

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 applicant should apply for a College of Education Graduate Assistantship via Interview Exchange. The dean and the two department chairs (Curriculum and Instruction, and Language, Learning and Leadership) will review the applications and conduct interviews with all finalists to determine the final list of graduate assistants for the fall semester. Criteria for selection as a graduate assistant within the College of Education include: availability for work assignment during regular office hours, Monday through Friday; intellectual potential to support appropriate research and program evaluation activities of the unit; appropriate written and oral communication skills; and appropriate scholarly and professional dispositions. Applications received by March 15 will be given priority.

Program Philosophy and Conceptual Framework for All Certification Programs
The College of Education believes that all children can learn and that they learn best when taught by reflective and responsive educators who carefully assess their instructional competence via reflections upon pupil performance. Responsive educators act upon information gleaned from their professional reflections; they make informed decisions and adjust instruction to enhance pupil progress.

Candidates enroll in course work related to child/adolescent development, educational foundations, and pedagogical strategies, as well as discipline-specific content courses. All of the courses strengthen the
candidates’ Four Pillars of Understanding (Knowledge, Pedagogy, Diversity, and Professionalism), which in turn support the process of effective planning, instructing, reflecting, and responding. Course work and instruction are rooted in a strong foundation of research-based practices and strategies, contextual factors that influence instruction, and standards for teaching and learning. Graduate programs provide a variety of gateways to advanced certification, further professional development, prepare students for doctoral programs, and act as a stepping-stone to lifelong learning.

**Council for the Accreditation of Educator Preparation (CAEP)**

Fredonia is fully accredited by CAEP, the national accreditation organization. CAEP advances excellent educator preparation through evidence-based accreditation that assures quality and supports continuous improvement to strengthen P-12 student learning. CAEP standards expect the College of Education-Professional Education Unit to base its programs on content and teaching standards set by professional associations in each content area. CAEP accreditation adds both credibility and national transportability to Fredonia certification programs.

**Office of Student Services**

The Office of Student Services in E259 Thompson Hall provides information for candidates and potential candidates (in all certification programs) in the areas of advisement, New York State testing requirements, fingerprinting requirements, application for teacher certification using the online TEACH website, course selection and registration information, professional development opportunities, and more. The office telephone number is (716) 673-4768.

**Teacher Education Certification**

The Dean of the College of Education serves as Fredonia's Chief Certification Officer and instructional leader for the graduate programs in education. The Dean is responsible for oversight of all applications for certification for compliance with institutional and New York State requirements. Any questions or concerns related to the process of acquiring certification should be directed to Dean Christine Givner, 704 Maytum Hall, (716) 673-3311.

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**GRADUATE PROGRAMS LEADING TO NEW YORK STATE CERTIFICATION**

**Graduation and Certification Requirements**

Before graduation, all students must complete an Application for Degree form in the Office of the Registrar. Students seeking certification must also fill out a Graduate Recommendation Release Form, also available in the Office of the Registrar, and online at http://www.fredonia.edu/COE/teachwaivers.asp in order for Fredonia to release academic and Social Security number information to the New York State Education Department.

Graduate students enrolled in one of the degree programs below are required to apply for their appropriate teacher certification online at http://www.highered.nysed.gov/tcert/teach/. It is the candidate's responsibility to apply for the appropriate New York State certificate.

Graduate students should check with the Office of Student Services for specific directions related to applying for teacher certification.

Upon a successful review of the graduation application, Fredonia will recommend candidates for the appropriate certification, also listed below. When the recommendation is for Professional certification, the candidate will be recommended for Professional certification in his/her area of initial certification.

<table>
<thead>
<tr>
<th>Master's Degrees Offered</th>
<th>HEGIS CODES</th>
<th>Certification Recommended</th>
</tr>
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<tbody>
<tr>
<td>Curriculum and Instruction in Inclusive Education MSEd (p. 85)</td>
<td>0829</td>
<td>Professional</td>
</tr>
<tr>
<td>English 7-12 MA</td>
<td>1501</td>
<td>Professional</td>
</tr>
<tr>
<td>Literacy Education Birth-Grade 12 MSEd (p. 89)</td>
<td>0830</td>
<td>Initial/Professional ***</td>
</tr>
<tr>
<td>Literacy Education Grades 5-12 MSEd (p. 90)</td>
<td>0830</td>
<td>Initial/Professional ***</td>
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<tr>
<td>Mathematics 7-12 MSEd (p. 113)</td>
<td>1701.01</td>
<td>Professional</td>
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<tr>
<td>Music Education K-12 MM (p. 134)</td>
<td>0832</td>
<td>Professional</td>
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</table>
Music Education Studies MM (p. 136) 0832 Professional
Music Education MM (p. 133) (Multi-Award) 0832 Initial/Professional
Speech Language-Pathology MS (p. 162) 1220 Initial/Professional ****
TESOL MSeD (p. 92) 1508 Initial/Professional ***
Initial/Professional Speech Language-Pathology MS (p. 162) 1220 Initial/Professional **** 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 leading to New York State Certification are subject to the guidelines and mandates established by New York State. Additionally, programs and degree options are held accountable to the Council for the Accreditation of Educator Preparation (CAEP) standards. As such, any changes made by the New York State Board of Regents or CAEP have the potential to impact the requirements of the program. Graduate programs are reviewed each semester to verify compliance with state certification and national accreditation requirements. Candidates should meet with their faculty advisors and attend any group advisement sessions that may be offered to secure up-to-date information on current programs and certification requirements.

Ongoing Assessment for All Certification Programs
Candidates in all certification programs are regularly monitored and evaluated throughout their programs via degree-specific Assessment Models. Each model includes a series of transition points that must be successfully completed 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. 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 dispositions consistent with the highest professional standards. The dispositions must be demonstrated in concrete ways in interactions with members of the faculty, school personnel, and P-12 pupils. Dispositional concerns may warrant remediation, probation, or dismissal from the program.

Candidates are expected to demonstrate the following Interstate Teacher Assessment and Support Consortium (InTASC) aligned dispositions:
1. Demonstrate cognitive ability to assume responsibility of own and students' development;
2. Appreciate and value human diversity and show respect for varied talents and perspectives;
3. Contribute to a positive climate in university and P-12 classrooms;
4. Master content and effectively create learning experiences that assure P-12 mastery of content;
5. Commitment to developing as a creative and collaborative problem-solver;
6. Commitment to reflection, assessment and learning as ongoing processes;
7. Plan instruction that supports every student in meeting rigorous learning goals by drawing on knowledge of content, curriculum, and pedagogy in context;
8. Understand and use a variety of instructional strategies to encourage learners to develop deep understanding and connections among content areas;
9. Demonstrate level of responsibility appropriate for a professional; and
10. Demonstrate sensitivity to community and cultural norms of the teacher education program, university classroom, and practicum settings.

Special Requirements for All Certification Programs

In light of the statutory requirements found in the Commissioner's Regulations subdivision 52.21(b), all candidates for New York State certification must complete required training in Child Abuse Detection and Reporting; Abduction Prevention; Alcohol, Tobacco and Drug Abuse Prevention; Fire Safety; and Schools Against Violence in Education (SAVE) legislation. In the College of Education, candidates participate in a series of two 1-credit hour courses to fulfill these New York State Requirements.

In addition, New York State legislation effective July 1, 2001, requires that all applicants for initial certification and all new school employees be cleared through FBI fingerprinting and criminal background check. The candidate incurs the costs for the fingerprinting and the background check. Current forms and regulations are available at http://www.highered.nysed.gov/tcert/.

Also, as of December 31, 2013, candidates in all education programs are required to complete training under the Dignity for All Students Act (DASA). The training required under the Dignity for All Students Act (DASA) is included in EDU 303 at Fredonia. Graduate candidates who may have completed EDU 303 prior to Spring 2014, or who do not have DASA training, must complete a DASA workshop prior to full admission.

International Exchange Program

The College of Education provides opportunities for graduate degree candidates to study in the United Kingdom. Through cooperative efforts in Plymouth, England, candidates are afforded the opportunity to engage in a five-week international teaching practicum. This five-week internship (May-June) includes classroom experience in the United Kingdom, organized cultural excursions, and free travel time for individual development. Candidates earn 3 hours of graduate credit that can be used to meet the Social Foundations requirement in the Curriculum and Instruction master’s degree program or as an elective in programs with elective options (with advisor's approval). TESOL candidates can also apply to student teach in Mexico.

**BILINGUAL EDUCATION - ADVANCED CERT.**

**Department of Education**
Office: E268 Thompson Hall
(716) 673-3701
Guangyu Tan, Chairperson
Email: Guangyu.Tan@fredonia.edu
Website: https://home.fredonia.edu/coe/ci

This eighteen (18) credit hour program leads to a recommendation for a Bilingual Extension to any NYS certification (except ESOL).

**Requirements for Admission to the Program with Matriculated Acceptance**

- Completion of a baccalaureate degree in an area of arts, science, or education
- Undergraduate GPA of 3.0 or above
- GRE* with minimum score of 272 for combined Verbal and Quantitative sections and submission of a GRE Analytic Writing section score
- Evidence of New York State DASA Training*
- Current New York State Certification (other than ESOL)
- Completed Graduate Application submitted to the Office of Graduate Studies including:
  a. three (3) names with current contact information of professional associates who will speak on the candidate’s behalf. These names are in lieu of submitting written recommendation letters. The
TESOL Program Coordinator has the option of contacting these professional people for a reference.

b. official academic transcripts from all prior undergraduate and graduate institutions (except Fredonia)

- Language Proficiency Requirements:

For Native Speakers of English:

- a graduate-level 800-1,200 word essay in English which addresses the topic: “Describe your reasons for pursuing a graduate program in Bilingual Education and support your rationale with specific information pertinent to your desired degree”

- oral and written proficiency in English and a target language of instruction. This can be accomplished via one of the following:
  1. Twelve (12) or more credits successfully completed in a language other than English
  2. An equivalent experience such as study abroad or language intensive training, in a language other than English.
  3. Be a native speaker of a language other than English

- For Non-Native Speakers of English:

- a graduate-level 800-1,200 word essay in English which addresses the topic: “Describe your reasons for pursuing a graduate program in Bilingual Education and support your rationale with specific information pertinent to your desired degree”

- further stipulations as listed below under “Additional requirements for non-native speakers of English to the Bilingual Education Program

* Conditional acceptance may be granted if DASA information are pending.

Additional Requirements for Non-Native Speakers of English to the Bilingual Education Program

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

Fredonia’s code for reporting the TOEFL and IELTS scores electronically is 2539. International students who have been awarded a prior degree from the U.S., U.K./Ireland, Australia, Anglophone Canada, New Zealand, Anglophone Africa, Singapore, and the Commonwealth Caribbean prior to applying to Fredonia are not required to submit TOEFL or IELTS scores.

- International applicants must provide official copies of all previous degrees/diplomas and transcripts issued in the original language with a literal English translation of each. Proof of an official certification of the award of any and all degrees must be provided. Include documentation describing in which language the courses were taught. The latter can be included in a separate document as a chart or statement.

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

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

PROGRAM COMPLETION REQUIREMENTS

Core Courses:

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<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td>EDU 518</td>
<td>Second Language Acquisition and Development</td>
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<tr>
<td>EDU 540</td>
<td>Content Area English as a Second Language</td>
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<tr>
<td>EDU 541</td>
<td>Practicum in TESOL II</td>
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<td>EDU 555</td>
<td>Methods of Bilingual Education</td>
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<tr>
<td>EDU 567</td>
<td>Practicum in TESOL III</td>
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<td>EDU 568</td>
<td>Foundations of Bilingual Education</td>
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<tr>
<td>EDU 569</td>
<td>Assessment and Evaluation of English Language Learners (ELLs)</td>
<td>3</td>
</tr>
<tr>
<td>EDU 674</td>
<td>Bilingual Education (BE) Practicum &amp; Supervision- 20 Day</td>
<td>3</td>
</tr>
</tbody>
</table>

Subtotal: 18

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

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

Gainful Employment

All non-degree certificate programs at The State University of New York at Fredonia are subject to Gainful
Employment (GE) rules. As part of the GE program regulations, institutions must disclose specific employment data about each of their GE programs to prospective students.

This information is intended to help students make informed choices about enrolling in a GE Program.

State Authorization Disclosure (p. 577)

CURRICULUM AND INSTRUCTION IN INCLUSIVE EDUCATION - M.S.ED DEGREE

Department of Education
Office: E270 Thompson Hall
(716) 673-3701
Robert L. Dahlgren, Chairperson
Email: ci@fredonia.edu

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. 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 530)
2. Performance-based evidence of technology use in being an effective teacher and professional colleague via portfolio assignment (see program coordinator for this assignment)
3. Performance-based evidence of cultural responsiveness as an educator via portfolio assignment (see program coordinator for this assignment)
4. Thesis/Project (as culminating experience in EDU 690)

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

Requirements for Admission to the Program without Deficiencies:

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

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

Minimum number of credit hours required for program completion: 36

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

Subtotal: 6

EDU 570: Should be completed within the first semester
EDU 660: Must have completed EDU 570 with a B grade or better and 24 credit hours of graduate work

Inclusive Education Core:
EDU 508 Teaching Exceptional Learners in Inclusive Settings 3
EDU 514 Assessment and Instruction of Diverse Learners I 3
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDU 529</td>
<td>Proactive Approaches to Classroom Management in Inclusive Settings</td>
<td>3</td>
</tr>
<tr>
<td>EDU 530</td>
<td>Assessment and Instruction of Diverse Learners II</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Subtotal: 12</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Linking Content and Pedagogy:**

Choose 12 credits from the following:

**Literacy/Language Arts**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDU 506</td>
<td>Introduction to Literacy Instruction</td>
<td>3</td>
</tr>
<tr>
<td>EDU 536</td>
<td>Adolescent Literacies, Literature and Technology</td>
<td>3</td>
</tr>
<tr>
<td>EDU 605</td>
<td>Issues, Trends, and Research in Elementary (Childhood) Language</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 5XX</td>
<td>By advisement</td>
<td></td>
</tr>
<tr>
<td>ENGL 6XX</td>
<td>By advisement</td>
<td></td>
</tr>
<tr>
<td>EDU 591</td>
<td>Special Topics: Curriculum and Instruction</td>
<td>3</td>
</tr>
</tbody>
</table>

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

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

**Social Studies**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDU 635</td>
<td>Curriculum Development in Social Studies Education</td>
<td>3</td>
</tr>
<tr>
<td>EDU 636</td>
<td>Issues, Trends, and Research in Elementary School Social Studies</td>
<td>3</td>
</tr>
<tr>
<td>HIST 5XX</td>
<td>By advisement</td>
<td></td>
</tr>
<tr>
<td>HIST 6XX</td>
<td>By advisement</td>
<td></td>
</tr>
<tr>
<td>POLI 5XX</td>
<td>By advisement</td>
<td></td>
</tr>
<tr>
<td>POLI 6XX</td>
<td>By advisement</td>
<td></td>
</tr>
<tr>
<td>EDU 591</td>
<td>Special Topics: Curriculum and Instruction</td>
<td>3</td>
</tr>
</tbody>
</table>

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

**Mathematics/Science/Technology**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDU 603</td>
<td>Issues, Trends, and Research in Elementary (Childhood) Science</td>
<td>3</td>
</tr>
<tr>
<td>EDU 640</td>
<td>Issues, Trends, and Research in Elementary (Childhood) Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>EDU 642</td>
<td>Activity-Oriented Elementary Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>EDU 643</td>
<td>Math Assessment in Support of All Learners</td>
<td>3</td>
</tr>
</tbody>
</table>

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

**Interdisciplinary**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDU 520</td>
<td>Curriculum Framework Theory/Development</td>
<td>3</td>
</tr>
<tr>
<td>EDU 525</td>
<td>Curriculum Framework Integration/Innovation</td>
<td>3</td>
</tr>
<tr>
<td>EDU 528</td>
<td>Technology in the Schools</td>
<td>3</td>
</tr>
<tr>
<td>EDU 543</td>
<td>Education for Gifted and Talented Students</td>
<td>3</td>
</tr>
<tr>
<td>EDU 562</td>
<td>Infant Development and Education</td>
<td>3</td>
</tr>
<tr>
<td>EDU 625</td>
<td>Early Childhood Curriculum</td>
<td>3</td>
</tr>
<tr>
<td>EDU 629</td>
<td>Issues, Trends, and Research in Early Childhood Education</td>
<td>3</td>
</tr>
</tbody>
</table>

**Electives:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Subtotal: 3</strong></td>
<td></td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDU 690</td>
<td>Master’s Thesis/Project</td>
<td>3-6</td>
</tr>
</tbody>
</table>

Subtotal: 3

**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:**

A minimum of 6 credit hours, not counting the Capstone requirement (see below). Note: At least one course that meets this requirement is offered each semester during the academic year.
EDU 570 Using Educational Research to Improve Instruction 3
EDU 660 Conducting Educational Research 3

Subtotal: 6

EDU 570: Should be completed within the first semester
EDU 660: Must have completed EDU 570 with a B grade or better and 24 credit hours of graduate work

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

Subtotal: 12

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

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

Subtotal: 12

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

Subtotal: 3

Capstone:
Must have completed EDU 660 with a B grade or better and 30 credit hours of graduate work
EDU 690 Master's Thesis/Project 3-6

Subtotal: 3

Subtotal: 36

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

LANGUAGE AND LEARNING - M.A. DEGREE

Department of Education
Office: E268 Thompson Hall
(716) 673-3701
Guangyu.Tan, Chairperson
Email: Guangyu.Tan@fredonia.edu

The Master of Arts in Language and Learning does not lead to recommendation for teacher certification in New York State. There are five specialization areas from which a student may choose; the selected area will be indicated on the student's transcript when degree is awarded:

- TESOL/TEFL
- Language Policy (not yet open for admissions)
- Bilingualism/Multilingualism
- Heritage Languages (not yet open for admissions)
- Sociolinguistics (not yet open for admissions)

Requirements for Admission to Fredonia's Language and Learning, MA:

NOTE: We are actively recruiting only for the TESOL, Bilingualism/Multilingualism, and Heritage Languages specialization track as of July 16, 2015; however, the admission requirements are the same for all five specialization areas.

- Completion of a baccalaureate degree in an area of arts, science, or education.
- Undergraduate GPA of 3.0 or above.
- Evidence of having taken the GRE with a minimum score of 272 for the combined areas of Quantitative and Verbal Reasoning as well as submission of a GRE Analytical Writing Score.
- Candidates may be accepted conditionally into the program without the GRE scores.
- International students are allowed one year from the time they arrive in the United States to fulfill this requirement.
- Completed Graduate Application submitted to the Office of Graduate Studies including:
  - Three (3) names with current contact information of professional associates who will speak on the candidate's behalf. These names are in lieu of submitting written recommendation letters. The TESOL Program Coordinator has the option of contacting these professional people for a reference.
  - Official academic transcripts from all prior undergraduate and graduate institutions (except Fredonia).
Language Proficiency Requirements

- for Native Speakers of English:
  - A graduate-level 800-1,200 word essay in English which addresses the topic: “Describe your reasons for pursuing a graduate degree in Language and Learning and support your rationale with specific information pertinent to your desired degree.”
  - Twelve (12) post-secondary credit hours in a Language Other than English (LOTE), or an approved equivalency, in a single language. Candidates may be accepted conditionally into the program without the LOTE credits fulfilled, but matriculation from the program is contingent upon the satisfactory completion of this requirement.

- for Non-Native Speakers of English:
  - A graduate level 800-1,200 word essay in the candidate’s native language. This can be any completed academic paper (e.g., a paper from a college course).

PROGRAM REQUIREMENTS:

Research Methods Sequence:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDU 570</td>
<td>Using Educational Research to Improve Instruction</td>
<td>3</td>
</tr>
<tr>
<td>EDU 660</td>
<td>Conducting Educational Research</td>
<td>3</td>
</tr>
<tr>
<td>EDU 690</td>
<td>Master's Thesis/Project</td>
<td>3-6</td>
</tr>
</tbody>
</table>

Subtotal: 9

NOTE:

- EDU 690 is a variable 3-6 credit hour course. Students must complete the course for 3 credit hours to satisfy the degree requirements.

Core Courses required for Specializations:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDU 518</td>
<td>Second Language Acquisition and Development</td>
<td>3</td>
</tr>
<tr>
<td>EDU 565</td>
<td>Language and Learning: Psycho- and Sociolinguistic Considerations for Educators of ELL Students or Foundations of Bilingual Education</td>
<td>3</td>
</tr>
<tr>
<td>EDU 568</td>
<td>Linguistics for ESL Educators</td>
<td>3</td>
</tr>
</tbody>
</table>

Subtotal: 9

NOTE:

- EDU 518 is an on campus course with an online component.
- EDU 565 is the core course taken for the Heritage Language and the Sociolinguistic Specializations

- EDU 568 is the core course taken for the TESOL/TFL, Language Policy, and Bilingualism/Multilingualism Specializations

ELECTIVES FOR SPECIALIZATIONS:

TESOL / TEFL:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDU 592</td>
<td>Special Topics: Language, Learning, and Leadership</td>
<td>3</td>
</tr>
<tr>
<td>EDU 519</td>
<td>Curriculum Theory for the Second Language Classroom - ESL I</td>
<td>3</td>
</tr>
<tr>
<td>EDU 540</td>
<td>Content Area English as a Second Language Elective</td>
<td>3</td>
</tr>
</tbody>
</table>

Subtotal: 12

Language Policy:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDU 592</td>
<td>Special Topics: Language, Learning, and Leadership</td>
<td>3</td>
</tr>
<tr>
<td>EDU 565</td>
<td>Language and Learning: Psycho- and Sociolinguistic Considerations for Educators of ELL Students Electives</td>
<td>6</td>
</tr>
</tbody>
</table>

Subtotal: 12

Bilingualism / Multilingualism:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDU 592</td>
<td>Special Topics: Language, Learning, and Leadership</td>
<td>3</td>
</tr>
<tr>
<td>EDU 565</td>
<td>Language and Learning: Psycho- and Sociolinguistic Considerations for Educators of ELL Students Electives</td>
<td>3</td>
</tr>
<tr>
<td>EDU 555</td>
<td>Methods of Bilingual Education</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>One course in Study Abroad in L2 context (by advisement)</td>
<td>3</td>
</tr>
</tbody>
</table>

Subtotal: 12

Sociolinguistics:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDU 592</td>
<td>Special Topics: Language, Learning, and Leadership</td>
<td>3</td>
</tr>
<tr>
<td>EDU 568</td>
<td>Foundations of Bilingual Education Electives</td>
<td>3</td>
</tr>
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</table>

Subtotal: 12

Heritage Languages:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDU 592</td>
<td>Special Topics: Language, Learning, and Leadership</td>
<td>3</td>
</tr>
<tr>
<td>EDU 519</td>
<td>Curriculum Theory for the Second Language Classroom - ESL I</td>
<td>3</td>
</tr>
<tr>
<td>EDU 568</td>
<td>Foundations of Bilingual Education Elective</td>
<td>3</td>
</tr>
</tbody>
</table>

Subtotal: 12

COURSES EXISTING IN OTHER DEPARTMENTS WHICH MAY BE
CONSIDERED AS ELECTIVES FOR SPECIALIZATIONS

Using these courses to satisfy a specialization elective depends on the specialization and requires approval from both the Chair of the department housing the course and the TESOL Program Coordinator.

**English:**
- ENED 554 Teaching Writing in the Secondary School 3
- ENED 665 Studies in English Education 3
- ENGL 520 Graduate Seminar in Literature and Culture 3

**INED:** Study abroad courses

**Open SUNY:**
- ADE 584: Literacy Skills and the Adult Learner (Buffalo State)
- ADE 688: Leadership in Organization (Buffalo State)
- EDI 647: Teaching Adolescence Reading, Writing, and Literature (The College at Brockport)

Others as approved.

**Psychology:**
- PSY 510 Contemporary Issues in Psychology 3

**Education - C&I or LLL:**
- EDU 503 Evaluation in the Schools 3
- EDU 505 The Process of Writing: K-12 3
- EDU 506 Introduction to Literacy Instruction 3
- EDU 508 Teaching Exceptional Learners in Inclusive Settings 3
- EDU 529 Proactive Approaches to Classroom Management in Inclusive Settings 3
- EDU 539 Current Issues and Problems in Education 3
- EDU 552 Introduction to Literacy Assessment 3
- EDU 556 Teaching Language Arts in Spanish 3
- EDU 579 Foundations of Literacy 3
- EDU 614 Introduction to Educational Leadership 3

**NOTE:**
- For the Bilingualism / Multilingualism and Heritage Languages specializations, any of the required courses for the bilingual extension (CAS-BLE) may serve as an elective.

**Total Credit Hours: 30**

**LITERACY EDUCATION: BIRTH-GRADE 12 - M.S.ED**

**Department of Education**
Office: E268 Thompson Hall
(716) 673-3701
Guangyu Tan, Chairperson
e-mail: Guangyu.Tan@fredonia.edu

This program leads to a Master of Science in Education: Literacy Education Birth to Grade 12 degree and recommendations for initial certification in both Literacy Education: Birth to Grade 6 and Literacy Education: Grades 5-12. Program completion results in the ability to teach as a reading specialist, a literary coach, or as informed and literacy-savvy classroom teachers at the level for which they were initially certified. The content of the program includes practicum work, research, and opportunities to provide professional development for paraprofessionals and classroom teachers.

The State University of New York at Fredonia does not have the authority to recommend graduating Literacy candidates for a professional certification in the area of their original initial certification, only for Literacy Education (initial and professional). Graduates of the Literacy program who are interested in applying for their professional certification related to their original initial certification area will have to submit their materials directly to NYSED for individual evaluation through the TEACH online system. Please see the following link for further information about this topic:
http://www.highered.nysed.gov/tcert/certificate/relatedmasters.html

**Requirements for Admission to the Degree Program with Matriculated Acceptance**
Submit a completed Graduate Application to the Office of Graduate Studies, including two current (within six months) letters of recommendation that address the applicant's academic and teaching abilities, official academic transcripts from all prior undergraduate and graduate institutions (except Fredonia), formal score reports from GRE (and TOEFL or IELTS if required), evidence of initial teaching certification and evidence of DASA training.

- Baccalaureate Degree awarded
- Baccalaureate GPA of 3.0 or above
- Completion of the GRE*, with a minimum qualifying score of 272 for combined Quantitative and Verbal
Reasoning and submission of a GRE Analytical Writing Score

- Initial teacher certification* for New York State or equivalent
- Evidence of completion of DASA* training
- Interview with Literacy faculty (this is a requirement for all applicants, not just non-native speakers)
- For non-native speakers of English, the following subscores on the Test of English as a Foreign Language (TOEFL) or the International English Language Testing System (IELTS):
  - TOEFL Reading: 21 or IELTS Reading: 6.5
  - TOEFL Speaking: 18 or IELTS Speaking: 6.0
  - TOEFL Listening: 15 or IELTS Listening: 6.0
  - TOEFL Writing: 21 or IELTS Writing: 6.5

* Applicants may be granted conditional acceptance and then have one semester to meet the conditions.

**PROGRAM REQUIREMENTS**

**Core courses:**
- EDU 513 Literacy in the Content Areas 3
- EDU 552 Introduction to Literacy 3
- EDU 570 Using Educational Research to Improve Instruction 3
- EDU 574 Multicultural Children's Literature & Technology 3
- EDU 576 Practicum in Literacy for All Students 1
- EDU 579 Foundations of Literacy 3
- EDU 583 Literacy Interventionist Practicum I 3
- EDU 613 Literacy Interventionist Practicum II 3
- EDU 623 Advanced Literacy Assessment 3
- EDU 628 Reading Specialist Practicum 1
- EDU 651 Issues and Research in Literacy 3
- EDU 659 Master's Thesis/Project in Literacy 3

Subtotal: 32

Additional Program Requirements:

- Specific Program Assessments aligned with the International Literacy Association (ILA) Standards
- Program assessments have been designed to meet these standards as part of the institutional accreditation efforts through the Council for the Accreditation of Educator Preparation (CAEP). Candidates will be kept informed of these assessments.

As of December 31, 2013, candidates in all education programs are required to complete training under the Dignity for All Students Act (DASA). Candidates entering the program without the DASA requirement may take an EDU DASA workshop through Fredonia's Extended Learning.

**LITERACY EDUCATION: GRADES 5-12 - M.S.ED**

**Department of Education**
Office: E268 Thompson Hall
(716) 673-3701
Guangyu.Tan, Chairperson
e-mail: Guangyu.Tan@fredonia.edu

The program leads to a degree in Literacy Education: Grades 5-12 Master of Science in Education and a recommendation for initial certification in Literacy Education: Grades 5-12. Program completion results in the ability to teach as a reading specialist, a literacy coach, or as an informed and literacy-savvy classroom teacher at the adolescent level for which they were initially certified. The content of the program includes practicum work, research, and opportunities to provide professional development for paraprofessionals and classroom teachers.

The State University of New York at Fredonia does not have the authority to recommend graduating Literacy candidates for a professional certification in the area of their original initial certification, only for Literacy Education (initial and professional). Graduates of the Literacy program who are interested in applying for their professional certification, related to their original initial 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:

**Requirements for Admission to the Degree Program without Deficiencies:**
Submit a Completed Graduate Application to the Office of Graduate Studies, including two current (within six months) letters of recommendation that address the applicant's academic and teaching abilities, official academic transcripts from all prior undergraduate and
graduate institutions (except Fredonia), formal score reports from GRE (and TOEFL or IELTS, if required), evidence of initial certification and evidence of DASA training.

- Baccalaureate Degree awarded
- Baccalaureate GPA of 3.0 or above
- GRE scores with a minimum combined Quantitative Reasoning and Verbal Reasoning score of 272 and submission of a GRE Analytical Writing score
- Initial certification for New York State or equivalent
- Evidence of completion of DASA training*
- Interview with Literacy Faculty
- For non-native speakers of English, the following subscores on the Test of English as a Foreign Language (TOEFL) or the International English Language Testing System (IELTS):
  - TOEFL Reading: 21 or IELTS Reading: 6.5
  - TOEFL Speaking: 18 or IELTS Speaking: 6.0
  - TOEFL Listening: 15 or IELTS Listening: 6.0
  - TOEFL Writing: 21 or IELTS Writing: 6.5

**PROGRAM REQUIREMENTS**

<table>
<thead>
<tr>
<th>Core Courses:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>EDU 513</td>
<td>Literacy in the Content Areas</td>
</tr>
<tr>
<td>EDU 552</td>
<td>Introduction to Literacy</td>
</tr>
<tr>
<td>EDU 570</td>
<td>Assessment</td>
</tr>
<tr>
<td>EDU 570</td>
<td>Using Educational Research to Improve Instruction</td>
</tr>
<tr>
<td>EDU 574</td>
<td>Multicultural Children's Literature &amp; Technology</td>
</tr>
<tr>
<td>EDU 579</td>
<td>Foundations of Literacy</td>
</tr>
<tr>
<td>EDU 583</td>
<td>Literacy Interventionist Practicum I</td>
</tr>
<tr>
<td>EDU 613</td>
<td>Literacy Interventionist Practicum II</td>
</tr>
<tr>
<td>EDU 623</td>
<td>Advanced Literacy Assessment</td>
</tr>
<tr>
<td>EDU 651</td>
<td>Issues and Research in Literacy</td>
</tr>
<tr>
<td>EDU 659</td>
<td>Master's Thesis/Project in Literacy</td>
</tr>
</tbody>
</table>

Subtotal: 30

* As of December 31, 2013, candidates in all education programs are required to complete training under the Dignity for All Students Act (DASA). Candidates entering the program without the DASA requirement may take an EDU DASA workshop through Fredonia's Extended Learning.

Additional Program Requirements

It is the candidate's responsibility to be aware of course prerequisites, the Program Assessment Plan, and Transition Point Grid noting the required grade of B or higher for EDU 552, EDU 623, EDU 583, EDU 613, EDU 651, and EDU 659, as well as the additional program requirements of:

- The New York State Content Specialty Test (CST) in Literacy which candidates must pass to become certified in Literacy Education in New York State
- Specific Program Assessments aligned with the International Literacy Association (ILA) Standards. These program assessments have been designed to meet these standards as part of the institutional accreditation efforts through the Council for the Accreditation of Educator Preparation (CAEP). Candidates will be kept informed of these assessments.

**EDUCATIONAL LEADERSHIP - ADVANCED CERT.**

Educational Leadership - Advanced Cert.

Department of Education
Office: E268 Thompson Hall
(716) 673-3701
Guangyu Tan, Chairperson
e-mail: Guangyu.Tan@fredonia.edu

The Advanced Certificate in Educational Leadership is a fully online program and is open to anyone already possessing teaching certification, a master's degree in education or a related field, and three years of satisfactory teaching or professional experience in a Pre-K-12 setting. This program consists of 30 credit hours of graduate level courses and includes a 600-clock hour internship. The program leads to a recommendation to the New York State Education Department for initial certification as both a School Building Leader (SBL) and as a School District Leader (SDL). Those state certificates allow the candidate to assume such roles as principal, assistant principal, supervisor, or superintendent.

**Requirements for Admission to the Advanced Certificate EDUL Program without Deficiencies**

- Valid New York State Education Department (NYSED) teaching certification or equivalent in a core area
- Master's degree in education or related field with a minimum GPA of 3.0
- 3 years of satisfactory teaching or professional experience in a PreK-12 school or its equivalent
• Evidence of completion of DASA training* for New York State. Applicant may be conditionally accepted pending completion of GRE and DASA.
• Two written recommendations, one each from the applicant’s
  a) district superintendent and
  b) immediate supervisor
• A completed graduate application.

Advising

Graduate students in the Educational Leadership Program will be advised by the EDUL Program Coordinator. They should (virtually) meet with the Coordinator least once every semester for purposes of program planning and course selection.

Program Requirements

There are Fall, Spring, and Summer enrollment portals. The introductory course offered in the summer is open to anyone who may think they are interested in educational leadership or administration. It is also the prerequisite course for all other EDUL courses.

The course work for this program consists of 30-credit hours: 10 courses, each with 3 credits and all conducted online. They are offered in the various semesters depending on the candidates starting semester. Candidates should consult with their advisor, the Program Coordinator, to plan their schedules.

1. Program meets licensure requirements in the following States: New York

For more information about graduation rates, loan repayment rates, and post-enrollment earnings about this institution and other postsecondary institutions please click here: https://collegescorecard.ed.gov/

1. PROGRAM REQUIREMENTS

Core Courses:
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td>EDUL 614</td>
<td>Introduction to Educational Leadership</td>
<td>3</td>
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<tr>
<td>EDUL 615</td>
<td>Operation &amp; Management Systems</td>
<td>3</td>
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<th>Course</th>
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<th>Credits</th>
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<tr>
<td>EDUL 616</td>
<td>School Law</td>
<td>3</td>
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<tr>
<td>EDUL 617</td>
<td>Personnel Leadership</td>
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<tr>
<td>EDUL 618</td>
<td>Instructional Leadership</td>
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<tr>
<td>EDUL 619</td>
<td>Problem Solving &amp; School Improvement</td>
<td>3</td>
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<tr>
<td>EDUL 620</td>
<td>Culturally Responsive Leadership</td>
<td>3</td>
</tr>
<tr>
<td>EDUL 630</td>
<td>School District Leadership</td>
<td>3</td>
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<tr>
<td>EDUL 640</td>
<td>Internship I: Competencies</td>
<td>3</td>
</tr>
<tr>
<td>EDUL 641</td>
<td>Internship II: Leadership Experience</td>
<td>3</td>
</tr>
</tbody>
</table>

Subtotal: 30

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

As of December 31, 2013, candidates in all education programs are required to complete training under the Dignity for All Students Act (DASA). Those entering the program without the DASA requirement may take an EDU DASA workshop through Fredonia's Extended Learning.

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.

Gainful Employment

All non-degree certificate programs at The State University of New York at Fredonia are subject to Gainful Employment (GE) rules. As part of the GE program regulations, institutions must disclose specific employment data about each of their GE programs to prospective students.

This information is intended to help students make informed choices about enrolling in a GE Program.

State Authorization Disclosure (p. 577)

Teaching English to Speakers of Other Languages - M.S.Ed / Advanced Cert

Department of Education
Office: E268 Thompson Hall
(716) 673-3701
Guangyu Tan, Chairperson
email: Guangyu.Tan@fredonia.edu

TESOL offers two degree choices for candidates seeking ESOL certification in New York State*:

• a Master of Science in Education (MSEd) in TESOL
  - Option 1 for candidates with a current NYS teaching certificate:
    Appropriate for candidates who have a baccalaureate degree and current New York State teacher certification. This 36 credit hour program leads to the
M.S.Ed in TESOL. In addition, New York State requires proof of successful completion of at least 12 post-secondary credit hours of study in a Language Other Than English (LOTE) for ESOL Certification.

Program Admission and Completion Requirements (p. 93)

- Option 2 for candidates without a current NYS teaching certificate:

Appropriate for those who have a baccalaureate degree or a master’s degree but do not have current New York State teacher certification. These candidates must complete the 36 credit hour program leading to the M.S.Ed in TESOL but must complete additional coursework. In addition, New York State requires proof of successful completion of at least 12 post-secondary credit hours of study in a Language Other Than English (LOTE) for ESOL certification.

Program Admission and Completion Requirements (p. 95)

- a Certificate of Advanced Study (CAS) in TESOL
- for candidates with a current NYS teaching certificate and a Master's degree

Both TESOL degree choices lead to a recommendation for an initial and/or professional certification in ESOL PreK-Gr12 in New York state. However, both degrees have different admission and completion requirements.

For the MSED in TESOL, see the TESOL Program Options section in this catalog.

For CAS in TESOL, see the TESOL Certificate of Advanced Study section (p. 96) in this catalog.

For Bilingual Education, see the Bilingual Education section (p. 83) in this catalog.

* Candidates wanting a degree in TESOL but not interested in NYS certification should apply to the Master of Arts in Language and Learning (p. 87).

TESOL (OPTION 1) - M.S.ED

Requirements for Admission to Fredonia’s TESOL M.S.Ed Program (Option 1) with matriculated acceptance:

- Completion of a baccalaureate degree in an area of arts, science, or education.
- Undergraduate GPA of 3.0 or above
- GRE scores with a minimum combined Quantitative Reasoning and Verbal Reasoning score of 272 and submission of a GRE Analytical Writing score
- Current New York State Teaching Certificate
- Completed Graduate Application submitted to the Office of Graduate Studies including:
  - Three (3) names with current contact information of professional associates who will speak on the candidates behalf. These names are in lieu of submitting written recommendation letters. The TESOL Program Coordinator has the option of contacting these professional people for a reference.
  - Official academic transcripts from all prior undergraduate and graduate institutions (except Fredonia).

Language Proficiency Requirements:

- for Native Speakers of English:
  - A graduate-level 800-1,200 word essay in English which addresses the topic: “Describe your reasons for pursuing a graduate degree in TESOL and support your rationale with specific information pertinent to your desired degree.”
  - Twelve (12) post-secondary credit hours in a Language Other than English (LOTE*), or an approved equivalency, in a single language. Candidates may be accepted conditionally into the TESOL program without the LOTE credits fulfilled, but matriculation from the TESOL program is contingent upon the satisfactory completion of this requirement.

- for Non-Native Speakers of English:
  - A statement of your background and goals in addition to a curriculum vitae (maximum three pages).
  - A graduate level 800-1,200 word essay in English which addresses the following topic: "Describe your reasons for pursuing a graduate degree in TESOL and support your rationale with specific information pertinent to your desired degree.
  - Further stipulations as listed under "Additional requirements for non-native speakers of English to the TESOL Program."

* Conditional Acceptance may be granted if GRE, LOTE, and/or DASA scores are pending.

Additional Requirements for Non-Native Speakers of English to the M.SEd Program:

- The program requires that non-native speakers of English show evidence of English proficiency by providing scores which are different from those required of the Graduate Studies. Proof of proficiency may be shown by achieving the following test scores:
  - TOEFL: 550 (paper), 213 (computer), or 79 (internet)
• IELTS (with no subsection below 6.0): 6.5
Fredonia’s code for reporting the TOEFL and IELTS scores electronically is 2539. International students who have been awarded a prior degree from the U.S., U.K./Ireland, Australia, Anglophone Canada, New Zealand, Anglophone Africa, Singapore, and the Commonwealth Caribbean prior to applying to SUNY Fredonia are not required to submit TOEFL or IELTS scores.

• International applicants must provide official copies of all previous degrees/diplomas and transcripts issued in the original language with a literal English translation of each. Proof of an official certification of the award of any and all degrees must be provided. Include documentation describing in which language the courses were taught. The latter can be included in a separate document as a chart or statement.

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

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

**DEGREE REQUIREMENTS**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>EDU 570</td>
<td>Using Educational Research to Improve Instruction</td>
<td>3</td>
</tr>
<tr>
<td>EDU 518</td>
<td>Second Language Acquisition and Development</td>
<td>3</td>
</tr>
<tr>
<td>EDU 519</td>
<td>Curriculum Theory for the Second Language Classroom - ESL I</td>
<td>3</td>
</tr>
<tr>
<td>EDU 521</td>
<td>Practicum in TESOL I</td>
<td>0</td>
</tr>
<tr>
<td>EDU 540</td>
<td>Content Area English as a Second Language</td>
<td>3</td>
</tr>
<tr>
<td>EDU 541</td>
<td>Practicum in TESOL II</td>
<td>0</td>
</tr>
<tr>
<td>EDU 564</td>
<td>Linguistics for ESL Educators</td>
<td>3</td>
</tr>
<tr>
<td>EDU 565</td>
<td>Language and Learning: Psycho- and Sociolinguistic Considerations for Educators of ELL Students</td>
<td>3</td>
</tr>
<tr>
<td>EDU 568</td>
<td>Foundations of Bilingual Education</td>
<td>3</td>
</tr>
<tr>
<td>EDU 567</td>
<td>Practicum in TESOL III</td>
<td>0</td>
</tr>
<tr>
<td>EDU 569</td>
<td>Assessment and Evaluation of English Language Learners (ELLs)</td>
<td>3</td>
</tr>
<tr>
<td>EDU 671</td>
<td>ESOL Practicum &amp; Supervision(20 Day)</td>
<td>3</td>
</tr>
</tbody>
</table>

Subtotal: 30

**Total Credit Hours: 30**

As of December 31, 2013, candidates in all education programs are required to complete training under the Dignity for All Students (DASA). Candidates entering the program without the DASA requirement may take an EDU DASA workshop through Fredonia’s Extended Learning.
Requirements for Admission to Fredonia’s TESOL M.S.Ed Program (Option 2) with matriculated acceptance:

- Completion of a baccalaureate degree in an area of arts, science, or education
- Undergraduate GPA of 3.0 or above
- GRE scores with a minimum combined Quantitative Reasoning and Verbal Reasoning score of 272 and submission of a GRE Analytical Writing score
- Completed Graduate Application submitted to the Office of Graduate Studies including:
  - Three (3) names with current contact information of professional associates who will speak on the candidate’s behalf. These names are in lieu of submitting written recommendation letters. The TESOL Program Coordinator has the option of contacting these professional people for a reference.
  - Official academic transcripts from all prior undergraduate and graduate institutions (except Fredonia).
- Language Proficiency Requirements
  - For Native Speakers of English:
    - A graduate-level 800 – 1,200 word essay in English which addresses the topic: “Describe your reasons for pursuing a graduate degree in TESOL and support your rationale with specific information pertinent to your desired degree.”
  - Twelve (12) post-secondary credit hours in a Language Other Than English (LOTES*), or an approved equivalency, in a single language. Candidates may be accepted conditionally into the TESOL Program with the LOTE credits fulfilled, but matriculation from the TESOL Program is contingent upon the satisfactory completion of this requirement.
  - For Non-Native Speakers of English:
    - A statement of your background and goals in addition to a curriculum vitae (maximum three pages).
    - A graduate-level 800-1,200 word essay in the candidate’s native language. This can be any completed academic paper (e.g., a paper from a college course).
    - Further stipulations as listed under “Additional requirements for non-native speakers of English to the TESOL Program.”

*Conditional Acceptance may be granted if GRE, LOTE scores are pending.

Additional Requirements for Non-Native Speakers of English to the Bilingual Education Program

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

Fredonia’s code for reporting the TOEFL and IELTS scores electronically is 2539. International students who have been awarded a prior degree from the U.S., U.K./Ireland, Australia, Anglophone Canada, New Zealand, Anglophone Africa, Singapore, and the Commonwealth Caribbean prior to applying to Fredonia are not required to submit TOEFL or IELTS scores.

- International applicants must provide official copies of all previous degrees/diplomas and transcripts issued in the original language with a literal English translation of each. Proof of an official certification of the award of any and all degrees must be provided. Include documentation describing in which language the courses were taught. The latter can be included in a separate document as a chart or statement.

- International applicants must also have transcripts translated and evaluated by WES (www.wes.org) or a similar agency against the American 4.0 standard. Additionally, all International applicants must meet the requirements outlined by the Graduate Studies website.

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<tr>
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<td>3</td>
</tr>
<tr>
<td>EDU 518</td>
<td>Second Language Acquisition and Development</td>
<td>3</td>
</tr>
<tr>
<td>EDU 519</td>
<td>Curriculum Theory for the Second Language Classroom - ESL I</td>
<td>3</td>
</tr>
<tr>
<td>EDU 521</td>
<td>Practicum in TESOL I</td>
<td>0</td>
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<tr>
<td>EDU 540</td>
<td>Content Area English as a Second Language</td>
<td>3</td>
</tr>
<tr>
<td>EDU 541</td>
<td>Practicum in TESOL II</td>
<td>0</td>
</tr>
<tr>
<td>EDU 564</td>
<td>Linguistics for ESL Educators</td>
<td>3</td>
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<td>EDU 565</td>
<td>Language and Learning: Psycho- and Sociolinguistic Considerations for Educators of ELL Students</td>
<td>3</td>
</tr>
<tr>
<td>EDU 568</td>
<td>Foundations of Bilingual Education</td>
<td>3</td>
</tr>
<tr>
<td>EDU 567</td>
<td>Practicum in TESOL III</td>
<td>0</td>
</tr>
</tbody>
</table>
EDU 569  Assessment and Evaluation of English Language Learners (ELLs)  3
EDU 673  ESOL Practicum & Supervision, Grades PreK-6 (40 Day)  1.5
EDU 683  ESOL Practicum & Supervision Grades 7-12 (40 day)  1.5

TESOL Program Portfolio
Graduation Requirement
a course in Cultural Perspectives
(as approved by the TESOL Program Coordinator)

Subtotal: 30

**ADDITIONAL COURSE REQUIREMENTS FOR NYS TEACHER CERTIFICATION**

One of the following two courses:
EDU 501  Child Development  3
EDU 502  Psychology of Adolescence  3

Subtotal: 3

All of the following courses:
EDU 303  Safe Schools/Healthy Students-DASA: Safety Education/Fire and Arson/School Violence  1
EDU 304  Safe Schools & Healthy Students  1
EDU 504  Intro to the Exceptional Learner  3
EDU 558  Practicum in Inclusive Education II  1
EDU 559  Educational Psychology  3

Subtotal: 8-9

**Total Credit Hours: 47-48**

Also required for New York State Teacher Certification:

- Fingerprinting;
- Completion of pertinent New York State Teacher Certification Exams (NYSTCE);
- Meeting of all existing and current requirements as mandated by the New York State Education Department and CAEP (Council for Accreditation of Educator Preparation).

As of December 31, 2013, candidates in all education programs are required to complete training under the Dignity for All Students Act (DASA). The training required under the Dignity for All Student Act (DASA) is included in EDU 303 at Fredonia.

**TESOL - ADVANCED CERT.**

This eighteen (18) credit hour program leads to a recommendation for a New York State (NYS) Certification in ESOL. The NYS requirement for twelve (12) credit hours of Language Other Than English (LOTE) is in addition to the 18 credit hours listed below for CAS program completion.

**Requirements for Admission to the Program with Matriculated Acceptance**

- Completion of a baccalaureate degree in an area of arts, science, or education
- Undergraduate GPA of 3.0 or above
- GRE* with a minimum score of 272 for combined Quantitative Reasoning and Verbal Reasoning and submission of a GRE Analytic Writing score
- Evidence of New York State DASA Training*
- Current NYS Teaching Certificate
- Completed Graduate Application submitted to the Office of Graduate Studies including:
  - Three (3) names with current contact information of professional associates who will speak on the candidate’s behalf. These names are in lieu of submitting written recommendation letters. The TESOL Program Coordinator has the option of contacting these professional people for a reference.
  - Official academic transcripts from all prior undergraduate and graduate institutions (except Fredonia).

**Language Proficiency Requirements: for Native speakers of English:**

- A graduate-level 800-1,200 word essay in English which addresses the topic: "Describe your reasons for pursuing a graduate degree in TESOL and support your rationale with specific information pertinent to your desired degree."
- Twelve (12) post-secondary credit hours in a Language Other Than English (LOTE*), or an approved equivalency, in a single language. Candidates may be accepted conditionally into the TESOL program without the LOTE credits fulfilled, but matriculation from the TESOL program is contingent upon the satisfactory completion of this requirement.

**Language Proficiency Requirements: for Non-Native speakers of English:**

- A graduate level 800-1,200 word essay in the candidate's native language. This can be any completed academic paper (e.g., a paper from a college course).
- Further stipulations as listed below under “Additional requirements for non-native speakers of English to the TESOL program”
* Conditional Acceptance may be granted if the GRE scores, LOTE, and/or the DASA are pending.

Additional Requirements for Non-Native Speakers of English to the TESOL Program

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

Fredonia’s school code for reporting the TOEFL and IELTS scores electronically is 2539. International students who have been awarded a prior degree from the U.S., U.K./Ireland, Australia, Anglophone Canada, New Zealand, Anglophone Africa, Singapore, and the Commonwealth Caribbean prior to applying to Fredonia are not required to submit TOEFL or IELTS.

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

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

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<th>Program Completion Courses:</th>
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<tbody>
<tr>
<td>EDU 518 Second Language Acquisition and Development</td>
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<tr>
<td>EDU 519 Curriculum Theory for the Second Language Classroom - ESL I</td>
<td>3</td>
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<td>EDU 521 Practicum in TESOL I</td>
<td>0</td>
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<tr>
<td>EDU 540 Content Area English as a Second Language</td>
<td>3</td>
</tr>
<tr>
<td>EDU 541 Practicum in TESOL II</td>
<td>0</td>
</tr>
<tr>
<td>EDU 568 Foundations of Bilingual Education</td>
<td>3</td>
</tr>
<tr>
<td>EDU 567 Practicum in TESOL III</td>
<td>0</td>
</tr>
<tr>
<td>EDU 569 Assessment and Evaluation of English Language Learners (ELLs)</td>
<td>3</td>
</tr>
<tr>
<td>EDU 671 ESOL Practicum &amp; Supervision (20 Day)</td>
<td>3</td>
</tr>
</tbody>
</table>

Subtotal: 18

* As of December 31, 2013, candidates in all education programs are required to complete training under the Dignity for All Students Act (DASA). Candidates entering the program without the DASA requirement may take an EDU DASA workshop through Fredonia’s Extended Learning.

Gainful Employment

All non-degree certificate programs at The State University of New York at Fredonia are subject to Gainful Employment (GE) rules. As part of the GE program regulations, institutions must disclose specific employment data about each of their GE programs to prospective students.

This information is intended to help students make informed choices about enrolling in a GE Program.

State Authorization Disclosure (p. 577)

ENGINEERING (COOPERATIVE) PROGRAM

Office: 112 Jewett Hall  
(716) 673-3302  
Justin Conroy, Director  
Email: cooperative.engineering@fredonia.edu  
Website: http://home.fredonia.edu/physics

The Cooperative Engineering program takes its name from the academic cooperative agreements between Fredonia and its affiliated engineering schools. The intent is to combine liberal arts and sciences at Fredonia with engineering at another school, thereby maximizing the student’s potential as a member of society and as an employer or employee. The agreements facilitate student transfer and mutual recognition of general education requirements. Fredonia is currently affiliated in a Cooperative Engineering program with the following institutions:

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

The following is a list of the diverse program options available at the engineering colleges, under the Fredonia Cooperative Engineering program, identified by the
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), (6), (8)
Aerospace (1), (11), (12)
Aerospace & Aviation (6)
Applied Physics (3)
Bioengineering (12)
Biomedical (1), (3), (4), (6), (8), (9), (10), (11), (13)
Biomedical Materials Eng. Science (5)
Ceramic (5), (6)
Chemical (1), (2), (3), (4), (6), (8), (9), (11), (12), (13)
Civil (1), (2), (3), (4), (6), (8), (11), (12), (13)
Civil and Environmental (6), (12)
Computer (1), (2), (3), (6), (7), (9), (10), (11), (12)
Computer and Systems (8)
Electrical (1), (2), (3), (6), (7), (8), (9), (10), (11)
Engineering Mechanics (3)
Engineering Physics (1), (6), (11), (12)
Engineering Science (12)
Environmental (3), (6), (8), (11), (12)
Fluid and Thermal Science (1)
Food, Agricultural, & Biological (6)
Glass Science (5)
Industrial (3), (4), (7), (9), (11)
Industrial and Management (8)
Industrial and Operations Research (3)
Industrial and Systems (6), (10)
Interdisciplinary and Management (2)
Manufacturing (12)
Materials (8)
Materials Science (3)
Materials Science and Engineering (1), (3), (5), (6), (10)
Mechanical (1), (2), (3), (4), (6), (7), (8), (9), (10), (11), (12), (13)
Microelectronic (9)
Nuclear (8)

Operations Research (3)
Polymer Science (1)
Renewable Energy Engineering (5)
Software Engineering (2), (7), (10)
Systems and Control Engineering (1), (6)
Welding (6)

These cooperative arrangements include but are not limited to the popular Three-Two (3-2) option. Briefly, a student in the 3-2 option takes a minimum of 90 credit hours (three years) at Fredonia in a curriculum, modified specifically for this program, in biology, business administration, chemistry, computer science, economics, English, geology, history, mathematics, mathematics physics, philosophy, physics, political science, psychology, or sociology. The student then transfers to an affiliated school and completes at least 60 credit hours (two years) in an engineering discipline. When the student completes this five-year option, he/she obtains a baccalaureate from the engineering institution. Provided the student has satisfied Fredonia’s remaining requirements at the engineering school, he/she obtains a second baccalaureate; this one from Fredonia according to the curriculum there followed. It is possible for students who do not wish to major in any one of the specified departments to enter the Interdisciplinary Studies program, which allows the student to design his/her own Cooperative Engineering curriculum. This curriculum will include, but not be limited to, the engineering core and related courses for the engineering college of the student’s choice. Although the popular 3-2 option is considered the basic option for Cooperative Engineering, 2-2, 2-3, 3-3, and 4-2 options are available. The 2-2 and 2-3 options do not lead to Fredonia degrees; the 3-3 and 4-2 programs do. In many cases the latter will result in a master’s degree in engineering in addition to the bachelor’s degree from Fredonia.

SUGGESTED ENGINEERING CORE:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
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<td>CHEM 115</td>
<td>General Chemistry Lecture I</td>
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<tr>
<td>CHEM 125</td>
<td>General Chemistry Laboratory I</td>
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<tr>
<td>CHEM 116</td>
<td>General Chemistry Lecture II</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 126</td>
<td>General Chemistry Laboratory II</td>
<td>1</td>
</tr>
<tr>
<td>MATH 122</td>
<td>University Calculus I</td>
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</tr>
<tr>
<td>MATH 123</td>
<td>University Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>MATH 224</td>
<td>Differential Equations</td>
<td>3</td>
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<tr>
<td>PHYS 230</td>
<td>University Physics I</td>
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<tr>
<td>PHYS 232</td>
<td>University Physics I Lab</td>
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<tr>
<td>PHYS 231</td>
<td>University Physics II</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 233</td>
<td>University Physics II Lab</td>
<td>1</td>
</tr>
</tbody>
</table>
Cooperative Engineering meet the director or authorized
updated, in institutions, and since these curricula are frequently
numerous concentrations available at the affiliated
Since there are more than 60 baccalaureate programs with
GPA’s exceeding 2.5, 100 percent have gained admission
not, in general, guaranteed. However, for 3
application is given special consideration. Admission is
affiliated engineering institution, a Fredonia student
motivated students with satisfactory academic records. At
recommendation from the director
courses comprising most courses typically taught in the
first two years at engineering schools are offered at
Fredonia. These include Statics, Dynamics and Mechanics
of Solids (PHYS 321, PHYS 329, PHYS 322), Circuit
Analysis (PHYS 323), Thermodynamics (PHYS 330),
Optics w/lab (PHYS 340-PHYS 341), and Electronics
w/lab (PHYS 325-PHYS 327).

Students should contact the director of the Cooperative
Engineering program for additional details for the
following awards:
• Herbert P. Carlyon Scholarship
• Cooperative Engineering Scholarship Award

English
Office: 278 Fenton Hall
(716) 673-3125
Bruce Simon, Chairperson
Email: english.department@fredonia.edu
Website: https://www.fredonia.edu/academics/colleges-
schools/college-liberal-arts-sciences/english

Mission Statement
Working collaboratively with faculty, Fredonia English
students explore the power of language and image in the
21st century. They discover new perspectives and develop
an essential skills: strong writing, thoughtful reading, and
critical thinking. Whether they choose to focus on
literature, creative writing, professional writing, or English
education, students personalize their paths through the
flexible major in consultation with department advisors. As
a vibrant community of learners, we investigate how texts
respond to and shape experience in and beyond the
classroom.

About Fredonia English
The English Department at Fredonia values the importance of
studying literature across cultures; fostering lifelong
readers and writers; engaging multiple forms of textual
literacy; practicing the arts of creative and critical writing;
and championing the key role of the humanities in higher
education. Our English programs blend contemporary
literary studies with critical, professional, and creative
writing, and give students numerous opportunities for
hands-on learning through community partnerships and
internships. We produce top-notch graduates who get hired
by regional and national organizations or go on to graduate

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 321</td>
<td>Engineering Statics</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 329</td>
<td>Engineering Dynamics</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 322</td>
<td>Mechanics of Solids</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 323</td>
<td>Circuit Analysis</td>
<td>4</td>
</tr>
<tr>
<td>ENGL 100</td>
<td>Craft of Writing</td>
<td>3</td>
</tr>
</tbody>
</table>

Subtotal: 46

NOTE:

- PHYS 321, PHYS 322, PHYS 329, PHYS 323, and
PHYS 324: Students interested in electrical engineering
may omit PHYS 322; areas other than electrical and
mechanical engineering may omit PHYS 324 (in some
cases, mechanicals may omit this also). Students are
encouraged to consult engineering school catalogs for
specific requirements.

Strongly recommended are courses in computer
programming such as Computer Science I (CSIT 121),
Modern Physics (PHYS 234), and 3 to 6 credit hours of
economics. This core, coupled with the departmental and
general university requirements, forms the basic
curriculum for the three-year program at Fredonia.

An attractive feature of the 3-2 option is that the final
decision regarding the area of engineering usually is not
made until the third year, thus providing the student with
sufficient experience to make a proper choice. However, it
is to the student’s advantage to choose the second
institution and the area of engineering as soon as possible
so course selections can be tailored to that choice. To
transfer, the student first consults with the Cooperative
Engineering director and then applies to one of the
affiliated engineering colleges or to any other engineering
college of his/her choice. Usually, a favorable letter of
recommendation from the director is forwarded for highly
motivated students with satisfactory academic records. At
the affiliated engineering institution, a Fredonia student
application is given special consideration. Admission is
not, in general, guaranteed. However, for 3-2 students with
GPA’s exceeding 2.5, 100 percent have gained admission
to an engineering school.

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 ensure 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
courses 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 Statics, Dynamics and Mechanics
of Solids (PHYS 321, PHYS 329, PHYS 322), Circuit
Analysis (PHYS 323), Thermodynamics (PHYS 330),
Optics w/lab (PHYS 340-PHYS 341), and Electronics
w/lab (PHYS 325-PHYS 327).

Students should contact the director of the Cooperative
Engineering program for additional details for the
following awards:
• Herbert P. Carlyon Scholarship
• Cooperative Engineering Scholarship Award

English
Office: 278 Fenton Hall
(716) 673-3125
Bruce Simon, Chairperson
Email: english.department@fredonia.edu
Website: https://www.fredonia.edu/academics/colleges-
schools/college-liberal-arts-sciences/english

Mission Statement
Working collaboratively with faculty, Fredonia English
students explore the power of language and image in the
21st century. They discover new perspectives and develop
an essential skills: strong writing, thoughtful reading, and
critical thinking. Whether they choose to focus on
literature, creative writing, professional writing, or English
education, students personalize their paths through the
flexible major in consultation with department advisors. As
a vibrant community of learners, we investigate how texts
respond to and shape experience in and beyond the
classroom.

About Fredonia English
The English Department at Fredonia values the importance of
studying literature across cultures; fostering lifelong
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literacy; practicing the arts of creative and critical writing;
and championing the key role of the humanities in higher
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literary studies with critical, professional, and creative
writing, and give students numerous opportunities for
hands-on learning through community partnerships and
internships. We produce top-notch graduates who get hired
by regional and national organizations or go on to graduate
programs all over the country. Recent graduates of the department are employed by law and business firms, journals and publishers, news and arts organizations, and schools.

English and English Adolescence Education majors at Fredonia actively participate in local small-press and online writing internships; community service learning projects; literacy campaigns; creative collaborations and field experiences with area schools; public readings of literature to area children, seniors, and the broader community through open-mic events; collaborations with Visual Arts and School of Music students in pairing original writings with graphic design and musical accompaniment; host visiting writers and literary critics; and read a whole lot of terrific literature.

The **B.A. in English** (p. 101) combines required foundational courses with a wide range of options among skills- and content-based course categories in order to open pathways for every student to gain the most from the major and our faculty. Internships and other applied learning opportunities in English-related fields help our students turn those pathways into careers.

The **B.A. in English Adolescence Education** (p. 25) combines required foundational courses in pedagogy and literature and a plethora of field experiences in order to open pathways for all students to develop the ideas and practices that will make them effective in the classrooms of an increasingly complex and diverse society.

The **B.A./M.A in English Adolescence Education** (p. 26) leads to initial 7-12 certification and eligibility for professional certification (after meeting New York State requirements for classroom teaching experience following completion of the program), allowing students to earn both their B.A. and M.A. in English Adolescence Education in five years, rather than the six required in traditional B.A. and M.A. programs. Through courses at both the undergraduate and graduate level, this program offers a solid content background in English, a wide range of courses focused on teaching secondary English, field experiences in secondary schools, and a graduate-level student teaching experience. Graduates of this clinically-rich combined B.A./M.A. will be fully prepared to teach in the secondary schools.

The **Minor in English** (p. 190) gives students maximum flexibility to explore the department’s range of offerings in American Studies, creative and persuasive writing, drama, English Education, film, linguistics, literary theory, popular culture, women’s and gender studies, and world literature.

The **Minor in Writing and Rhetoric** (p. 210) empowers students from an array of disciplines to write effective, persuasive prose for a variety of audiences, contexts, and purposes.

The **Minor in Creative Writing** (p. 186) offers talented fiction writers, essayists, and poets an opportunity to develop their voices and hone their craft through a progression of workshop courses in and across genres taught by our award-winning writers. Students also learn to read like a writer and engage in hands-on experiences.

**Awards and Scholarships**

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

- **Best Paper by a First-Year Student Award**
- **Best Paper by an Upper-Level Student Award**
- **John and Eleanor Courts Memorial Scholarship**
- **Albert A. Dunn Book Grant Award**
- **Albert A. Dunn Memorial Scholarship**
- **Laura D. Foster 1929 Graduates' Fund Award**
- **Crescense Ehmke Graham Scholarship**
- **Terry Mosher Writing the Natural World Award**
- **The Mac Nelson Scholarship**
- **Dr. John Robert Quatroche Scholarship**
- **Henry F. Salerno Scholarship**
- **Dr. Robert and Joanne L. Schweik Scholarship**
- **The Howard Herkimer and Hildegard Maytum Strong Scholarship**
- **Mary Louise White Book Scholarship**
- **Mary Louise White Excellence in Creative Writing Award**
- **Mary Louise White Fiction Award**
- **Mary Louise White Poetry Award**

**Honor Society**

Qualified undergraduate students may apply for membership in the international English honor society, Sigma Tau Delta. Candidates for undergraduate membership must have four semesters of college work, as well as a minimum of four college courses in the English Department at Fredonia beyond the usual requirement for Craft of Writing. They must also have a minimum of a 3.5 grade point average in English courses.

**English Department Honors Program**

Students enrolled in Honors in English write a thesis during the senior year on a topic related to literature, language, or English pedagogy. Students can be nominated by a faculty member or may nominate themselves; nominations must be accompanied by a brief
recommendation from a faculty member. Nominations should be made to the department’s chairperson.

Students writing an English Honors Thesis should enroll in HONR 400 (p. 364). Students who choose to write the thesis in the fall semester should use the preceding summer for research. Students who choose to write the thesis in the spring semester should use the fall semester for research by taking ENGL 490 Independent Study. Before beginning work on the thesis, the student should identify a faculty member who will be willing to serve as the thesis director. The completed thesis should be read by the director and one other reader, who will typically be a member of the English Department but who may, if the topic so requires, be from another department.

Requirements for Transfer Credit
The English Department requires majors in English to complete a minimum of 21 credit hours of courses applied to the major at Fredonia. Thus, students transferring to Fredonia should normally expect no more than 21 credit hours earned elsewhere to apply to the major in English.

Advising
An assigned faculty advisor will aid each student majoring in English or English Adolescence Education in completing his or her portfolio or e-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 puts course descriptions on our website that feature additional details each semester that are not found in the University Catalog, such as required texts and assignments. Please see https://www.fredonia.edu/academics/colleges-schools/college-liberal-arts-sciences/english/fredonia-english-courses

ENGLISH - B.A. DEGREE

Department of English
Office: 278 Fenton Hall
(716) 673-3125
Bruce Simon, Chairperson
Email: english.department@fredonia.edu
Website: https://www.fredonia.edu/academics/colleges-schools/college-liberal-arts-sciences/english

- The major in English requires a minimum of 42 credit hours of courses selected according to the outline given below. It also requires the completion of an e-portfolio. In special circumstances, a particular course requirement may be waived and another course substituted. Students seeking a waiver of a particular course requirement should consult their advisors and complete a Degree Exception Request form; approval for such waivers is granted by the English Department chairperson or designee.
- All students must earn a grade of C or higher in all courses required for completion of the major.
- Majors must take one course in literature written before 1800 from among ENGL 291, ENGL 312, ENGL 389, ENGL 397, ENGL 408, ENGL 412, ENGL 414, ENGL 416, ENED 413.
- A course in the Theoretical Approaches category is a prerequisite for ENGL 400.
- No more than 6 credit hours earned in any combination of internships and independent studies may be counted toward the major.
- All English majors must complete at least 45 credit hours at Fredonia in order to graduate, of which at least 21 credit hours must be taken within the major.
- All English majors must complete at least 45 upper-level credit hours in order to graduate, of which at least 24 credit hours must be taken at or above the 300 level within the major.
- Only Fredonia Foundations courses ENGL 227, 260, 274, and 296 will count toward the English major.
- All English majors must complete a separate minor or second major in another discipline, in creative writing, in writing and rhetoric, or in one of the interdisciplinary programs. Students choosing to minor in creative writing or writing and rhetoric would need more than 120 credit hours to reach 66 credit hours outside of English; students with these minors may count up to six (6) credit hours from them toward the major.
- All majors must complete at least 66 credit hours outside the major in order to graduate. Credits earned for ENGL 100 (Craft of Writing) do not count toward the major, but do count as credit hours outside the major. Credits transferred as ENGL 099 do not count toward the major, but do count as hours outside the major.

Major Requirements

Foundations Courses:
- ENGL 106 Introduction to Literary Studies 3
- ENGL 213 Texts and Contexts 3

Subtotal: 6

Literature/Textual Studies Courses:
Three (3) credit hours from each of the following categories:

Genres
These courses examine the development and cultural importance of one or more specific types of literature or popular culture and help students connect form,
conventions, and style to economic, political, and social circumstances.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 207</td>
<td>Drama and Film</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 209</td>
<td>Novels and Tales</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 215</td>
<td>Detective Fiction</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 216</td>
<td>Science Fiction</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 217</td>
<td>Fantasy Fiction</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 280</td>
<td>Introduction to Film</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 315</td>
<td>The Gothic Novel</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 318</td>
<td>Studies in Poetry</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 321</td>
<td>Contemporary Drama</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 329</td>
<td>Graphic Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 330</td>
<td>The Contemporary Novel</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 333</td>
<td>Environmental Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 405</td>
<td>Page and Stage</td>
<td>1.5-6</td>
</tr>
<tr>
<td>ENED 355</td>
<td>Adolescent Literature</td>
<td>3</td>
</tr>
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</table>

**Subtotal: 3**

### Literature and Identities

These courses explore the ways literature both reflects and shapes individual and group ideas of self and community, addressing issues like gender, sexuality, religious and cultural heritage, social class, race, and profession.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>ENGL 240</td>
<td>Introduction to African American Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 241</td>
<td>Introduction to Latino/a Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 242</td>
<td>American Indian Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 296</td>
<td>American Identities</td>
<td>3</td>
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<tr>
<td>ENGL 304</td>
<td>Latina Literature and Cultural Studies</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 314</td>
<td>Women Writers</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 331</td>
<td>American Literary Roots</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 340</td>
<td>Black Women Writers</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 342</td>
<td>African American Autobiography</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 344</td>
<td>Contemporary Multiethnic American Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 390</td>
<td>Jewish Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 396</td>
<td>Russian Literature</td>
<td>3</td>
</tr>
</tbody>
</table>

**Subtotal: 3**

### Literary History I (Broad)

These survey and landmarks courses enable students to develop a big picture of how changes in literary styles, movements, and modes relate to their changing cultural contexts.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 204</td>
<td>Survey of English Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 206</td>
<td>Survey of American Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 301</td>
<td>American Literary Landmarks</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 302</td>
<td>British Literary Landmarks</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 422</td>
<td>English Novel I</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 424</td>
<td>English Novel II</td>
<td>3</td>
</tr>
</tbody>
</table>

**Subtotal: 3**

### Literary History II (Focused)

These courses delve deeply into one period or movement of literature in order to closely examine how writers of a time address important social and political issues through art.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 310</td>
<td>Medieval Literature</td>
<td>3</td>
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<tr>
<td>ENGL 312</td>
<td>Renaissance Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 313</td>
<td>Scribbling Women</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 316</td>
<td>The Early 17th Century</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 319</td>
<td>Modern Drama</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 320</td>
<td>The Restoration and 18th Century</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 322</td>
<td>The Romantic Age</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 326</td>
<td>Victorian Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 327</td>
<td>Modern European Literature</td>
<td>3</td>
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<tr>
<td>ENGL 328</td>
<td>Modern British Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 332</td>
<td>American Romanticism in Literature</td>
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</tr>
<tr>
<td>ENGL 334</td>
<td>Realism/Naturalism in American Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 335</td>
<td>Modern American Poetry</td>
<td>3</td>
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<tr>
<td>ENGL 336</td>
<td>Modernism in American Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 338</td>
<td>Contemporary American Literature</td>
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<tr>
<td>ENGL 339</td>
<td>Contemporary American Poetry</td>
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<tr>
<td>ENGL 341</td>
<td>Harlem Renaissance</td>
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<tr>
<td>ENGL 397</td>
<td>Discourses of the Enlightenment</td>
<td>3</td>
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<tr>
<td>ENGL 416</td>
<td>Elizabethan Drama</td>
<td>3</td>
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<tr>
<td>ENGL 418</td>
<td>Restoration/18th Century Drama</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 430</td>
<td>Bloomsbury Modernism</td>
<td>3</td>
</tr>
</tbody>
</table>

**Subtotal: 3**

### World Literature

In our increasingly global society, engagement with the writings of different cultures is essential to intercultural communication, understanding, and empathy. These courses offer students the chance to travel literarily across the globe and to examine different perspectives, aesthetics, and writing styles.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 205</td>
<td>Epic and Romance</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 211</td>
<td>World Poetry</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 291</td>
<td>The Bible as Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 300</td>
<td>European Literary Landmarks</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 303</td>
<td>Global Literary Landmarks</td>
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</tr>
<tr>
<td>ENGL 306</td>
<td>Middle Eastern Literatures</td>
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</tr>
<tr>
<td>ENGL 386</td>
<td>Women in Global Cinema</td>
<td>4</td>
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<tr>
<td>ENGL 389</td>
<td>Greek and Roman Literature</td>
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</tr>
<tr>
<td>ENGL 391</td>
<td>Romanticism in World Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 392</td>
<td>Asian Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 393</td>
<td>Literatures of Colonization and Globalization</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 394</td>
<td>Japanese Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 395</td>
<td>Non-Western Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 408</td>
<td>Arthurian Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 425</td>
<td>Irish Literature</td>
<td>3</td>
</tr>
</tbody>
</table>

**Subtotal: 3**
Major Author

These courses explore the lives, works, and impact of one or two specific authors. Students can see how social and cultural experiences shape a writer’s craft, themes, reception, and influences.

ENGL 387 American Film Directors 4
ENGL 410 Chaucer 3
ENGL 412 Early Shakespeare 3
ENGL 414 Later Shakespeare 3
ENGL 420 Milton 3
ENGL 427 Major Writers 3
ENED 413 Teaching Shakespeare 3

Subtotal: 3

Theoretical and Rhetorical Approaches Courses:

Nine (9) credit hours from the following categories:

Theoretical Approaches (minimum of 3 credits)

These courses provide students with a range of methodologies for examining cultural texts and/or social issues.

ENGL 324 Myth and Symbol in Literature 3
ENGL 343 Queer Studies in Literature 3
ENGL 345 Critical Reading 3
ENGL 346 History of Literary Criticism 3
ENGL 348 Modern Literary Criticism 3
ENGL 349 Theories of Gender 3
ENGL 380 Film: Silence to Sound 4
ENGL 381 Narrative Film After 1940 4
ENGL 446 Contemporary Literary Theory 3
ENED 357 Literacy/Language/Learning Theory 3

Subtotal: 3

Rhetorical Writing (minimum of 3 credits)

These advanced writing-focused courses offer practical strategies, methods, and tools for developing clear, accurate, and effective writing for a variety of genres, contexts, audiences, and purposes.

ENGL 366 Opinion in Journalism 3
ENGL 367 Advanced Composition 3
ENGL 369 Argumentative Writing 3
ENGL 372 Grammar and Style for Writers 3
ENGL 374 Writing and Social Change 3
ENGL 375 Writing for the Professions 3
ENGL 377 Academic Writing 3
ENGL 378 Advanced Writing I: The Essay 3
ENGL 379 Writing in a Digital World 3
ENGL 455 Writing Tutors 3

Subtotal: 3

and an additional Theoretical Approaches or Rhetorical Writing course

Subtotal: 3

Elective Courses:

Subtotal: 6

Capstone Experience:

A course in the Theoretical Approaches category is a prerequisite for ENGL 400.

ENGL 400 Senior Seminar 3
ENGL 401 Portfolio Completion 0

Subtotal: 3

Subtotal: 42

Total Credit Hours: 42

EXERCISE SCIENCE - B.S. DEGREE

Department of Biology
Office: 221 Science Center
(716) 673-3282
Todd Backes, Program Coordinator
Email: Todd.Backes@fredonia.edu
Website: http://home.fredonia.edu/biology

MAJOR REQUIREMENTS

Core Courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 131</td>
<td>Introductory Ecology and Evolution</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 132</td>
<td>Introductory Ecology and Evolution Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>BIOL 133</td>
<td>Introductory Cell and Molecular Biology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 134</td>
<td>Introductory Cell and Molecular Biology Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>BIOL 220</td>
<td>Principles of Human Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 245</td>
<td>Human Anatomy and Physiology I</td>
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<tr>
<td>BIOL 246</td>
<td>Human Anatomy and Physiology II</td>
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</tr>
<tr>
<td>EXSC 250</td>
<td>Introduction to Applied Human Physiology</td>
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<tr>
<td>EXSC 300</td>
<td>Exercise Physiology</td>
<td>4</td>
</tr>
<tr>
<td>EXSC 302</td>
<td>Exercise Prescription</td>
<td>3</td>
</tr>
<tr>
<td>EXSC 350</td>
<td>Kinesiology</td>
<td>3</td>
</tr>
<tr>
<td>EXSC 425</td>
<td>Biomechanics</td>
<td>3</td>
</tr>
<tr>
<td>EXSC 491</td>
<td>Senior Capstone - Research</td>
<td>1-3</td>
</tr>
<tr>
<td>EXSC 492</td>
<td>Senior Capstone - Internship</td>
<td>1-3</td>
</tr>
<tr>
<td>EXSC 493</td>
<td>Senior Capstone - Course</td>
<td>3</td>
</tr>
</tbody>
</table>
Upper level electives (300 level or higher) by advisement 9

Subtotal: 45

NOTE:
• EXSC 491 and EXSC 492 are variable, 1-3 credit hour courses. Students are to complete the course they are advised to enroll in for at least 3 credit hours to satisfy the degree requirement.

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

PHYS 121 College Physics I 3
PHYS 123 College Physics Lab I 1

PHYS 122 College Physics II 3
PHYS 124 College Physics II Lab 1

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

PHYS 231 University Physics II 4
PHYS 233 University Physics II Lab 1

PSY 129 Foundations of Psychology 3

PSY Psychology Elective 200 level or higher 3

STAT 250 Statistics for Scientists 3

Subtotal: 25-27

Subtotal: 70-72

FRENCH - B.A. DEGREE

World Languages and Cultures
Office: E332 Thompson Hall
(716) 673-3380
Dr. David Kinkela, Chairperson
Email: David.Kinkela@fredonia.edu
Website: https://www.fredonia.edu/academics/colleges-schools/college-liberal-arts-sciences/world-languages-cultures

MAJOR REQUIREMENTS

Core Courses:
FREN 315 French Masterpieces 3
or
FREN 316 French Plays and Prose 3
FREN 317 French Conversation 3
FREN 318 French Composition 3
FREN 423 Senior Seminar 3

Plus an additional 24 credit hours of 300 or 400 level French courses

Total Credit Hours: 36

Students majoring in French should pass FREN 317, FREN 318, and FREN 315 or FREN 316 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.

All students are required to complete a separate minor whether it is in another language, in another discipline, or in an interdisciplinary program. Students select a minor in consultation with and approval of the department. Double majors and Adolescence Education majors in language are exempt from the minor requirement.

Childhood and Early Childhood Education majors may earn a concentration in French. Students should consult the Childhood (p. 45) or Early Childhood Education (p. 64) course requirements for these programs.

Students can apply a maximum of 21 credit hours of Study Abroad with a minimum grade of C toward the major in French.

Requirement for Transfer and Study Abroad Credits
A maximum of 21 credit hours of transfer and/or Study Abroad courses can apply to the major at Fredonia. All students are required to take 15 credit hours of their major in residence. They must complete 9 credit hours at the 300-level or above, the senior seminar and at least one other 400-level course at Fredonia.

A maximum of 9 credit hours of transfer and/or Study Abroad courses can apply to the minor. At least 6 credit hours at the 300-level should be taken in residence.

Geology and Environmental Sciences
Office: 112 Jewett Hall
(716) 673-3302
Justin Conroy, Chairperson
Email: geosciences@fredonia.edu
Website: http://home.fredonia.edu/earth

The Department of Geology and Environmental Sciences offers three degree programs.

The B.S. degree program in Geology (p. 105) 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. Graduates of this program will have met the educational requirements for licensure in the State of New York. 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.A. degree program in Earth Science (p. 66) 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 Environmental Sciences (p. 67) is intended primarily for students seeking a career in an environmentally related field such as conservation, climate change, wildlife, and forestry. The interdisciplinary nature of this program prepares students for a wide variety of possible careers including: environmental consulting, resource management, conservation scientist, aquatic and fishery research/management, wildlife management, conservation officer, and environmental and community planning.

The B.S. degree program in Adolescence Education (p. 24) is intended for those students who plan to teach earth science in secondary schools. It includes the fundamental courses in geology, meteorology, astronomy, and oceanography, which constitute the “content” of earth science, and the necessary professional education courses.

Students planning to pursue a career in the earth sciences as professional scientists should earn one of the B.S. degrees in Geology and Geochemistry, rather than the B.A. or B.S. degrees in Earth Science, because the former require a more rigorous background in physics and mathematics which is needed to pursue graduate studies in the geosciences or employment as professional scientists.

Teacher Certification: Students who desire to teach earth science in secondary schools may obtain initial certification by completing the B.S. degree program in Earth Science with its required professional courses in Education EDU 224, EDU 250, EDU 303, EDU 304, EDU 349, EDU 430 and Science Education SCED 105, SCED 276, SCED 303, SCED 305, SCED 419). Students in all education programs are required to demonstrate competence in a foreign language. This requirement may be satisfied in any one of the following ways: (1) Achieving an 85 percent on a Regents language exam, (2) Achieving a 65 percent or better on a Regents language exam and successfully completing an Elementary I or Elementary II level college language course, (3) successfully completing Elementary I level and Elementary II level college language courses in the same language, or (4) successfully completing an equivalent Fredonia language proficiency exam. The College Core Curriculum foreign language requirement differs from the certification requirement and must be satisfied for degree conferral. Students are screened by the department chairperson before entering SCED 419.

Students are encouraged to participate in the activities of the Geology Club.

The department awards textbook scholarships for academic achievement each semester and annually presents the MacDiarmid Award to the department’s outstanding graduating senior, the Paul D. Willette Scholarship to the outstanding junior, the Walther M. Barnard Geosciences Scholarship to the outstanding sophomore, and the Mark D. and April Hoefner Orgren Scholarship to the outstanding freshman. The Susan Mara Scholarship is awarded by the faculty to students deserving of special recognition, and the Florence M. Eikenburg scholarship is awarded to outstanding sophomore or junior majors, with first preference going to female students. In addition, the department awards the Spatial Studies Award to outstanding students pursuing studies in Geographic Information Systems (GIS) and related fields, the Gary and Eileen Lash Award to promote student growth in the area of field studies, and the Temporal Studies Award for students doing outstanding work in time-based studies of geological processes relevant to issues facing society.

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 - B.S. DEGREE (LICENSURE - QUALIFYING)

Department of Geology and Environmental Sciences
Office: 112 Jewett Hall
(716) 673-3302
Justin Conroy, Chairperson
Email: geosciences@fredonia.edu
Website: http://home.fredonia.edu/earth

MAJOR REQUIREMENTS

Core Courses:
- GEO 102 Freshman Seminar 1
- GEO 165 Planet Earth 3
- GEO 169 Planet Earth Lab 1
- GEO 210 Earth History 3
- GEO 211 Earth History Lab 1
- GEO 330 Geomorphology 4
- GEO 345 Paleontology 4
- GEO 370 Structural Geology 4
- GEO 400 Stratigraphy 4
- GEO 411 Mineralogy 4
- GEO 421 Petrology 4
GEO 459  Seminar in Geosciences         1
GEO 460  Senior Seminar                1
GEO 461  Field Geology                3
One GEO or GIS 300/400 level elective course 3-4

Subtotal: 41-42

Supporting Courses:

MATH 120 Survey of Calculus I          3
MATH 121 Survey of Calculus II         3
or
MATH 122 University Calculus I         4
MATH 123 University Calculus II        4
CHEM 115 General Chemistry Lecture I  3
CHEM 125 General Chemistry Laboratory I 1
CHEM 116 General Chemistry Lecture II 3
CHEM 126 General Chemistry Laboratory II 1
PHYS 121 College Physics I             3
PHYS 123 College Physics Lab I         1
and
PHYS 122 College Physics II            3
PHYS 124 College Physics II Lab        1
or
PHYS 230 University Physics I          4
PHYS 232 University Physics I Lab      1
and
PHYS 231 University Physics II         4
PHYS 233 University Physics II Lab     1
STAT Statistics 200 level course or higher 3

Subtotal: 25-29

Subtotal: 66-71

Total Credit Hours: 66-71

History

Office: E332A Thompson Hall
(716) 673-3277
David Kinkela, Chairperson
Email: history.department@fredonia.edu
Website: http://home.fredonia.edu/history

The Department of History offers a broad-based and worldwide curriculum, with an emphasis on developing critical thinking and writing skills. History majors study the complexities of the human experience, deepen their knowledge of their own society and its past, explore other cultures and societies, and prepare for life in a multi-cultural and international community. The History major also prepares the student for a variety of career opportunities in business and industry, including development planning, data analytics, and publishing. In addition, many History majors pursue careers in government, public policy, the law, higher education, journalism, librarianship, and public history. The Social

Studies Adolescence Education major prepares students to teach social studies in middle school and high school.

Internships: The history department facilitates internships at local museums and archives, in Washington, D.C. and Albany, N.Y., and within the university. The department also encourages students to participate in international experiences and earn college credit through the Study Abroad or Student Exchange programs, as well as through department-sponsored short-term Study Abroad experiences.

Scholarships and Awards

The department gives a variety of scholarships and awards. These include the Helen B. Mancuso Scholarship for junior or senior majors; the MacPhee Scholarship for junior majors; the David H. Carnahan Scholarship; the Kenneth E. Cutler Scholarship; the Kim Korhummel Scholarship; the Robert and Marilyn Maytum Scholarship for incoming freshman majors; the Joseph T. Gallagher Memorial Scholarship for minority students pursuing careers in education; the Zimmer History Scholarship for students pursuing a career in law or communications; and the William and Helen Chazanof Award for student work in local history. The department also annually recognizes Outstanding History and Social Studies majors and an Outstanding History paper. The department inducts juniors and seniors who have done excellent work in history courses into Phi Alpha Theta, the national history honor society, and encourages students to present papers at the annual regional conference of the society.

HISTORY/SOCIAL STUDIES ADOLESCENCE EDUCATION DOUBLE MAJOR

In order to achieve a double major in History and Social Studies-Adolescence Education, the student must complete the History Capstone course, as well as 3-6 credit hours of HIST classes in consultation with academic advisor.

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 - B.A. DEGREE

Department of History
Office: E332A Thompson Hall
(716) 673-3277
David Kinkela, Chairperson
Email: history.department@fredonia.edu
MAJOR REQUIREMENTS

Forty-two (42) credit hours in history, at least 18 credit hours of which must be at the 300-level or above, with the exception that follows. Of those 18 credit hours, 3 credit 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 (Decoding History) and HIST 201 (Doing History). All students must complete a Capstone Seminar (HIST 495/HIST 499*). Selected students will have the opportunity to participate in the History Department Honors Program. Students must earn at least a C- in all classes required for the major.

The program must include the following:

Methodologies:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>HIST 100</td>
<td>Decoding History</td>
<td>3</td>
</tr>
<tr>
<td>HIST 201</td>
<td>Doing History</td>
<td>3</td>
</tr>
<tr>
<td>HIST 202</td>
<td>Applied History</td>
<td>3</td>
</tr>
<tr>
<td>HIST 495</td>
<td>Capstone Seminar</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td></td>
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<tr>
<td>HIST 499</td>
<td>Honors Research Seminar</td>
<td>3</td>
</tr>
</tbody>
</table>

Subtotal: 12

NOTE:

• HIST 202: Students may also fulfill the Applied History requirement by taking a study abroad course, completing an internship, or taking a special topics course on a relevant subject. Discuss these possibilities with your advisor.

• HIST 499: By invitation only. The course is required for students who wish to graduate with honors in History.

Subtotal: 12

BREADTH OF KNOWLEDGE:

Four survey classes total, including ONE European, ONE American, and TWO Global as indicated below.

European History:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>HIST 232</td>
<td>Survey of Pre-Modern European History</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HIST 233</td>
<td>Survey of Modern European History</td>
<td>3</td>
</tr>
</tbody>
</table>

Subtotal: 3

American History:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST 222</td>
<td>Survey of Early U.S. History</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HIST 223</td>
<td>Survey of Modern U.S. History</td>
<td>3</td>
</tr>
</tbody>
</table>

Subtotal: 3

Global History:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST 243</td>
<td>Pre-Modern Global History</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>One (1) World Regional Civilization course</td>
<td>3</td>
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</tbody>
</table>

Subtotal: 6

NOTE:

• World Regional Civilization courses are numbered HIST 250-288.

Subtotal: 12

DEPTH OF KNOWLEDGE:

Six upper-level classes; two each in European, American, and Global as indicated below. The majority of these courses should be taken after you have completed your Breadth of Knowledge coursework.

European History:

Two (2) 300-Level courses:

Students will have taken a survey focused on either Pre-Modern or Modern Europe. At least one of these 300-level courses should focus on a different time period. (For example, if the student took HIST 232, Survey of Pre-Modern European History, then at least one of their 300-level courses needs to focus on the Modern period.) Select your 300-level courses in consultation with your advisor.

Subtotal: 6

American History:

Two (2) 300-Level courses:

Students will have taken a survey focused on either Early or Modern U.S. history. At least one of these 300-level courses should focus on a different time period. (For example, if the student took HIST 222, Survey of Early U.S. History, then at least one of their 300-level courses needs to focus on the Modern period.) Select your 300-level courses in consultation with your advisor.

Subtotal: 6

Global History:

Two (2) 300-Level courses

Subtotal: 6

Subtotal: 18

Total Credit Hours: 42

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.
INDUSTRIAL MANAGEMENT - B.S. DEGREE

Department of Physics
Office: 112 Jewett Hall
(716) 673-3302
Justin Conroy, Director
Email: industrial.management@fredonia.edu
Website: http://home.fredonia.edu/physics/indman

There is a well-recognized need for scientifically and technologically educated managers in the industrial and Research and Development (R & D) communities. The Industrial Management program at Fredonia is designed to serve this need by providing the necessary foundation in applied physics, business, economics, and mathematics. It is similar to many engineering and management programs. The curriculum is structured to prepare students for careers either in industry, governmental facilities or other organizations that address the present and future technological needs of our society. Graduates can also pursue advanced studies at graduate institutions.

The Industrial Management program is an integrated multidisciplinary curriculum combining courses from applied physics (24-25 credit hours), business/economics (24 credit hours), mathematics/computer science (17 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.

MAJOR REQUIREMENTS

Physics:
Phys 230 University Physics I 4
Phys 231 University Physics II 4
Phys 321 Engineering Statics 3
Phys 322 Mechanics of Solids 4
Phys 323 Circuit Analysis 4
or
Phys 325 Electronics 3
and
Phys 327 Electronics Lab 1
Phys 330 Thermodynamics 3

Mathematics/Computer Science:
Subtotal: 22
MATH 122 University Calculus I 4
MATH 123 University Calculus II 4
MATH 224 Differential Equations 3
CSIT 121 Computer Science I 3
or
CSIT 105 Visual BASIC I 3

Subtotal: 14

Business/Economics:
ACCT 201 Principles of Financial Accounting 3
ACCT 202 Principles of Managerial Accounting 3
ECON 205 Principles of Microeconomics 3
ECON 210 Principles of Macroeconomics 3
BUAD 310 Legal Environment of Business 3
BUAD 320 Managerial Finance 3
BUAD 323 Organizational Behavior 3
BUAD 328 Marketing Foundations 3

Subtotal: 24

Operations Research and Statistics:
BUAD 327 Operations Management 3
BUAD 427 Applied Quality Operations 3
ECON 200 Fundamentals of Statistics for Business Administration and Economics 3
or
STAT 350 Probability and Statistics 3
or
PSY 200 Statistics for Psychology 3
or
SOC 200 Statistics in the Real World 3

Subtotal: 9

Communications:
COMM 105 Public Speaking 3
ENGL 375 Writing for the Professions 3

Subtotal: 6

Total Credit Hours: 75

NOTE:
• 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.
• 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 the undergraduate interdisciplinary study self-design program
Office: 4th Floor Reed Library - Academic Advising Services
(716) 673-3188
Amy Marshall, Director of Academic Advising Services
Email: amy.marshall@fredonia.edu; interdisciplinary.studies@fredonia.edu
Website: http://home.fredonia.edu/interdisciplinary

For information on the graduate interdisciplinary study self-design program
Office: 804 Maytum Hall
(716) 673-3173
Office of Graduate Studies
Email: graduate.studies@fredonia.edu
Website: http://home.fredonia.edu/gradstudies/interdisciplinary-studies

INTRODUCTION TO THE UNDERGRADUATE INTERDISCIPLINARY STUDIES PROGRAM

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. 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 Provost for Curriculum, Assessment and Academic Support. Students should see the Associate Provost 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 minor should consult with the coordinator from the appropriate area. Minor programs and coordinators are listed on the chart. All minors must be formally declared through the Office of the Registrar.

Requirements for the Undergraduate Major in Interdisciplinary Studies Degree Program

- Student must complete a degree plan proposal and submit it for approval to the Associate Provost for Curriculum, Assessment and Academic Support.
- All students in this major program 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 45 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 at 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.

### INTERDISCIPLINARY STUDIES COORDINATORS

Students interested in the Interdisciplinary Studies minors should consult with the coordinator from the appropriate area.

<table>
<thead>
<tr>
<th>Areas of Study</th>
<th>Coordinators</th>
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</thead>
<tbody>
<tr>
<td>Dance Studio Administration</td>
<td>Angelika Summerton</td>
</tr>
<tr>
<td></td>
<td>Theatre &amp; Dance</td>
</tr>
<tr>
<td></td>
<td>147 Dods Hall</td>
</tr>
<tr>
<td></td>
<td>(716) 673-3355</td>
</tr>
<tr>
<td>Ethnic Studies includes:</td>
<td>Jennifer Hildebrand</td>
</tr>
<tr>
<td>African American Studies</td>
<td>History</td>
</tr>
<tr>
<td>Latinx Studies</td>
<td>E304 Thompson Hall</td>
</tr>
<tr>
<td>Native American Studies</td>
<td>(716) 673-3274</td>
</tr>
<tr>
<td>Film Studies</td>
<td>Shannon McRae</td>
</tr>
<tr>
<td></td>
<td>English</td>
</tr>
<tr>
<td></td>
<td>275 Fenton Hall</td>
</tr>
<tr>
<td></td>
<td>(716) 673-3884</td>
</tr>
<tr>
<td>Geographic Information Systems</td>
<td>Justin Conroy</td>
</tr>
<tr>
<td></td>
<td>Geosciences</td>
</tr>
<tr>
<td></td>
<td>112 Jewett Hall</td>
</tr>
<tr>
<td></td>
<td>(716) 673-3301</td>
</tr>
<tr>
<td>International Studies</td>
<td>Ivani Vassoler</td>
</tr>
<tr>
<td></td>
<td>Politics and International Affairs</td>
</tr>
<tr>
<td></td>
<td>E390 Thompson Hall</td>
</tr>
<tr>
<td></td>
<td>(716) 673-3887</td>
</tr>
<tr>
<td>Leadership Studies</td>
<td>Sue McNamara</td>
</tr>
<tr>
<td></td>
<td>School of Business</td>
</tr>
<tr>
<td></td>
<td>W315 Thompson Hall</td>
</tr>
<tr>
<td></td>
<td>(716) 673-3898</td>
</tr>
<tr>
<td>Program</td>
<td>Name</td>
</tr>
<tr>
<td>---------------------------------</td>
<td>--------------------------</td>
</tr>
<tr>
<td>Museum Studies</td>
<td>Nancy Hagedorn</td>
</tr>
<tr>
<td>Public Health</td>
<td>Randolph Hohle</td>
</tr>
<tr>
<td>Undergraduate INDS Self-Design</td>
<td>Carmen S. Rivera, Interim Associate Provost</td>
</tr>
<tr>
<td>Women's and Gender Studies</td>
<td>Jeffry Iovannone</td>
</tr>
</tbody>
</table>
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 and is graded on a satisfactory/unsatisfactory basis.

For more information on the Liberal Arts program, see Liberal Arts (p. 516).

Mathematical Sciences

Office: 223 Fenton Hall
(716) 673-3243

Julia Wilson, Chairperson

Keary Howard, Mathematics Education Coordinator
Email: mathematics.department@fredonia.edu
Website: http://www.fredonia.edu/department/math/

The goal of the programs in mathematics is to prepare students for the lifelong study and use of mathematics. The application of mathematics has made possible many of the technological advances now taken for granted. Conversely, problems in business, science and engineering, when formulated mathematically, often spur advances in mathematics. This interplay between mathematics and other disciplines has been growing and now includes many more areas than would have been thought possible only a few years ago.

The Department of Mathematical Sciences offers several undergraduate program options within mathematics. The Mathematics major is recommended for those who plan to pursue graduate study in mathematics or seek general employment following graduation. Students who plan a mathematics-related career in business, industry, or science may wish to major in Applied Mathematics. For students planning a career in teaching, the department offers two majors: Mathematics Adolescence Education (p. 29), to prepare high school mathematics teachers (grades 7 through 12), and Middle Childhood Education – Mathematics Specialist (p. 117), to prepare mathematics teachers for middle school (grades 5 through 9). Both teacher preparation programs lead to recommendation for Initial Certification in New York State.

The department offers a Mathematics 7-12 Master of Science in Education (p. 113) degree program to provide middle and high school mathematics teachers the opportunity to work towards Professional Certification. The department also offers minors in Mathematics, Applied Mathematics, Statistics, and Data Science, and, in collaboration with the Department of Physics, a degree program in Mathematics-Physics (p. 114). 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 requirements for the program are as follows:

- MATH 390 (Introduction to Mathematical Research, 2 credit hours);
- a MATH or STAT course numbered 311 or higher, to be approved by the Honors Mathematics Committee chairperson, that is an elective, i.e. not used to fulfill other program requirements for the student; and
- MATH 490 (Honors Thesis, 3 credit hours).

Generally, MATH 390 is taken in the spring semester of the student's junior year, and MATH 490 is taken in the senior year. The department also offers MATH 190 Honors Problem Solving each spring to a select group of freshmen who have been recommended by their calculus instructors. Although not a formal part of the Honors Program, MATH 190 is a good course for freshmen who like working on non-trivial problems and wish to further develop their analytical thinking skills.

Many mathematics students participate in the activities of the Mathematics Club (Chi Tau Omega). The club holds academic and social activities, and helps sponsor trips to professional meetings. In addition, Fredonia has a chapter of Pi Mu Epsilon, a national honorary society devoted to the promotion of scholarly activity in mathematics by students.

Several scholarships are awarded annually to mathematics majors based on academic performance and faculty recommendations: the Frank R. Olson Scholarship, the Earl G. Mathewson Memorial Scholarship, the Santa A. B. DiPasquale Memorial Scholarship, the Mark Buckenmeyer Scholarship, the Dr. Nelson C. & Louise A. Wood Memorial Fund Scholarship, the Boynton Scholarship, the Zastrow Scholarship, and the Myron T. Dana Scholarship.

For further details about the programs in mathematics, contact the chairperson of the Department of Mathematical Sciences. Interested persons should also examine the programs offered in Computer and Information Sciences.
**MATHEMATICS - B.S. DEGREE**

Department of Mathematical Sciences  
Office: 223 Fenton Hall  
(716) 673-3243  
Julia Wilson, Chairperson  
Keary Howard, Mathematics Education Coordinator  
Email: mathematics.department@fredonia.edu  
Website: http://www.fredonia.edu/department/math/  

**MAJOR REQUIREMENTS**

Core Courses:
- MATH 125  
  Software for Mathematics  
  3
- or
- CSIT 121  
  Computer Science I  
  3
- MATH 122  
  University Calculus I  
  4
- MATH 123  
  University Calculus II  
  4
- MATH 210  
  Mathematical Structures and Proof  
  4
- MATH 223  
  University Calculus III  
  4
- MATH 224  
  Differential Equations  
  3
- MATH 231  
  Linear Algebra  
  4
- MATH 323  
  Introductory Real Analysis  
  3
- MATH 331  
  Abstract Algebra I  
  3
- STAT 350  
  Probability and Statistics  
  3
- MATH 405  
  Senior Seminar  
  1
- MATH 332  
  Abstract Algebra II  
  3
- or
- MATH 420  
  Advanced Calculus  
  3

Two additional MATH or STAT courses numbered 311 or higher, as advised

Subtotal: 45

**NOTE:** Cooperative Engineering students following this track may substitute PHYS 425 for MATH 420.

All mathematics majors must complete a science course and its laboratory selected from the following:
- CHEM 115  
  General Chemistry Lecture I  
  3
  and
  CHEM 125  
  General Chemistry Laboratory I  
  1

or

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

Subtotal: 49-50

**Total Credit Hours: 49-50**

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.

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**MATHEMATICS 7-12 - M.S.ED**

Department of Mathematical Sciences  
Office: 223 Fenton Hall  
(716) 673-3243  
Julia Wilson, Chairperson  
Keary Howard, Graduate Coordinator  
Email: mathematics.department@fredonia.edu  
Website: http://home.fredonia.edu/math/mathmsed  

The Department of Mathematical Sciences offers a program leading to the Master of Science in Education: Mathematics 7-12. Candidates completing this program are eligible to be recommended for professional certification in "Mathematics 7-12" and/or "Mathematics 5-9," depending on their initial certification.

**REQUIREMENTS FOR ADMISSION TO THE PROGRAM WITHOUT DEFICIENCIES:**

Initial certification in New York State in Mathematics Adolescence Education, with a bachelor's degree in mathematics that includes courses equivalent to:
- MATH 210  
  Mathematical Structures and Proof  
  4
- MATH 223  
  University Calculus III  
  4
- MATH 323  
  Introductory Real Analysis  
  3
- MATH 331  
  Abstract Algebra I  
  3
- at least two of the following:
  - MATH 341  
    Geometry  
    3
  - STAT 350  
    Probability and Statistics  
    3
  - MATH 381  
    History of Mathematics  
    3

Subtotal: 20

Initial certification in New York State in Middle Childhood Education - Mathematics Specialist, with a bachelor's degree in mathematics that includes courses equivalent to:
- MATH 123  
  University Calculus II  
  4
- MATH 201  
  Concepts of Foundational Mathematics: A Problem Solving Approach  
  3
- or
- MATH 202  
  Concepts of Foundational Mathematics II  
  3
- MATH 210  
  Mathematical Structures and Proof  
  4
- MATH 231  
  Linear Algebra  
  4
- MATH 341  
  Geometry  
  3
- MATH 381  
  History of Mathematics  
  3
- MAED 303  
  Advanced Mathematics for School Teachers  
  3
  and
  a statistics course

Subtotal: 30

**Program Requirements**
The program requires a minimum of 30 credit hours at the graduate level distributed as follows. The student's advisor or the department chairperson must approve any course used to fulfill the requirements below:

1. A course in research methods
2. A minimum of three courses covering three of the following categories:
   a. historical, philosophical, or comparative foundations of education,
   b. design and evaluation of mathematics curricula,
   c. instructional methods,
   d. use of educational technology in the teaching and learning of mathematics,
   e. psychological foundations of education.
3. A minimum of four courses covering four of the following categories:
   a. algebra or analysis,
   b. geometry or topology,
   c. number theory, probability, or statistics,
   d. history or philosophy of mathematics,
   e. applications of mathematics,
   f. any approved course in mathematics.
4. Mathematics Education Seminar (MAED 602)
5. Graduate Project (MAED 690)

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

For certification information, students should check the Graduate Teacher Education Certification (p. 607) section of the catalog.

### MAJOR REQUIREMENTS

**Computer Science Requirement:**
- CSIT 106 Scientific Programming Using C/C++ 3
- or
- CSIT 121 Computer Science I 3

Subtotal: 3

**Mathematics Requirements:**
- MATH 122 University Calculus I 4
- MATH 123 University Calculus II 4
- MATH 223 University Calculus III 4
- MATH 210 Mathematical Structures and Proof 4
- MATH 224 Differential Equations 3
- MATH 231 Linear Algebra 4

Subtotal: 23

**Mathematics or Mathematics/Physics Sequence:**
- MATH 323 Introductory Real Analysis 3
- and
- MATH 420 Advanced Calculus 3
- or
- MATH 323 Introductory Real Analysis 3
- and
- PHYS 425 Mathematical Physics I 3
- or
- PHYS 425 Mathematical Physics I 3
- and
- PHYS 426 Mathematical Physics II 3

Subtotal: 6

**Physics Requirements:**
- PHYS 230 University Physics I 4
- PHYS 232 University Physics I Lab 1
- PHYS 231 University Physics II 4
- PHYS 233 University Physics II Lab 1
- PHYS 234 Modern Physics 4
- PHYS 431 Introduction to Quantum Mechanics 3
- PHYS 400 Undergraduate Seminar Plus 9 additional credit hours from Physics 321-479, 490

Subtotal: 27

**One Course Chosen From:**
- PHYS 330 Thermodynamics 3
- PHYS 331 Theoretical Mechanics 3
- PHYS 333 Electricity and Magnetism 3

Subtotal: 3

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**MATHEMATICS-PHYSICS - B.S. DEGREE**

**Physics Department**
Office: 205 Jewett Hall
(716) 673-3301
Dr. Justin Conroy, Chairperson
Email: Physics.Department@fredonia.edu
The training of students during the senior clinical internship under affiliation agreements entered into by the university, compared to a national passage rate of only 83 percent. An attempt has been 100 percent over the past 10 years, passing the Board of Registry Examination on the first attempt.

The percentage of Fredonia Medical Technology students received a B.S. degree in Medical Technology and have obtained N.Y.S. licensure. Technologists in N.Y.S. hospitals 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 obtain jobs within their discipline by the time they graduate; in most cases, they have job offers several months prior to graduation.

The program is recommended for students wishing to prepare for careers as clinical diagnostic scientists in hospital, forensic, industrial and biotechnology laboratories, and as sales representatives for pharmaceutical, medical instrumentation and computer companies. The curriculum requires the student to study three years at Fredonia and one year in an accredited clinical hospital program. Contracted agreements with three hospitals allow internship placement for qualified students who have successfully completed university requirements. Entrance to the clinical program is highly competitive, and generally requires a minimum 3.0 science GPA, strong letters of recommendation, and interviews. The clinical year consists of study in a hospital laboratory where students are supervised and instructed by medical technologists and physicians. After successful completion of the internship, students receive clinical certification from the hospital, 30 university credits, and the B.S. degree with a major in Medical Technology from Fredonia.

Students are then eligible to take the Board of Registry exam given by the American Society of Clinical Pathologists. Passage of the exam results in national board certification. Graduates are also eligible for licensure through the N.Y.S. Education Department Office of the Professions. The only individuals able to work as Medical Technologists in N.Y.S. hospitals are those who have received a B.S. degree in Medical Technology and have obtained N.Y.S. licensure.

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 obtain jobs within their discipline by the time they graduate; in most cases, they have job offers several months prior to graduation.

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The Medical Technology program requires students to complete 34 credit hours of biology courses and 30 credit hours of medical technology courses. Students are expected to complete at least half of the biology courses at Fredonia. Additional credit hours transferred may be used as general electives toward graduation. As a rule, the department will not accept as equivalent for upper level courses, credit earned at two-year colleges.

MEDICAL TECHNOLOGY - B.S. DEGREE

Department of Biology
Office: 221 Science Center
(716) 673-3282
Ted Lee, Chairperson
Email: biology@fredonia.edu
Website: https://www.fredonia.edu/academics/colleges-sciences/biology/medtech

Core Requirements:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 131</td>
<td>Introductory Ecology and Evolution</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 132</td>
<td>Introductory Ecology and Evolution</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 133</td>
<td>Introductory Cell and Molecular Biology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 134</td>
<td>Introductory Cell and Molecular Biology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 237</td>
<td>Genetics</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 238</td>
<td>Genetics Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>BIOL 245</td>
<td>Human Anatomy and Physiology I</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 246</td>
<td>Human Anatomy and Physiology II</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 256</td>
<td>Introduction to Clinical Science</td>
<td>1</td>
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<tr>
<td>BIOL 333</td>
<td>Biochemistry</td>
<td>3</td>
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<td>BIOL 334</td>
<td>Biochemistry Laboratory</td>
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BIOL 338 Microbiology 4  
BIOL 344 Parasitology 1  
BIOL 431 Senior Seminar 1  
BIOL 453 Basic Hematology 1  
BIOL 461 Immunology and Serology 3  

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 338</td>
<td>Microbiology</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 344</td>
<td>Parasitology</td>
<td>1</td>
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<tr>
<td>BIOL 431</td>
<td>Senior Seminar</td>
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</tr>
<tr>
<td>BIOL 453</td>
<td>Basic Hematology</td>
<td>1</td>
</tr>
<tr>
<td>BIOL 461</td>
<td>Immunology and Serology</td>
<td>3</td>
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</table>

**Subtotal: 35**

**Clinical Internship**

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credits</th>
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<tbody>
<tr>
<td>MEDT 490</td>
<td>Clinical Internship</td>
<td>15</td>
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<tr>
<td>MEDT 491</td>
<td>Clinical Internship</td>
<td>15</td>
</tr>
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</table>

**Subtotal: 30**

**Required supporting course work:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 115</td>
<td>General Chemistry Lecture I</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 125</td>
<td>General Chemistry Laboratory I</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 116</td>
<td>General Chemistry Lecture II</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 126</td>
<td>General Chemistry Laboratory II</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 215</td>
<td>Organic Chemistry Lecture I</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 225</td>
<td>Organic Chemistry Laboratory I</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 216</td>
<td>Organic Chemistry Lecture II</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 226</td>
<td>Organic Chemistry Laboratory II</td>
<td>1</td>
</tr>
<tr>
<td>STAT 250</td>
<td>Statistics for Scientists</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 121</td>
<td>College Physics I</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 123</td>
<td>College Physics Lab I</td>
<td>1</td>
</tr>
<tr>
<td>PHYS 122</td>
<td>College Physics II</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 124</td>
<td>College Physics II Lab</td>
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<td>PHYS 230</td>
<td>University Physics I</td>
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<tr>
<td>PHYS 232</td>
<td>University Physics I Lab</td>
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<td>PHYS 231</td>
<td>University Physics II</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 233</td>
<td>University Physics II Lab</td>
<td>1</td>
</tr>
</tbody>
</table>

**Subtotal: 27-29**

NOTE: Chemistry and mathematics courses should be completed by the end of the sophomore year, physics courses by the end of the junior year.

Subtotal: 92-94

**Total Credit Hours: 92-94**

**Clinical Internship Courses (MEDT 490 and MEDT 491)**

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/Coeagulation:** 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.
MATH MIDDLE CHILDHOOD SPECIALIST -
B.S. DEGREE

Mathematical Sciences
Office: 223 Fenton Hall
(716) 673-3243
Julia Wilson, Chairperson
Keary Howard, Mathematics Education Coordinator
Email: mathematics.department@fredonia.edu
Website: https://www.fredonia.edu/academics/colleges-schools/college-liberal-arts-sciences/mathematics-adolescence-education

MAJOR REQUIREMENTS

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 122</td>
<td>University Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>MATH 123</td>
<td>University Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>MATH 202</td>
<td>Concepts of Foundational Mathematics II</td>
<td>3</td>
</tr>
<tr>
<td>MATH 210</td>
<td>Mathematical Structures and Proof</td>
<td>4</td>
</tr>
<tr>
<td>MATH 231</td>
<td>Linear Algebra</td>
<td>4</td>
</tr>
<tr>
<td>MATH 201</td>
<td>Concepts of Foundational Mathematics: A Problem Solving Approach</td>
<td>3</td>
</tr>
<tr>
<td>MAED 303</td>
<td>Advanced Mathematics for School Teachers</td>
<td>3</td>
</tr>
<tr>
<td>MAED 310</td>
<td>Reading and Writing Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>MATH 341</td>
<td>Geometry</td>
<td>3</td>
</tr>
<tr>
<td>STAT 150</td>
<td>Statistical Ideas</td>
<td>3</td>
</tr>
<tr>
<td>MAED 240</td>
<td>Statistics for School Teachers</td>
<td>3</td>
</tr>
<tr>
<td>STAT 350</td>
<td>Probability and Statistics</td>
<td>3</td>
</tr>
<tr>
<td>MATH 381</td>
<td>History of Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>MATH 405</td>
<td>Senior Seminar</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>One additional MATH or STAT course numbered 311 or higher</td>
<td>3</td>
</tr>
<tr>
<td>MAED 105</td>
<td>Introduction to Contemporary Mathematics Education</td>
<td>3</td>
</tr>
<tr>
<td>MAED 106</td>
<td>Contemporary Mathematics Education - Field Experience</td>
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<tr>
<td>EDU 224</td>
<td>Adolescent Development</td>
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<tr>
<td>EDU 250</td>
<td>Introduction to the Exceptional Learner</td>
<td>3</td>
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<tr>
<td></td>
<td>and</td>
<td></td>
</tr>
<tr>
<td>EDU 251</td>
<td>Practicum in Inclusive Education II</td>
<td>1</td>
</tr>
<tr>
<td>MAED 276</td>
<td>Literacy and Technology for Science and Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>EDU 303</td>
<td>Safe Schools/Healthy Students-DASA: Safety Education/Fire and Arson/School Violence</td>
<td>1</td>
</tr>
<tr>
<td>EDU 304</td>
<td>Safe Schools &amp; Healthy Students</td>
<td>1</td>
</tr>
<tr>
<td>MAED 305</td>
<td>Diversity in the Teaching of Science and Mathematics</td>
<td>3</td>
</tr>
</tbody>
</table>

Subtotal: 83

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

Chemistry:
CHEM 115 General Chemistry Lecture I 3
CHEM 125 General Chemistry Laboratory I 1
Subtotal: 4

or

Physics:
PHYS 230 University Physics I 4
PHYS 232 University Physics I Lab 1
Subtotal: 5

NOTE:
- Majors in the Middle Childhood Specialist - Mathematics Track may satisfy this requirement by taking SCI 301, SCI 302, and SCI 303.

Total Credit Hours: 87-88

Candidates in all education programs are required to demonstrate competence in a foreign language. Proficiency requirement met by the following:

- Fredonia Placement Exam determination of Fredonia Foundations courses 100 and 110 in the same World Language or course 110 (or higher) in World Language.

- Proficiency may also be fulfilled by qualifying AP, IB, CLEP Exam scores or transferred courses of Elem I and Elem II of same language, as verified by Registrar’s Office.

The General Education foreign language requirement (p. Error! Bookmark not defined.) differs from the certification requirement and must be satisfied for degree conferral.
As of December 31, 2013, candidates in all education programs are required to complete training under the Dignity for All Students Act (DASA). Beginning in the Fall 2013 semester, the training required under the Dignity for All Student Act (DASA) will be included in EDU 303 at Fredonia. Undergraduate candidates planning to graduate after Fall 2013 who have already completed EDU 303 on campus or taken a workshop as a substitution for EDU 303 must also complete the EDU DASA workshop prior to graduation.

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 (p. 72) section of the catalog.

**MOLECULAR GENETICS - B.S. DEGREE**

**Department of Biology**  
Office: 221 Science Center  
(716) 673-3282  
Ted Lee, Department Chairperson  
Scott B. Ferguson, Program Coordinator  
Email: biology@fredonia.edu  
Website: http://home.fredonia.edu/biology/molgen

Virtually all areas of the life sciences use molecular approaches to solve biological problems. Molecular Genetics majors will develop a strong background in genetics, cell biology, biochemistry, and developmental biology that will develop a strong background in genetics, cell biology, biochemistry, and developmental biology that allows students to address problems in medicine, physiology, agriculture, environmental science, industry, forensics and basic biology. Indeed, molecular genetics is playing a central role in virtually all aspects of modern biology from genes to ecosystems.

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 medicine, molecular biology, and biotechnology. Students enrolled in the program will gain experience in DNA cloning, fluorescent microscopy, protein biochemistry, forensic DNA analysis, bioinformatics, gene editing, and DNA sequencing, which form the backbone of molecular genetics research. Graduates in Molecular Genetics are well prepared for graduate work in molecular biology, cell biology, biochemistry, and developmental biology, genetic counseling or forensic science as well direct 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. The program then allows students to specialize in genetics, development, cell biology, biochemistry, and/or physiology. Many of the upper-level lab courses engage students in a research project setting. This provides bona fide research opportunities to all students as well as comprehensive, hands-on experience with the techniques employed in modern biomedical 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 are available in molecular or cellular biology, biochemistry, physiology, behavior, aquatic biology and ecology. Students interested in research frequently complete a capstone research project as the culmination of their undergraduate experience.

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 are supported by the the Holmberg Foundation, Falcone Endowment, Dr. Robert Wettingfeld Endowment, Constantine Barker Memorial Endowment, Biology Endowment, and the Yunghans-Dieter Award. Each award provides the student with a generous stipend and a supplies budget. For more information, interested students should contact a faculty sponsor in the department.

Each student performs a capstone experience in their senior year. The experience can take the form of research, an internship, a study abroad experience, or course, and provides significant learning experiences in problem solving and written and oral communication. These capstone experiences are extremely important in helping the student prepare for entry into professional programs, graduate school or employment.

**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.
## MAJOR REQUIREMENTS

### Core Courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 131</td>
<td>Introductory Ecology and Evolution</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 132</td>
<td>Introductory Ecology and Evolution Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>BIOL 133</td>
<td>Introductory Cell and Molecular Biology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 134</td>
<td>Introductory Cell and Molecular Biology Laboratory</td>
<td>1</td>
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<tr>
<td>BIOL 237</td>
<td>Genetics</td>
<td>3</td>
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<tr>
<td>BIOL 238</td>
<td>Genetics Laboratory</td>
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<tr>
<td>BIOL 243</td>
<td>Organismal Biology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 333</td>
<td>Biochemistry</td>
<td>3</td>
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<td>BIOL 334</td>
<td>Biochemistry Laboratory</td>
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<tr>
<td>BIOL 338</td>
<td>Microbiology</td>
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<tr>
<td>BIOL 380</td>
<td>Cell and Molecular Biology</td>
<td>3</td>
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<td>BIOL 381</td>
<td>Cell and Molecular Biology Lab</td>
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<tr>
<td>BIOL 435</td>
<td>Developmental Biology</td>
<td>3</td>
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<tr>
<td>BIOL 437</td>
<td>Molecular Genetics Laboratory</td>
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</tr>
<tr>
<td>BIOL 491</td>
<td>Senior Capstone - Research</td>
<td>1-3</td>
</tr>
<tr>
<td>or BIOL 492</td>
<td>Senior Capstone - Internship</td>
<td>1-3</td>
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<tr>
<td>or BIOL 493</td>
<td>Senior Capstone - Course</td>
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<tr>
<td></td>
<td>Nine additional credit hours of biology electives at the 300-400 level</td>
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**Subtotal: 44**

### Supporting Courses:

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<td>CHEM 115</td>
<td>General Chemistry Lecture I</td>
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<tr>
<td>CHEM 125</td>
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<tr>
<td>CHEM 116</td>
<td>General Chemistry Lecture II</td>
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<td>CHEM 126</td>
<td>General Chemistry Laboratory II</td>
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<tr>
<td>CHEM 215</td>
<td>Organic Chemistry Lecture I</td>
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<td>CHEM 225</td>
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<td>CHEM 216</td>
<td>Organic Chemistry Lecture II</td>
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<td>CHEM 226</td>
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<td>PHYS 121</td>
<td>College Physics I</td>
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<td>PHYS 124</td>
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</tr>
<tr>
<td>or PHYS 230</td>
<td>University Physics I</td>
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<tr>
<td>PHYS 231</td>
<td>University Physics II</td>
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<tr>
<td>PHYS 233</td>
<td>University Physics II Lab</td>
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<tr>
<td>MATH 120</td>
<td>Survey of Calculus I</td>
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<tr>
<td>or MATH 122</td>
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<td>4</td>
</tr>
<tr>
<td>MATH 123</td>
<td>University Calculus II</td>
<td>4</td>
</tr>
</tbody>
</table>

**Subtotal: 30-34**

**Total Credit Hours: 74-78**

### NOTE:

- BIOL 491 and BIOL 492 are variable, 1-3 credit hour courses. Students are to complete the course they are advised to enroll in for at least 3 credit hours to satisfy the degree requirement.
- 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.
School of Music

Office: 1151 Mason Hall
(716) 673-3151

Daniel Ihasz, Interim Director
Laura Koepke, Associate Director and Graduate Coordinator
Barry M. Kilpatrick, Assistant Director
Email: music.school@fredonia.edu
Website: http://home.fredonia.edu/music

Curricular Area Coordinators:

Academic Studies
Michael Markham

Music Education
Katherine M. Levy

Performance
Sarah Hamilton

Music History/Literature
James A. Davis

Music Theory
Gordon Root

Music Composition
Robert Deemer

Music Therapy
Heeyoun Cho

Sound Recording Technology
Bernd Gottinger

Applied Studies
Sean Duggan, Keyboard
Kay H. Stonefelt, Percussion/Harp
Wildy Zumwalt, Woodwinds
David Rose, String
Barry Kilpatrick, Brass
Joe Dan Harper, Voice

The State University of New York at Fredonia School of Music is internationally recognized for its programs at the undergraduate and graduate professional level. It provides the foundation of outstanding musicianship for all music majors and enriches the cultural life of the campus and community. Its mission is to provide the resources and guidance necessary to motivate students to seek excellence in their individual careers in music education, performance, composition, musical theatre, music therapy and sound recording. In an environment oriented to the individual, it endeavors to create musicians who will assume vigorous roles as leaders and participants in significant musical experiences.

An audition is required for admission to a degree program in the School of Music. All first-year students have essentially the same course work, and specialization increases in each subsequent year of study.

All students pursuing a degree program in the School of Music take private lessons on their principal instrument (Applied Music) and will be involved in ensembles.

Statement on Applied Study: A grade of "F" in any semester of private applied study or a grade of "D" in two consecutive semesters of private applied study will result in the removal of the student from the School of Music curriculum.

Statement on Ensembles:

No undergraduate student will be allowed to enroll in more than two 1-credit ensembles in a given semester. Undergraduate students enroll in up to four curricular ensembles (1-credit and ½-credit) in a semester. Any student may be asked to be in more than one 1-credit ensemble in a semester, but they cannot be required to do so. This does not pertain to the choral requirements for instrumental Music Education majors, as that is a requirement of the major.

Each undergraduate student pursuing the General BA track as well as the MusB-Performance and MusB-Composition degree programs in the School of Music is required to audition for and enroll in a 1-credit ensemble each semester. See below for requirements for the other BA tracks.

Each undergraduate student pursuing a Bachelor of Science degree program in the School of Music is required to audition for and enroll in a 1-credit or ½-credit ensemble during the semesters of private applied study.

If an undergraduate student is in residence at Fredonia in a fifth (or later) undergraduate year, the ensemble participation requirement remains in force if the student is taking private lessons.

All students required to enroll in a 1-credit ensemble will do so on the instrument correlating to the primary studio assignment unless specifically exempted by the administration of the School of Music. Graduate students taking private lessons may be involved in ensembles as advised by their graduate advisor in consultation with their private instructor.

Exemption from any ensemble policy requires agreement between the ensemble director(s) and the studio instructor, and may be appealed to the Director of the School of Music.

Specific Degree Program Requirements

- Bachelor of Arts in Music – General: 8 semesters of 1-credit ensemble (8 credits total).
- Bachelor of Arts in Music – Jazz: 4 semesters of 1-credit ensembles, and 4-credits of jazz-orientated ensembles (8 credits total)
• Bachelor of Arts in Music – Music Technology, Entrepreneurship, History and Literature: 4 semesters of 1-credit ensembles (4 credits total)

• Bachelor of Music in Composition: 8 semesters of 1-credit ensemble, of which at least two will be choral (8 credits total)

• Bachelor of Music in Music Education (if an undergraduate student is in residence at Fredonia in the fifth (or later) undergraduate year, the ensemble participation requirement remains in force if the student is taking private lessons).

• Choral/General Music Concentration (and the principal instrument is voice): 7 semesters of 1-credit choral ensembles (7 credits total)

• Choral/General Music Concentration (and the principal instrument is piano): 3 semesters of Piano Ensemble and 4 semesters of 1-credit choral ensembles (7 total)

• Choral/General Music Concentration (and the principal instrument is neither voice or piano): 4 semesters of 1-credit choral ensembles and 3 semesters of elected 1-credit and or ½-credit ensembles (7 credits total)

• Instrumental Concentration: 7 semesters of 1-credit instrumental ensemble, 2 semesters of 1-credit choral ensembles and 1 semester of ½-credit chamber music ensemble (9.5 credits total)

• Bachelor of Music in Performance
  • Instrumental Concentration: 8 semesters of 1-credit ensemble (8 credits) plus 3 credits earned in ½-credit ensembles (at least 2 credits of which will be in chamber ensembles (11 credits total)
  • Voice Concentration: 8 semesters of 1-credit ensemble (8 credits) plus 3 credits earned in ½-credit ensembles (at least 2 credits of which will be in Opera Practicum (11 credits total)

• Bachelor of Science in Sound Recording Technology or Music Therapy: 4 total credits in any combination of 1-credit and ½-credit ensembles as deemed appropriate by their private instructor in consultation with the head of their degree program.

Master of Music (MM): by advisement

Statement on Music Theory and Aural Skills: to begin the theory sequence, new and transfer students take a placement exam. Following initial placement, students must earn a grade of C- or higher in each course to pass into each successive level.

Statement on the Graduate Program: The School of Music offers five masters degrees: Music Education (p. 134), Music Education Studies (p. 136), Music Performance (p. 140), Music Therapy (p. 143) and Music Theory-Composition (p. 141).

Statement on Accreditation: The State University of New York at Fredonia is accredited by the National Association of Schools of Music (NASM), the Council for the Accreditation of Educator Preparation (CAEP), and the National Association of Schools of Theatre (NAST).

MUSIC - B.A DEGREE

School of Music
Office: Mason Hall
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Email: music@fredonia.edu
Website: https://www.fredonia.edu/academics/colleges-schools/school-music/music/ba-music

The Bachelor of Arts in Music is conceived as a flexible program that guides the student toward broad learning and a wide range of professional applications. The School of Music has established four tracks of specialization. All tracks require 66 credit hours outside of Music.

MAJOR REQUIREMENTS

Musicanship Core:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 115</td>
<td>Music Appreciation</td>
<td>3</td>
</tr>
<tr>
<td>MUS 263</td>
<td>Music History in Western Civilization I</td>
<td>3</td>
</tr>
<tr>
<td>MUS 264</td>
<td>Music History in Western Civilization II</td>
<td>3</td>
</tr>
<tr>
<td>MUS 231</td>
<td>Conducting I</td>
<td>2</td>
</tr>
<tr>
<td>MUS 121</td>
<td>Aural Skills I</td>
<td>2</td>
</tr>
<tr>
<td>MUS 122</td>
<td>Aural Skills II</td>
<td>2</td>
</tr>
<tr>
<td>MUS 123</td>
<td>Music Theory I</td>
<td>3</td>
</tr>
<tr>
<td>MUS 124</td>
<td>Music Theory II</td>
<td>3</td>
</tr>
<tr>
<td>MUS 221</td>
<td>Aural Skills III</td>
<td>2</td>
</tr>
<tr>
<td>MUS 222</td>
<td>Aural Skills IV</td>
<td>2</td>
</tr>
<tr>
<td>MUS 223</td>
<td>Music Theory III</td>
<td>3</td>
</tr>
<tr>
<td>MUS 224</td>
<td>Music Theory IV</td>
<td>3</td>
</tr>
<tr>
<td>MUS 118</td>
<td>Piano Class, Elementary</td>
<td>2</td>
</tr>
<tr>
<td>MUS 100</td>
<td>Recital-Seminar</td>
<td>0</td>
</tr>
<tr>
<td>MUS 120</td>
<td>Concert Attendance</td>
<td>0</td>
</tr>
<tr>
<td>MUS 125</td>
<td>Applied Music Major</td>
<td>2</td>
</tr>
<tr>
<td>MUS 126</td>
<td>Applied Music Major</td>
<td>2</td>
</tr>
<tr>
<td>MUS 200</td>
<td>Recital Seminar</td>
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<tr>
<td>MUS 225</td>
<td>Applied Music Major</td>
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</tr>
<tr>
<td>MUS 226</td>
<td>Applied Music Major</td>
<td>2</td>
</tr>
</tbody>
</table>

Subtotal: 45

NOTE:

• Students enrolled in the Jazz track complete:
  • MUS 265 in place of MUS 263
  • MUS 361 in place of MUS 222
  • MUS 362 in place of MUS 224
• MUS 118 waived for students whose principal instrument is piano.
• MUS 120 is required each semester of private applied lessons.

**TRACK SPECIALIZATIONS (SELECT ONE)**

• Limited to 21-27 credit hours, 9 of which will be outside of music.

**GENERAL TRACK:**

In this plan, the student is able to explore subjects in and beyond music while fully developing musicianship skills and accessing four years of lessons and performance study.

- **MUS 217** Piano Class, Intermediate 1
- **MUS 218** Piano Class, Intermediate 1
- **MUS 300** Recital Seminar 0
- **MUS 325** Applied Music Major 2
- **MUS 326** Applied Music Major 2
- **MUS 400** Recital Seminar 0
- **MUS 425** Applied Music Major 2
- **MUS 426** Applied Music Major 2
- **MUED 291** Technology in Music I 2
- **MUS 233** Musics of the World 3
- **HIST 339** 20th Century American Culture 3
- **ETHN 206** African American Studies 3

**Subtotal: 23**

**Additional electives by advisement, selected from:**
- **MUS 334** Music of Latin America 3
- **MUS 267** African American Music 3
- **ANTH 324** Caribbean Societies and Cultures 3
- **HIST 334** African American History Since 1877 3
- **MUSB 201** The Business of Music 3
- **MUSB 301** Music Copyrights 3
- **MUSB 320** Music Contracts 3
- **COMM 465** Intercultural Communication 3

**Subtotal: 9**

**JAZZ TRACK:**

Jazz is no longer a stylistic idiom in and of itself. This program treats jazz as an arm of American culture, allowing the student to fully develop performance skills while exploring its context within the whole of our complex society.

- **MUS 300** Recital Seminar 0
- **MUS 325** Applied Music Major 2
- **MUS 326** Applied Music Major 2
- **MUS 400** Recital Seminar 0
- **MUS 425** Applied Music Major 2
- **MUS 426** Applied Music Major 2
- **MUED 291** Technology in Music I 2
- **MUS 233** Musics of the World 3
- **HIST 339** 20th Century American Culture 3
- **ETHN 206** African American Studies 3
- **JAZZ 207** Jazz-oriented ensembles 4
- **Senior Recital** 0

**Subtotal: 23**

**ENTREPRENEURSHIP TRACK:**

This program will provide the student a core of musical studies while exploring the world of business, non-profit organizations, foundation and corporate grants, and personal enterprise.

- **MUS 272** Arts Advocacy and Leadership 3
- **MUS 363** Music Entrepreneurship I 3
- **MUS 364** Music Entrepreneurship II 3
- **MUS 492** Music Capstone Project 3
- **ECON 205** Principles of Microeconomics 3
- **ACCT 201** Principles of Financial Accounting 3

**Subtotal: 18**

**NOTE:**
- ECON 205 serves General Education - Social Sciences category and Critical Thinking & Analysis theme.
Electives by advisement, selected from:

- MUSB 201 The Business of Music 3
- MUSB 301 Music Copyrights 3
- MUSB 320 Music Contracts 3
- COMM 102 Mass Media and Society 3
- COMM 111 Web Design 1
- COMM 222 Principles of Public Relations 3
- COMM 244 Introduction to Social Media 3
- ECON 210 Principles of Macroeconomics 3

Subtotal: 9

Subtotal: 27

MUSIC TECHNOLOGY TRACK:

As with many industries today, music and its related fields have been influenced by the advances of new technologies. This program builds a foundation of musical skills and the knowledge to apply them to current digital and technological trends.

- SRT 105 Recording Techniques for Music 1
- MUED 291 Technology in Music I 2
- and
- MUED 292 Technology in Music II 2
- MUS 440 Composition for Electronic Media: Analog 3
- and
- MUS 441 Composition for Electronic Media: Digital 3
- or
- MUS 442 Digital Music Seminar: Digital Orchestration 3
- and
- MUS 443 Digital Music Seminar: Sound Design 3
- PHYS 121 College Physics I 3
- PHYS 311 Acoustics I 3
- Guided Specialization 6

Subtotal: 23

NOTE:
- Guided Specialization: Courses fulfilling the guided specialization must be chosen in consultation with the advisor based on the student's potential career interest and the nature of the anticipated Capstone Project. These courses may be in the School of Music or in other departments with supporting courses.

Capstone
- MUS 492 Music Capstone Project 3

Subtotal: 3

HISTORY AND LITERATURE TRACK:

Musicology considers how music works as expressive testimony of people and events. It prepares students for the resurgent field of cultural criticism, thinking and writing about music and art. Students venture deeply into the history of music and explore across the humanities.

Music History Seminars, chosen from:

- MUS 453 The Baroque Period in Music 3
- MUS 454 The Classical Period in Music 3
- MUS 455 The Romantic Period in Music 3
- MUS 456 The Modern Period in Music 3

Subtotal: 6

Music History Electives, by advisement:

Subtotal: 6

Supporting courses outside of music

selected by consultation with the advisor, in areas such as history, art theory and history, and English and world literature.

Subtotal: 6

Capstone
- MUS 492 Music Capstone Project 3

Subtotal: 3

NOTE: * A total of two courses among these 12 credits may be selected to also satisfy General Education requirements.

Subtotal: 21

MUSIC COMPOSITION - MUS.B. DEGREE

School of Music
Office: Mason Hall
(716) 673-3151
Dr. Robert Deemer, Program Coordinator
Email: Robert.Deemer@fredonia.edu
Website: https://www.fredonia.edu/academics/colleges-schools/school-music/music/music-composition

The program explores artistic concepts and pragmatic tools that are necessary to begin a career in music composition.

MAJOR REQUIREMENTS

Musicianship Core

The musicianship core is the set of required studies common to all music degree programs (Bachelor of Arts in Music, Bachelor of Science in Music Therapy, Bachelor of Science in Music with an emphasis in Sound Recording Technology, all programs of the Bachelor of Music).

- MUS 115 Music Appreciation 3
- MUS 263 Music History in Western Civilization I 3
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
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</thead>
<tbody>
<tr>
<td>MUS 264</td>
<td>Music History in Western Civilization II</td>
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<td>MUS 231</td>
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<td>Aural Skills I</td>
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<td>MUS 302</td>
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<td>MUS 310</td>
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<td>MUS 311</td>
<td>Composition Lab: Advanced Techniques</td>
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<tr>
<td>MUS 312</td>
<td>Composition Lab: Styles &amp; Genres I</td>
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<tr>
<td>MUS 314</td>
<td>Composition Lab: Repertoire &amp; Analysis I</td>
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<tr>
<td>MUS 321</td>
<td>Composition Lab: Entrepreneurship I</td>
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<tr>
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<tr>
<td>MUS 323</td>
<td>Composition Lab: Styles and Genres II</td>
<td>1</td>
</tr>
<tr>
<td>MUS 324</td>
<td>Comp Lab: Repertoire and Analysis II</td>
<td>1</td>
</tr>
<tr>
<td>MUS 403</td>
<td>Counterpoint</td>
<td>3</td>
</tr>
<tr>
<td>MUS 404</td>
<td>Choral Scoring &amp; Arranging</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Ensembles, by advisement</td>
<td>8</td>
</tr>
</tbody>
</table>

**Subtotal:** 37

**NOTE:**
- MUS 125 and MUS 126 (instead of MUS 105 and MUS 106) for students approved to take the Extended Applied Lessons;
- MUS 118: waived for students whose principal instrument is piano;
- MUS 120: each semester of private applied lessons;
- MUS 107 and MUS 108 are required of all freshmen oboe and bassoon majors.

Applied Lessons:

Composition majors have a minimum requirement of 30-minute applied lessons on their primary instrument for six semesters. They may choose to apply to take eight semesters of hour-long applied lessons (see Extended Applied Lessons below) and give an instrumental or voice recital (with studio instructor permission):

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 205</td>
<td>Applied Music Major</td>
<td>2</td>
</tr>
<tr>
<td>MUS 206</td>
<td>Applied Music Major</td>
<td>2</td>
</tr>
<tr>
<td>MUS 305</td>
<td>Applied Music Major</td>
<td>2</td>
</tr>
<tr>
<td>MUS 306</td>
<td>Applied Music Major</td>
<td>2</td>
</tr>
<tr>
<td>MUS 200</td>
<td>Recital Seminar</td>
<td>0</td>
</tr>
<tr>
<td>MUS 300</td>
<td>Recital Seminar</td>
<td>0</td>
</tr>
</tbody>
</table>

**Subtotal:** 45

**NOTE:**
- Senior Composition Recital during final year of lessons;
- One (1) credit ensemble each semester of residence, two (2) of which must be choral ensembles;
- MUS 404 is not required for voice and piano students taking Extended Applied Lessons (see below).

ADDITIONAL REQUIREMENTS IF PRINCIPAL INSTRUMENT IS NOT VOICE OR PIANO

**One of the following courses:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 437</td>
<td>Digital Music Seminar: Scoring for Video Games</td>
<td>3</td>
</tr>
<tr>
<td>MUS 438</td>
<td>Digital Music Seminar:Scoring for Film and Video</td>
<td>3</td>
</tr>
<tr>
<td>MUS 442</td>
<td>Digital Music Seminar: Digital Orchestration</td>
<td>3</td>
</tr>
<tr>
<td>MUS 443</td>
<td>Digital Music Seminar: Sound Design</td>
<td>3</td>
</tr>
</tbody>
</table>

**Plus one of the following:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 440</td>
<td>Composition for Electronic Media: Analog</td>
<td>3</td>
</tr>
<tr>
<td>MUS 441</td>
<td>Composition for Electronic Media: Digital</td>
<td>3</td>
</tr>
</tbody>
</table>

**Subtotal:** 6
### ADDITIONAL REQUIREMENTS IF VOICE IS PRINCIPAL INSTRUMENT

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 033</td>
<td>Opera Prod Practicum</td>
<td>0.5</td>
</tr>
<tr>
<td>MUS 137</td>
<td>Diction for Singers-English</td>
<td>.5</td>
</tr>
<tr>
<td>MUS 138</td>
<td>Diction for Singers-Italian</td>
<td>.5</td>
</tr>
<tr>
<td>MUS 139</td>
<td>Diction for Singers-German</td>
<td>.5</td>
</tr>
<tr>
<td>MUS 140</td>
<td>Diction for Singers-French</td>
<td>.5</td>
</tr>
<tr>
<td>One of the following courses:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUS 437</td>
<td>Digital Music Seminar: Scoring for Video Games</td>
<td>3</td>
</tr>
<tr>
<td>MUS 438</td>
<td>Digital Music Seminar: Scoring for Film and Video</td>
<td>3</td>
</tr>
<tr>
<td>MUS 442</td>
<td>Digital Music Seminar: Digital Orchestration</td>
<td>3</td>
</tr>
<tr>
<td>MUS 443</td>
<td>Digital Music Seminar: Sound Design</td>
<td>3</td>
</tr>
</tbody>
</table>

Subtotal: 5.5

NOTE:
- MUS 033: one semester required during the first year.

### ADDITIONAL REQUIREMENTS IF PIANO IS PRINCIPAL INSTRUMENT

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 201</td>
<td>Collaborative Piano Skills and Repertoire I</td>
<td>2</td>
</tr>
<tr>
<td>MUS 202</td>
<td>Collaborative Piano Skills and Repertoire II</td>
<td>2</td>
</tr>
</tbody>
</table>

Subtotal: 4

NOTE:
- Piano students who take Extended Applied Lessons will not be required to take MUS 404 Choral Scoring & Arranging.

### CREDIT HOURS TOTALS

- Applied Lessons, not voice or piano: 96 credit hours
- Applied Lessons, voice: 95.5 credit hours
- Applied Lessons, piano: 94 credit hours
- Extended Applied Lessons, not voice or piano: 94 credit hours
- Extended Applied Lessons, voice: 94.5 credit hours
- Extended Applied Lessons, piano: 96 credit hours

Total Credit Hours: 87-95

### MUSIC EDUCATION - MUS. B. DEGREE

School of Music  
Office: Mason Hall  
(716) 673-3157  
**Dr. Katherine Levy**, Program Coordinator  
Email: Katherine.Levy@fredonia.edu  
Website: https://www.fredonia.edu/academics/colleges-schools/school-music/music/music-education

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 students to pass tests of professional knowledge (the Teacher Performance Assessment - edTPA portfolio, the Educating All Students test – EAS), the Content Specialty Test (CST) in music, fingerprinting, practicum hours including 15 hours focused on understanding the needs of students with disabilities, practicum in a high needs school setting, and workshops designated for all applicants for the Initial Certificate to teach music.

### MAJOR REQUIREMENTS

**Musicianship Core:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 115</td>
<td>Music Appreciation</td>
<td>3</td>
</tr>
<tr>
<td>MUS 263</td>
<td>Music History in Western Civilization I</td>
<td>3</td>
</tr>
<tr>
<td>MUS 264</td>
<td>Music History in Western Civilization II</td>
<td>3</td>
</tr>
<tr>
<td>MUS 231</td>
<td>Conducting I</td>
<td>2</td>
</tr>
<tr>
<td>MUS 121</td>
<td>Aural Skills I</td>
<td>2</td>
</tr>
<tr>
<td>MUS 122</td>
<td>Aural Skills II</td>
<td>2</td>
</tr>
<tr>
<td>MUS 123</td>
<td>Music Theory I</td>
<td>3</td>
</tr>
<tr>
<td>MUS 124</td>
<td>Music Theory II</td>
<td>3</td>
</tr>
<tr>
<td>MUS 221</td>
<td>Aural Skills III</td>
<td>2</td>
</tr>
<tr>
<td>MUS 222</td>
<td>Aural Skills IV</td>
<td>2</td>
</tr>
<tr>
<td>MUS 223</td>
<td>Music Theory III</td>
<td>3</td>
</tr>
<tr>
<td>MUS 224</td>
<td>Music Theory IV</td>
<td>3</td>
</tr>
<tr>
<td>MUS 118</td>
<td>Piano Class, Elementary</td>
<td>2</td>
</tr>
<tr>
<td>MUS 100</td>
<td>Recital-Seminar</td>
<td>0</td>
</tr>
<tr>
<td>MUS 120</td>
<td>Concert Attendance</td>
<td>0</td>
</tr>
<tr>
<td>MUS 125</td>
<td>Applied Music Major</td>
<td>2</td>
</tr>
<tr>
<td>MUS 126</td>
<td>Applied Music Major</td>
<td>2</td>
</tr>
</tbody>
</table>

**NOTE:**

- MUS 118: waived for students whose principal instrument is piano;
- MUS 120: each semester of private applied lessons;
- Each student must declare a General Choral or Instrumental concentration as designated by the Music Education Handbook.

**Plus the following:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 200</td>
<td>Recital Seminar</td>
<td>0</td>
</tr>
<tr>
<td>MUS 217</td>
<td>Piano Class, Intermediate</td>
<td>1</td>
</tr>
<tr>
<td>MUS 218</td>
<td>Piano Class, Intermediate</td>
<td>1</td>
</tr>
<tr>
<td>MUS 225</td>
<td>Applied Music Major</td>
<td>2</td>
</tr>
<tr>
<td>MUS 226</td>
<td>Applied Music Major</td>
<td>2</td>
</tr>
<tr>
<td>MUS 232</td>
<td>Conducting II</td>
<td>2</td>
</tr>
<tr>
<td>MUS 300</td>
<td>Recital Seminar</td>
<td>0</td>
</tr>
<tr>
<td>MUS 325</td>
<td>Applied Music Major</td>
<td>2</td>
</tr>
<tr>
<td>MUS 326</td>
<td>Applied Music Major</td>
<td>2</td>
</tr>
</tbody>
</table>

**MUED 150** Introduction to Public School Music 0

**MUED 250** Foundations of Music Education I 2

**MUED 251** Psychology and Sociology in Music Education 3

**MUED 252** Child Abuse/Neglect Reporting 0

**MUED 253** Alcohol, Tobacco, and Drug Abuse Identification 0

**MUED 255** Foundations I Practicum - Elementary 0

**MUED 256** Foundations II Practicum - Middle School 0

**MUED 291** Technology in Music I 2

**MUED 300** Foundations in Music Education III 3

**MUED 303** Literacy Instruction Workshop 0

**MUED 355** Foundations III Practicum - Secondary 0

**MUED 356** Methods Practicum 0

**MUED 400** Professional Semester 12

**MUTY 240** Music for Children with Disabilities 1

**EDU 303** Safe Schools/Healthy Students-DASA: Safety Education/Fire and Arson/School Violence 1

**Subtotal: 36**

**NOTE:**

- One (1) MUED 255/MUED 256 practicum must be in a high needs school;
- MUED 255 must be in an elementary general music class setting.

**Subtotal: 73**

### GENERAL CHORAL CONCENTRATION REQUIREMENTS

**For Non-Piano/Non-Voice Students:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 317</td>
<td>Piano Class</td>
<td>1</td>
</tr>
<tr>
<td>MUS 318</td>
<td>Piano Class</td>
<td>1</td>
</tr>
<tr>
<td>MUS 417</td>
<td>Piano Class for Non-Keyboard Majors</td>
<td>1</td>
</tr>
<tr>
<td>MUED 203</td>
<td>Intermediate Voice Class</td>
<td>1.5</td>
</tr>
<tr>
<td>MUED 204</td>
<td>Advanced Voice Class</td>
<td>1.5</td>
</tr>
<tr>
<td>MUED 210</td>
<td>Guitar Class</td>
<td>1</td>
</tr>
<tr>
<td>MUED 211</td>
<td>Guitar Class</td>
<td>1</td>
</tr>
<tr>
<td>MUED 301</td>
<td>General Music in Elementary School</td>
<td>2</td>
</tr>
<tr>
<td>MUED 302</td>
<td>General Music in Secondary School</td>
<td>2</td>
</tr>
<tr>
<td>MUED 391</td>
<td>Elementary School Choral Rehearsal Techniques</td>
<td>3</td>
</tr>
<tr>
<td>MUED 392</td>
<td>Secondary School Choral Rehearsal Techniques</td>
<td>3</td>
</tr>
</tbody>
</table>

**Ensembles, by advisement 1-7**

**Subtotal: 36**
NOTE:

- Music Education electives by advisement, including brass, woodwinds, string and percussion secondary instruments;
- One (1) credit hour ensemble each semester of residence, four (4) of which must be choral ensembles.

Subtotal: 19-25

For Keyboard Students:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 113</td>
<td>Voice Class</td>
<td>1</td>
</tr>
<tr>
<td>MUS 415</td>
<td>Piano Class for Keyboard Majors</td>
<td>1</td>
</tr>
<tr>
<td>MUS 416</td>
<td>Piano Class for Keyboard Majors</td>
<td>1</td>
</tr>
<tr>
<td>MUED 203</td>
<td>Intermediate Voice Class</td>
<td>1.5</td>
</tr>
<tr>
<td>MUED 204</td>
<td>Advanced Voice Class</td>
<td>1.5</td>
</tr>
<tr>
<td>MUED 210</td>
<td>Guitar Class</td>
<td>1</td>
</tr>
<tr>
<td>MUED 211</td>
<td>Guitar Class</td>
<td>1</td>
</tr>
<tr>
<td>MUED 301</td>
<td>General Music in Elementary School</td>
<td>2</td>
</tr>
<tr>
<td>MUED 302</td>
<td>General Music in Secondary School</td>
<td>2</td>
</tr>
<tr>
<td>MUED 391</td>
<td>Elementary School Choral Rehearsal Techniques</td>
<td>3</td>
</tr>
<tr>
<td>MUED 392</td>
<td>Secondary School Choral Rehearsal Techniques</td>
<td>3</td>
</tr>
</tbody>
</table>

Subtotal: 19-25

For Voice Students:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 033</td>
<td>Opera Prod Practicum</td>
<td>0.5</td>
</tr>
<tr>
<td>MUS 137</td>
<td>Diction for Singers-English</td>
<td>.5</td>
</tr>
<tr>
<td>MUS 138</td>
<td>Diction for Singers-Italian</td>
<td>.5</td>
</tr>
<tr>
<td>MUS 139</td>
<td>Diction for Singers-German</td>
<td>.5</td>
</tr>
<tr>
<td>MUS 140</td>
<td>Diction for Singers-French</td>
<td>.5</td>
</tr>
<tr>
<td>MUS 317</td>
<td>Piano Class</td>
<td>1</td>
</tr>
<tr>
<td>MUS 318</td>
<td>Piano Class</td>
<td>1</td>
</tr>
<tr>
<td>MUS 417</td>
<td>Piano Class for Non-Keyboard Majors</td>
<td>1</td>
</tr>
<tr>
<td>MUED 210</td>
<td>Guitar Class</td>
<td>1</td>
</tr>
<tr>
<td>MUED 211</td>
<td>Guitar Class</td>
<td>1</td>
</tr>
<tr>
<td>MUED 301</td>
<td>General Music in Elementary School</td>
<td>2</td>
</tr>
<tr>
<td>MUED 302</td>
<td>General Music in Secondary School</td>
<td>2</td>
</tr>
<tr>
<td>MUED 391</td>
<td>Elementary School Choral Rehearsal Techniques</td>
<td>3</td>
</tr>
<tr>
<td>MUED 392</td>
<td>Secondary School Choral Rehearsal Techniques</td>
<td>3</td>
</tr>
</tbody>
</table>

Subtotal: 19-25

NOTE:

- As designated by the Music Education Handbook;
- Successful completion of competency examinations on specified secondary instruments;
- Music Education electives by advisement;
- One (1) credit hour ensemble using principal instrument each semester, plus two (2) semesters in a one (1) credit choral ensemble, plus at least one (1) semester of instrumental chamber music.
For Instrumental Applied Students:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 113</td>
<td>Voice Class</td>
<td>1</td>
</tr>
<tr>
<td>MUED 301</td>
<td>General Music in Elementary School</td>
<td>2</td>
</tr>
<tr>
<td>or</td>
<td>General Music in Secondary School</td>
<td>2</td>
</tr>
<tr>
<td>MUED 304</td>
<td>Instrumental Music in Elementary School</td>
<td>2</td>
</tr>
<tr>
<td>MUED 305</td>
<td>Instrumental Music in Secondary School</td>
<td>2</td>
</tr>
<tr>
<td>MUED 393</td>
<td>Elementary School Instrumental Rehearsal Techniques</td>
<td>2</td>
</tr>
<tr>
<td>MUED 394</td>
<td>Secondary School Instrumental Rehearsal Techniques</td>
<td>2</td>
</tr>
</tbody>
</table>

Subtotal: 11

For Keyboard or Voice Students (this option only by permission of the Area Chair for Music Education):

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 315</td>
<td>Secondary Applied Study</td>
<td>1</td>
</tr>
<tr>
<td>MUS 316</td>
<td>Secondary Applied Study</td>
<td>1</td>
</tr>
<tr>
<td>MUED 301</td>
<td>General Music in Elementary School</td>
<td>2</td>
</tr>
<tr>
<td>or</td>
<td>General Music in Secondary School</td>
<td>2</td>
</tr>
<tr>
<td>MUED 304</td>
<td>Instrumental Music in Elementary School</td>
<td>2</td>
</tr>
<tr>
<td>MUED 305</td>
<td>Instrumental Music in Secondary School</td>
<td>2</td>
</tr>
<tr>
<td>MUED 393</td>
<td>Elementary School Instrumental Rehearsal Techniques</td>
<td>2</td>
</tr>
<tr>
<td>MUED 394</td>
<td>Secondary School Instrumental Rehearsal Techniques</td>
<td>2</td>
</tr>
</tbody>
</table>

Subtotal: 12

NOTE:
- MUS 316: additional permission required

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- MUS 316 or other approved private study on an orchestral instrument (woodwind, brass, string, or percussion).

Students who can demonstrate the competencies and any additional requirements associated with any course will be excused from taking the course. However, since there is no upper limit in skill development, it is recommended that students use the time thus saved to complete a like amount of advanced course work from the area(s) in question. Students are encouraged to elect as much additional course work as possible in their concentration, in music education, or in performance, theory, history and literature in consultation with their academic advisor and/or the Music Education Area Head.

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 the Educator Preparation Program. At the end of sophomore year, each student will submit a formal application for Professional Standing and must demonstrate the following:

1. 3.0 overall GPA (no MUED classes with a grade lower than C);
2. Music Theory completed MUS 222 and MUS 224 with no grade lower than a C-;
3. MUED 150, MUED 250, and MUED 251 completed;
4. Two practica completed;
5. Secondary Instrument Competencies:
   - vocal - MUS 218 and MUED 204
   - instrumental - four playing classes, two proficiencies, MUS 113 and MUS 218
6. MUS 231 and MUS 232.

Any student not meeting all standards will be denied acceptance into Professional Standing and will not be admitted into Music Education Educator Preparation courses. 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. Proficiency requirement met by the following:

- Fredonia Placement Exam determination of Fredonia Foundations courses 100 and 110 in the same World Language or course 110 (or higher) in World Language.
- Proficiency may also be fulfilled by qualifying AP, IB, CLEP Exam scores or transferred courses of Elem I and Elem II of same language, as verified by Registrar’s Office.

The General Education foreign language requirement (p. Error! Bookmark not defined.) differs from the certification requirement and must be satisfied for degree conferral.

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

**Student Teaching**
(Student teaching and assorted special seminar classes held irregularly during student teaching.) The student must have:

1. An overall 3.00 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. Satisfactorily completed four required practica (MUED 255, MUED 256, MUED 355, MUED 356);
6. The recommendation of the Music Education professional staff, based on contact with the student in the Foundations in Music Education sequence of courses and the Methods Course sequence MUED 150, MUED 250, MUED 251, MUED 300, MUED 301, MUED 302, MUED 304, MUED 305, MUED 391, MUED 392, MUED 393, MUED 394. 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.
7. Demonstrated professional dispositions as specified by the Music Education Handbook and the College of Education;
8. Completed and submitted student teaching application and personal data forms 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.

Subtotal: 35-41

**Music Education Multi-Award MusB/MM**
The Music Education MusB/MM program enables candidates to earn two separate degrees, the Bachelor of Music - Music Education and the Master of Music - Music Education, within as few as five years. Combined, these two music education degrees fulfill the academic requirements for New York Initial and Professional Certificates in Music Education. Candidates for this program attain admission to the Music Education Bachelor of Music degree program. Upon successful admission to Professional Standing and prior to beginning the student teaching semester, candidates in good standing may apply for the Music Education MusB/MM Program. Undergraduates accepted in the Music Education MusB/MM Program may begin graduate work during the senior year and complete the remaining requirements for the Master’s degree in as few as two semesters and one summer.

**MUSIC EDUCATION - MUS.B. DEGREE**

**School of Music**
Office: Mason Hall
(716) 673-3157
**Dr. Katherine Levy, Program Coordinator**
Email: Katherine.Levy@fredonia.edu
Website: https://www.fredonia.edu/academics/colleges-schools/school-music/music-music-education

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 students to pass tests of professional knowledge (the Teacher Performance Assessment - edTPA portfolio, the Educating All Students test – EAS), the Content Specialty Test (CST) in music, fingerprinting, practicum hours including 15 hours focused on understanding the needs of students with disabilities, practicum in a high needs school setting, and workshops designated for all applicants for the Initial Certificate to teach music.
### MAJOR REQUIREMENTS

**Musicianship Core:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 115</td>
<td>Music Appreciation</td>
<td>3</td>
</tr>
<tr>
<td>MUS 263</td>
<td>Music History in Western Civilization I</td>
<td>3</td>
</tr>
<tr>
<td>MUS 264</td>
<td>Music History in Western Civilization II</td>
<td>3</td>
</tr>
<tr>
<td>MUS 231</td>
<td>Conducting I</td>
<td>2</td>
</tr>
<tr>
<td>MUS 121</td>
<td>Aural Skills I</td>
<td>2</td>
</tr>
<tr>
<td>MUS 122</td>
<td>Aural Skills II</td>
<td>2</td>
</tr>
<tr>
<td>MUS 123</td>
<td>Music Theory I</td>
<td>3</td>
</tr>
<tr>
<td>MUS 124</td>
<td>Music Theory II</td>
<td>3</td>
</tr>
<tr>
<td>MUS 221</td>
<td>Aural Skills III</td>
<td>2</td>
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<tr>
<td>MUS 222</td>
<td>Aural Skills IV</td>
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<tr>
<td>MUS 223</td>
<td>Music Theory III</td>
<td>3</td>
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<tr>
<td>MUS 224</td>
<td>Music Theory IV</td>
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<tr>
<td>MUS 118</td>
<td>Piano Class, Elementary</td>
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<tr>
<td>MUS 100</td>
<td>Recital-Seminar</td>
<td>0</td>
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<tr>
<td>MUS 120</td>
<td>Concert Attendance</td>
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<tr>
<td>MUS 125</td>
<td>Applied Music Major</td>
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<tr>
<td>MUS 126</td>
<td>Applied Music Major</td>
<td>2</td>
</tr>
</tbody>
</table>

Subtotal: 37

**NOTE:**

- MUS 118: waived for students whose principal instrument is piano;
- MUS 120: each semester of private applied lessons;
- Each student must declare a General Choral or Instrumental concentration as designated by the Music Education Handbook.

**Plus the following:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 200</td>
<td>Recital Seminar</td>
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<tr>
<td>MUS 217</td>
<td>Piano Class, Intermediate</td>
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<tr>
<td>MUS 218</td>
<td>Piano Class, Intermediate</td>
<td>1</td>
</tr>
<tr>
<td>MUS 225</td>
<td>Applied Music Major</td>
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</tr>
<tr>
<td>MUS 226</td>
<td>Applied Music Major</td>
<td>2</td>
</tr>
<tr>
<td>MUS 232</td>
<td>Conducting II</td>
<td>2</td>
</tr>
<tr>
<td>MUS 300</td>
<td>Recital Seminar</td>
<td>0</td>
</tr>
<tr>
<td>MUS 325</td>
<td>Applied Music Major</td>
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</tr>
<tr>
<td>MUS 326</td>
<td>Applied Music Major</td>
<td>2</td>
</tr>
<tr>
<td>MUED 150</td>
<td>Introduction to Public School Music</td>
<td>0</td>
</tr>
<tr>
<td>MUED 250</td>
<td>Foundations of Music Education I</td>
<td>2</td>
</tr>
<tr>
<td>MUED 251</td>
<td>Psychology and Sociology in Music Education</td>
<td>3</td>
</tr>
<tr>
<td>MUED 252</td>
<td>Child Abuse/Neglect Reporting</td>
<td>0</td>
</tr>
<tr>
<td>MUED 253</td>
<td>Alcohol, Tobacco, and Drug Abuse Identification</td>
<td>0</td>
</tr>
<tr>
<td>MUED 255</td>
<td>Foundations I Practicum - Elementary</td>
<td>0</td>
</tr>
<tr>
<td>MUED 256</td>
<td>Foundations II Practicum - Middle School</td>
<td>0</td>
</tr>
<tr>
<td>MUED 291</td>
<td>Technology in Music I</td>
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<td>MUED 300</td>
<td>Foundations in Music Education III</td>
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<td>MUED 303</td>
<td>Literacy Instruction Workshop</td>
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<td>MUED 355</td>
<td>Foundations III Practicum - Secondary</td>
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<td>MUED 356</td>
<td>Methods Practicum</td>
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<td>MUED 400</td>
<td>Professional Semester</td>
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<tr>
<td>MUYT 240</td>
<td>Music for Children with Disabilities</td>
<td>1</td>
</tr>
<tr>
<td>EDU 303</td>
<td>Safe Schools/Healthy Students - DASA: Safety Education/Fire and Arson/School Violence</td>
<td>1</td>
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</table>

Subtotal: 36

**NOTE:**

- One (1) MUED 255/MUED 256 practicum must be in a high needs school;
- MUED 255 must be in an elementary general music class setting.

Subtotal: 73

### GENERAL CHORAL CONCENTRATION REQUIREMENTS

**For Non-Piano/Non-Voice Students:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 317</td>
<td>Piano Class</td>
<td>1</td>
</tr>
<tr>
<td>MUS 318</td>
<td>Piano Class</td>
<td>1</td>
</tr>
<tr>
<td>MUS 417</td>
<td>Piano Class for Non-Keyboard Majors</td>
<td>1</td>
</tr>
<tr>
<td>MUED 203</td>
<td>Intermediate Voice Class</td>
<td>1.5</td>
</tr>
<tr>
<td>MUED 204</td>
<td>Advanced Voice Class</td>
<td>1.5</td>
</tr>
<tr>
<td>MUED 210</td>
<td>Guitar Class</td>
<td>1</td>
</tr>
<tr>
<td>MUED 211</td>
<td>Guitar Class</td>
<td>1</td>
</tr>
<tr>
<td>MUED 301</td>
<td>General Music in Elementary School</td>
<td>2</td>
</tr>
<tr>
<td>MUED 302</td>
<td>General Music in Secondary School</td>
<td>2</td>
</tr>
<tr>
<td>MUED 391</td>
<td>Elementary School Choral Rehearsal Techniques</td>
<td>3</td>
</tr>
<tr>
<td>MUED 392</td>
<td>Secondary School Choral Rehearsal Techniques</td>
<td>3</td>
</tr>
</tbody>
</table>

**Ensembles, by advisement:** 1-7

Subtotal: 19-25

**NOTE:**

- Music Education electives by advisement, including brass, woodwinds, string and percussion secondary instruments;
- One (1) credit hour ensemble each semester of residence, four (4) of which must be choral ensembles.

**For Keyboard Students:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 113</td>
<td>Voice Class</td>
<td>1</td>
</tr>
<tr>
<td>MUS 415</td>
<td>Piano Class for Keyboard Majors</td>
<td>1</td>
</tr>
<tr>
<td>MUS 416</td>
<td>Piano Class for Keyboard Majors</td>
<td>1</td>
</tr>
<tr>
<td>MUED 203</td>
<td>Intermediate Voice Class</td>
<td>1.5</td>
</tr>
</tbody>
</table>

Subtotal: 36

**NOTE:**

- One (1) MUED 255/MUED 256 practicum must be in a high needs school;
- MUED 255 must be in an elementary general music class setting.

Subtotal: 73
MUED 204 Advanced Voice Class 1.5
MUED 210 Guitar Class 1
MUED 211 Guitar Class 1
MUED 301 General Music in Elementary School 2
MUED 302 General Music in Secondary School 2
MUED 391 Elementary School Choral Rehearsal Techniques 3
MUED 392 Secondary School Choral Rehearsal Techniques Ensembles, by advisement 1-7

Subtotal: 19-25

NOTE:
• Music Education electives by advisement, including brass, woodwinds, string and percussion secondary instruments;
• One-(1)-credit hour ensemble each semester of residency including piano ensemble and a minimum of four (4) semesters in choral ensembles.

For Voice Students:
MUS 033 Opera Prod Practicum 0.5
MUS 137 Diction for Singers-English .5
MUS 138 Diction for Singers-Italian .5
MUS 139 Diction for Singers-German .5
MUS 140 Diction for Singers-French .5
MUS 317 Piano Class 1
MUS 318 Piano Class 1
MUS 417 Piano Class for Non-Keyboard Majors 1
MUED 210 Guitar Class 1
MUED 211 Guitar Class 1
MUED 301 General Music in Elementary School 2
MUED 302 General Music in Secondary School 2
MUED 391 Elementary School Choral Rehearsal Techniques 3
MUED 392 Secondary School Choral Rehearsal Techniques Ensembles, by advisement 1-7

Subtotal: 18.5-24.5

NOTE:
• MUS 033: one (1) semester in Freshman year;
• Music Education electives by advisement, including brass, woodwinds, string and percussion secondary instruments;
• One(1) credit choral ensembles, each semester of residency.

INSTRUMENTAL CONCENTRATION REQUIREMENTS

Secondary Instrument Courses:
MUED 161 Beginning Trumpet 1
MUED 162 Beginning Trombone 1
MUED 163 Beginning French Horn 1
MUED 164 Beginning Tuba/Euphonium 1
MUED 171 Beginning Clarinet 1
MUED 172 Beginning Flute 1
MUED 173 Beginning Oboe 1
MUED 174 Beginning Bassoon 1
MUED 175 Beginning Saxophone 1
MUED 185 Beginning Violin/Viola 1
MUED 186 Beginning Cello 1
MUED 187 Beginning String Bass 1
MUED 221 Percussion Class 2
MUED 222 Advanced Percussion 1
MUED 260 Brass Pedagogy 1
MUED 261 Advanced Trumpet 1
MUED 262 Advanced Trombone 1
MUED 263 Advanced French Horn 1
MUED 264 Advanced Tuba/Euphonium 1
MUED 271 Advanced Clarinet 2
MUED 272 Advanced Flute 2
MUED 273 Advanced Oboe 2
MUED 274 Advanced Bassoon 2
MUED 275 Advanced Saxophone 2
MUED 285 Advanced Violin/Viola 2
MUED 286 Advanced Cello/String Bass 2
Ensembles, by advisement 4-10

Subtotal: 8

NOTE:
• As designated by the Music Education Handbook;
• Successful completion of competency examinations on specified secondary instruments;
• Music Education electives by advisement;
• One (1) credit hour ensemble using principal instrument each semester, plus two (2) semesters in a one (1) credit choral ensemble, plus at least one (1) semester of instrumental chamber music.

For Instrumental Applied Students:
MUS 113 Voice Class 1
MUED 301 General Music in Elementary School 2
or
MUED 302 General Music in Secondary School 2
MUED 304 Instrumental Music in Elementary School 2
MUED 305 Instrumental Music in Secondary School 2
MUED 393 Elementary School Instrumental Rehearsal Techniques 2
MUED 394 Secondary School Instrumental Rehearsal Techniques 2

Subtotal: 11

For Keyboard or Voice Students (this option only by permission of the Area Chair for Music Education):
MUS 315 Secondary Applied Study 1
MUS 316 Secondary Applied Study 1
MUED 301 General Music in Elementary School 2
or 
MUED 302 General Music in Secondary School 2
MUED 304 Instrumental Music in Elementary School 2
MUED 305 Instrumental Music in Secondary School 2
MUED 393 Elementary School Instrumental Rehearsal Techniques 2
MUED 394 Secondary School Instrumental Rehearsal Techniques 2

Subtotal: 12

NOTE:
• MUS 316: additional permission required

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- MUS 316 or other approved private study on an orchestral instrument (woodwind, brass, string, or percussion).

Students who can demonstrate the competencies and any additional requirements associated with any course will be excused from taking the course. However, since there is no upper limit in skill development, it is recommended that students use the time thus saved to complete a like amount of advanced course work from the area(s) in question. Students are encouraged to elect as much additional course work as possible in their concentration, in music education, or in performance, theory, history and literature in consultation with their academic advisor and/or the Music Education Area Head.

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 the Educator Preparation Program. At the end of sophomore year, each student will submit a formal application for Professional Standing and must demonstrate the following:
1. 3.0 overall GPA (no MUE class with a grade lower than C);
2. Music Theory completed MUS 222 and MUS 224 with no grade lower than a C-;
3. MUED 150, MUED 250, and MUED 251 completed;
4. Two practica completed;
5. Secondary Instrument Competencies:
   • vocal - MUS 218 and MUED 204
   • instrumental - four playing classes, two proficiencies, MUS 113 and MUS 218
6. MUS 231 and MUS 232.

Any student not meeting all standards will be denied acceptance into Professional Standing and will not be admitted into Music Education Educator Preparation courses. 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. Proficiency requirement met by the following:
• Fredonia Placement Exam determination of Fredonia Foundations courses 100 and 110 in the same World Language or course 110 (or higher) in World Language.
• Proficiency may also be fulfilled by qualifying AP, IB, CLEP Exam scores or transferred courses of Elem I and Elem II of same language, as verified by Registrar’s Office.

The General Education foreign language requirement (p. Error! Bookmark not defined.) differs from the certification requirement and must be satisfied for degree conferral.

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

Upon successful admission to Professional Standing and prior to beginning the student teaching semester,
candidates in good standing may apply for the Music Education MusB/MM Program. Candidates must have:

1. An overall 3.00 GPA.
2. An average of 3.00 GPA in all MUED 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. Completed the MUS 325 or equivalent jury earning no less than a grade of C.
5. Submitted two Recommendation Letters attesting to the candidate’s quality of performance and ability to engage in graduate-level work.
6. Record of acceptable demonstration of the ten Interstate New Teacher Assessment and Support Consortium (INTASC) dispositions.
7. Completed and submitted the Music Education MusB/MM Program application by the announced deadline.

Candidates accepted in the Music Education MusB/MM Program may begin graduate work during the senior year by advisement. After successfully completing the Bachelor’s Degree in Music Education, candidates are required to:

1. Attain their Initial Music 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.
2. Complete the GRE Revised General Test and submit scores to Fredonia. The ETS institution code for Fredonia is 2539.

Candidates may complete the remaining requirements for the Master’s degree in Music - Music Education in as few as two semesters and one summer.

**Student Teaching**
(Students teaching and assorted special seminar classes held irregularly during student teaching.) The student must have:

1. An overall 3.00 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. Satisfactorily completed four required practica (MUED 255, MUED 256, MUED 355, MUED 356);
6. The recommendation of the Music Education professional staff, based on contact with the student in the Foundations in Music Education sequence of courses and the Methods Course sequence MUED 150, MUED 250, MUED 251, MUED 300, MUED 301, MUED 302, MUED 304, MUED 305, MUED 391, MUED 392, MUED 393, MUED 394. 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.
7. Demonstrated professional dispositions as specified by the Music Education Handbook and the College of Education;
8. Completed and submitted student teaching application and personal data forms 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.

Subtotal: 31


- Completion of a baccalaureate degree in Music at an accredited four-year institution with a minimum of 3.0 GPA preferred;
- Prior (undergraduate) GPA of 3.0 or above;
- Initial certification to teach music in the public schools of New York State or equivalent preparation;
- Reported scores on the GRE with a minimum combined Quantitative Reasoning and Verbal Reasoning score of 272 and submission of a GRE Analytical Writing score;
- Applicants who do not meet these requirements may be admitted conditionally by permission of the Director of the School of Music and with the approval of the Associate Provost for Graduate Studies;
- A performance audition is not necessary; however, students in the Music Education degree program who desire to do a Performance Recital Final Project must audition for and be accepted by the appropriate applied music faculty at the time of application and not later than 6 to 12 credit hours into the program.

The School of Music offers two tracks in the Master of Music - Music Education, the Final Project Program and the In-Service Program. 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

This 30-credit program leads to one of three Final Project options: Thesis/Final Project, 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.

General Requirements

1. At least 12 credit hours of the overall program should be in music education and music education-related course work;
2. At least 15 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. MUED 695 Thesis/Final Project.

In-Service Program

The 36-credit In-Service program provides 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.

Specific Requirements

Required courses for all Master of Music - Music Education

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 521</td>
<td>Music Bibliography</td>
<td>3</td>
</tr>
<tr>
<td>MUS 624</td>
<td>Analytic Techniques</td>
<td>3</td>
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<tr>
<td>MUED 619</td>
<td>Foundations of Music Education I</td>
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<tr>
<td>MUED 620</td>
<td>Foundations of Music Education II</td>
<td>3</td>
</tr>
<tr>
<td>MUED 621</td>
<td>Music Education Foundation III</td>
<td>3</td>
</tr>
</tbody>
</table>

Subtotal: 24

NOTE:

- *Individualized selections of course work in theory, history, literature, performance and special studies MUS 590 or MUED 590 and MUED 591. Course work outside of music may be acceptable, subject to the establishing of a clear relationship to the candidate's professional goals. Short "workshops" MUED 555/MUED 565 can be applied only in this category. For those approved for the performance recital option, electives will include MUS 605 and MUS 606 studio lessons as 4 of the 6 elective credits.
- As of December 31, 2013, candidates in all education programs are required to complete training under the Dignity for All Students Act (DASA). Beginning in the Fall 2013 semester, the training required under the Dignity for All Student Act (DASA) will be included in EDU 303 at Fredonia. Undergraduate candidates planning to graduate after Fall 2013 who have already completed EDU 303 on campus or taken a workshop as a substitution for EDU 303 must also complete the EDU DASA workshop prior to graduation.

Music Education K-12 - M.M. Degree
Requirements for Admission to Program without Deficiencies:

• Undergraduate studies equivalent to the Bachelor of Music Education degree offered at Fredonia;

• Completion of a baccalaureate degree in Music at an accredited four-year institution with a minimum of 3.0 GPA preferred;

• Prior (undergraduate) GPA of 3.0 or above;

• Initial certification to teach music in the public schools of New York State or equivalent preparation;

• Reported scores on the GRE with a minimum combined Quantitative Reasoning and Verbal Reasoning score of 272 and submission of a GRE Analytical Writing score;

• Applicants who do not meet these requirements may be admitted conditionally by permission of the Director of the School of Music and with the approval of the Associate Provost for Graduate Studies;

• A performance audition is not necessary; however, students in the Music Education degree program who desire to do a Performance Recital Final Project must audition for and be accepted by the appropriate applied music faculty at the time of application and not later than 6 to 12 credit hours into the program.

The School of Music offers two tracks in the Master of Music - Music Education, the Final Project Program and the In-Service Program. 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
This 30-credit program leads to one of three Final Project options: Thesis/Final Project, 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.

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. MUED 695 Thesis/Final Project.

In-Service Program
The 36-credit In-Service program provides 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.

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.

SPECIFIC REQUIREMENTS

<table>
<thead>
<tr>
<th>Required courses for all Master of Music - Music Education</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 521 Music Bibliography</td>
<td>3</td>
</tr>
<tr>
<td>MUS 624 Analytic Techniques</td>
<td>3</td>
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<tr>
<td>MUED 619 Foundations of Music Education I</td>
<td>3</td>
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<tr>
<td>MUED 620 Foundations of Music Education II</td>
<td>3</td>
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<tr>
<td>MUED 621 Music Education Foundation III</td>
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</tr>
<tr>
<td>9 credit hours of elective course work, by advisement</td>
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</tbody>
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Subtotal: 24

NOTE:

• *Individualized selections of course work in theory, history, literature, performance and special studies MUS 590 or MUED 590 and MUED 591. Course work outside of music may be acceptable, subject to the establishing of a clear relationship to the candidate's professional goals. Short "workshops" MUED 555/MUED 565 can be applied only in this category. For those approved for the performance recital option, electives will include MUS 605 and MUS 606 studio lessons as 4 of the 6 elective credits.

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

MUSIC EDUCATION STUDIES - M.M. DEGREE

School of Music
Office: Mason Hall
(716) 673-3157
Dr. Katherine Levy, Program Coordinator
Email: Heeyoun.Cho@fredonia.edu
Website: https://www.fredonia.edu/academics/colleges-schools/school-music/music/grad

The Master of Music in Music Education Studies program is intended for students who seek a graduate degree in Music Education but who do not intend to teach in public K-12 schools in the state of New York. The program leads to a Master's degree but does not lead to New York State teacher certification. It is ideal for out-of-state and international students.

Requirements for Admission to Program Without Deficiencies:

• Undergraduate studies equivalent to the Bachelor of Music Education degree offered at Fredonia.
• Completion of a baccalaureate degree in Music at an accredited four-year institution with a minimum GPA of 3.0.
• Applicants who do not meet these requirements may be admitted conditionally by permission of the Director of the School of Music and with the approval of the Associate Provost for Graduate Studies.
• A performance audition and acceptance by the appropriate applied music faculty at the time of application and not later than 6 to 12 credit hours into the program are required only for those students in the Music Education Studies degree program who desire to complete a performance recital.

The School of Music offers two tracks in the Music Education Studies Master of Music: the Final Project Program and the Educational Expertise Program. 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
This 30-credit program leads to one of three Final Project options: Thesis/Final Project, 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.

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. MUED 695 Thesis/Final Project.

Educational Expertise Program
The 36-credit Educational Expertise program provides 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.

General Requirements

1. At least 15 credit hours for the overall program should be in music education and music education-related course work;
2. At least 12 credit hours for 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.

Note:
• Candidates seeking the Professional Certification for Music teaching in New York State should apply for the Music Education Master of Music degree.

Specific Requirements

Required courses for all Music Education Studies

Master of Music tracks:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 521</td>
<td>Music Bibliography</td>
<td>3</td>
</tr>
<tr>
<td>MUS 624</td>
<td>Analytic Techniques</td>
<td>3</td>
</tr>
<tr>
<td>MUED 619</td>
<td>Foundations of Music Education I</td>
<td>3</td>
</tr>
<tr>
<td>MUED 620</td>
<td>Foundations of Music Education II</td>
<td>3</td>
</tr>
<tr>
<td>MUED 621</td>
<td>Music Education Foundation III</td>
<td>3</td>
</tr>
</tbody>
</table>

3 credit hours of Music Education or Music Education-related course work, by advisement (MUED)
3 credit hours of music theory, history, literature, performance  
9 credit hours of elective coursework, by advisement

**Subtotal: 30**

NOTE:

*Individualized selections of course work in theory, history, literature, performance and special studies MUS 590 or MUED 590 and MUED 591. Course work outside of music may be acceptable, subject to the establishing of a clear relationship to the candidate's professional goals. Short "workshops" MUED 555/MUED 565 can be applied only in this category. For those approved for the performance recital option, electives will include MUS 605 and MUS 606 studio lessons as 4 of the 6 elective credits. Subtotal: 30
MUSIC INDUSTRY - B.S. DEGREE

Music Industry is housed within the School of Business
Office: E336D Thompson Hall
(716) 673-4750
Dr. Reneta Barneva, Program Coordinator
Email: Reneta.Barneva@fredonia.edu
Website: http://home.fredonia.edu/musicindustry

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

MAJOR REQUIREMENTS

Supporting Courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMM 102</td>
<td>Mass Media and Society</td>
<td>3</td>
</tr>
<tr>
<td>CSIT 107</td>
<td>Web Programming I</td>
<td>3</td>
</tr>
<tr>
<td>CSIT 104</td>
<td>Introduction to Microcomputer Software</td>
<td>3</td>
</tr>
<tr>
<td>CSIT 151</td>
<td>Introduction to Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>ECON 200</td>
<td>Fundamentals of Statistics for Business</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td>Administration and Economics</td>
<td></td>
</tr>
<tr>
<td>BUAD 200</td>
<td>Fundamentals of Statistics for Business</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td>Economics</td>
<td></td>
</tr>
<tr>
<td>ACCT 201</td>
<td>Principles of Financial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 202</td>
<td>Principles of Managerial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>ECON 205</td>
<td>Principles of Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 210</td>
<td>Principles of Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 100</td>
<td>Craft of Writing</td>
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Subtotal: 27

Core Courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>MUS 021-048 Special Ensemble</td>
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</tr>
<tr>
<td>MUS 021-048 Special Ensemble</td>
<td>0.5</td>
<td></td>
</tr>
<tr>
<td>MUSB 100</td>
<td>Pathway to Success</td>
<td>3</td>
</tr>
<tr>
<td>MUS 101</td>
<td>Beginning Music Theory I</td>
<td>3</td>
</tr>
<tr>
<td>MUS 104</td>
<td>Applied Music Class for Non-Music Majors</td>
<td>1</td>
</tr>
<tr>
<td>MUS 115</td>
<td>Music Appreciation</td>
<td>3</td>
</tr>
<tr>
<td>MUSB 101</td>
<td>Music Industry Career</td>
<td>3</td>
</tr>
<tr>
<td>MUSB 201</td>
<td>The Business of Music</td>
<td>3</td>
</tr>
<tr>
<td>MUSB 230</td>
<td>History of the Music Industry</td>
<td>3</td>
</tr>
<tr>
<td>MUSB 301</td>
<td>Music Copyrights</td>
<td>3</td>
</tr>
<tr>
<td>MUSB 304</td>
<td>Business of the Beatles</td>
<td>3</td>
</tr>
</tbody>
</table>

MUSB 320 | Music Contracts                                 | 3       |
MUSB 351 | Digital Marketing for Music Industry             | 3       |
MUSB 420 | Student Record Label                            | 3       |
MUSB 425 | Music Marketing and Promotion                    | 3       |
MUSB 435 | Contemporary Issues in Music and the Marketplace| 3       |
MUSB 465 | Music Industry Internship                        | 1-15    |
MUSB 470 | Concert Touring and Sound                       | 3       |
MUSB 233 | Musics of the World                             | 3       |

Subtotal: 51

NOTE:

- MUS 104 must be taken twice for a total of 2 credit hours (credit hours are included in the total above).
- MUSB 465 is a variable 1-15 credit hour course; students must successfully complete the course with a minimum of 3 credit hours to satisfy the degree requirements.

Plus 3 credit hours from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 265</td>
<td>History of Jazz</td>
<td>3</td>
</tr>
<tr>
<td>MUS 270</td>
<td>The History of American Popular Music, 1900-1963</td>
<td>3</td>
</tr>
<tr>
<td>MUSB 457</td>
<td>Seminar in Popular Music</td>
<td>3</td>
</tr>
</tbody>
</table>

Subtotal: 3

Total Credit Hours: 81
MUSIC PERFORMANCE - MUS.B. DEGREE

School of Music
Office: 2157 Mason Hall
(716) 673-3151
Dr. Sarah Hamilton, Program Coordinator
Email: Music@fredonia.edu
Website: https://www.fredonia.edu/academics/colleges-schools/school-music/music/undergrad

Through a study of solo, chamber and large ensemble literature, this program emphasizes the development of skills for a potential career as a performer.

MAJOR REQUIREMENTS:

Musicianship Core
The musicianship core is the set of required studies common to all music degree programs (Bachelor of Arts in Music, Bachelor of Science in Music Therapy, Bachelor of Science in Music with an emphasis in Sound Recording Technology, all programs of the Bachelor of Music).

MUS 115 Music Appreciation 3
MUS 263 Music History in Western Civilization I 3
MUS 264 Music History in Western Civilization II 3
MUS 231 Conducting I 2
MUS 121 Aural Skills I 2
MUS 122 Aural Skills II 2
MUS 123 Music Theory I 3
MUS 124 Music Theory II 3
MUS 221 Aural Skills III 2
MUS 222 Aural Skills IV 2
MUS 223 Music Theory III 3
MUS 224 Music Theory IV 3
MUS 118 Piano Class, Elementary 2
MUS 100 Recital-Seminar 0
MUS 120 Concert Attendance 0
MUS 125 Applied Music Major 2
MUS 126 Applied Music Major 2

Subtotal: 37

NOTE:
- MUS 118: waived for students whose principal instrument is piano;
- MUS 120: each semester of private applied lessons;
- MUS 107 and MUS 108 are required of all freshmen oboe and bassoon majors.

Plus the following:
MUS 200 Recital Seminar 0
MUS 245 Performance Major 3
MUS 246 Performance Major 3
MUS 300 Recital Seminar 0
MUS 345 Performance Major 3
MUS 346 Performance Major 3
MUS 400 Recital Seminar 0
MUS 445 Performance Major 3
MUS 446 Performance Major 3
MUS 347 Junior Recital 1
MUS 447 Senior Recital 1
MUED 291 Technology in Music I 2
Ensembles, by advisement 11

Subtotal: 33

NOTE:
- Ensembles: 1-credit hour ensemble using principal instrument each semester of residency/six (6) participations in .5 credit hour ensembles.

Each student is admitted to the program on a principal performing instrument, with additional requirements as follows:

Percussion
MUS 217 Piano Class, Intermediate 1
MUS 218 Piano Class, Intermediate 1
MUS 355 Pedagogy Practicum 0
MUS 356 Pedagogy Practicum 0

Subtotal: 2

Piano
MUS 201 Collaborative Piano Skills and Repertoire I 2
MUS 202 Collaborative Piano Skills and Repertoire II 2
MUS 340 Piano Pedagogy I 3
MUS 420 Piano Literature I 3
MUS 421 Piano Literature II 3
MUS 355 Pedagogy Practicum 0
MUS 356 Pedagogy Practicum 0
MUS 415 Piano Class for Keyboard Majors 1
MUS 416 Piano Class for Keyboard Majors 1

Subtotal: 15

String Instruments
MUS 217 Piano Class, Intermediate 1
MUS 218 Piano Class, Intermediate 1
MUS 355 Pedagogy Practicum 0
MUS 356 Pedagogy Practicum 0
Electives in music theory, musicology, string literature or chamber music literature 6

Subtotal: 8

Voice
MUS 137 Diction for Singers-English .5
MUS 138 Diction for Singers-Italian .5
MUS 139 Diction for Singers-German .5
MUS 140 Diction for Singers-French .5
MUS 213 Opera Seminar I 1
MUS 217 Piano Class, Intermediate 1

Subtotal: 9

Total: 139

ALL PROGRAMS 139
MUS 218 Piano Class, Intermediate 1
MUS 313 Opera Seminar II 1
MUS 317 Piano Class 1
MUS 318 Piano Class 1
MUS 344 Vocal Pedagogy 3
MUS 349 Vocal Pedagogy Practicum 1
MUS 417 Piano Class for Non-Keyboard Majors 1
MUS 418 Vocal Accompaniment for Non-Keyboard Majors 1
Music Theory elective 3
Music History or Literature elective 3

Subtotal: 20

NOTE:

• MUS 417-MUS 418: may be replaced by one semester of accompanying work under the supervision of the MUS 418 Class Piano Instructor.

• Recommended: four semesters of German, French, Italian or Spanish by advisement.

• 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.

Wind Instruments
MUS 217 Piano Class, Intermediate 1
MUS 218 Piano Class, Intermediate 1
MUS 355 Pedagogy Practicum 0
MUS 356 Pedagogy Practicum 0
Music Theory elective 3
Music History elective 3

Subtotal: 8

Oboe or Bassoon
MUS 107 Double Reed Class I .5
MUS 108 Double Reed Class II .5

Subtotal: 1

Total Credit Hours: 72-92

MUSIC PERFORMANCE - M.M. DEGREE

School of Music
Office: 2157 Mason Hall
(716) 673-4631
Dr. Sarah Hamilton, Program Coordinator
Email: Sarah.Hamilton@fredonia.edu
Website: https://www.fredonia.edu/academics/graduate-studies/all-graduate-programs

Requirements for Admission to Program without Deficiencies:

Completion of a baccalaureate degree in Music at an accredited four-year institution with a minimum of 3.0 GPA preferred. Applicants who do not meet these requirements may be admitted conditionally by permission of the Director of the School of Music and with the approval of the Office of Graduate Studies.

Must audition for and be accepted by the appropriate applied music faculty.

A student working toward a Master of Music in Performance must select one of the four performance tracks: 1) Instrumental, 2) Voice, 3) Conducting, or 4) Collaborative Piano. 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.

MAJOR REQUIREMENTS:

Core Curriculum
MUS 521 Music Bibliography 3
MUS 592 Graduate Performance Major 3
MUS 593 Graduate Performance Major 3
MUS 624 Analytic Techniques 3
MUS 692 Graduate Performance Major 3
MUS 693 Graduate Performance Major 3
Comprehensive Oral Examination 0
Graduate Recital

Subtotal: 18

PERFORMANCE TRACK REQUIREMENTS

Voice
MUS 615 Graduate Diction for Singers 3
By advisement:
Music Theory or History 3
Electives 10

Subtotal: 16

NOTE:

• Electives: 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 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.

- Vocal majors will participate in two public performances.

**Instrumental (orchestral instruments, guitar, piano)**

*All courses by advisement.*

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Music Theory and History</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Electives in supporting areas</td>
<td>3</td>
</tr>
<tr>
<td><strong>Subtotal:</strong> &amp; <strong>Total Credit Hours:</strong>          &amp; <strong>30-38</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Conducting**

*All courses by advisement.*

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Music Theory and History</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Electives in supporting areas</td>
<td>3</td>
</tr>
<tr>
<td><strong>Subtotal:</strong> &amp; <strong>Total Credit Hours:</strong>          &amp; <strong>12</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Collaborative Piano**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 522</td>
<td>Style and Techniques of Song Literature</td>
<td>3</td>
</tr>
<tr>
<td>MUS 523</td>
<td>Sonata Duo and Chamber Ensemble Seminar</td>
<td>3</td>
</tr>
<tr>
<td>MUS 524</td>
<td>Techniques of Opera Coaching</td>
<td>3</td>
</tr>
<tr>
<td>MUS 516</td>
<td>Collaborative Piano Performance Seminar</td>
<td>1</td>
</tr>
<tr>
<td>MUS 516</td>
<td>Collaborative Piano Performance Seminar</td>
<td>1</td>
</tr>
<tr>
<td>MUS 615</td>
<td>Graduate Diction for Singers</td>
<td>3</td>
</tr>
<tr>
<td>MUS 616</td>
<td>Collaborative Piano Performance Seminar</td>
<td>1</td>
</tr>
<tr>
<td>MUS 616</td>
<td>Collaborative Piano Performance Seminar</td>
<td>1</td>
</tr>
<tr>
<td><strong>By advisement:</strong> &amp; <strong>Total Credit Hours:</strong>    &amp; <strong>12</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Total Credit Hours: 30-38**

**MUSIC THEORY / MUSIC COMPOSITION - M.M. DEGREE**

**School of Music**
Office: Mason Hall
(716) 673-3157

**Dr. Robert Deemer, Program Coordinator**
Email: Robert.Deemer@fredonia.edu
Website: https://www.fredonia.edu/academics/colleges-schools/school-music/music/grad

**Requirements for Admission to Program without Deficiencies:**
Undergraduate studies in music equivalent to a Bachelor of Music degree with a major in theory or composition, or any other undergraduate music degree which includes four semesters of music theory (equivalent to Fredonia's MUS 121-MUS 122, MUS 123-MUS 124, MUS 221-MUS 222, MUS 223-MUS 354), a music history survey (equivalent to MUS 263 and MUS 264), and advanced undergraduate courses in theory, composition, orchestration, counterpoint, or music history totaling at least 12 semester hours.

**MUSIC THEORY TRACK**

Final Comprehensive Oral Examination required

**Core Courses:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 521</td>
<td>Music Bibliography</td>
<td>3</td>
</tr>
<tr>
<td>MUS 624</td>
<td>Analytic Techniques</td>
<td>3</td>
</tr>
<tr>
<td><strong>Subtotal:</strong> &amp; <strong>Total Credit Hours:</strong>          &amp; <strong>6</strong></td>
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</table>

**Required Theory Courses:**

<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 503</td>
<td>20th Century Counterpoint</td>
<td>3</td>
</tr>
<tr>
<td>MUS 614</td>
<td>The Pedagogy of Music Theory</td>
<td>3</td>
</tr>
<tr>
<td>MUS 652</td>
<td>Schenkerian Analysis</td>
<td>3</td>
</tr>
<tr>
<td>MUS 653</td>
<td>Post-Tonal Analysis</td>
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</tr>
<tr>
<td><strong>Subtotal:</strong> &amp; <strong>Total Credit Hours:</strong>          &amp; <strong>9</strong></td>
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<td></td>
</tr>
</tbody>
</table>

**Music History Courses:**

Select 3 of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 542</td>
<td>Renaissance Period in Music</td>
<td>3</td>
</tr>
<tr>
<td>MUS 643</td>
<td>Baroque Period in Music</td>
<td>3</td>
</tr>
<tr>
<td>MUS 544</td>
<td>Classical Period in Music</td>
<td>3</td>
</tr>
<tr>
<td>MUS 545</td>
<td>Romantic Period in Music</td>
<td>3</td>
</tr>
<tr>
<td>MUS 646</td>
<td>Modern Period in Music</td>
<td>3</td>
</tr>
<tr>
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<td></td>
</tr>
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</table>

**Final Course:**
During the final semester, theory track majors will complete the following projects:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>MUS 695</td>
<td>Thesis</td>
<td>1-3</td>
</tr>
<tr>
<td><strong>Subtotal:</strong> &amp; <strong>Total Credit Hours:</strong>          &amp; <strong>3</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**NOTE:**
- MUS 695 is a variable 1-3 credit hour course. Students must complete the course for 3 credit hours in order to satisfy the degree requirements.

**MUSIC COMPOSITION TRACK**

Final Comprehensive Oral Examination required

**Core Courses:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 521</td>
<td>Music Bibliography</td>
<td>3</td>
</tr>
<tr>
<td>MUS 624</td>
<td>Analytic Techniques</td>
<td>3</td>
</tr>
<tr>
<td><strong>Subtotal:</strong> &amp; <strong>Total Credit Hours:</strong>          &amp; <strong>6</strong></td>
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**Composition Courses:**

<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 609</td>
<td>Composition</td>
<td>3</td>
</tr>
<tr>
<td>MUS 610</td>
<td>Composition</td>
<td>3</td>
</tr>
<tr>
<td>MUS 611</td>
<td>Composition</td>
<td>3</td>
</tr>
<tr>
<td>MUS 651</td>
<td>Pedagogy of Music Composition</td>
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</tr>
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</table>

**Music Theory Requirements:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 614</td>
<td>The Pedagogy of Music Theory</td>
<td>3</td>
</tr>
</tbody>
</table>
Choose one course from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 503</td>
<td>20th Century Counterpoint</td>
<td>3</td>
</tr>
<tr>
<td>MUS 652</td>
<td>Schenkerian Analysis</td>
<td>3</td>
</tr>
<tr>
<td>MUS 653</td>
<td>Post-Tonal Analysis</td>
<td>3</td>
</tr>
</tbody>
</table>

Subtotal: 6

Music History Courses:

Select three courses from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 542</td>
<td>Renaissance Period in Music</td>
<td>3</td>
</tr>
<tr>
<td>MUS 643</td>
<td>Baroque Period in Music</td>
<td>3</td>
</tr>
<tr>
<td>MUS 544</td>
<td>Classical Period in Music</td>
<td>3</td>
</tr>
<tr>
<td>MUS 545</td>
<td>Romantic Period in Music</td>
<td>3</td>
</tr>
<tr>
<td>MUS 646</td>
<td>Modern Period In Music</td>
<td>3</td>
</tr>
</tbody>
</table>

Subtotal: 3

Final Course:

During the final semester, composition track majors will complete the following projects:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 695</td>
<td>Thesis</td>
<td>1-3</td>
</tr>
</tbody>
</table>

Subtotal: 3

NOTE:
- MUS 695 is a variable 1-3 credit hour course. Students must complete the course for 3 credit hours in order to satisfy the degree requirements.

Subtotal: 36

MUSIC THERAPY - B.S. DEGREE

School of Music
Office: Mason Hall
(716) 673-3151
Dr. Heeyoun Cho, Program Coordinator
Email: Heeyoun.Cho@fredonia.edu
Website: https://www.fredonia.edu/academics/colleges-schools/school-music/music/music-therapy

The Bachelor of Science in Music Therapy Program is designed to provide the academic, clinical and professional preparation necessary for an entry-level career in music therapy nationwide. Upon completion of all degree requirements, students are eligible to sit for the Board Certification Exam of the Certification Board for Music Therapists (CBMT). Upon successfully passing the exam, candidates are designated Music Therapist-Board Certified (MT-BC), and may also join the American Music Therapy Association as professional members.

The program is designed as direct preparation for the Master of Music degree in Music Therapy. The completion of the master's degree fulfills the educational requirement for the New York State License in Creative Arts Therapy.

Music Therapy majors must achieve a minimum grade of B- in all courses designated with the prefix MUTY.
NOTE:

- MUS 113 waived if voice is principal instrument;
- MUS 217 - MUS 218, MUS 317 waived if piano is principal instrument;
- MUS 318 music therapy section;
- PSY 289 or other developmental psychology course with advisory approval;
- PSY 200 may be substituted with an elective psychology course, as advised;
- Recommended ensemble experiences: 1-credit large ensemble with principal instrument; choral experience for non-vocalists;
- MUS 370 may substitute for yoga.

For Piano Majors:

- MUS 415 Piano Class for Keyboard Majors 1

Subtotal: 1

For Vocal Majors:

- MUS 033 Opera Prod Practicum 0.5
- MUS 137 Diction for Singers-English .5
- MUS 138 Diction for Singers-Italian .5
- MUS 139 Diction for Singers-German .5
- MUS 140 Diction for Singers-French .5

Subtotal: 2.5

Total Credit Hours: 98-101.5

MUSIC THERAPY - M.M. DEGREE

School of Music
Office: Mason Hall
(716) 673-3157

Dr. Heeyoun Cho, Program Coordinator
Email: Heeyoun.Cho@fredonia.edu
Website: https://www.fredonia.edu/academics/colleges-schools/school-music/music/grad

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 graduate music therapy courses, mental health courses (Psychopathology and Developmental Psychology) and graduate music education courses (Psychology of Music and Psychological Research in Music). The program offers music therapist the opportunity to advance and deepen their music therapy skills, knowledge and practice to meet the Advanced Competencies of the American Music Therapy Association (AMTA) and fulfills the educational requirement for the New York State Licensed Creative Arts Therapist (LCAT). It is designed with the needs of full-time working music therapists in mind and may be pursued on a part-time basis. Opportunities for advanced training include Guided Imagery and Music, Clinical Improvisation and Vocal Psychotherapy.

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)

MAJOR REQUIREMENTS

Graduate Core Curriculum:

- MUS 521 Music Bibliography 3
- MUS 624 Analytic Techniques 3

Subtotal: 6
## Music Therapy Courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUTY 505</td>
<td>Foundations of Advanced Music Therapy I</td>
<td>3</td>
</tr>
<tr>
<td>MUTY 510</td>
<td>Advanced Guitar Skills for Music Therapists</td>
<td>2</td>
</tr>
<tr>
<td>MUTY 518</td>
<td>Foundations of Clinical Piano Improvisation</td>
<td>2</td>
</tr>
<tr>
<td>MUTY 520</td>
<td>Theory of Vocal Psychotherapy</td>
<td>2</td>
</tr>
<tr>
<td>MUTY 530</td>
<td>Introduction to Guided Imagery and Music</td>
<td>2</td>
</tr>
<tr>
<td>MUTY 590</td>
<td>Special Studies in Music Therapy</td>
<td>3</td>
</tr>
<tr>
<td>MUTY 605</td>
<td>Foundations of Advanced Music Therapy II</td>
<td>3</td>
</tr>
<tr>
<td>MUTY 620</td>
<td>Vocal Psychotherapy Practice</td>
<td>2</td>
</tr>
<tr>
<td>MUTY 630</td>
<td>Clinical Music and Imagery</td>
<td>2</td>
</tr>
</tbody>
</table>

**Subtotal: 21**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUTY 550</td>
<td>Internship in Music Therapy</td>
<td>4</td>
</tr>
<tr>
<td>MUTY 650</td>
<td>Advanced Practicum in Music</td>
<td>2</td>
</tr>
</tbody>
</table>

**Subtotal: 6**

**NOTE:**
- MUTY 590, as advised.

## Music Education Courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUED 514</td>
<td>Psychology of Music</td>
<td>3</td>
</tr>
<tr>
<td>MUED 522</td>
<td>Psychological Research in Music</td>
<td>3</td>
</tr>
</tbody>
</table>

**Subtotal: 6**

## Psychology Courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUTY 560</td>
<td>Lifespan Human Development</td>
<td>3</td>
</tr>
<tr>
<td>MUTY 570</td>
<td>Psychopathology</td>
<td>3</td>
</tr>
</tbody>
</table>

**Subtotal: 6**

## Final Project:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUED 695</td>
<td>Thesis/Final Project</td>
<td>1-3</td>
</tr>
</tbody>
</table>

**Subtotal: 3**

**NOTE:**
- MUED 695 is a variable 1-3 credit hour course. Student must complete a total of 3 credit hours.

## Total Credit Hours: 48
MUSICAL THEATRE - B.F.A DEGREE

Department of Theatre and Dance
Office: 212 Rockefeller Arts Center
(716) 673-3596
Sam Kenney, Chairperson
Email: theatre.dance@fredonia.edu
Website: http://home.fredonia.edu/theatredance

School of Music
Office: 1151 Mason Hall
(716) 673-3151
Daniel Ihasz, Director
Laura Koepke, Associate Director
Email: music.school@fredonia.edu
Website: http://home.fredonia.edu/music

MAJOR REQUIREMENTS

Core courses:
DANC 111  Contemporary Technique I  2
DANC 112  Ballet I  2
DANC 113  Jazz Dance I  2
DANC 114  Tap Dance I  2
or
DANC 214  Tap Dance II  2
DANC 213  Jazz Dance II  2
MUS 100  Recital-Seminar  0
MUS 101  Beginning Music Theory I  3
MUS 102  Beginning Music Theory II  3
MUS 117  Piano Class, Elementary  1
MUS 118  Piano Class, Elementary  2
MUS 125  Applied Music Major  2
MUS 126  Applied Music Major  2
MUS 137  Diction for Singers-English  .5
MUS 138  Diction for Singers-Italian  .5
MUS 200  Recital Seminar  0
MUS 217  Piano Class, Intermediate  1
MUS 235  Musical Theatre Voice  3
MUS 236  Musical Theatre Voice  3
MUS 300  Recital Seminar  0
MUS 335  Musical Theatre Voice  3
MUS 336  Musical Theatre Voice  3
MUS 400  Recital Seminar  0
MUS 435  Musical Theatre Voice  3
MUS 436  Musical Theatre Voice  3
THEA 100  Theatre Majors Seminar  1
THEA 103  Fundamentals of Theatre  1
THEA 121  Introduction to Technical Theatre  3
THEA 131  Acting Studio: Acting I  3
THEA 132  Acting Studio: Acting II  3
THEA 201  Theatre and Dance Productions  1
THEA 202  Theatre and Dance Productions  1
THEA 231  Acting Studio: Scene Study I  3
THEA 232  Acting Studio: Scene Study II  3
THEA 242  Acting Studio: Introduction to Voice and Movement I  3
THEA 243  Acting Studio: Introduction to Voice and Movement II  3
THEA 301  Theatre and Dance Productions  1
THEA 302  Theatre and Dance Productions  1
THEA 341  Acting Studio: Shakespeare  3
THEA 353  History of Musical Theatre  3
THEA 382  Musical Theatre Styles I  3
THEA 424  The Business of Acting  3
THEA 432  Musical Theatre Styles II  3
THEA 435  Rehearsal and Performance  1

Subtotal: 85

NOTE:
• Recital Seminars (MUS 100, MUS 200, MUS 300, MUS 400) must each be taken twice. Students are required to be in a Recital Seminar class for each semester they are taking voice lessons.
• THEA 435 is a 1-credit course that must be taken twice.
• All majors in the Department of Theatre and Dance are expected to carry a minimum GPA of 3.0 in their major program, and a minimum cumulative GPA of 2.0.

Electives
In addition to the courses listed above, all BFA Musical Theatre majors must complete 10 credits of discipline-specific electives. Six (6) of those credits must come from upper-level THEA courses, and the remaining four (4) must come from DANC courses. These electives should be chosen from the following:
DANC 111  Contemporary Technique I  2
DANC 112  Ballet I  2
DANC 113  Jazz Dance I  2
DANC 114  Tap Dance I  2
DANC 211  Contemporary Technique II  2
DANC 212  Ballet II  2
DANC 213  Jazz Dance II  2
DANC 214  Tap Dance II  2
DANC 241  Dance Improvisation  2
DANC 264  Choreography I  3
DANC 311  Contemporary Technique III  2
DANC 312  Ballet III  2
DANC 313  Jazz Dance III  2
DANC 341  Selected Topics in Dance .5- 3
DANC 364  Choreography II  3
DANC 370  Dance Studio Management  3
THEA 338  Special Topics .5- 3
THEA 341  Acting Studio: Shakespeare  3
THEA 345  Acting Studio: Voice and Movement III  3
THEA 346  Acting Studio: Voice and Movement IV  3
THEA 359  Commedia dell’Arte  3
THEA 410  Acting for Media I  3
THEA 411  Acting for Media II  3
THEA 423  Acting Studio: Alternative Acting Styles  3
THEA 467  Meisner Technique  3
THEA 468  Devising Theatre  3
THEA 482  Directed Study  1-3
THEA 490  Professional Theatre Intern  1-3

Subtotal: 10

Total Credit Hours: 95

Philosophy
Office: E370 Thompson Hall
(716) 673-3207
David Rankin, Chairperson
Email: political.science@fredonia.edu

Philosophy is the study of the most basic questions one can ask about the nature of reality, human existence, knowledge, value, and meaning. It develops the skills of careful inquiry and logical thinking, which are the hallmarks of successful people in all walks of life. The philosophy department offers a major, a minor, and a series of courses designed to complement student majors in other fields, as well as courses of general interest to all students.

Numerous philosophy courses are designed to complement student majors in other fields including business, economics, computer science, art, film, music, theatre, criminal justice, legal studies, and the natural and social sciences. The philosophy department has advisement material available for students who wish to pursue an interest in philosophy in conjunction with these majors and minors.

PHILOSOPHY DEPARTMENTAL HONORS

Philosophy Departmental Honors
Philosophy department honors will be earned by those graduating majors who fulfill the following: (1) an overall GPA of at least 3.3; (2) a GPA in philosophy courses of at least 3.50; (3) completion of at least two 400-level courses with grades of “A-” or higher (exclusive of credit earned as a teaching assistant).

Philosophy department high honors will be earned by those graduating majors who fulfill the following: (1) an overall GPA of at least 3.3; (2) a GPA in philosophy courses of at least 3.70; (3) completion of at least two 400-level courses with grades of “A” (exclusive of credit earned as a teaching assistant); (4) completion of a 3-credit hour, independent study thesis, PHIL 485, with a grade of “A-” or higher.

PHILOSOPHY - B.A. DEGREE

MAJOR REQUIREMENTS

Thirty (30) credit hours in philosophy, at least 18 credit hours of which are in courses numbered 300 or above.

Core Courses:

One logic course
PHIL 116  Introduction to Logic  3
or
PHIL 301  Intermediate Deductive Logic  3

Subtotal: 3

One history of philosophy course
PHIL 222  The Greek Way  3
or
PHIL 223  Roman Philosophy  3
or
PHIL 224  Medieval Thought  3
or
PHIL 226  The Age of Reason and Its Legacy  3
or
PHIL 432  The Age of Analysis: Philosophy Since 1900  3

Subtotal: 3

One capstone course
PHIL 477  Capstone Seminar  3

Subtotal: 3

A Model Program would include the following (in addition to the required courses listed above):

PHIL 115  Introduction to Philosophy  3
PHIL 218  Introduction to Ethics  3
or
PHIL 265  Social/Political Philosophy  3
PHIL 345  The Meaning of Life  3
or
PHIL 441  Philosophy of Language and Semantics  3
PHIL 430  Philosophy of Mind  3
or
PHIL 351  Metaphysics  3
or
PHIL 353  Theory of Knowledge  3

Subtotal: 12

NOTE:
• Plus related philosophy courses and PHIL 477 capstone experience. Seniors are strongly urged to take an additional seminar.

Subtotal: 21
Total Credit Hours: 21
Graduates with a major in Philosophy typically go on to careers in areas such as law, business, public service, teaching and creative writing.

The Fredonia Philosophical Society is a student-initiated club organized for the purpose of holding extracurricular discussions of a wide range of philosophical topics. The Fredonia Philosophical Society and the Department of Philosophy co-sponsor external speakers of general interest. All meetings are open to the entire campus and the public.

Students should consult the department for current offerings in the above areas. All waivers of requirements must be approved by the chairperson.

Physics
Office: 112 Jewett Hall
(716) 673-3301
Justin Conroy, Chairperson
Email: physics.department@fredonia.edu
Website: http://home.fredonia.edu/physics

The discipline of physics is basic among the sciences and focuses on the study of natural phenomena. Its centrality and emphasis on problem solving makes an undergraduate degree in physics an excellent beginning for diverse careers well beyond the discipline, such as in engineering, biophysics, technical business, patent law, medicine, and radiation therapy to name a few. Within physics itself, research and development opportunities are growing as new fields such as nanotechnology, quantum computing, and new energy technologies mature. A steady demand for teachers at the high school and college level provides additional attractive physics careers. Within the department students find many opportunities for independent study and research with faculty. An active student club provides additional research experiences, travel opportunities to conferences, and social events. Some students also engage in internships with businesses and national laboratories.

The Department of Physics offers a major with concentrations in theoretical and experimental physics, a minor, a major through the 3-2 Cooperative Engineering program, an initial certification to teach physics in secondary school (Adolescence Education - Physics (p. 30)), interdisciplinary major in Mathematics-Physics (p. 114), a major in Industrial Management (p. 108), and courses to complement majors in other areas.

Additional Programs
The Department of Physics administers the Cooperative Engineering program and the degree program in Industrial Management (p. 108). See separate entries in the catalog for these programs.

It is of special note that students may double major in Physics and Industrial Management, if they choose to do so. Interested students should see their academic advisor for details.

Student Honors and Awards
Student honors and awards presented by the Department of Physics include the Hack Arroe Memorial Scholarship Award, the John J. Connelly Physics Scholarship Incentive Award, the John J. Connelly Physics Peer Recognition Award, and the Physics Department Scholarship Award. Students should contact the Department of Physics chairperson for additional details on these awards. Specific awards for Cooperative Engineering students are also available (see section on Cooperative Engineering)

PHYSICS - B.S. DEGREE

Physics Department
Office: 205 Jewett Hall
(716) 673-3301
Dr. Justin Conroy, Chairperson
Email: Physics.Department@fredonia.edu

MAJOR REQUIREMENTS

The requirements for a B.S. in Physics include the Physics Core and an emphasis chosen from: Theoretical, Experimental or Physics with Cooperative Engineering

Physics Core:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 230</td>
<td>University Physics I</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 232</td>
<td>University Physics I Lab</td>
<td>1</td>
</tr>
<tr>
<td>PHYS 231</td>
<td>University Physics II</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 233</td>
<td>University Physics II Lab</td>
<td>1</td>
</tr>
<tr>
<td>PHYS 234</td>
<td>Modern Physics</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 330</td>
<td>Thermodynamics</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 400</td>
<td>Undergraduate Seminar</td>
<td>1</td>
</tr>
<tr>
<td>PHYS 425</td>
<td>Mathematical Physics I</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 431</td>
<td>Introduction to Quantum Mechanics</td>
<td>3</td>
</tr>
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Subtotal: 24

Supporting math/CSIT courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td>MATH 122</td>
<td>University Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>MATH 123</td>
<td>University Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>MATH 223</td>
<td>University Calculus III</td>
<td>4</td>
</tr>
<tr>
<td>MATH 224</td>
<td>Differential Equations</td>
<td>3</td>
</tr>
<tr>
<td>CSIT 106</td>
<td>Scientific Programming Using C/C++</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>or</td>
<td></td>
</tr>
<tr>
<td>CSIT 121</td>
<td>Computer Science I</td>
<td>3</td>
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Subtotal: 18

Theoretical

<table>
<thead>
<tr>
<th>Course</th>
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<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 331</td>
<td>Theoretical Mechanics</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 333</td>
<td>Electricity and Magnetism</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 426</td>
<td>Mathematical Physics II</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Physics from 321-479, 490</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Science, mathematics, computer</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>science, engineering, or education</td>
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</table>
Subtotal: 27

NOTE:

• Recommended courses include MATH 231 and CHEM 115-CHEM 116 (with CHEM 125 - CHEM 126).

Experimental

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit</th>
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</thead>
<tbody>
<tr>
<td>PHYS 333</td>
<td>Electricity and Magnetism</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 340</td>
<td>Optics</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 341</td>
<td>Optics Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>PHYS 426</td>
<td>Mathematical Physics II</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 450</td>
<td>Advanced Laboratory</td>
<td>1</td>
</tr>
</tbody>
</table>

or

Experimental Physics Project (independent study or tutorial)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physics from 321-479, 490</td>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>

or

Science, mathematics, computer science, engineering, or education 12

Subtotal: 27

NOTE:

• Twelve (12) additional credit hours of science, mathematics, computer science, engineering, or education, including at least one additional course from PHYS 322 through 328 and PHYS 340 - PHYS 341 as advised. Students interested in electrical engineering should take PHYS 323 and PHYS 324 while students interested in non-electrical engineering should take PHYS 322.

• CHEM 115 and CHEM 116 (with CHEM 125 and CHEM 126) is strongly recommended and required by most engineering schools.

• Affiliated engineering institutions may have additional requirements for courses and/or grades.

Total Credit Hours: 69

Politics & International Affairs

Office: E370 Thompson Hall
(716) 673-3207

David Rankin, Chairperson
Email: political.science@fredonia.edu
Website: http://home.fredonia.edu/polisci

The Department of Politics and International Affairs offers a Political Science Bachelor of Arts (p. 149) or minor in Political Science (p. 203) and a minor in International Studies.

A degree in Political Science is a liberal arts discipline designed to prepare students as informed citizens and leaders in the public and private sector. Fredonia graduates hold responsible positions from local to international levels of government and politics, policy, business, journalism, education, numerous and diverse careers across the United States and abroad. Many of our alumni continue their studies in graduate or law school. Our department offers a wide array of courses and specialization across American politics, comparative politics, international relations, public law and political theory. Areas of specialization include U.S. foreign policy, Latin American politics, European politics, media and politics, constitutional law, elections, Congress, the presidency, public administration, public policy and many other areas.

We encourage students to enhance and apply their learning on and off campus. Students participate in study abroad, for a full semester or for shorter trips of two to three weeks. Many students earn academic credit while interning in Washington, DC or Albany for the summer or a full semester. Others participate in the Model European Union across New York State and in Europe. Still others participate in local and regional internship opportunities to earn academic credit through their work on political campaigns, in governmental agencies, offices, and an assortment of organizations. Many students are actively involved in campus leadership and initiatives with the Political Science Association and as part of numerous other student group activities on campus, in the community, and region.

Awards, Activities and Organizations

The department is a member of Pi Sigma Alpha, the national Political Science Honor Society. Undergraduates need not be a political science major to qualify for membership.

Fredonia also operates a chapter of Sigma Iota Rho, honor society for International Studies. Students who are interested in membership should contact the coordinator of the International Studies minor program.
The Department offers scholarships to entering freshmen, based on merit: the Political Science Alumni Scholarship, the Politics & International Affairs Faculty Scholarship and a J.R. Soukup Freshmen Award.

The Department annually gives the Erna G. and J. Murdoch Dawley Award to the outstanding graduating senior. A J.R. Soukup Pi Sigma Alpha Award is given annually to the outstanding junior. The department awards the John R. Quatroche Jr. Award to a Political Science student who demonstrates an outstanding record of involvement in extracurricular affairs, campus service and leadership. The James Hurtgen Scholarship provides assistance to students interning in Washington, DC.

Politics and International Affairs Special Program
The Department of Politics & International Affairs participates in various Interdisciplinary Studies minors such as the Geographic Information Systems minor (p. 193), and the International Studies minor (p. 194). The department also participates in the Engineering (Cooperative) (p. 97) program.

POLITICAL SCIENCE - B.A. DEGREE

Politics and International Affairs

Office: E368 Thompson Hall
(716) 673-3207
Dr. David Rankin, Chairperson
Email: David.Rankin@fredonia.edu

MAJOR REQUIREMENTS

Core Courses:
- POLI 120 Politics in American Life 3
- POLI 150 World Affairs 3
- POLI 200 Statistics 3
- POLI 241 Democracy Across Societies 3

Subtotal: 12

Students must pick an area of concentration, which are: American Politics, Law and Politics or World Politics as noted below.

American Politics Concentration

Three courses from the following (at least one of which must be POLI 323, POLI 324 or POLI 370)
- POLI 311 Fundamentals of Public Administration 3
- POLI 321 Political Parties and Interest Groups 3
- POLI 322 New York Government 3
- POLI 323 Elections in America 3
- POLI 324 President and Congress 3
- POLI 325 Public Opinion and Participation 3
- POLI 326 Media and Politics 3
- POLI 329 Topics in American Politics 3
- POLI 370 American Constitutional Law 3
- POLI 382 Social Welfare Policy 3

and Political Theory Course 3

and World Politics Courses (2) 6

Subtotal: 18

Law and Politics Concentration

Three courses from the following:
- POLI 353 International Law and Organization 3
- POLI 370 American Constitutional Law 3
- POLI 371 Civil Rights and Liberties 3
- POLI 375 The Judicial Branch 3
- POLI 379 Topics in Public Law 3
- POLI 383 Courts and Social Policy 3

and Political Theory Course 3

and World Politics Courses (2) 6

Subtotal: 18

World Politics Concentration

Four courses from the following:

Western Courses
- POLI 330 Western European Politics 3
- POLI 332 Russian Politics 3
- POLI 343 International Migration and Immigration Politics 3
- POLI 348 The European Union 3
- POLI 349 Topics in Comparative Politics 3
- POLI 351 The Inter-American System 3

Non-Western Courses
- POLI 341 Political Economy of Development 3
- POLI 345 Film and Politics 4
- POLI 346 East Asian Political Economy 3

International Relations
- POLI 352 World Political Geography 3
- POLI 353 International Law and Organization 3
- POLI 355 International Political Economy 3
- POLI 356 U.S. Foreign Policy 3
- POLI 359 Topics in International Politics 3
- POLI 362 Terrorism and Counterterrorism 3

and American Politics Course 3
and

Political Theory Course 3

Subtotal: 18

Political Theory Concentration

A concentration in Political Theory may be designed with the approval of the department chairperson.

Political Theory courses include the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>POLI 360</td>
<td>Classical Political Theory</td>
<td>3</td>
</tr>
<tr>
<td>POLI 361</td>
<td>Modern Political Theory</td>
<td>3</td>
</tr>
<tr>
<td>POLI 363</td>
<td>Game Theory</td>
<td>3</td>
</tr>
<tr>
<td>POLI 365</td>
<td>American Political Thought</td>
<td>3</td>
</tr>
<tr>
<td>POLI 369</td>
<td>Topics in Political Theory</td>
<td>3</td>
</tr>
</tbody>
</table>

Students may also create their own concentration, e.g., International Political Economy, Middle East Politics, Political Theory, with the approval of the department chairperson.

Required Senior Seminar Course (Capstone experience)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>POLI 450</td>
<td>Capstone Seminar</td>
<td>3</td>
</tr>
</tbody>
</table>

Subtotal: 3

Total Credit Hours: 33

Pre-Law Advisement

Office: 232 Fenton Hall
(716) 673-3852
David Kaplin, Pre-Law Advisor

Office: W375 Thompson Hall
(716) 673-4612
Jesse Norris, Pre-Law Advisor
Website: http://home.fredonia.edu/interdisciplinary/pre-law-advisement

Pre-Law Advising Program

A liberal arts education offers the ideal preparation for a career in law. The American Bar Association does not recommend a particular major or set of courses to prepare for a legal education; instead, it identifies a series of skills required in law school and later as an attorney (http://www.abanet.org/legaled/prelaw/prep.html). At Fredonia, students are able to develop the reading comprehension ability, written and oral communication skills, and analytical and critical thinking skills necessary to excel in these environments. In addition, there are many substantive courses dealing with the law and its role in society, politics and business that will grant students greater familiarity with the law and the legal profession.

Mission Statement

To help students take advantage of Fredonia’s curriculum, the Pre-Law Advising Committee at Fredonia works to advise and support students preparing for a career in law and those who plan to attend law school. The committee assists students through course and career advisement and provides guidance on the preparation of a successful law school application, including the organization of test (LSAT) preparation programs.

Overview

The Pre-Law Advising Program at Fredonia assists students interested in attending law school. The Program holds general meetings to introduce all students to process of preparing for law school, as well as offering individual counseling.

All Fredonia students interested in attending law school should register with the Pre-Law Advising Program. Please see David Kaplin, Alex Caviedes, or Jesse Norris.

Students interested in receiving advisement as to which courses are particularly suited to develop and strengthen the above-listed skills should contact Alex Caviedes, in Thompson Hall E388, or Jesse Norris, in Thompson Hall W375.

Students interested in preparing for the Law School Admissions Test (LSAT) should contact David Kaplin, in Fenton Hall 232.

Students interested in receiving advisement and assistance with the process of applying to law school can contact either Alex Caviedes, David Kaplin, or Jesse Norris.

Pre-Medicine and Allied Areas

Health Professions Advising Program

Office: 221 Science Center
(716) 673-3282
Ted Lee, Program Coordinator
Email: biology@fredonia.edu
Website: http://home.fredonia.edu/prehealth

Fredonia graduates have enjoyed considerable success in gaining entry to medical, veterinary, osteopathic, optometry, dental and other professional health programs. The Health Professions Advising Committee closely advises and assists each pre-medical student and prepares a committee letter on his/her behalf. The complete credentials file is assembled by the Biology Department and submitted in a timely manner on behalf of each applicant.

While medical schools do not stipulate a particular major program of undergraduate study, they do require that students have minimum preparation in a number of areas including Biology, Chemistry, English, Psychology, and Physics. The Fredonia Biology major meets the requirements for American medical schools and many students choose it as the most appropriate undergraduate pre-med program. Pre-Health students may select any major at Fredonia. Students interested in careers in the health professions should register with the Health Professions Advising Program as freshmen to ensure appropriate advice and assistance (register at the Department of Biology Office in the Science Center, room 221).
The Health Professions Advising Committee at Fredonia advises students on course selection and extracurricular activities. The committee interviews sophomores to provide advice early in the academic program and when the students are preparing to apply to health professional schools. It is highly recommended that all pre-health students use the advising services of the Health Professions Advising Committee.

Students who are seriously considering a medical, veterinary or dental career should seek appropriate summer employment/internship opportunities early in their undergraduate experience. Fredonia students regularly intern at local practices and clinics.

The Health Professions Advising Office has books, DVDs and other resources on careers in medicine and the health professions that students can borrow. The program offers a 1-credit professional development course (BIOL 275 Health Professions Careers) that is designed to assist students in preparing for the application process and beyond. Students take this course in the fall semester of their sophomore or junior years. The Pre-Health Professions Club invites guest speakers to campus to talk about careers in the health professions, has on-campus meetings and activities, and sponsors local volunteering events.

Early Acceptance program with the Lake Erie College of Osteopathic Medicine (LECOM)
Fredonia has an affiliation agreement with LECOM that allows students to earn a baccalaureate degree from Fredonia and a doctoral degree in osteopathic medicine. There are 2 tracks to the program: a 3+4 track where students complete their undergraduate degree at Fredonia before matriculating to LECOM and a 4+4 track where students complete 3 years at Fredonia and 4 years at LECOM. Students in the 3+4 track earn the baccalaureate degree from Fredonia upon completion of 30 credit hours at LECOM. Admission to the program is competitive and dependent on a number of factors in addition to the usual admission policies at Fredonia. Students may apply as high school seniors or as Fredonia undergraduates. Students interested in this program should contact either the Department of Biology or the Admissions Office for further details.

There is also an affiliation agreement with LECOM’s Pharmacy School. There are both 3+4 and 4+4 tracks for this program. Students may apply as high school seniors or as Fredonia undergraduates. Students interested in this program should contact either the Department of Biology or the Admissions Office for further details.

Combined Degree Program with SUNY College of Optometry
This Combined Degree (3/4) Program is a seven-year program developed between the State University of New York at Fredonia and the State University of New York State College of Optometry. This program allows participating students the opportunity to receive a baccalaureate (B.S.) degree in Biology and a Doctor of Optometry (O.D.) degree in optometry. The first three years of the program are completed at Fredonia and the last four years are completed at SUNY College of Optometry. Admission is competitive and requirements are in addition to the usual admission policies at Fredonia. Accepted students are admitted into Fredonia's Biology major and simultaneously admitted to candidacy to the SUNY College of Optometry's professional program of study. Students interested in this program should contact either the Department of Biology or the Admissions Office for further details.

Combined degree program with the New England 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 New England College College of Optometry (NECO). This program allows participating students the opportunity to receive a baccalaureate (B.S.) degree in Biology and a Doctor of Optometry (O.D.) degree in optometry. The first three years of the program are completed at Fredonia and the last four years are completed at NECO. Admission is competitive and requirements are in addition to the usual admission policies at Fredonia. Accepted students are admitted into Fredonia's Biology major. Students interested in this program should contact either the Department of Biology or the Admissions Office for further details.

Combined Degree Program with the University of Buffalo School of Pharmacy and Pharmaceutical Sciences
The Combined Degree Program is a seven-year program developed between the State University of New York at Fredonia and the State University of New York at Buffalo, School of Pharmacy and Pharmaceutical Sciences. This program allows participating students the opportunity to receive a baccalaureate degree in either Biology or Biochemistry and a doctoral degree in pharmacy. The first three years of the program are completed at Fredonia and the last four years are completed at SUNY at Buffalo, School of Pharmacy and Pharmaceutical Sciences. Students apply to this program in their junior year at Fredonia and need to have completed the prerequisite courses for the Pharmacy program at Buffalo with a 3.5 GPA for all courses. Students interested in this program should contact either the Department of Biology or the Admissions Office for further details.
Psychology

Office: W357 Thompson Hall
(716) 673-3129
Joseph McFall, Chairperson
Email: psychology.department@fredonia.edu
Website: http://www.fredonia.edu/department/psychology/

Our department offers a Bachelor of Arts degree in Psychology (p. 153) and a Bachelor of Science degree in Psychology (p. 154), as well as minors in General Psychology (p. 203), School and Counseling Psychology, (p. 205) and Industrial-Organizational Psychology (p. 194). Our curriculum is aligned to the learning standards and guidelines for undergraduate studies in psychology recommended by the American Psychological Association. Our curricular requirements ensure that students explore the many subdisciplines of psychology to have broad exposure to the field, while also providing flexibility. Students may specialize their degree by taking advanced elective courses offered by specialists in those fields.

Our university prides itself on being student-centered and the Psychology Department exemplifies that achievement. Students may learn and apply skills outside of the classroom through our Internship Program, Mentoring Program, Teaching Practicum, and student research opportunities. We have an active Psychology Club and a chapter of the Psi Chi honor society. Our department also provides opportunities for students who wish to study abroad.

Students perform internships in clinical, school, counseling, and forensic settings, as well as work with organizations and family support/social services agencies. Our Mentoring Program pairs advanced students with new students in the program to build supportive relationships to help all students succeed. Several students each semester learn about teaching and serve as learning assistants in our Psychology Lab course. We also encourage students to participate in their peer’s human research studies, volunteer in a research lab, conduct empirical or library research with faculty members through independent study, be mentored by faculty in conducting their own original research, or complete an Honors Thesis. Many students have co-authored published articles and presented the results of their research at local, regional, and national conferences.

The department recognizes superior student performance with the Psychology Merit Award, the Donald John Lehr Endowment, the Dr. Daniel C. Krawczyk Exemplary Award, and the Elizabeth Scorborough Psychology Scholarship.

Our graduates have gone on to enjoy rewarding careers with mental health agencies, schools, hospitals, drug and alcohol treatment centers, as well as business careers such as sales, management, and human resources.

The Psychology program at Fredonia provides a solid foundation for advanced degree work, with many majors continuing on in their education to earn graduate degrees in school psychology, social work, developmental psychology, counseling psychology, and human factors engineering.

Interested persons are encouraged to contact the department chairperson for additional information.

Mission Statement

The Mission of the Department of Psychology is to provide a comprehensive undergraduate education in Psychology to its majors, expose interested non-majors to the discipline of psychology, and offer courses that support the campus general education program (CCC or Fredonia Foundations), and programs in other majors. Students are required to sample from a variety of core courses that span the discipline of psychology and to acquire a firm foundation in research methods and data analysis. Qualified students are able to apply their content knowledge, research and clinical skills through internship and independent study.

Student Learning Outcomes

The psychology department has selected a subset of intended student learning outcomes from the American Psychological Association (APA) Guidelines for the Undergraduate Major (2013). The learning outcomes are tied to each required course in the major. The departments five intended student learning outcomes are:

1. Knowledge Base in Psychology: Majors will demonstrate fundamental knowledge and comprehension of the major concepts, theoretical perspectives, historical trends, and empirical findings in psychology.

2. Scientific Inquiry and Critical Thinking: Majors will engage in scientific reasoning and critical thinking, including effective research methodology in solving problems related to behavior and mental processes. This includes psychology information literacy and interpreting, designing and conducting basic psychological research.

3. Ethical and Social Responsibility in a Diverse World: Majors will develop socially responsible behaviors for professional and personal settings, including development of values that build diverse communities.

4. Communication: Majors will demonstrate competence in writing, oral and interpersonal communication skills.

5. Professional Development: Majors will apply psychology specific content skills, including effective self-reflection, project-management skills, and teamwork skills to develop career and graduate school readiness.

Requirements for Transfer Credit
• For a transfer course to be counted toward the minimum hours required for a major or a minor, the course must be evaluated as equivalent to a course taught in the Department of Psychology.

• For a major, a limit of 12 transfer credits may be counted towards the 35 required, i.e., a minimum of 23 credit hours must be taken in the department at Fredonia.

• For a minor, a minimum of 9 credit hours must be taken in the department at Fredonia.

**PSYCHOLOGY - B.A DEGREE**

**Psychology**
Office: W357 Thompson Hall
(716) 673-3129
Dr. Joseph McFall, Chairperson
Email: Psychology.Department@fredonia.edu

**MAJOR REQUIREMENTS**

The Psychology Department requires a good academic standing (minimum overall GPA 2.0) for entry into the Psychology B.A. major from another major at Fredonia.

**Core Courses:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSY 129</td>
<td>Foundations of Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSY 130</td>
<td>Psychology Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>PSY 200</td>
<td>Statistics for Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSY 315</td>
<td>Research Methods</td>
<td>3</td>
</tr>
</tbody>
</table>

Subtotal: 9-10

**NOTE:**

• The above courses should be completed by the end of the junior year.

• PSY 100 Freshman Seminar is recommended for all first semester freshman majors.

• PSY 130 is waived for all students entering the program with 30 hours or more of undergraduate coursework completed.

**Choose one course from the Psychophysiology area:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSY 342</td>
<td>Perception</td>
<td>3</td>
</tr>
<tr>
<td>PSY 351</td>
<td>Physiological Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSY 361</td>
<td>Cognitive Neuroscience</td>
<td>3</td>
</tr>
<tr>
<td>PSY 363</td>
<td>Psychopharmacology</td>
<td>3</td>
</tr>
</tbody>
</table>

Subtotal: 3

**Choose one course from the Cognitive area:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSY 343</td>
<td>Cognitive Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSY 344</td>
<td>Psychology of Language</td>
<td>3</td>
</tr>
<tr>
<td>PSY 364</td>
<td>Cognitive Development</td>
<td>3</td>
</tr>
</tbody>
</table>

Subtotal: 3

**Choose one course from the Social/Personality area:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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</tr>
</thead>
<tbody>
<tr>
<td>PSY 246</td>
<td>Personality</td>
<td>3</td>
</tr>
<tr>
<td>PSY 345</td>
<td>Social Psychology</td>
<td>3</td>
</tr>
</tbody>
</table>

**Subtotal:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSY 356</td>
<td>Abnormal Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSY 379</td>
<td>Child Psychopathology</td>
<td>3</td>
</tr>
<tr>
<td>PSY 447</td>
<td>Introduction to Counseling</td>
<td>3</td>
</tr>
</tbody>
</table>

Subtotal: 3

**Choose one course from the Clinical/Counseling area:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSY 429</td>
<td>History and Systems of Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSY 430</td>
<td>Theories of Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSY 439</td>
<td>Senior Honors Seminar</td>
<td>3</td>
</tr>
</tbody>
</table>

Subtotal: 3

**Choose one course in Theoretical Thinking (capstone experience) area:**

<table>
<thead>
<tr>
<th>Course</th>
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<th>Credits</th>
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</thead>
<tbody>
<tr>
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<td>Lifespan Human Development</td>
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<td>Psychology of Adulthood</td>
<td>3</td>
</tr>
<tr>
<td>PSY 379</td>
<td>Child Psychopathology</td>
<td>3</td>
</tr>
</tbody>
</table>

Subtotal: 3

**NOTE:**

• Students choosing to take PSY 364, PSY 365 or PSY 379 to meet both an area requirement and a developmental focus must take an additional psychology elective in order to fulfill the requirement that they have 35 credit hours of psychology courses.

**Psychology Electives:**

7-8 credit hours of any psychology courses to bring total psychology credit hours to 35.

Subtotal: 7-8

**Math Requirement**

Completion of one course with a MATH prefix at the 100 level or above.

Subtotal: 3

**Minor Requirement**

A minor in a field other than Psychology to complement the major, chosen with advisement, is required.

Note:

• Transfer students must complete at least 23 credit hours in Psychology at Fredonia

• Minimum 2.0 cumulative quality point average in all Psychology courses

Subtotal: 38

**Total Credit Hours: 38**
**PSYCHOLOGY - B.S. DEGREE**

Psychology  
Office: W357 Thompson Hall  
(716) 673-3129  
Dr. Joseph McFall, **Chairperson**  
Email: Psychology.Department@fredonia.edu

**MAJOR REQUIREMENTS**

The Psychology Department requires a good academic standing (minimum overall GPA 2.0) for entry into Psychology Bachelor of Science major from another major at Fredonia.

**Core Courses:**

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</tr>
<tr>
<td>PSY 315</td>
<td>Research Methods</td>
<td>3</td>
</tr>
<tr>
<td>PSY 415</td>
<td>Advanced Research Methods</td>
<td>3</td>
</tr>
<tr>
<td>PSY 489</td>
<td>Independent Study</td>
<td>1-3</td>
</tr>
</tbody>
</table>

**Core Subtotal:** 15-16

**NOTE:**

- The above courses should be completed by the end of the junior year.
- PSY 100 Freshman Seminar is recommended for all first semester freshman majors.
- PSY 130 is waived for all students entering the program with 30 hours or more of undergraduate coursework completed.
- PSY 489 is a variable 1-3 credit hour course. Students must complete at least 3 credit hours total to satisfy the degree requirement.

**Choose one course from the Psychophysiology area:**

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
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<td>PSY 342</td>
<td>Perception</td>
<td>3</td>
</tr>
<tr>
<td>PSY 351</td>
<td>Physiological Psychology</td>
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<td>PSY 361</td>
<td>Cognitive Neuroscience</td>
<td>3</td>
</tr>
<tr>
<td>PSY 363</td>
<td>Psychopharmacology</td>
<td>3</td>
</tr>
</tbody>
</table>

**Psychophysiology Subtotal:** 3

**Choose one course from the Cognitive area:**

<table>
<thead>
<tr>
<th>Course</th>
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<td>Cognitive Development</td>
<td>3</td>
</tr>
</tbody>
</table>

**Cognitive Subtotal:** 3

**Choose one course from the Social/Personality area:**

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
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<td>PSY 365</td>
<td>Social Development</td>
<td>3</td>
</tr>
</tbody>
</table>

**Social/Personality Subtotal:** 3

**Choose one course from the Clinical/Counseling area:**

<table>
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<tr>
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<td>Introduction to Counseling</td>
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</table>

**Clinical/Counseling Subtotal:** 3

**Choose one course from the Theoretical Thinking (capstone experience) area:**

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<tr>
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<td>PSY 439</td>
<td>Senior Honors Seminar</td>
<td>3</td>
</tr>
</tbody>
</table>

**Theoretical Thinking Subtotal:** 3

**Choose one course of a Developmental Focus:**

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
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<td>Lifespan Human Development</td>
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<tr>
<td>PSY 379</td>
<td>Child Psychopathology</td>
<td>3</td>
</tr>
</tbody>
</table>

**Developmental Focus Subtotal:** 3

**Choose one course of a Theoretical Thinking Developmental Focus:**

<table>
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<tr>
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<td>PSY 363</td>
<td>Psychopharmacology</td>
<td>3</td>
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</table>

**Theoretical Thinking Developmental Focus Subtotal:** 3

**Psychology Electives:**

7-8 credit hours of any Psychology courses to bring total Psychology credit hours to 41.

**Math Requirement:**

Completion of one course with a MATH prefix at the 100 level or above.

**Subtotal:** 7-8

**Select ONE Focus (Biology/Chemistry/Data Science)**

**Biology Focus**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 131</td>
<td>Introductory Ecology and Evolution</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 132</td>
<td>Introductory Ecology and Evolution Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>BIOL 133</td>
<td>Introductory Cell and Molecular Biology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 134</td>
<td>Introductory Cell and Molecular Biology Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 115</td>
<td>General Chemistry Lecture I</td>
<td>3</td>
</tr>
</tbody>
</table>

**Biology Subtotal:** 11

**Chemistry Focus**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 115</td>
<td>General Chemistry Lecture I</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 125</td>
<td>General Chemistry Laboratory I</td>
<td>1</td>
</tr>
</tbody>
</table>

**Chemistry Subtotal:** 4

**NOTE:**

- Students who have fewer than 24 upper-level Psychology credits should take a 300-level or 400-level elective, as all students are required to take at least 24 upper-level credits in their major.
- Students choosing to take PSY 364, PSY 365 or PSY 379 to meet both an area requirement and a developmental focus must take an additional psychology elective in order to fulfill the requirement that they have 41 credit hours of psychology courses.
CHEM 116 General Chemistry Lecture II 3
CHEM 126 General Chemistry Laboratory II 1
BIOL XXX One Biology Course 3

Subtotal: 11

Note:

• Transfer students must complete at least 23 credit hours in Psychology at Fredonia

• Honors Thesis may be substituted for independent study requirement

• Minimum 2.0 cumulative quality point average in all Psychology courses

Subtotal: 54-55

Total Credit Hours: 54-55

PUBLIC ACCOUNTANCY - B.S. DEGREE

School of Business
Office: W307 Thompson Hall
(716) 673-3402
Dr. Julie Fitzpatrick, Program Coordinator
Email: business.administration@fredonia.edu
Website: http://home.fredonia.edu/businessadministration

MAJOR REQUIREMENTS

In order to qualify for Certified Public Accountant (CPA) licensure in New York State, students must complete 150 credit hours including the following courses

Supporting Courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 120</td>
<td>Survey of Calculus I</td>
<td>3</td>
</tr>
<tr>
<td>CSIT 104</td>
<td>Introduction to Microcomputer Software</td>
<td>3</td>
</tr>
<tr>
<td>CSIT 151</td>
<td>Introduction to Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>CSIT 251</td>
<td>Information Systems Structures</td>
<td>3</td>
</tr>
</tbody>
</table>

Subtotal: 9

Lower Level Business Core Courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 200</td>
<td>Fundamentals of Statistics for Business Administration and Economics</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 201</td>
<td>Principles of Financial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 202</td>
<td>Principles of Managerial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>ECON 205</td>
<td>Principles of Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 210</td>
<td>Principles of Macroeconomics</td>
<td>3</td>
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</tbody>
</table>

Subtotal: 15

Upper Level Business Core Courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUAD 300</td>
<td>Statistical Analysis</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 311</td>
<td>Business Law I</td>
<td>3</td>
</tr>
<tr>
<td>BUAD 320</td>
<td>Managerial Finance</td>
<td>3</td>
</tr>
<tr>
<td>BUAD 323</td>
<td>Organizational Behavior</td>
<td>3</td>
</tr>
<tr>
<td>BUAD 327</td>
<td>Operations Management</td>
<td>3</td>
</tr>
<tr>
<td>BUAD 328</td>
<td>Marketing Foundations</td>
<td>3</td>
</tr>
<tr>
<td>BUAD 499</td>
<td>Strategic Management</td>
<td>3</td>
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</table>

Subtotal: 21

Accounting Courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 301</td>
<td>Intermediate Accounting I</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 302</td>
<td>Intermediate Accounting II</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 303</td>
<td>Cost Management</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 304</td>
<td>Taxation I</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 305</td>
<td>Taxation II</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 307</td>
<td>Accounting Information Systems I</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 312</td>
<td>Business Law II</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 401</td>
<td>Advanced Accounting</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 405</td>
<td>Auditing</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 407</td>
<td>Accounting Information Systems II</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 440</td>
<td>Accounting Theory &amp; Research</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 455</td>
<td>Adv Auditing &amp; Fraud Examination</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 480</td>
<td>Internship</td>
<td>1-9</td>
</tr>
<tr>
<td>BUAD 378</td>
<td>Business and Ethics</td>
<td>3</td>
</tr>
</tbody>
</table>

Subtotal: 55

NOTE:

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

• Public Accountancy majors must complete at least 66 credit hours of non-ACCT/BUAD prefixed courses.

• Public Accountancy majors are allowed to repeat a failed major course no more than two times.

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

Subtotal: 100

Total Credit Hours: 100
Sociocultural and Justice Sciences
(formerly the Department of Sociology, Anthropology, Social Work, and Criminal Justice)
Office: W363 Thompson Hall
(716) 673-3205
Randolph Hohle, Chairperson
Email: sociocultural.justice@fredonia.edu
Website: http://home.fredonia.edu/sociocultural

The Department of Sociocultural and Justice Sciences offers majors in Sociology (p. 156), Social Work (p. 157), and Criminal Justice (p. 61). Minors in Criminal Justice (p. 187), Public Health (p. 204), and Sociology (p. 205) are offered as well.

SOCIOCULTURAL AND JUSTICE SCIENCES

SOCIOCULTURAL AND JUSTICE SCIENCES
Office: W363 Thompson Hall
(716) 673-3205
Randolph Hohle, Chairperson
Email: sociocultural.justice@fredonia.edu
Website: http://home.fredonia.edu/sociocultural

Sociology provides valuable insights into the human experience and assists in the understanding of human behavior. Sociologists are interested in understanding how people live and interact, in learning how human groups of all kinds (families, Sport teams, religious groups, crowds, large bureaucratic organizations, etc.) operate in a wide variety of situations, and in assessing and evaluating how societies work. Sociology explores assumptions about people, their groups, and their societies. It carefully analyzes problem areas and evaluates possible solutions.

Student Honors and Awards
Sociology majors who maintain a minimum 3.0 grade point average in the discipline and overall will be eligible for induction into Alpha Kappa Delta, the International Sociology Honor Society. A minimum of 12 credit hours of sociology taken at Fredonia is required.

MAJOR REQUIREMENTS

Core Courses:
ANTH 115 Introductory Anthropology 3 or
SOC 219 Cultures of the World 3
SOC 116 Introductory Sociology 3
SOC 200 Statistics in the Real World 3
SOC 300 Research Methods 3
SOC 380 Sociological Theory 3
SOC 400 Senior Seminar 3

Subtotal: 18

Electives:
21 credits required, minimum 15 at 300 level or above.
Students may choose any class from any theme.

Cultural Sociology
SOC 201 Social Problems 3
SOC 219 Cultures of the World 3
SOC 275 Social Inequalities 3
SOC 306 Sex and Gender 3
SOC 310 Sociology of Deviant Behavior 3
SOC 324 City and Community 3
SOC 331 American Utopian Communities 3
SOC 334 Caribbean Societies and Cultures 3
SOC 335 Sociology of Sport 3

Healthcare and Public Health
SOC 215 Introduction to Public Health 3
SOC 218 Introduction to Social Work 3
SOC 311 Sociology of Addiction 3
SOC 312 Plagues and Peoples 3
SOC 340 Medical Sociology 3
SOC 342 Food and Culture 3
SOC 345 Women, Health and Society 3
SOC 415 Seminar in Public Health 1

Families
SOC 230 Our Populated Planet 3
SOC 320 Family Sociology 3
SOC 363 Victimology 3
SOC 364 Juvenile Delinquency 3
SOC 365 Family Violence 3

Alternating Themes
SOC 350 Special Topics 1-3
SOC 470 Directed Study 1-3
SOC 472 Sociology Internship 1-15

Subtotal: 21

NOTE:
- SOC 200, or equivalent
- SOC 219, only for students who have taken ANTH 115 in the core
- SOC 380, Fall semester only
- SOC 400, Spring semester only
- Internship credit may be applied toward your Sociology electives if approved by your advisor. However, no more than 6 hours of internship credit may be applied toward your Sociology electives. Internship credit beyond 6 hours may be applied as non-major electives (up to the college limit for internship credit).
- Designated cross-listed courses: SOC 306, SOC 312, SOC 331, SOC 334, SOC 345

Subtotal: 18
Total Credit Hours: 39

SOCIAL WORK - B.S. DEGREE

Sociocultural and Justice Sciences
Office: W381 Thompson Hall
(716) 673-3470
Michael Clarkson-Hendrix, Program Director
Email: sociocultural.justice@fredonia.edu
Website: http://home.fredonia.edu/socialwork

The Bachelor of Science in Social Work is one of several major degree programs offered by the Department of Sociocultural and Justice Sciences (formerly known as the Department of Sociology, Anthropology, Social Work, and Criminal Justice). The program is accredited by the Council on Social Work Education (CSWE), the profession’s educational accreditation organization. All program activities are designed to meet its mission and goals. Students must demonstrate mastery of ten core competencies for which they and the program are assessed on an annual basis.

Social Work Program Mission Statement
The mission of The State University of New York at Fredonia Bachelor of Science in Social Work program is to enact the mission of the university and home department, the Department of Sociocultural and Justice Sciences. Through committed, quality teaching-learning activities, the program educates, challenges, and inspires students to be connected, creative, responsible, global citizens and generalist social work professionals who will advance and promote a socially and economically just world.

Program Goals
The goals of the Fredonia Social Work program are as follows:

1. The Fredonia Social Work program seeks to prepare generalist social workers who value the principles of service and importance of human relationships in their efforts to maintain and improve the social functioning of individuals, families, groups, organizations, communities and society.

2. The Fredonia Social Work program seeks to prepare generalist social workers who are practitioner-researchers: active, applied social scientists who work to strengthen and improve the well-being of others through their critical and scientific approach and enactment of the generalist problem solving method with systems of all sizes.

3. The Fredonia Social Work program seeks to prepare generalist social workers who understand and enact the standards and core principles of the NASW Code of Ethics in their interactions, relationships and decision-making.

4. The Fredonia Social Work program seeks to prepare generalist social workers who practice ethnic and culturally sensitive social work practice with diverse populations and who fight to eliminate social injustice experienced by oppressed populations.

5. The Fredonia Social Work program seeks to prepare well-rounded, liberal arts trained generalist social workers who have mastered the CSWE core competencies, especially the skills and mindset needed in the use of the professional self.

6. The Fredonia Social Work program seeks to prepare generalist social workers who integrate knowledge, values, and skills for competent entry-level professional practice and/or graduate education.

Program Policies
The social work profession has been a leader in the cause of fighting prejudice, discrimination, and oppression against all people in society. Admission and advancement into the program are based upon the published criteria. Race, color, national origin, religion, creed, age, disability, sex, gender identity, sexual orientation, familial status, pregnancy, predisposing genetic characteristics, military status, domestic violence victim status, ethnicity, and/or political orientation play no role in the program decisions. Criminal conviction does not play a role in admission and advancement. However, criminal conviction can be an obstacle to placement in certain field agency sites. The program works with these students to find appropriate placement.

Social work is also a professional field with expectations of professional behavior. Students who meet the published criteria but who have evidenced a pattern of unprofessional, unsuitable behavior may be denied advancement and/or dismissed from the program. Students may also be dismissed from the program for academic reasons. Students must earn a grade of “C” or better in their required social work major courses to continue in the major. More specific expectations and policies are detailed in the student handbook.

Assessment
The program assesses students’ mastery of the nine core competencies on a yearly basis. A multiple methods approach based upon students’ actual performance and written products are used in this assessment. A weighted score is created for each student and for each cohort group. The aggregate cohort scores are reported on the program web page each year and they serve as guides in curriculum discussions. Assessment patterns and trends inform curriculum decisions.
**Transfer Students**
The Social Work program welcomes transfer students. The curriculum was designed to facilitate a successful transition from other institutions. Incoming freshmen and sophomore students are given intensive advising to prepare for advancement and to promote success in all academic pursuits. Incoming juniors who transfer with an A.A./A.S. degree or who have 60 credit hours are also given intensive advisement but they must meet all the advancement criteria prior to transfer. When applying for advancement into the junior year course work, these students must file their application with supporting documents and they must:

1. Be formally accepted into Fredonia for the fall semester;
2. Document the completion of 60 credit hours (or submit their plan to complete at least 60 hours before they start the fall semester); and
3. Establish equivalency for courses transferring as Introduction to Social Work (e.g., Introduction to Human Services), and Human Biology.

To establish equivalency, students must submit a syllabus for the course in question to the Social Work Program Director who must determine that the purpose, content, and scope of the course is the same or similar enough to the Fredonia course that it can stand in the place of the Fredonia course. The program director may contact the college/university to gather more information to make a determination. If approved, a Transfer Credit Approval form must be filed with the Fredonia Registrar.

Social work courses transferred from a Council on Social Work Education Accredited program will be approved for credit but may not be judged equivalent to the Fredonia social work courses. This occurs because of differences in curriculum and course sequencing among programs. Transfer students from an accredited program will need to meet with the program director to determine equivalency. No equivalency will be granted for the Field Practicum unless placed by the program in an international placement. Students earning a B.S. degree in Social Work from Fredonia must complete their 450 practicum hours through the Fredonia program.

*NOTE: No academic credit for life or work experience will be given as an equivalent for any course.*

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**C.S.W.E. Competencies**
The curriculum is designed to help students master C.S.W.E.'s nine core professional social work competencies. Each course is intentionally designed and delivered to teach the knowledge, values and skills needed to perform the practice behaviors associated with each competency. In our capstone professional field education experience, students put the knowledge, values and skills into action. These nine competencies are:

1. Demonstrate ethical and professional behavior;
2. Engage diversity and difference in practice;
3. Advance human rights and social, economic, and environmental justice;
4. Engage in practice-informed research and research-informed practice;
5. Engage in policy practice;
6. Engage with individuals, families, groups, organizations, and communities;
7. Assess individuals, families, groups, organizations, and communities;
8. Intervene with individuals, families, groups, organizations, and communities; and
9. Evaluate practice with individuals, families, groups, organizations, and communities.

---

**Advancement into the Professional Methods Sequence**
CSWE Accreditation Standards require programs to have admissions criteria into the major. The Fredonia program has a two tiered process. First, students are classified as “pre-candidates” until they have completed 30 credit hours of general education and other course work; passed Introductory Sociology, Foundations of Psychology, Human Biology and Statistics; and have a 2.0 cumulative grade point average. Upon completion of these criteria, students will be considered candidates for “Advanced Status” in Social Work. To obtain Advanced Status, candidates must complete the second tier of the Advancement process which allows entry into the foundation professional methods courses. The professional methods courses are taken in a sequence beginning in the fall semester of the junior year. The second-tier of the Advancement process requires an application, a written response to a question posed on the application, three recommendations, verification that all the prerequisite coursework and grade point average criteria are met.

**MAJOR REQUIREMENTS**
Degree candidates in Social Work must

1. complete the Fredonia Foundations general education program;
2. complete prerequisite courses;
3. successfully complete the Advancement process in the second semester of their sophomore year;
4. complete required social work courses;
5. complete 6 credit hours of course work with diversity content from an approved list of Fredonia Foundations courses;

6. maintain and complete a portfolio;

7. complete enough general elective hours and/or a minor to earn 120 credit hours; and

8. consistently demonstrate professional behavior.

**Prerequisite Courses:**

- SOC 116  Introductory Sociology  3
- PSY 129  Foundations of Psychology  3
- BIOL 110  Human Biology  3
- BUAD 200  Fundamentals of Statistics for Business and Economics  3
- EDU 200  Statistics  3
- or
- POLI 200  Statistics  3
- or
- PSY 200  Statistics for Psychology  3
- or
- SOC 200  Statistics in the Real World  3
- or
- STAT 200  Statistical Methods I  3
- SOC 218  Introduction to Social Work  3

**Subtotal: 15**

**Social Work Courses:**

- SOCW 249  Toward a Great Society  3
- POLI 382  Social Welfare Policy  3
- SOC 300  Research Methods  3
- SOCW 325  Foundations of Generalist Practice  3
- SOCW 340  Human Behavior in Social Environment I  3
- SOCW 341  Human Behavior in Social Environment II  3
- SOCW 370  Generalist Practice Skills  3
- SOCW 390  Practice with Individuals, Families and Small Groups  3
- SOCW 400  Practice with Organizations and Larger Social Systems  3
- SOCW 480  Field Practicum I  3
- SOCW 485  Field Practicum I with Seminar  3
- SOCW 490  Field Practicum II  3
- SOCW 495  Field Practicum II with Seminar  3
- Six (6) credit hours of Approved Social Work Electives  6

**Subtotal: 45**

**Field Education**

In the senior year, students must complete a 450 hour professionally supervised placement in a social service agency. Conceived as one experience spread over two semesters, the student must complete a minimum of 225 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 2.0 average in all the required social work courses.

Field practicum policies and procedures can be found in the *Field Manual* available to the students during the application-to-the-field process in the spring semester.

**Social Work Field Education Courses:**

- SOCW 480  Field Practicum I  3
- SOCW 485  Field Practicum I with Seminar  3
- SOCW 490  Field Practicum II  3
- SOCW 495  Field Practicum II with Seminar  3

**Subtotal: 12**

**TRANSCRIPTS MUST DOCUMENT THAT STUDENTS HAVE MET THE FOLLOWING ADVANCEMENT REQUIREMENTS:**

1. 2.5 GPA average in prerequisite courses
2. Minimum cumulative GPA average of 2.0
3. Grade of "C" or better in SOC 218-Introduction to Social Work

**Total Credit Hours: 72**

**SOUND RECORDING TECHNOLOGY - B.S. DEGREE**

**School of Music**

Office: 1151 Mason Hall  
(716) 673-3151

**Melvin Unger, Director, School of Music**  
**Bernd Gottinger, Coordinator**

Email: soundrecording.technology@fredonia.edu  
Website: http://home.fredonia.edu/music/srt

The Bachelor of Science degree program in Sound Recording Technology is designed to provide undergraduate students with academic and professional preparation necessary for successful careers in music, sound recording, and related professions, and in technical, artistic, and management positions.

**MAJOR REQUIREMENTS**

**Musicianship Core:**

- MUS 115  Music Appreciation  3
- MUS 263  Music History in Western Civilization I
- MUS 264  Music History in Western Civilization II
- MUS 231  Conducting I  2
- MUS 121  Aural Skills I  2
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 122</td>
<td>Aural Skills II</td>
<td>2</td>
</tr>
<tr>
<td>MUS 123</td>
<td>Music Theory I</td>
<td>3</td>
</tr>
<tr>
<td>MUS 124</td>
<td>Music Theory II</td>
<td>3</td>
</tr>
<tr>
<td>MUS 221</td>
<td>Aural Skills III</td>
<td>2</td>
</tr>
<tr>
<td>MUS 222</td>
<td>Aural Skills IV</td>
<td>2</td>
</tr>
<tr>
<td>MUS 223</td>
<td>Music Theory III</td>
<td>3</td>
</tr>
<tr>
<td>MUS 224</td>
<td>Music Theory IV</td>
<td>3</td>
</tr>
<tr>
<td>MUS 118</td>
<td>Piano Class, Elementary</td>
<td>2</td>
</tr>
<tr>
<td>MUS 100</td>
<td>Recital-Seminar</td>
<td>0</td>
</tr>
<tr>
<td>MUS 120</td>
<td>Concert Attendance</td>
<td>0</td>
</tr>
<tr>
<td>MUS 105</td>
<td>Applied Music Major</td>
<td>2</td>
</tr>
<tr>
<td>MUS 106</td>
<td>Applied Music Major</td>
<td>2</td>
</tr>
</tbody>
</table>

Subtotal: 37

NOTE:
- MUS 118: waived for students whose principal instrument is piano.
- MUS 120: each semester of private applied lessons.
- MUS 107 and MUS 108 are required of all freshmen oboe and bassoon majors.

Sound Recording Technology Requirements:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SRT 105</td>
<td>Recording Techniques for Music</td>
<td>1</td>
</tr>
<tr>
<td>SRT 200</td>
<td>Recording Practicum</td>
<td>2</td>
</tr>
<tr>
<td>SRT 201</td>
<td>Recording Practicum</td>
<td>2</td>
</tr>
<tr>
<td>SRT 250</td>
<td>Recording Techniques</td>
<td>2</td>
</tr>
<tr>
<td>SRT 251</td>
<td>Recording Techniques</td>
<td>2</td>
</tr>
<tr>
<td>SRT 300</td>
<td>Recording Practicum</td>
<td>2</td>
</tr>
<tr>
<td>SRT 301</td>
<td>Recording Practicum</td>
<td>2</td>
</tr>
<tr>
<td>SRT 350</td>
<td>Technology and Practices of the Recording Industry</td>
<td>3</td>
</tr>
<tr>
<td>SRT 351</td>
<td>Technology and Practices of the Recording Industry</td>
<td>3</td>
</tr>
<tr>
<td>SRT 450</td>
<td>Senior Seminar/Project</td>
<td>2</td>
</tr>
<tr>
<td>SRT 451</td>
<td>Senior Seminar/Project</td>
<td>2</td>
</tr>
<tr>
<td>CSIT 105</td>
<td>Visual BASIC I</td>
<td>3</td>
</tr>
<tr>
<td>MATH 122</td>
<td>University Calculus I</td>
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</tr>
<tr>
<td>MATH 123</td>
<td>University Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 121</td>
<td>College Physics I</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 123</td>
<td>College Physics Lab I</td>
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<tr>
<td>PHYS 230</td>
<td>University Physics I</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 232</td>
<td>University Physics I Lab</td>
<td>1</td>
</tr>
<tr>
<td>PHYS 122</td>
<td>College Physics II</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 124</td>
<td>College Physics II Lab</td>
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</tr>
<tr>
<td>PHYS 231</td>
<td>University Physics II</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 233</td>
<td>University Physics II Lab</td>
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</tr>
<tr>
<td>PHYS 311</td>
<td>Acoustics I</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 318</td>
<td>Basic Electronics</td>
<td>3</td>
</tr>
</tbody>
</table>

Subtotal: 50-52

NOTE:
- Ensembles by advisement, during semester of private lessons;
- Internships within the recording history are strongly encouraged. Up to 15 credit hours of credit may be earned;
- Electives by advisement from Sound Recording Technology Coordinator.

Total Credit Hours: 87-89

SPANISH - B.A. DEGREE

World Languages and Cultures
Office:E332 Thompson Hall
(716) 673-3380
Dr. David Kinkela, Chairperson
Email: David.Kinkela@fredonia.edu
Website: https://www.fredonia.edu/academics/colleges-schools/college-liberal-arts-sciences/world-languages-cultures

MAJOR REQUIREMENTS

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPAN 313</td>
<td>Spanish Conversation</td>
<td>3</td>
</tr>
<tr>
<td>SPAN 314</td>
<td>Spanish Composition</td>
<td>3</td>
</tr>
<tr>
<td>SPAN 315</td>
<td>Readings in Spanish</td>
<td>3</td>
</tr>
<tr>
<td>SPAN 423</td>
<td>Senior Seminar</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>24 Credits SPAN 300-400 Level</td>
<td>24</td>
</tr>
<tr>
<td></td>
<td>Courses</td>
<td></td>
</tr>
</tbody>
</table>

Total Credit Hours: 36

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

A maximum of 6 credit hours of LANG courses can be applied towards the major as long as the student does the course work in the target language.

Childhood and Early Childhood Education majors may earn a concentration in Spanish. Students should consult the Childhood or Early Childhood Education course requirements for these programs.

All students are required to complete a separate minor whether it is in another language, in another discipline, or in an interdisciplinary program. Students select a minor in consultation with and approval of the department. Double majors and Adolescence Education majors in language are exempted from the minor requirement.

Students can apply a maximum of 21 credit hours of Study Abroad with a minimum grade of C toward the major in Spanish.
Requirement for Transfer and Study Abroad Credits

A maximum of 21 credit hours of transfer and/or Study Abroad courses can apply to the major at Fredonia. All students are required to take 15 credit hours of their major in residence. They must complete 9 credit hours at the 300-level or above, the senior seminar and at least one other 400-level course at Fredonia.

A maximum of 9 credit hours of transfer and/or Study Abroad courses can apply to the minor. At least 6 credit hours at the 300-level should be taken in residence.
SPEECH LANGUAGE-PATHOLOGY - M.S. DEGREE

Communication Disorders and Sciences
Office: W123 Thompson Hall
(716) 673-3202
Dr. McLoddy Kadyamusuma,
Chairperson and Undergraduate Advisor
Timothy Overbeck, Graduate Advisor
Email: communicationdisorders.sciences@fredonia.edu
Website: http://www.fredonia.edu/department/commdisorders/

The graduate program in Speech Language-Pathology offers 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 Fredonia is accredited by the Council on Academic Accreditation (CAA) in Audiology and Speech Language-Pathology of the American Speech-Language Hearing Association (ASHA).

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

To be considered for Graduate Admission, an Applicant must have:

- A bachelor’s degree from an accredited institution.
- A minimum grade point average of 3.0.
- Evidence of having taken the GRE with a minimum score of 272 for the combined areas of Quantitative Reasoning and Verbal Reasoning and submission of a GRE Analytical Writing score.
- A minimum of 30 credits in communication disorders and sciences courses as follows:
  - 15 credit hours of coursework related to the normal development of or the sciences related to speech, language, and hearing;
  - 9 credit hours in speech-language pathologies;
  - 6 credit hours in audiology.
- Three-credit courses in biology, physical sciences, statistics, and social sciences.
- Submitted a completed graduate application packet by the deadline.

MISSION OF THE DEPARTMENT OF COMMUNICATION DISORDERS AND SCIENCES

The Department of Communication Disorders and Sciences challenges and inspires students to become competent professionals by developing a foundation of knowledge and effective clinical skills. Students will demonstrate a positive attitude for learning, connect in cooperative relationships with faculty, supervisors, and fellow students, develop responsibility for ethical and professional behavior in the academic and clinical environments.

Program Goals

1. Engage the local, university, and professional communities through clinical training, clientele support groups, and continuing education seminars;
2. Provide opportunities for student and faculty research resulting in presentations or publications;
3. Complete diagnostic evaluations of speech, language and hearing disorders for culturally, economically and linguistically diverse populations of persons with communication and swallowing disorders in all age groups across the life span, including screening and prevention, collecting and integrating case history information, using appropriate evaluation procedures and adapting these as necessary, interpreting and synthesizing evaluative data, reporting, and referring when necessary;
4. Plan and execute treatment programs for diverse populations of persons with communication and swallowing disorders in all age groups across the life span, including developing and implementing setting-appropriate intervention plans; selecting, developing, and using appropriate materials and instruments; measuring and evaluating performance; modifying plans, strategies, materials, and instruments as needed; reporting; and identifying and referring when appropriate;
5. Integrate current developments in methodology and technology into clinical practice;
6. Maintain familiarity with current research, evidence-based practice, and relate findings to the improvement of diagnostic and therapeutic clinical practice;
7. Adhere to ASHA’s code of ethics, professional standards, scope of practice, and preferred practice patterns; and
8. Satisfy the academic and practicum requirements for obtaining the ASHA Certification of Clinical Competence in Speech-Language Pathology (CCC-SLP), the New York State Professional License in Speech Pathology, and New York State Initial/Professional Certification for a Teacher of
Students with Speech and Language Disabilities at the completion of the M.S. degree requirements.

**MAJOR REQUIREMENTS:**

**Required Courses:**
- CDS 555  Dysphagia  3
- CDS 598  Voice Disorders  3
- CDS 500  Child Language Disorders  3
- CDS 530  Augmentative and Alternative Communication  3
- CDS 582  Fluency Disorders  3
- CDS 584  Speech Sound Disorders and Language Intervention  3
- CDS 589  Professional Issues  2
- CDS 606  Research Design in Communication Disorders and Sciences  3
- CDS 608  Neurogenic Language Disorders  3
- CDS 611  Motor Speech Disorders  3
- Four electives as advised (3 credit hours each)  12

*Subtotal: 41*

**Clinical Experiences:**

- Capstone experiences
  - CDS 502  Clinical Practice, Communication Disorders  3
  - CDS 605  Advanced Clinical Methods and Practice  6
  - CDS 632  Graduate Student Teaching  6

*Subtotal: 21*

**NOTE:**

- All graduate students must complete the course content required for application for New York State Department of Education initial/professional certification for the TSSLD certificate.
- Subtotal: 62-68
- **Total Credit Hours: 62-68**

- Three CDS 502 classes at 3 credit hours each must be taken to satisfy the clinical practice course, for a total of 9 credit hours.

- CDS 605 is a variable 6-12 credit course. Students who have already earned the initial teaching certification will register for 12 credit hours. All other students will register for 6 credit hours in CDS 605 and 6 credit hours in CDS 632 to satisfy the degree requirements.

**One of the following:**
- CDS 619  Comprehensive Exam  0
- CDS 629  Directed Studies in Research Methodology - Thesis Research  1-6

**NOTE:**

- CDS 629 is an elective course;

- 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;
Sport Management
Office: E336D Thompson Hall
(716) 673-4750
Dr. Reneta Barneva, Program Coordinator
Reneta.Barneva@fredonia.edu

The major in Sport Management incorporates the social and cultural dimensions of sport, management and leadership, ethics, marketing, communications, budget and finance, economics, sport governance, sport law, facility and event management and video technology in its program offerings. A pre-internship and internship (400 clock hours) complete the requirements for a Bachelor of Science degree in Sport Management.

Our capstone experience requires students to engage in a 400-hour internship at an organization involved in sports or sport management/administration. The Buffalo Bills, Buffalo Sabres, New York Islanders, Jamestown Jammers, Buffalo Bisons, local and regional universities and high school athletic departments, regional and national YMCA’s, service organizations, sporting good firms, and local and regional health and recreation centers are just a few of the high-quality internship experiences Fredonia Sport Management students have contracted with. The Sport Management internship may be completed during any semester including summer and J-Term. Students must meet all transportation and living expenses while involved in the intern experience.

For information on Sport Management internships, please contact the instructor of the internship course SPMG 400. The Career Development Office provides additional information on these and other opportunities and college policy on experiential education.

The following programs are included within Sport Management:

- Sport Management, B.S. Degree (p. 164)
- Sport Management Minor (p. 205)

**SPORT MANAGEMENT - B.S. DEGREE**

Office: E336D Thompson Hall
(716) 673-4750
Dr. Reneta Barneva, Program Coordinator
Reneta.Barneva@fredonia.edu

**MAJOR REQUIREMENTS**

**Supporting Courses:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>CSIT 104</td>
<td>Introduction to Microcomputer Software</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>or Introduction to Information Systems</td>
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**Core Courses:**

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>ECON 205</td>
<td>Principles of Microeconomics</td>
<td>3</td>
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<tr>
<td>ECON 210</td>
<td>Principles of Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>PSY 129</td>
<td>Foundations of Psychology</td>
<td>3</td>
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**Lower Level Core Courses:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td>SPMG 100</td>
<td>Pathway to Success</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 201</td>
<td>Principles of Financial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>PSY 237</td>
<td>Sport Psychology</td>
<td>3</td>
</tr>
<tr>
<td>STAT 200</td>
<td>Statistical Methods I</td>
<td>3</td>
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<tr>
<td>SPMG 210</td>
<td>Principles of Sports Management</td>
<td>3</td>
</tr>
<tr>
<td>SPMG 218</td>
<td>Technology in Sports</td>
<td>3</td>
</tr>
<tr>
<td>SPMG 230</td>
<td>Sport in Diverse Societies</td>
<td>3</td>
</tr>
<tr>
<td>SPMG 250</td>
<td>Digital Marketing for Sport Management</td>
<td>3</td>
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</table>

**Subtotal: 12**

**Upper Level Core Courses:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td>SPMG 211</td>
<td>Facility Management</td>
<td>3</td>
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<tr>
<td>SPMG 212</td>
<td>Event Management</td>
<td>3</td>
</tr>
<tr>
<td>SPMG 305</td>
<td>Economics of Sport</td>
<td>3</td>
</tr>
<tr>
<td>SPMG 330</td>
<td>Leadership and Management in Sport</td>
<td>3</td>
</tr>
<tr>
<td>SPMG 410</td>
<td>Sport Law and Risk Management</td>
<td>3</td>
</tr>
<tr>
<td>SPMG 428</td>
<td>Marketing and Public Relations in Sport</td>
<td>3</td>
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<tr>
<td>SPMG 440</td>
<td>Data Analytics for Sport Management</td>
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**Subtotal: 24**

**Elective Courses:**

<table>
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<tr>
<td>SPMG 450</td>
<td>International Sport Management</td>
<td>3</td>
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<tr>
<td>BUAD 323</td>
<td>Organizational Behavior</td>
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<tr>
<td>PSY 347</td>
<td>Organizational Psychology</td>
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**Subtotal: 3**

**Internship (capstone experience):**

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</thead>
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<tr>
<td>SPMG 398</td>
<td>Pre-Internship</td>
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<tr>
<td>SPMG 400</td>
<td>Sport Studies Internship</td>
<td>.5-12</td>
</tr>
</tbody>
</table>

**Subtotal: 7**

**Total Credit Hours: 67**

**NOTE:**

- SPMG 400 Sports Studies Internship is a variable 1-12 credit course. Students must successfully complete the course with a minimum of 6 credit hours to satisfy the degree requirements.
- Sport Management majors with a coaching minor are required to complete 8 credit hours of internship, all other majors complete 6 credit hours.

Subtotal: 67
The Department of Theatre and Dance also administers three minor programs to students whose primary academic focus is elsewhere, but who still wish to pursue interests in Theatre or Dance:

- Minor in Dance (p. 188)
- Minor in Dance Studio Administration (p. 188)
- Minor in Theatre (p. 207)

The State University of New York at Fredonia is fully accredited by the National Association of Schools of Theatre (NAST).

Auditions or portfolio reviews are required for admission to all of the Department's Bachelor of Fine Arts Programs, as well as the Minor in Dance. Please visit our Audition Overview page for audition requirements, and our Audition Information page for current application processes and audition dates. The BFA programs are designed for those students who have a clear idea of their professional goals, and who are seeking a focused and immersive training experience.

The Bachelor of Arts in Theatre Arts program does not require an audition, and is open to all students who are academically accepted to the University. Designed to be a broad-spectrum degree in Theatre Arts, the program offers coursework in many aspects of theatrical theory and practice, including performance, technical production, design, theory, criticism, and history. When combined with the students’ choice of a required minor program, or second major, this degree offers students a great deal of flexibility to shape their educational experience to their individual interests.

For more detailed information, please visit the Department’s website at www.fredonia.edu/theatredance.

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**THEATRE ARTS: B.A. DEGREE**

*Department of Theatre and Dance*
Office: 212 Rockefeller Arts Center
(716) 673-3596
Sam Kenney, Chairperson
Email: theatre.dance@fredonia.edu
Website: http://home.fredonia.edu/theatredance

**MAJOR REQUIREMENTS**

**Core Courses:**
- THEA 100 Theatre Majors Seminar 1
- THEA 101 Theatre and Dance Productions 1
- THEA 102 Theatre and Dance Productions 1
- THEA 114 Introduction to the Performing Arts 3
- THEA 117 Script Analysis 3
- THEA 121 Introduction to Technical Theatre 3
- THEA 133 Introduction to Acting 3
- THEA 201 Theatre and Dance Productions 1
- THEA 202 Theatre and Dance Productions 1
- DANC 250 Dance Ensemble 1
- DANC 251 Dance Repertory 1
- THEA 220 Makeup 1
- THEA 301 Theatre and Dance Productions 1
- THEA 302 Theatre and Dance Productions 1
- DANC 250 Dance Ensemble 1
- DANC 251 Dance Repertory 1
- THEA 441 Directing I 3
- THEA 451 History of the Theatre I 3
- THEA 452 History of the Theatre II 3
- THEA 460 Performing Arts Organization and Management 3
- THEA 481 Senior Projects Seminar 1
- THEA 498 Senior Project 3

Subtotal: 34

**ELECTIVES:**

Students must take a minimum of 12 credit hours from the following courses. The required 12 credit hours must be from two different areas of theatre and dance. For example, a student may take 9 credit hours in performance courses and 3 credit hours in technical courses to fulfill this requirement.
Design/Technical Courses:

- THEA 123 Introduction to Technical Production 3
- THEA 125 Drawing and Drafting for the Theatre 3
- THEA 222 Stagecraft I 3
- THEA 223 Lighting and Sound Technology 3
- THEA 226 Scene Painting I 3
- THEA 228 Costume Construction I 3
- THEA 245 Sound for the Theatre 3
- THEA 324 Lighting Design I 3
- THEA 325 History of Costume 3
- THEA 326 Scene Design I 3
- THEA 327 Costume Design I 3
- THEA 420 Special Studies in Technical Theatre 3

Performance Courses:

- THEA 215 Movement For The Stage 3
- THEA 230 Introduction to Scene Study 3
- THEA 330 Introduction to Styles 3
- THEA 347 Stage Combat: Unarmed 3
- THEA 350 Introduction to Musical Theatre 3
- THEA 353 History of Musical Theatre 3
- THEA 359 Commedia dell'Arte 3
- THEA 383 Acting Studio: Theatre Games 3
- THEA 410 Acting for Media I 3
- THEA 415 Stage Combat: Medieval Weapons 3
- THEA 423 Acting Studio: Alternative Acting Styles 3
- THEA 442 Directing II 3
- THEA 468 Devising Theatre 3

Practica/Internships/Special Topics

- AADM 400 Arts Administration Practicum 1-3
- AADM 410 Ticket Office Practicum 1-3
- THEA 338 Special Topics .5-3
- THEA 490 Professional Theatre Intern 1-15

Dance or Literature Courses (up to 9 credit hours):

- DANC 100 Introduction to Dance 3
- DANC 111 Contemporary Technique I 2
- DANC 211 Contemporary Technique II 2
- DANC 311 Contemporary Technique III 2
- DANC 112 Ballet I 2
- DANC 212 Ballet II 2
- DANC 312 Ballet III 2
- DANC 113 Jazz Dance I 2
- DANC 213 Jazz Dance II 2
- DANC 313 Jazz Dance III 2
- DANC 114 Tap Dance I 2
- DANC 214 Tap Dance II 2
- DANC 241 Dance Improvisation 2
- ENGL 207 Drama and Film 3
- ENGL 319 Modern Drama 3
- ENGL 321 Contemporary Drama 3
- ENGL 381 Narrative Film After 1940 4
- ENGL 407 Tragedy 3
- ENGL 412 Early Shakespeare 3
- ENGL 414 Later Shakespeare 3
- ENGL 416 Elizabethan Drama 3
- ENGL 418 Restoration/18th Century Drama 3

Subtotal: 12

Total Credit Hours: 46

All students in the BA Theatre Arts program must complete a minor consisting of 18-24 credit hours. Minors should be selected in consultation with the student's Academic Advisor.

NOTE:

- All Fredonia students must complete a minimum of 120 credit hours prior to graduation.
- All BA students must complete a minimum of 66 credit hours outside of the major (THEA). These credits may include General Education courses, as well as courses taken through a student's minor or dual major.
- All majors in the Department of Theatre and Dance are expected to carry a minimum GPA of 3.0 in their major program, and a cumulative minimum GPA of 2.0.

THEATRICAL PRODUCTION AND DESIGN - B.F.A. DEGREE

Department of Theatre and Dance
Office: 212 Rockefeller Arts Center
(716) 673-3596
Sam Kenney, Chairperson
Email: theatre.dance@fredonia.edu
Website: http://home.fredonia.edu/theatredance

MAJOR REQUIREMENTS

Core Courses:

- THEA 100 Theatre Majors Seminar 1
- THEA 101 Theatre and Dance Productions 1
- THEA 102 Theatre and Dance Productions 1
- THEA 121 Introduction to Technical Theatre 3
- THEA 125 Drawing and Drafting for the Theatre 3
- THEA 133 Introduction to Acting 3
- THEA 201 Theatre and Dance Productions 1
- THEA 202 Theatre and Dance Productions 1
- THEA 220 Makeup 1
- THEA 221 Digital Tools for the Performing Arts 3
- THEA 222 Stagecraft I 3
- THEA 223 Lighting and Sound Technology 3
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
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<tr>
<td>THEA 226</td>
<td>Scene Painting I</td>
<td>3</td>
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<tr>
<td>THEA 228</td>
<td>Costume Construction I</td>
<td>3</td>
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<tr>
<td>THEA 301</td>
<td>Theatre and Dance Productions</td>
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<tr>
<td>THEA 302</td>
<td>Theatre and Dance Productions</td>
<td>1</td>
</tr>
<tr>
<td>THEA 303</td>
<td>Rendering Technique I</td>
<td>3</td>
</tr>
<tr>
<td>THEA 304</td>
<td>Rendering Technique II</td>
<td>3</td>
</tr>
<tr>
<td>THEA 315</td>
<td>The Dramatic Imagination</td>
<td>3</td>
</tr>
<tr>
<td>THEA 324</td>
<td>Lighting Design I</td>
<td>3</td>
</tr>
<tr>
<td>THEA 326</td>
<td>Scene Design I</td>
<td>3</td>
</tr>
<tr>
<td>THEA 327</td>
<td>Costume Design I</td>
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</tr>
<tr>
<td>THEA 334</td>
<td>Digital Tools for the Performing Arts II</td>
<td>3</td>
</tr>
<tr>
<td>THEA 381</td>
<td>Technical Theatre Seminar</td>
<td>.5</td>
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<tr>
<td>THEA 401</td>
<td>Theatre and Dance Productions</td>
<td>1</td>
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<tr>
<td>THEA 402</td>
<td>Theatre and Dance Productions</td>
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</tr>
<tr>
<td>THEA 436</td>
<td>Design/Technical Production</td>
<td>1-3</td>
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<tr>
<td>THEA 441</td>
<td>Directing I</td>
<td>3</td>
</tr>
<tr>
<td>THEA 451</td>
<td>History of the Theatre I</td>
<td>3</td>
</tr>
<tr>
<td>THEA 452</td>
<td>History of the Theatre II</td>
<td>3</td>
</tr>
<tr>
<td>THEA 481</td>
<td>Senior Projects Seminar</td>
<td>1</td>
</tr>
<tr>
<td>THEA 499</td>
<td>Performance/Production Seminar</td>
<td>3</td>
</tr>
<tr>
<td>ARTH 102</td>
<td>Art in Culture from 1400 to the Present</td>
<td>3</td>
</tr>
<tr>
<td>ARTS 105</td>
<td>Foundations in Drawing</td>
<td>3</td>
</tr>
<tr>
<td>THEA 245</td>
<td>Sound for the Theatre</td>
<td>3</td>
</tr>
<tr>
<td>THEA 322</td>
<td>Stagecraft II</td>
<td>3</td>
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<tr>
<td>THEA 337</td>
<td>Properties for the Stage</td>
<td>3</td>
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<tr>
<td>THEA 339</td>
<td>Stage Management</td>
<td>3</td>
</tr>
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<td>THEA 384</td>
<td>History of Architecture and Decor for Theatre</td>
<td>3</td>
</tr>
<tr>
<td>THEA 420</td>
<td>Special Studies in Technical Theatre</td>
<td>3</td>
</tr>
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<td>THEA 426</td>
<td>Scene Design II</td>
<td>3</td>
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<td>THEA 427</td>
<td>Scene Painting II</td>
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<td>THEA 429</td>
<td>Lighting Design II</td>
<td>3</td>
</tr>
<tr>
<td>THEA 460</td>
<td>Performing Arts Organization and Management</td>
<td>3</td>
</tr>
</tbody>
</table>

**Subtotal: 74**

**NOTE:**

- THEA 381 is a .5 credit course, to be taken six (6) times.
- THEA 436 is a variable-credit course that must be taken for a minimum of three (3) total credits.
- Theatrical Production and Design majors must earn a cumulative GPA of 3.0 in the major to successfully complete the degree.
- Theatrical Production and Design majors must earn a grade of C- or better in all core and focus-requirement courses. This does not apply to electives within the area of focus.

In addition to the core courses listed above, students are advised to take a desired Area of Focus: Costume Design, Lighting Design, Scenic Design, or Technical Direction. They should choose an area by the end of the sophomore year.

**COSTUME DESIGN:**

**Required Courses:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>THEA 319</td>
<td>Costume Construction II</td>
<td>3</td>
</tr>
<tr>
<td>THEA 321</td>
<td>Costume Crafts, Dyeing and Painting</td>
<td>3</td>
</tr>
<tr>
<td>THEA 325</td>
<td>History of Costume</td>
<td>3</td>
</tr>
<tr>
<td>THEA 328</td>
<td>Costume Design II</td>
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**Subtotal: 12**

**Elective Courses:**

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<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>ARTH 101</td>
<td>Art in Culture from Prehistory to 1400</td>
<td>3</td>
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</table>

**Subtotal: 9**

**LIGHTING DESIGN:**

**Required Courses:**

<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
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</tr>
</thead>
<tbody>
<tr>
<td>THEA 441</td>
<td>Directing I</td>
<td>3</td>
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<tr>
<td>THEA 451</td>
<td>History of the Theatre</td>
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**Elective Courses:**

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</tr>
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<td>ARTS 105</td>
<td>Foundations in Drawing</td>
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<td>THEA 319</td>
<td>Costume Construction II</td>
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<tr>
<td>THEA 322</td>
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<tr>
<td>THEA 337</td>
<td>Properties for the Stage</td>
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<tr>
<td>THEA 339</td>
<td>Stage Management</td>
<td>3</td>
</tr>
<tr>
<td>THEA 384</td>
<td>History of Architecture and Decor for Theatre</td>
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<tr>
<td>THEA 420</td>
<td>Special Studies in Technical Theatre</td>
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<td>THEA 426</td>
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<td>THEA 427</td>
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<td>THEA 429</td>
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<tr>
<td>THEA 460</td>
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**Subtotal: 6**

**SCENE DESIGN:**

**Required Courses:**

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**Subtotal: 9**
THEA 427  Scene Painting II  3

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<td>THEA 245  Sound for the Theatre</td>
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<td>THEA 319  Costume Construction II</td>
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<td>THEA 322  Stagecraft II</td>
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<td>THEA 325  History of Costume</td>
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<td>or</td>
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<td>3</td>
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<tr>
<td>THEA 429  Lighting Design II</td>
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<td>THEA 460  Performing Arts Organization and Management</td>
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<tr>
<td>ARTH 102  Art in Culture from 1400 to the Present</td>
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<tr>
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<td>THEA 245  Sound for the Theatre</td>
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<td>THEA 319  Costume Construction II</td>
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<td>THEA 460  Performing Arts Organization and Management</td>
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Subtotal: 9

Total Credit Hours: 92

NOTE:

- All majors in the Department of Theatre and Dance are expected to carry a minimum GPA of 3.0 in their major program, and a cumulative GPA of 2.0.

Visual Arts and New Media

Office: 217 Rockefeller Arts Center
(716) 673-3537
Michele Bernatz, Chairperson
Email: visualarts.newmedia@fredonia.edu
Website: http://home.fredonia.edu/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 as well as 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.

The Department of Visual Arts and New Media is an accredited institutional member of the National Association of Schools of Art and Design.

Degree Programs

The department offers Visual Arts and New Media majors multiple opportunities for professional education in studio specialties and art history through various degree options. Students may receive a Bachelor of Arts degree in Art History (p. 170) or in Visual Arts and New Media (p. 170). A Bachelor of Fine Arts degree is also available with majors in Animation and Illustration (p. 171), Ceramics (p. 173), Drawing and Painting (p. 173), Graphic Design (p. 175), Film and Video Arts (p. 174), Photography (p. 175).
or Sculpture (p. 176). Students in the department may consider dual majoring between the studio and art history degree programs. The Bachelor of Arts (B.A.) degree in Art History offers a wide variety of courses ranging from ancient times to the 21st century. The Bachelor of Arts (B.A.) in Visual Arts and New Media degree is a balanced, comprehensive overview of the range of creative and career possibilities in different media, with the added benefit of incorporating an interdisciplinary pedagogy within a traditional liberal arts curriculum. Both of these degree options, more general than the Bachelor of Fine Arts (B.F.A.), provide an excellent grounding for students interested in dual majors or graduate studies in areas such as secondary education, art therapy, imaging technologies in the visual arts, advertising and marketing, public relations or arts administration.

The Bachelor of Fine Arts (B.F.A.) degree 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, 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 concept and context. Critical awareness and self-evaluation are encouraged and developed.

Students from other departments may also receive a Visual Arts and New Media minor (p. 207) or an Art History minor (p. 182) to complement their major field of study. Art History majors may also consider a minor in Visual Arts and New Media, and Visual Arts and New Media studio majors may consider a minor in Art History. Students selecting minors should consult with a department advisor in choosing courses or specific area of study.

Admission to the Program
Admission to the department's studio program requires the submission of an acceptable portfolio for both first-year and transfer students. Information specific to portfolio content may be found on the department's website at http://home.fredonia.edu/art/admissions. 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. Portfolios may be submitted at any time; however, acceptance will be based upon quality of work and available space in the program.

Please contact the Department of Visual Arts and New Media with any additional questions or concerns.

Visiting Artist Program (VAP)
All Visual Arts and New Media students are required to participate in the Visiting Artist Program each semester in which they are enrolled as a major on campus. A forum for departmental news and updates, VAP program content includes a range of thought-provoking speakers each semester, providing information about the many directions, options, and possibilities inherent in art and design, as well as opportunities to attend gallery openings throughout the academic year.

24 Credit-Hour Review
The 24 Credit-Hour Review takes place after students have completed, or are in the process of completing, 24 credit hours in Visual Arts and New Media courses (reviews take place in the spring semester). The purposes of the 24 Credit-Hour Review are to evaluate student performance, offer constructive criticism and advice, and help students assess their career goals. The review is a mandatory departmental requirement. Any student failing to participate in the 24 Credit-Hour Review process could be suspended from taking further courses in the Department of Visual Arts and New Media.

Senior Exhibition
All students pursuing the B.A. or B.F.A. in studio art are strongly advised to participate in Senior Exhibition (ARTS 400), an opportunity to show senior-level work in the Cathy and Jesse Marion Art Gallery. Interested students should discuss the requirements of the course with faculty advisors.

Academic Standing and Grade Point Average
All Visual Arts and New Media students must maintain a 2.0 average to remain in good academic standing. Students may repeat courses to improve their grade point average.

Awards and Enrichments
In addition to the academic scholarships available to students through the campus Financial Aid Office, the department of Visual Art and New Media recognizes aptitude and accomplishment by awarding the following competitive scholarships and awards: the Alford Bjurlin Scholarship, the George W. Booth Scholarship, the Marano-Gnirke Scholarship, the Robert W. Marvel Scholarship, the Chautauqua Craft Alliance Scholarship, Fredonia Potters Co-op Awards, the Rodney W. Welling Memorial Scholarship, the Thomas E. Malinowski Scholarship, the Daniel D. Reiff Art History Scholarship, and the Colonel David Correll Photography Scholarship are given to exceptional Visual Arts and New Media majors. Additional scholarships may be available through portfolio competitions on a regional or national level.

The studio and classroom experience is enriched by participation in student clubs such as American Institute of Graphic Arts (AIGA), Animation and Illustration Club, Art Forum, Cinema Alternatives, and Life Drawing sessions. 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 Career Development Office lists internship opportunities. The Office of International Education will assist students with the study abroad application process.

VISUAL ARTS AND NEW MEDIA: ART HISTORY - B.A. DEGREE

Department of Visual Arts and New Media
Office: 217 Rockefeller Arts Center
(716) 673-3537
Michele Bernatz, Chairperson
Email: visualarts.newmedia@fredonia.edu
Website: http://home.fredonia.edu/art

MAJOR REQUIREMENTS
42 credit hours required plus 8 credit hours of Visiting Artist Program

Foundation Program:
ART 100 Visual Concepts 3
ARTH 101 Art in Culture from Prehistory to 1400 3
ARTH 102 Art in Culture from 1400 to the Present 3
ARTH 350 Art History Theory and Methods 3
ARTH 355 Writing About Art 3

Subtotal: 15

Art History Electives:
200-Level Art History courses 6
300-Level Art History courses 6
200 or 300-Level Art History Electives
ARTS courses, as advised 6
ARTH 460 Gallery Practicum 1-4
or
ARTH 490 Learning Assistant - Art History 3
or
ARTH 497 Research Practicum in Art History 1-3
or
ARTH 499 Internship 1-15

Subtotal: 27

NOTE:
- ARTH 460, ARTH 497, and ARTH 499 are variable 1-3 / 1-15 credit hour courses. Students who elect any of these three courses must successfully complete the course with 3 credit hours to satisfy the degree requirements.

Visiting Artist Program:
Eight (8) semesters at 1 credit hour per semester.

Subtotal: 8

NOTE: The Visiting Artist Program is only required each semester the student is a major within the department.

Subtotal: 50

Total Credit Hours: 50

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 five (5) studio art courses beyond the two (2) required for the Art History major in order to complete the minor.

All Art History majors who plan to study at the graduate level are strongly advised to complete a Senior Thesis. This senior-level paper is typically initiated in ARTH 355 Writing about Art and completed in a later ARTH 495 Independent Study. Students should discuss this option with Art History faculty during the junior year of study. Senior Thesis topics must meet required guidelines and be approved by art history faculty.

All Art History majors are strongly advised to pursue a foreign language beyond the University requirement. Majors interested in pursuing graduate studies in art history should reach the intermediate to advanced level, preferably in French, Italian, Spanish 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 - B.A. DEGREE

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Website: http://home.fredonia.edu/art

MAJOR REQUIREMENTS

Core Courses:
ARTH 101 Art in Culture from Prehistory to 1400 3
ARTH 102 Art in Culture from 1400 to the Present 3
ARTH 100 Visual Concepts 3

- 200-level Art History courses: one course in Ancient, Pre-Columbian, Medieval or Renaissance art, and one course in Modern, Post-modern or Contemporary Art
- 300-level Art History courses: one course in Ancient, Pre-Columbian, Medieval or Renaissance art, and one course in Modern, Post-modern or Contemporary Art
ARTS 102  Foundations in 2-D Form and Content  3
ARTS 105  Foundations in Drawing  3
ARTS 240  Foundations of 3-D Form and Content  3
       or
ARTS 270  Foundations in Clay  3
ARTS 222  Cinema Arts I  3
       or
ARTS 225  Digital Foundations  3
       or
ARTS 221  Foundations of Time-Based Media  3
   Subtotal: 21

Additional Requirements:

- Visual Arts/New Media studio courses at the 300-level or above (9 credit hours) - Excluding all ARTS 490 and ARTS 497 courses
- Advanced Level ARTS Course: 400-level in Animation + Illustration, Ceramics, Film + Video, Graphic Design, Painting + Drawing, Photography or Sculpture (3 credits hours) Excluding all ARTS 490 and ARTS 497 courses
- Art History elective (3 credit hours)
- ARTS studio electives as advised (12 credit hours, only 3 credit hours of ARTS 490 or ARTS 497 allowed)
- Capstone experience (by advisement)
   Subtotal: 27

Visiting Artist Program:
   Subtotal: 8

NOTE: The Visiting Artist Program is only required each semester the student is a major within the department.

Subtotal: 56

Total Credit Hours: 56

VISUAL ARTS AND NEW MEDIA:
ANIMATION AND ILLUSTRATION - B.F.A.

DEGREE

Department of Visual Arts and New Media
Office: 217 Rockefeller Arts Center
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Michele Bernatz, Chairperson
Email: visualarts.newmedia@fredonia.edu
Website: http://home.fredonia.edu/art

MAJOR REQUIREMENTS

Foundation Program:

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<td>ARTS 105</td>
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<td>ARTS 222</td>
<td>Cinema Arts I</td>
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<td>ARTH 102</td>
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<td>ARTS 214</td>
<td>Drawing and Painting I</td>
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<td>Color and Light</td>
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<td>Figure Modeling</td>
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<td>ARTS 280</td>
<td>Introduction to Illustration</td>
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<td>ARTS 285</td>
<td>Introduction to 2-D Animation</td>
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<td>ARTS 380</td>
<td>Intermediate Illustration</td>
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<td>ARTS 385</td>
<td>Intermediate 2-D Animation</td>
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<td>ARTS 386</td>
<td>3D Modeling &amp; Animation</td>
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<td>ARTS 495</td>
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<td>Advanced Animation/Illustration</td>
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<td>ARTS 489</td>
<td>Animation and Illustration</td>
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   Subtotal: 51

NOTE:

- Electives may emphasize another major within the visual arts as advised.
- ARTS 400 Senior Seminar is optional, but strongly recommended. To enroll, a 3.5 GPA (in ARTS) and/or area faculty approval is required.
- ARTS 485 Advanced Animation/Illustration is to be completed twice for a total of 6 credit hours.
- ARTS 490 Learning Assistant can be used for a maximum of 6 credit hours of electives under advisement.
- ARTS 497 Research Practicum can be used for a maximum of 3 credit hours of electives under advisement.
Visiting Artist Program:

Eight (8) semesters at 1 credit hour per semester.

Subtotal: 8

NOTE: The Visiting Artist Program is only required each semester the student is a major within the department.

Subtotal: 80

Total Credit Hours: 80
VISUAL ARTS AND NEW MEDIA: CERAMICS - B.F.A. DEGREE

Department of Visual Arts and New Media
Office: 217 Rockefeller Arts Center
(716) 673-3537
Michele Bernatz, Chairperson
Email: visualarts.newmedia@fredonia.edu
Website: http://home.fredonia.edu/art

MAJOR REQUIREMENTS

Foundation Program:

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<td>ARTH 101</td>
<td>Art in Culture from Prehistory to 1400</td>
<td>3</td>
</tr>
<tr>
<td>ARTH 102</td>
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</tr>
<tr>
<td>ARTS 102</td>
<td>Foundations in 2-D Form and Content</td>
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<tr>
<td>ARTS 105</td>
<td>Foundations in Drawing</td>
<td>3</td>
</tr>
<tr>
<td>ARTS 270</td>
<td>Foundations in Clay</td>
<td>3</td>
</tr>
<tr>
<td>ARTS 222</td>
<td>Cinema Arts I</td>
<td>3</td>
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<tr>
<td>or ARTS 225</td>
<td>Digital Foundations</td>
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<tr>
<td>or ARTS 221</td>
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Subtotal: 21

Core Requirements:

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</tr>
<tr>
<td>ARTS 490</td>
<td>Learning Assistant</td>
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<tr>
<td>ARTS 494</td>
<td>Directed Studio Projects</td>
<td>1-3</td>
</tr>
<tr>
<td>ARTS 495</td>
<td>Independent Studio Projects</td>
<td>1-6</td>
</tr>
<tr>
<td>ARTS</td>
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<td>12</td>
</tr>
<tr>
<td>ARTH</td>
<td>Art History Electives</td>
<td>6</td>
</tr>
</tbody>
</table>

Subtotal: 51

NOTE:

- Electives may emphasize another major within the visual arts as advised.
- ARTS 400 Senior Exhibition is optional, but strongly recommended. To enroll, a 3.5 GPA (in ARTS) and/or area faculty approval is required.
- ARTS 321 Installation Art and ARTS 490 Learning Assistant should be taken as advised, or substituted with ARTS 495 Independent Studio Project.
- ARTS 497 Research Practicum can be used for a maximum of 3 credit hours of electives under advisement.
- ARTS 494 and ARTS 495 are variable 1-3 credit hour courses, and BFA students must successfully complete the courses with 3 credit hours each. ARTS 494 and ARTS 495 will focus on Ceramics.

Visiting Artist Program:

Eight semesters at 1 credit hour per semester.

Subtotal: 8

Total Credit Hours: 80

VISUAL ARTS AND NEW MEDIA: DRAWING AND PAINTING - B.F.A. DEGREE

Department of Visual Arts and New Media
Office: 217 Rockefeller Arts Center
(716) 673-3537
Michele Bernatz, Chairperson
Email: visualarts.newmedia@fredonia.edu
Website: http://home.fredonia.edu/art

MAJOR REQUIREMENTS:

Foundation Program:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 100</td>
<td>Visual Concepts</td>
<td>3</td>
</tr>
<tr>
<td>ARTH 101</td>
<td>Art in Culture from Prehistory to 1400</td>
<td>3</td>
</tr>
<tr>
<td>ARTH 102</td>
<td>Art in Culture from 1400 to the Present</td>
<td>3</td>
</tr>
<tr>
<td>ARTS 240</td>
<td>Foundations of 3-D Form and Content</td>
<td>3</td>
</tr>
<tr>
<td>or ARTS 270</td>
<td>Foundations in Clay</td>
<td>3</td>
</tr>
<tr>
<td>or ARTS 222</td>
<td>Cinema Arts I</td>
<td>3</td>
</tr>
<tr>
<td>or ARTS 225</td>
<td>Digital Foundations</td>
<td>3</td>
</tr>
<tr>
<td>or ARTS 221</td>
<td>Foundations of Time-Based Media</td>
<td>3</td>
</tr>
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Subtotal: 21

Core Requirements:

<table>
<thead>
<tr>
<th>Course</th>
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<th>Credits</th>
</tr>
</thead>
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<tr>
<td>ARTS 212</td>
<td>Life Drawing I</td>
<td>3</td>
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<tr>
<td>ARTS 214</td>
<td>Drawing and Painting I</td>
<td>3</td>
</tr>
<tr>
<td>ARTS 241</td>
<td>Figure Modeling</td>
<td>3</td>
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<tr>
<td>ARTS 312</td>
<td>Life Drawing II</td>
<td>3</td>
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<td>ARTS 314</td>
<td>Drawing and Painting II</td>
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<tr>
<td>ARTS 315</td>
<td>Drawing and Painting III</td>
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Subtotal: 21

NOTE:
ARTS 415  Drawing and Painting IV  3
ARTS 494  Directed Studio Projects  1-3
ARTS 495  Independent Studio Projects  1-6
ARTS  Art Studio Electives  18
ARTH  Art History Electives  6

Subtotal: 51

NOTE:
• ARTS electives must include at least 12 Upper Level credits.
• ARTS 400 Senior Exhibition is optional, but strongly recommended. To enroll, a 3.5 GPA (in ARTS) and/or area faculty approval is required.
• Electives may emphasize another major within the visual arts as advised.
• ARTS 490 Learning Assistant can be used for a maximum of 6 credit hours of electives under advisement.
• ARTS 497 Research Practicum can be used for a maximum of 3 credit hours of electives under advisement.
• ARTS 494 and ARTS 495 are variable credit hour courses. Students are to complete the courses for 3 credit hours each to satisfy the degree requirements. ARTS 494 and ARTS 495 will focus on Drawing and Painting.

Visiting Artist Program
Eight semesters at 1 credit hour each.

Subtotal: 8

NOTE: The Visiting Artist Program is only required each semester the student is a major within the department.
Subtotal: 80

Total Credit Hours: 80

VISUAL ARTS AND NEW MEDIA: FILM & VIDEO ARTS - B.F.A. DEGREE

Department of Visual Arts and New Media
Office: 217 Rockefeller Arts Center
(716) 673-3537
Michele Bernatz, Chairperson
Email: visualarts.newmedia@fredonia.edu
Website: http://home.fredonia.edu/art

MAJOR REQUIREMENTS

Foundation Program:
ART 100  Visual Concepts  3
ARTH 101  Art in Culture from Prehistory to  3
1400
ARTH 102  Art in Culture from 1400 to the  3
Present

Subtotal: 21

Core Requirements:
ARTH 276  Film Form  3
ARTS 322  Cinema Arts II  3
ARTS 323  Experimental Narrative  3
ARTS 324  Special Effects for Experimental Video  3
ARTS 340  3-D Methods and Materials  3
ARTS 155  Introduction to Film Photography  3
or
ARTS 156  Introduction to Digital Photography  3

Subtotal: 51

NOTE:
• ARTS 400 Senior Exhibition is optional, but strongly recommended. To enroll, a 3.5 GPA (in ARTS) and/or area faculty approval is required.
• ARTS 490 Learning Assistant can be used for a maximum of 6 credit hours of electives under advisement. ARTS 497 Research Practicum can be used for a maximum of 3 credit hours of electives under advisement.
• ARTS 494 and ARTS 495 are variable 1-3 credit hour courses. BFA students must complete the courses with 3 credit hours each to satisfy the degree requirements.

Visiting Artist Program:
Eight semesters at 1 credit hour each.

Subtotal: 8

NOTE:
• The Visiting Artist Program is only required each semester the student is a major within the department.

Total Credit Hours: 80
VISUAL ARTS AND NEW MEDIA: GRAPHIC DESIGN - B.F.A. DEGREE

Department of Visual Arts and New Media
Office: 217 Rockefeller Arts Center
(716) 673-3537
Michele Bernatz, Chairperson
Email: visualarts.newmedia@fredonia.edu
Website: http://home.fredonia.edu/art

MAJOR REQUIREMENTS

<table>
<thead>
<tr>
<th>Foundation Program:</th>
<th>Art History Electives</th>
<th>Subtotal: 51</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 100 Visual Concepts</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ARTH 101 Art in Culture from Prehistory to 1400</td>
<td></td>
<td></td>
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<tr>
<td>ARTH 102 Art in Culture from 1400 to the Present</td>
<td></td>
<td></td>
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<tr>
<td>ARTS 102 Foundations in 2-D Form and Content</td>
<td></td>
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<tr>
<td>ARTS 105 Foundations in Drawing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ARTS 240 Foundations of 3-D Form and Content</td>
<td></td>
<td></td>
</tr>
<tr>
<td>or ARTS 270 Foundations in Clay</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ARTS 222 Cinema Arts I</td>
<td></td>
<td></td>
</tr>
<tr>
<td>or ARTS 225 Digital Foundations</td>
<td></td>
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<tr>
<td>or ARTS 221 Foundations of Time-Based Media</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subtotal: 21</td>
<td></td>
<td></td>
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</tbody>
</table>

Core Requirements:

| ARTS 214 Drawing and Painting I           | 3                    |
| ARTS 260 Graphic Design I                | 3                    |
| ARTS 261 Graphic Design II               | 3                    |
| ARTS 360 Graphic Design III              | 3                    |
| ARTS 361 Graphic Design IV               | 3                    |
| ARTS 365 Typography I                    | 3                    |
| ARTS 366 Typography II                   | 3                    |
| ARTH 371 History of Graphic Design       | 3                    |
| ARTS 460 Graphic Design V                | 3                    |
| ARTS 465 Typography III                  | 3                    |
| ARTS 469 Design Realities/Professional Practice | 1-3                |
| ARTS 155 Introduction to Film Photography | 3                    |
| or ARTS 156 Introduction to Digital Photography | 3                |

Twelve additional credit hours of electives, 9 of which should concentrate in another discipline

NOTE:
- ARTS 400 Senior Exhibition is optional, but strongly recommended. To enroll, a 3.5 GPA (in ARTS) and/or area faculty approval is required.
- ARTS 469 is a variable 1-3 credit hour course, and BFA students must successfully complete the course with 3 credit hours.
- ARTS 490 Learning Assistant can be used for a maximum of 6 credit hours of electives under advisement.
- ARTS 497 Research Practicum can be used for a maximum of 3 credit hours of electives under advisement.

Visiting Artist Program:

Eight semesters at 1 credit hour each.

Subtotal: 8

NOTE: The Visiting Artist Program is only required each semester the student is a major within the department. Subtotal: 80

Total Credit Hours: 80

VISUAL ARTS AND NEW MEDIA: PHOTOGRAPHY - B.F.A. DEGREE

Department of Visual Arts and New Media
Office: 217 Rockefeller Arts Center
(716) 673-3537
Michele Bernatz, Chairperson
Email: visualarts.newmedia@fredonia.edu
Website: http://home.fredonia.edu/art

MAJOR REQUIREMENTS

| Foundation Program:                      | 3                    |
|------------------------------------------|----------------------|--------------|
| 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           |                      |              |

with the department of Visual Arts and New Media, per advisement
ARTS 222  Cinema Arts I  3  
or  
ARTS 225  Digital Foundations  3  
or  
ARTS 221  Foundations of Time-Based Media  3  
Subtotal: 21

Core Requirements:
ARTS 155  Introduction to Film Photography  3  
ARTS 156  Introduction to Digital Photography  3  
ARTS 159  Photographic Explorations  3  
ARTS 250  Photo Lighting Technique  3  
ARTS 255  Color and Light  3  
ARTS 352  Studio Lighting  3  
ARTS 353  Photographic Illustration  3  
ARTS 355  Digital Imaging  3  
or  
ARTS 356  The Photographic Narrative  3  
ARTS 459  Photographic Inquiry  3  
ARTS 496  Studio Art Internship  1-15  
ARTS  Upper Level designated Art Studio Electives  15  
ARTH  Art History Electives  6  
Subtotal: 51

NOTE:
• Electives will be determined with advisor upon consultation on intended career path.
• Electives may emphasize another major within the visual arts as advised.
• ARTS 400 Senior Exhibition is optional, but strongly recommended. To enroll, a 3.5 GPA (in ARTS) and/or area faculty approval is required.
• ARTS 490 Learning Assistant can be used for a maximum of 6 credit hours of electives under advisement.
• ARTS 496 Studio Art Internship is a variable 1-15 credit hour course. Students need to complete the course for at least 3 credit hours to satisfy the degree requirements.
• ARTS 497 Research Practicum can be used for a maximum of 3 credit hours of electives under advisement.

Visiting Artist Program:
Eight semesters at 1 credit hour per semester.  
Subtotal: 8

NOTE: The Visiting Artist Program is only required each semester the student is a major within the department.

Subtotal: 80

Total Credit Hours: 80

VISUAL ARTS AND NEW MEDIA:
SCULPTURE - B.F.A. DEGREE

Department of Visual Arts and New Media  
Office: 217 Rockefeller Arts Center  
(716) 673-3537  
Michele Bernatz, Chairperson  
Email: visualarts.newmedia@fredonia.edu  
Website: http://home.fredonia.edu/art

MAJOR REQUIREMENTS

Foundation Program:
ART 100  Visual Concepts  3  
ARTH 101  Art in Culture from Prehistory to 1400  3  
ARTH 102  Art in Culture from 1400 to the Present  3  
ARTS 102  Foundations in 2-D Form and Content  3  
ARTS 105  Foundations in Drawing  3  
ARTS 240  Foundations of 3-D Form and Content  3  
ARTS 222  Cinema Arts I  3  
or  
ARTS 225  Digital Foundations  3  
or  
ARTS 221  Foundations of Time-Based Media  3  
Subtotal: 21

Core Requirements:
ARTS 270  Foundations in Clay  3  
ARTS 333  Paper Arts  3  
ARTS 334  Book Arts  3  
ARTS 212  Life Drawing I  3  
ARTS 321  Installation Art  3  
or  
ARTS 370  Intermediate Ceramics  3  
ARTS 241  Figure Modeling  3  
ARTS 340  3-D Methods and Materials  3  
ARTS 440  3D Objects and Ideas  3  
ARTS 494  Directed Studio Projects  1-3  
ARTS 495  Independent Studio Projects  1-6  
ARTH  Art History Electives  6  
ARTS  Art Studio Electives  15  
Subtotal: 51

NOTE:
• Electives may emphasize Special Effects for Film and Industry as advised.
• ARTS 400 Senior Exhibition is optional, but strongly recommended. To enroll, a 3.5 GPA (in ARTS) and/or area faculty approval is required.

• ARTS 490 Learning Assistant can be used for a maximum of 6 credit hours of electives under advisement.

• ARTS 494 and ARTS 495 are variable 1-3 credit hours courses, and BFA students must successfully complete the courses with 3 credit hours each. ARTS 494 and ARTS 495 will focus on Sculpture.

• ARTS 497 Research Practicum can be used for a maximum of 3 credit hours of electives under advisement.

Visiting Artist Program:

Eight semesters at 1 credit hour per semester.

Subtotal: 8

NOTE: The Visiting Artist Program is only required each semester the student is a major within the department.

Subtotal: 80

Total Credit Hours: 80
World Languages and Cultures
Office: E332 Thompson Hall
(716) 673-3380
David Kinkela, Chairperson
Email: worldlang@fredonia.edu
Website: http://home.fredonia.edu/worldlanguages

With its interdisciplinary and global vision of a changing world, the Department of World Languages and Cultures contributes to the international education of students. Knowledge of a second language has become essential whether one lives and works within the United States or abroad. Conscious that language and cultural manifestations are expressions of the complexities of a country’s culture, the department is committed to the formation of citizens that are culturally sensitive to the nuances of everyday business and interpersonal exchanges.

The department focuses on world languages that are spoken and used throughout the world. It offers a Bachelor of Arts in French (p. 104) and in Spanish (p. 160). 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, other language offerings include, beginning instruction in Arabic, Chinese, German, Italian, Russian and American Sign Language.

A major or minor (p. 192) may be earned in French and/or Spanish. Certification programs for Adolescence Education (p. 28) are offered in French and Spanish. Students can also design programs that go across disciplines and fields, with the assistance of their advisor.

Majors, minors, and world language concentration students are encouraged to travel to a foreign country for one or two semesters of study abroad. The department offers programs in Aix-en-Provence, France; Oaxaca, Mexico; and San Juan, Puerto Rico. Students participating in these and other programs have found the experience enormously enriching. Many students choose to travel to other countries in Latin America and the French-speaking world. The department encourages students to participate in overseas programs. Plans should be discussed early with their advisor so they can take advantage of this opportunity as early as the sophomore year.

The department sponsors the French Club and has affiliation with two national honor societies: Pi Delta Phi in French and Sigma Delta Pi in Spanish.

The Thomas Goetz–Robert Rie Scholarship for Excellence in Modern Languages is awarded each year to an upper level major in modern languages who demonstrates outstanding academic ability and commitment to his/her field of study. Recommendations are submitted by the faculty to the chair of the department.

Requirements for Transfer Credit
A student can transfer up to 21 credit hours with a minimum grade of C towards the major. A minimum of 15 credit hours must be taken in the department at Fredonia.
For a minor, a student can transfer up to 9 credit hours with a minimum grade of C towards the program.

NOTE:
1. Depending on the language preparation in high school, a student can be placed at a more or less advanced section of a language course by the instructor. Students are encouraged to speak with their instructor the first week of classes to ensure placement at the appropriate level.
2. Unless otherwise specified, all courses are conducted principally in the appropriate foreign language.
Honors Program
Office: 276 Fenton Hall
(716) 673-3855
Dr. Natalie Gerber, Program Director
email: honors.program@fredonia.edu

The Honors Program is designed to challenge, support, and enrich student learning at Fredonia. In this 18-credit program*, students will take 2 or 3 Honors-only sections within the Fredonia Foundations general education program, as well as 2 or 3 upper-level Honors seminars. In consultation with faculty advisor, students will select the best path for completion. Students are also required to complete a senior project, which may be a thesis, major capstone, or, in consultation with program director, a senior recital, exhibition, seminar, or other 400-level coursework.

FIRST-YEAR STUDENTS
Fredonia Foundations Honors Courses 6 credits
Upper-Level Honors Seminars 6 credits
Senior Project** 3 credits
Total Program Requirement 18 credits

* Students may substitute part of the program requirements with an applied-learning project, which includes study abroad, internship, service learning, and/or volunteer project. Students must consult with the program director prior to the experience to receive credit (learning contract).

**Students must submit a completed senior project form to program director the semester prior to enrollment.

TRANSFER OR EXISTING STUDENTS
Students may apply and enter the program at any point after completing 15 credit hours at Fredonia or from another institution.

15-45 credit hours completed
Fredonia Foundations Honors Courses 6 credits
Upper-Level Honors Seminars 6 or 9 credits
Senior Project** 3 credits
Total Program Requirement 15-18 credits

45 credit hours and above completed
Fredonia Foundations Honors Courses 0-3 credits
and/or
Upper-Level Honors Seminars 6-9 credits
Senior Project** 3 credits
Total Program Requirement 12 credits
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. In addition, the Honors House provides a unique living and learning experience for students in the program.

Students must maintain at least a 3.30 cumulative GPA to remain in good standing. Students will receive a one-time, one-semester grace period to meet the GPA requirement if they fall under the minimum requirements.

Students with questions pertaining to the Honors program are advised to contact the director, Dr. Natalie Gerber, at 276 Fenton Hall, or at (716) 673-3855 or by emailing honors.program@fredonia.edu.
ALL MINORS

A “minor” is a specified minimum number of hours recorded on official transcripts, but involving fewer hours than a major. Below is a comprehensive list of all minors offered at Fredonia.

ACCOUNTING MINOR

School of Business
Office: E336 Thompson Hall
(716) 673-3505
Coordinator: Julie Fitzpatrick
julie.fitzpatrick@fredonia.edu

REQUIREMENTS FOR THE MINOR IN ACCOUNTING

The department offers a minor in Accounting that requires 18 credit hours of accounting courses as specified below:

Required Courses

Some courses require prerequisites. Click on any hyperlinked course for additional information.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>ACCT 201</td>
<td>Principles of Financial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 202</td>
<td>Principles of Managerial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 301</td>
<td>Intermediate Accounting I</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 302</td>
<td>Intermediate Accounting II</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 303</td>
<td>Cost Management</td>
<td>3</td>
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<tr>
<td>ACCT 307</td>
<td>Accounting Information Systems I</td>
<td>3</td>
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</table>

Subtotal: 18

Total Credit Hours: 18

AFRICAN AMERICAN STUDIES MINOR

Office: E304 Thompson Hall
(716) 673-3274

Jennifer Hildebrand, Coordinator
Email: africanamerican.studies@fredonia.edu
Website: http://home.fredonia.edu/interdisciplinary

The African American Studies minor provides an interdisciplinary investigation of the origins, experiences, conditions, accomplishments, and contributions of people of African ancestry in the Americas. The program is designed for all students who want to deepen their understanding of African Americans by studying their earlier history in Africa, their transition to the New World, and their diasporic experiences in the Americas. The program also seeks to promote new ways of thinking about race, culture and social representation from different perspectives—notably, historical, literary, sociological, anthropological, psychological and artistic.

African American Studies is for everyone. No matter your major or your future plans, the program will provide intellectual skills and cultural knowledge that will benefit you. A minor in African American Studies will deepen your ability to listen and communicate in a meaningful way. It will make you more aware and respectful of differences in your community. These skills will help to prepare you for employment in education, government, legislation, international business and marketing, urban planning, counseling and social work, the media, and many other fields.

REQUIREMENTS FOR THE MINOR IN AFRICAN AMERICAN STUDIES (21 CREDIT HOURS)

Students declaring an African American Studies minor may use past courses retroactively with approval of the coordinator.

Some courses require prerequisites. Click on any hyperlinked course for additional information.

Core courses (12 credit hours):

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>ETHN 202</td>
<td>Foundations of Social Justice</td>
<td>3</td>
</tr>
<tr>
<td>ETHN 206</td>
<td>African American Studies</td>
<td>3</td>
</tr>
<tr>
<td>ETHN 333</td>
<td>African American History to 1877 or</td>
<td>3</td>
</tr>
<tr>
<td>ETHN 334</td>
<td>African American History since 1877</td>
<td>3</td>
</tr>
<tr>
<td>ETHN 240</td>
<td>Introduction to African American Literature and Culture</td>
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Subtotal: 12

Electives (6 credit hours):

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<tbody>
<tr>
<td>ANTH 322</td>
<td>Anthropology of Africa</td>
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</tr>
<tr>
<td>ANTH 324</td>
<td>Caribbean Societies and Cultures</td>
<td>3</td>
</tr>
<tr>
<td>DANC 231</td>
<td>African-Caribbean Dance</td>
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<tr>
<td>ENGL 340</td>
<td>Black Women Writers</td>
<td>3</td>
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<tr>
<td>ENGL 341</td>
<td>Harlem Renaissance</td>
<td>3</td>
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<td>ENGL 342</td>
<td>African American Autobiography</td>
<td>3</td>
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<td>ENGL 344</td>
<td>Contemporary Multiethnic American Literature</td>
<td>3</td>
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<td>HIST 272</td>
<td>Africa to 1800</td>
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<td>ETHN 333</td>
<td>African American History to 1877</td>
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<td>HIST 336</td>
<td>African American Black Women's History</td>
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<td>HIST 343</td>
<td>Civil Rights Movement</td>
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<td>HIST 344</td>
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Subtotal: 12
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<th>ETHN 359</th>
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<td>MUS 265</td>
<td>History of Jazz</td>
<td>3</td>
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<tr>
<td>MUS 267</td>
<td>African American Music</td>
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<tr>
<td>POLI 334</td>
<td>African Politics</td>
<td>3</td>
</tr>
<tr>
<td>POLI 371</td>
<td>Civil Rights and Liberties</td>
<td>3</td>
</tr>
<tr>
<td>SOC 275</td>
<td>Social Inequalities</td>
<td>3</td>
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Subtotal: 6

NOTE:

- Six credit hours earned in two courses, each in a different discipline; must not include a course that has been used for core course credit; other courses not listed may be included with approval of coordinator.

Capstone course (3 credit hours):

| ETHN 491 | Social Change Capstone      | 3 |

Subtotal: 3

Subtotal: 21

Total Credit Hours: 21

Students are encouraged to explore relevant Study Abroad courses to meet the elective requirements.

The African American Studies minor falls under the umbrella of the Ethnic Studies program, which also offers minors in Native American Studies, Latinx Studies, and Multi-Ethnic Studies.

APPLIED MATHEMATICS MINOR

Mathematical Sciences
Office: Fenton Hall 223
(716) 673-3243
Julia Wilson, Chairperson
Email: mathematics.department@fredonia.edu
Website: https://home.fredonia.edu/math

REQUIREMENTS FOR THE MINOR IN APPLIED MATHEMATICS

Required Courses

Some courses require prerequisites. Click on any hyperlink for additional information.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 122</td>
<td>University Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>MATH 123</td>
<td>University Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>MATH 223</td>
<td>University Calculus III</td>
<td>4</td>
</tr>
<tr>
<td>MATH 231</td>
<td>Linear Algebra</td>
<td>4</td>
</tr>
</tbody>
</table>

Subtotal: 16

Plus three additional courses chosen from:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 224</td>
<td>Differential Equations</td>
<td>3</td>
</tr>
<tr>
<td>MATH 322</td>
<td>Partial Differential Equations</td>
<td>3</td>
</tr>
<tr>
<td>MATH 325</td>
<td>Numerical Analysis</td>
<td>3</td>
</tr>
<tr>
<td>MATH 329</td>
<td>Mathematical Modeling</td>
<td>3</td>
</tr>
<tr>
<td>MATH 337</td>
<td>Combinatorics</td>
<td>3</td>
</tr>
<tr>
<td>MATH 359</td>
<td>Probability Models in Operations Research</td>
<td>3</td>
</tr>
</tbody>
</table>

Subtotal: 9

NOTE: At least one of these courses must be a course numbered 311 or higher.

Subtotal: 25

Total Credit Hours: 25

A student may not minor in both Mathematics and Applied Mathematics.

ART HISTORY MINOR

Visual Arts and New Media
Office: 217 Rockefeller Arts Center
(716) 673-3537
Michele Bernatz, Chairperson
Email: visualarts.newmedia@fredonia.edu
Website: http://home.fredonia.edu/art

REQUIREMENTS FOR THE MINOR IN ART HISTORY (21 CREDIT HOURS)

Some courses require prerequisites. Click on any hyperlink for additional information.

Foundation Program (6 credit hours)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTH 101</td>
<td>Art in Culture from Prehistory to 1400</td>
<td>3</td>
</tr>
<tr>
<td>ARTH 102</td>
<td>Art in Culture from 1400 to the Present</td>
<td>3</td>
</tr>
</tbody>
</table>

Subtotal: 6

Choose one of the following courses:

(Note that these courses are only offered every third semester)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTH 350</td>
<td>Art History Theory and Methods</td>
<td>3</td>
</tr>
<tr>
<td>ARTH 355</td>
<td>Writing About Art</td>
<td>3</td>
</tr>
</tbody>
</table>

Subtotal: 3

Plus the following electives (12 credit hours):

200-level ARTH courses 6
300–400 level ARTH courses 6

Subtotal: 12

Subtotal: 21
Total Credit Hours: 21

NOTE:
- Students should consult with a department advisor in planning a course of study as an Art History minor.
- A minimum of nine (9) credit hours must be completed at Fredonia.

ARTS ADMINISTRATION MINOR
Office: 1144 Mason Hall
(716) 673-4628
Coordinator: Marc Levy
Email: marc.levy@fredonia.edu
Website: http://home.fredonia.edu/artsadmin

The Arts Administration minor introduces students to the fundamentals of planning, financing, and managing live performing arts events. Required practical experience in our campus Ticket Office and our six theatres and concert halls makes this minor a valuable enhancement to Bachelor’s Degrees in the arts, business, or communications.

PROGRAM REQUIREMENTS
Some courses require prerequisites. Click on any hyperlinked course for additional information.

Capstone
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AADM 400</td>
<td>Arts Administration Practicum</td>
<td>1-3</td>
</tr>
<tr>
<td>or AADM 490</td>
<td>Arts Administration Internship</td>
<td>1-15</td>
</tr>
</tbody>
</table>

Subtotal: 3

Core Courses
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AADM 310</td>
<td>Fundraising and Grant Writing for Non-Profits</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 201</td>
<td>Principles of Financial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>MUS 272</td>
<td>Arts Advocacy and Leadership</td>
<td>3</td>
</tr>
<tr>
<td>THEA 460</td>
<td>Performing Arts Organization and Management</td>
<td>3</td>
</tr>
<tr>
<td>AADM 410</td>
<td>Ticket Office Practicum</td>
<td>1-3</td>
</tr>
</tbody>
</table>

Subtotal: 15

Note: Students must complete 3 credits of AADM 410.

Elective Courses
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTH 460</td>
<td>Gallery Practicum</td>
<td>1-4</td>
</tr>
<tr>
<td>BUAD 354</td>
<td>Entrepreneurship</td>
<td>3</td>
</tr>
<tr>
<td>COMM 111</td>
<td>Web Design</td>
<td>1</td>
</tr>
<tr>
<td>COMM 112</td>
<td>Desktop Video</td>
<td>1</td>
</tr>
<tr>
<td>COMM 113</td>
<td>Flash</td>
<td>1</td>
</tr>
<tr>
<td>COMM 114</td>
<td>Electronic Darkroom</td>
<td>1</td>
</tr>
<tr>
<td>COMM 116</td>
<td>Desktop Publishing</td>
<td>1</td>
</tr>
<tr>
<td>COMM 118</td>
<td>Desktop Audio</td>
<td>1</td>
</tr>
<tr>
<td>COMM 222</td>
<td>Principles of Public Relations</td>
<td>3</td>
</tr>
<tr>
<td>DANC 370</td>
<td>Dance Studio Management</td>
<td></td>
</tr>
<tr>
<td>MUS 363</td>
<td>Music Entrepreneurship I</td>
<td></td>
</tr>
<tr>
<td>MUSB 201</td>
<td>The Business of Music</td>
<td></td>
</tr>
</tbody>
</table>

Subtotal: 3

Total Credit Hours: 21

ATHLETIC COACHING MINOR

School of Business
Office: E366E Thompson Hall
Dr. Mojtaba Seyedian, Program Coordinator
(716) 673-3505
mojtaba.seyedian@fredonia.edu

MINOR IN ATHLETIC COACHING (23 CREDIT HOURS)

The Athletic Coaching minor is offered to students seeking certification from The New York State Education Department (NYSED) to coach athletic teams in the public schools. Recipients of this minor will also have certification necessary to work in community programs and private schools and organizations.

The NYSED requires the following courses to partially meet the requirements for coaching certification:
- First Aid Skills and Knowledge
- Philosophy, Principles and Organization of Athletics in Education
- Health Sciences Applied to Coaching
- Theory and Techniques of Coaching

To complete the minor, students must also take the following courses: Fitness and Wellness, Sport Psychology, Pre-internship and an internship completed under the direction of a certified experienced coach.

Additional information concerning NYSED Coaching Certification may be found at http://www.p12.nysed.gov/ciai/pe/toolkitdocs/coachingguidelines_07_09.pdf.

Course Requirements:

Some courses require prerequisites. Click on any hyperlinked course for additional information.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HLTH 115</td>
<td>First Aid Skills and Knowledge</td>
<td>3</td>
</tr>
<tr>
<td>HLTH 303</td>
<td>Fitness and Wellness</td>
<td>3</td>
</tr>
<tr>
<td>PSY 129</td>
<td>Foundations of Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSY 237</td>
<td>Sport Psychology</td>
<td>3</td>
</tr>
<tr>
<td>SPMG 398</td>
<td>Pre-Internship</td>
<td>1</td>
</tr>
<tr>
<td>SPMG 400</td>
<td>Sport Studies Internship</td>
<td>.5-12</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
</tr>
<tr>
<td>-------------</td>
<td>--------------------------------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>HLTH 220</td>
<td>Health Sciences Applied to Coaching</td>
<td>3</td>
</tr>
<tr>
<td>HLTH 221</td>
<td>Philosophy, Principles and Organization of Athletics in Education</td>
<td>3</td>
</tr>
<tr>
<td>HLTH 321</td>
<td>Theory &amp; Techniques of Coaching</td>
<td>2</td>
</tr>
</tbody>
</table>

Subtotal: 23

NOTE:
- SPMG 400 is a variable 1-12 credit hour course. Students must complete the course with a minimum of two credit hours to satisfy the requirements for the minor.

Subtotal: 23

Total Credit Hours: 23

BIOLOGY MINOR

Biology
Office: 221 Science Center
(716) 673-3282
Ted Lee, Chairperson
Email: biology@fredonia.edu
Website: http://home.fredonia.edu/biology

REQUIREMENTS FOR THE MINOR IN BIOLOGY

A total of 22 credit hours of biology

Required Courses

Some courses require prerequisites. Click on any hyperlinked course for additional information.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 131</td>
<td>Introductory Ecology and Evolution</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 132</td>
<td>Introductory Ecology and Evolution Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>BIOL 133</td>
<td>Introductory Cell and Molecular Biology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 134</td>
<td>Introductory Cell and Molecular Biology Laboratory</td>
<td>1</td>
</tr>
</tbody>
</table>

Subtotal: 8

either Biodiversity and General Ecology with labs:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 243</td>
<td>Organismal Biology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 244</td>
<td>Organismal Biology Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>BIOL 330</td>
<td>Ecology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 331</td>
<td>Ecology Laboratory</td>
<td>1</td>
</tr>
</tbody>
</table>

Subtotal: 8

or Genetics and Biochemistry with labs:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 237</td>
<td>Genetics</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 238</td>
<td>Genetics Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>BIOL 333</td>
<td>Biochemistry</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 334</td>
<td>Biochemistry Laboratory</td>
<td>1</td>
</tr>
</tbody>
</table>

Subtotal: 8

Biology courses at the 300 or 400 level (not including BIOL 440)

Subtotal: 6

NOTE:
- Students electing BIOL 330 must complete a minimum of 4 credit hours of chemistry, prior to taking the course, including CHEM 115 and CHEM 125;
- Students electing BIOL 333 must complete 16 credit hours of prerequisite chemistry courses, specifically CHEM 115, 125, 116, 126, 215, 225, 216, 226;
- 200 level Biology courses may not be counted towards the 6 credits of Biology courses at the 300/400 level.

Subtotal: 22

Total Credit Hours: 22

BUSINESS ADMINISTRATION MINOR

School of Business
Office: E336 Thompson Hall
(716) 673-3505
Coordinator: Julie Fitzpatrick
julie.fitzpatrick@fredonia.edu

REQUIREMENTS FOR THE MINOR IN BUSINESS ADMINISTRATION

The department offers a minor in Business Administration that requires 27 credit hours of courses as indicated below:

Required Courses

Some courses require prerequisites. Click on any hyperlinked course for additional information.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 120</td>
<td>Survey of Calculus I and</td>
<td>3</td>
</tr>
<tr>
<td>BUAD 200</td>
<td>Fundamentals of Statistics for Business and Economics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 200</td>
<td>Fundamentals of Statistics for Business Administration and Economics</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 201</td>
<td>Principles of Financial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 202</td>
<td>Principles of Managerial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>ECON 205</td>
<td>Principles of Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 210</td>
<td>Principles of Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>BUAD 320</td>
<td>Managerial Finance</td>
<td>3</td>
</tr>
<tr>
<td>BUAD 323</td>
<td>Organizational Behavior</td>
<td>3</td>
</tr>
<tr>
<td>BUAD 328</td>
<td>Marketing Foundations</td>
<td>3</td>
</tr>
</tbody>
</table>

Subtotal: 27

Subtotal: 27
Total Credit Hours: 27

NOTE:

- Accounting and Music Industry students wishing to minor in Business Administration must take at least 9 credit hours of 300/400 level BUAD-preixed courses beyond those required for their respective major.

CHEMISTRY MINOR

Chemistry and Biochemistry
Office: 221 Science Center
(716) 673-3281
Matthew A. Fountain, Chairperson
Email: chemistry.department@fredonia.edu
Website: http://home.fredonia.edu/chemistry

REQUIREMENTS FOR THE MINOR IN CHEMISTRY

A minimum of 24 credit hours in chemistry is required including

Required Courses

Some courses require prerequisites. Click on any hyperlinked course for additional information.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 115</td>
<td>General Chemistry Lecture I</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 116</td>
<td>General Chemistry Lecture II</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 125</td>
<td>General Chemistry Laboratory I</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 126</td>
<td>General Chemistry Laboratory II</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 130</td>
<td>Honors General Chemistry Laboratory</td>
<td>1</td>
</tr>
</tbody>
</table>

16 additional credit hours at the 200-level or above

Subtotal: 24

NOTE:

- Of the 16 additional credit hours: (1) at least 2 credit hours must be in laboratory courses; (2) at least 6 credit hours must be from 300 or 400-level courses; and (3) CHEM 154, CHEM 170, CHEM 300, CHEM 302, CHEM 305, CHEM 371, and CHEM 372 cannot be counted.

Subtotal: 24

Total Credit Hours: 24

COMMUNICATION MINOR

Communication
Office: 326 McEwen Hall
(716) 673-3410
Mark Kiyak, Chairperson
Email: communication.department@fredonia.edu
Website: http://home.fredonia.edu/communication

REQUIREMENTS FOR THE MINOR IN COMMUNICATION

A minor in Communication requires 18 credit hours including

Required Courses

Some courses require prerequisites. Click on any hyperlinked course for additional information.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMM 101</td>
<td>Fundamentals of Communication</td>
<td>3</td>
</tr>
<tr>
<td>Other COMM courses</td>
<td></td>
<td>15</td>
</tr>
</tbody>
</table>

Subtotal: 18

NOTE:

- A minimum of 9 credit hours at the 300 level or above must be taken at Fredonia.
- Students may not use COMM 470- WNYF/FRS/Leader Practicum, COMM 475- Communication Supervision, COMM 480- Communication Internship, or COMM 490- Independent Study toward the minor requirements.
- Advising with the department is strongly recommended.
- The minimum GPA for successful completion of the minor is 2.50.

Subtotal: 18

Total Credit Hours: 18

COMPUTER INFORMATION SYSTEMS MINOR

Computer and Information Sciences
Office: 2148 Fenton Hall
(716) 673-4820
Junaid Zubairi, Chairperson
Email: csit@fredonia.edu
Website: http://home.fredonia.edu/cis

REQUIREMENTS FOR THE MINOR IN COMPUTER INFORMATION SYSTEMS

Required Courses

Some courses require prerequisites. Click on any hyperlinked course for additional information.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSIT 151</td>
<td>Introduction to Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>CSIT 105</td>
<td>Visual BASIC I</td>
<td>3</td>
</tr>
<tr>
<td>CSIT 121</td>
<td>Computer Science I</td>
<td>3</td>
</tr>
<tr>
<td>CSIT 205</td>
<td>Visual BASIC II</td>
<td>3</td>
</tr>
<tr>
<td>CSIT 221</td>
<td>Computer Science II</td>
<td>3</td>
</tr>
<tr>
<td>CSIT 251</td>
<td>Information Systems Structures</td>
<td>3</td>
</tr>
<tr>
<td>CSIT 351</td>
<td>Business Systems Development</td>
<td>3</td>
</tr>
</tbody>
</table>
### COMPUTER SCIENCE MINOR

**Computer and Information Sciences**  
Office: 2148 Fenton Hall  
(716) 673-4820  
Junaid Zubairi, Chairperson  
Email: csit@fredonia.edu  
Website: http://home.fredonia.edu/cis  

**REQUIREMENTS FOR THE MINOR IN COMPUTER SCIENCE**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 201</td>
<td>Principles of Financial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>CSIT 201</td>
<td>Computer Security and Ethics</td>
<td>3</td>
</tr>
<tr>
<td>CSIT 203</td>
<td>Multimedia Systems</td>
<td>3</td>
</tr>
<tr>
<td>CSIT 225</td>
<td>Java Programming</td>
<td>3</td>
</tr>
<tr>
<td>CSIT 241</td>
<td>Discrete Mathematics I</td>
<td>3</td>
</tr>
<tr>
<td>CSIT 312</td>
<td>Computer Structures</td>
<td>3</td>
</tr>
<tr>
<td>CSIT 341</td>
<td>Data Structures</td>
<td>3</td>
</tr>
<tr>
<td>CSIT 333</td>
<td>Mobile Applications Development</td>
<td>3</td>
</tr>
<tr>
<td>CSIT 425</td>
<td>Software Engineering</td>
<td>3</td>
</tr>
<tr>
<td>CSIT 435</td>
<td>Data Communication and Networks</td>
<td>3</td>
</tr>
<tr>
<td>CSIT 455</td>
<td>Relational and Object Databases</td>
<td>3</td>
</tr>
<tr>
<td>CSIT 456</td>
<td>Information and Decision Support Systems</td>
<td>3</td>
</tr>
<tr>
<td>CSIT 461</td>
<td>Introduction to AI and Knowledge Engineering</td>
<td>3</td>
</tr>
<tr>
<td>CSIT 462</td>
<td>Computer Graphics</td>
<td>3</td>
</tr>
<tr>
<td>CSIT 463</td>
<td>Introduction to Digital Image</td>
<td>3</td>
</tr>
<tr>
<td>CSIT 471</td>
<td>Information Systems Management</td>
<td>3</td>
</tr>
<tr>
<td>CSIT 473</td>
<td>Data Warehousing and Mining</td>
<td>3</td>
</tr>
<tr>
<td>CSIT 475</td>
<td>Electronic Commerce</td>
<td>3</td>
</tr>
<tr>
<td>CSIT 311</td>
<td>Assembly Language and Computer Organizations</td>
<td>3</td>
</tr>
<tr>
<td>CSIT 341</td>
<td>Data Structures</td>
<td>3</td>
</tr>
<tr>
<td>CSIT 224</td>
<td>Problem Solving Using Objects</td>
<td>3</td>
</tr>
</tbody>
</table>

**Subtotal: 6**

**NOTE:**
- At least one of these must be at the 300-400 level.
- A minimum 15 credit hours counted toward the minor must be taken at Fredonia

**Subtotal: 18**

**Total Credit Hours: 24**

### CREATIVE WRITING MINOR

**English**  
Office: 278 Fenton Hall  
(716) 673-3125  
Bruce Simon, Chairperson  
Email: english.department@fredonia.edu  
Website: https://www.fredonia.edu/academics/colleges-schools/college-liberal-arts-sciences/english  

**REQUIREMENTS FOR THE MINOR IN CREATIVE WRITING**

The Minor in Creative Writing requires a minimum of 21 credit hours of courses.

Some courses require prerequisites. Click on any hyperlinked course for additional information.

**Four (4) core courses as follows (12 credit hours):**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 260</td>
<td>Introduction to Creative Writing</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 361</td>
<td>Intermediate Fiction Writing</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL 490</td>
<td>Seminar on Selected Topics</td>
<td>1-3</td>
</tr>
<tr>
<td>ENGL 496</td>
<td>Special Topics</td>
<td>1-3</td>
</tr>
<tr>
<td>ENGL 497</td>
<td>Thesis</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 499</td>
<td>Senior Project</td>
<td>3</td>
</tr>
</tbody>
</table>

**Subtotal: 3**

**Total Credit Hours: 24-25**
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 362</td>
<td>Intermediate Poetry Writing</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 365</td>
<td>Form and Theory of Writing</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 460</td>
<td>Advanced Poetry Writing</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 461</td>
<td>Advanced Fiction Writing</td>
<td>3</td>
</tr>
</tbody>
</table>

**Subtotal: 12**

Three (3) elective courses chosen from the following (9 credit hours):

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 261</td>
<td>Literary Publishing</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 271</td>
<td>Rhetoric for Writers</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 361</td>
<td>Intermediate Fiction Writing</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 362</td>
<td>Intermediate Poetry Writing</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 363</td>
<td>Intermediate Creative Nonfiction</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 366</td>
<td>Opinion in Journalism</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 369</td>
<td>Argumentative Writing</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 374</td>
<td>Writing and Social Change</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 375</td>
<td>Writing for the Professions</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 378</td>
<td>Advanced Writing I: The Essay</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 379</td>
<td>Writing in a Digital World</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 299/399</td>
<td>Special Topics</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 455</td>
<td>Writing Tutors</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 460</td>
<td>Advanced Poetry Writing</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 461</td>
<td>Advanced Fiction Writing</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 465</td>
<td>English Internships</td>
<td>1-12</td>
</tr>
<tr>
<td>ENGL 490</td>
<td>Independent Study</td>
<td>1-6</td>
</tr>
</tbody>
</table>

**Subtotal: 9**

**NOTE:**

- Courses in the minor may be taken only once for credit, except for ENGL 299 or ENGL 399.
- Students may count ENGL 299 or ENGL 399 for credit in the minor only when the special topic focuses on writing.
- ENGL 399, ENGL 465, and ENGL 490 are variable credit hour courses. No more than 3 credit hours in internships and/or independent studies may be counted toward the minor.

**ADDITIONAL REQUIREMENTS**

- All students must earn a grade of C or higher in all courses required for completion of the minor.
- A minimum of 15 credit hours counted toward the minor must be taken at Fredonia.
- Students may count 6 credit hours of courses for both an English major and the creative writing minor.
- Students should seek prior permission from the Chairperson to include courses from other departments as electives in the minor. No more than 6 credit hours will be accepted.

- Please note that intermediate and advanced courses in poetry and fiction writing are typically offered once a year; students are advised to plan carefully to ensure they can complete the necessary coursework in a timely fashion.

**Total Credit Hours: 21**

**CRIMINAL JUSTICE MINOR**

**Sociocultural and Justice Sciences**
Office: W363 Thompson Hall
(716) 673-3205
**Brian Masciadrelli, Chairperson**
Email: sociocultural.justice@fredonia.edu
Website: http://home.fredonia.edu/sociocultural

**REQUIREMENTS FOR THE MINOR IN CRIMINAL JUSTICE**

The minor in Criminal Justice consists of a minimum of 21 credit hours that must include the following:

**Required core courses (12 credit hours):**

Some courses require prerequisites. Click on any hyperlinked course for additional information.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRMJ 100</td>
<td>Introduction to Criminal Justice</td>
<td>3</td>
</tr>
<tr>
<td>CRMJ 230</td>
<td>Criminal Law</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td>CRMJ 331</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td>CRMJ 360</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td>CRMJ 370</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td>CRMJ 375</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td>CRMJ 440</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td>CRMJ 441</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td>CRMJ 470</td>
<td>1-15</td>
</tr>
<tr>
<td>PHIL 303</td>
<td>Crime and Punishment</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 362</td>
<td>Philosophy of Law</td>
<td>3</td>
</tr>
<tr>
<td>CSIT 201</td>
<td>Computer Security and Ethics</td>
<td>3</td>
</tr>
<tr>
<td>POLI 276</td>
<td>Law and Society</td>
<td>3</td>
</tr>
<tr>
<td>POLJ 277</td>
<td>Understanding the Law</td>
<td>3</td>
</tr>
</tbody>
</table>

**Subtotal: 21**

**Electives (9 credit hours from at least two disciplines):**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRMJ 250</td>
<td>Transnational Crime</td>
<td>3</td>
</tr>
<tr>
<td>CRMJ 331</td>
<td>Criminal Procedure</td>
<td>3</td>
</tr>
<tr>
<td>CRMJ 332</td>
<td>Homeland Security</td>
<td>3</td>
</tr>
<tr>
<td>CRMJ 333</td>
<td>Criminal Investigations</td>
<td>3</td>
</tr>
<tr>
<td>CRMJ 350</td>
<td>Special Topics</td>
<td>3</td>
</tr>
<tr>
<td>CRMJ 355</td>
<td>Organized Crime</td>
<td>3</td>
</tr>
<tr>
<td>CRMJ 360</td>
<td>Criminal Justice Ethics</td>
<td>3</td>
</tr>
<tr>
<td>CRMJ 361</td>
<td>Capital Punishment</td>
<td>3</td>
</tr>
<tr>
<td>CRMJ 375</td>
<td>Serial and Mass Murder in the U.S.</td>
<td>3</td>
</tr>
<tr>
<td>CRMJ 440</td>
<td>Corrections Administration</td>
<td>3</td>
</tr>
<tr>
<td>CRMJ 441</td>
<td>Police Administration</td>
<td>3</td>
</tr>
<tr>
<td>CRMJ 470</td>
<td>Criminal Justice Internship</td>
<td>1-15</td>
</tr>
<tr>
<td>PHIL 303</td>
<td>Crime and Punishment</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 362</td>
<td>Philosophy of Law</td>
<td>3</td>
</tr>
</tbody>
</table>

**Subtotal: 12**
### POLI 311
Fundamentals of Public Administration 3

### POLI 370
American Constitutional Law 3

### POLI 371
Civil Rights and Liberties 3

### POLI 383
Courts and Social Policy 3

### PSY 246
Personality 3

### PSY 356
Abnormal Psychology 3

### PSY 358
Psychology and the Law 3

### SOC 201
Social Problems 3

### SOC 218
Introduction to Social Work 3

### SOC 275
Social Inequalities 3

### SOC 310
Sociology of Deviant Behavior 3

### SOC 311
Sociology of Addiction 3

### SOC 350
Special Topics 1-3

### SOC 363
Victimology 3

### SOC 364
Juvenile Delinquency 3

### SOC 365
Family Violence 3

**Subtotal: 9**

**NOTE:**

- SOC 350 Special Topics (as advised).
- At least 9 credit hours for the minor must be taken at the 300-level or above.
- Students may transfer up to 9 credit hours of appropriate course work towards completion of the minor.

**Total Credit Hours: 21**

### DANCE MINOR

**Department of Theatre and Dance**

Office: 212 Rockefeller Arts Center
(716) 673-3596

**Sam Kenney, Chairperson**

Email: theatre.dance@fredonia.edu
Website: http://home.fredonia.edu/theatredance

The Minor in Dance requires the completion of technique courses in Contemporary Dance, Jazz and Ballet, as well as theoretical courses including: Choreography, Kinesiology and Dance History. The Dance Minor can complement any major and is open to all students in good academic standing.

Students must earn a minimum GPA of 2.0 in all Minor courses in order to graduate with a Minor in Dance.

**REQUIREMENTS FOR THE MINOR IN DANCE**

Some courses require prerequisites. Click on any hyperlinked course for additional information.

**Movement Courses:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>DANC 111</td>
<td>Contemporary Technique I</td>
<td>2</td>
</tr>
<tr>
<td>DANC 112</td>
<td>Ballet I</td>
<td>2</td>
</tr>
<tr>
<td>DANC 113</td>
<td>Jazz Dance I</td>
<td>2</td>
</tr>
</tbody>
</table>

**Theory Courses:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>DANC 241</td>
<td>Dance Improvisation</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td><strong>Subtotal:</strong> 8</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>DANC 260</td>
<td>Dance Kinesiology</td>
<td>3</td>
</tr>
<tr>
<td>DANC 264</td>
<td>Choreography I</td>
<td>3</td>
</tr>
<tr>
<td>DANC 353</td>
<td>Contemporary Dance History</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td>DANC 453 Forces and Figures in American Jazz Dance</td>
<td>3</td>
</tr>
<tr>
<td>DANC 360</td>
<td>Dancer Wellness</td>
<td>3</td>
</tr>
</tbody>
</table>

**Subtotal: 12**

**Total Credit Hours: 20**

### DANCE STUDIO ADMINISTRATION MINOR

**Department of Theatre and Dance**

Office: 212 Rockefeller Arts Center
(716) 673-3596

**Sam Kenney, Chairperson**

Email: theatre.dance@fredonia.edu
Website: https://home.fredonia.edu/theatredance

A dance studio can provide income as a part-time business or quickly grow into a larger private enterprise. Success is closely tied to the efficient administration of the business and a long-standing personal relationship with the surrounding community. There are various styles of dance studios, each of which can be tailored easily to the demands of the customer base or to the creative intent of the proprietor. Good interpersonal communication and efficient organization are the backbone of such a community-oriented business. The Minor in Dance Studio Administration will provide students with the necessary education, preparation, and confidence to take steps in the direction of private ownership. The transferable skills acquired with this minor are in alignment with the University’s mission to enrich the world through scholarship, artistic expression, community engagement, and entrepreneurship.

**REQUIRED COURSES FOR THE MINOR IN DANCE STUDIO ADMINISTRATION:**

**Core Courses:**

Some courses require prerequisites. Click on any hyperlinked course for additional information.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 201</td>
<td>Principles of Financial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>BUAD 310</td>
<td>Legal Environment of Business</td>
<td>3</td>
</tr>
<tr>
<td>COMM 336</td>
<td>Introduction to Business Communication</td>
<td>3</td>
</tr>
<tr>
<td>CSIT 104</td>
<td>Introduction to Microcomputer Software</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSIT 151</td>
<td>Introduction to Information Systems</td>
<td>3</td>
</tr>
</tbody>
</table>
## DATA SCIENCE MINOR

### Mathematical Sciences

Office: Fenton Hall 223  
(716) 673-3243  
**Julia Wilson, Chairperson**  
Email: mathematics.department@fredonia.edu  
Website: https://home.fredonia.edu/math

### MINOR REQUIREMENTS

Some courses require prerequisites. Click on any hyperlinked course for additional information.

#### Core Courses:
- **CSIT 121** Computer Science I 3  
- **STAT 260** Introduction to Data Science 3  
- **STAT 360** Topics in Data Science 3  
- **CSIT 473** Data Warehousing and Mining 3  
  or  
- **CSIT 455** Relational and Object Databases 3  
- **STAT 405** Statistics Seminar 1

#### Introductory Statistics Course:
- **BUAD 200** Fundamentals of Statistics for Business and Economics 3  
- **ECON 200** Fundamentals of Statistics for Business Administration and Economics 3  
- **POLI 200** Statistics 3  
- **PSY 200** Statistics for Psychology 3  
- **SOC 200** Statistics in the Real World 3  
- **STAT 350** Probability and Statistics 3  
- **STAT 250** Statistics for Scientists 3

#### Elective Courses:
- **BIOL 457** Biostatistics 3  
- **BUAD 300** Statistical Analysis 3  
- **BUAD 323** Organizational Behavior 3  
- **BUAD 327** Operations Management 3  
- **BUAD 328** Marketing Foundations 3  
- **BUAD 340** Marketing Research 3  
- **CDS 390** Designing Surveys 3  
- **CSIT 351** Business Systems Development 3  
- **CSIT 451** Introduction to Files and Databases 3  
- **CSIT 455** Relational and Object Databases 3  
- **CSIT 461** Introduction to AI and Knowledge Engineering 3  
- **CSIT 471** Information Systems Management 3  
- **CSIT 473** Data Warehousing and Mining 3  
- **ESCI 410** Environmental Assessment 3  
- **EXSC 425** Biomechanics 3  
- **MUTY 422** Psychological Research in Music 3  
- **POLI 363** Game Theory 3  
- **PSY 315** Research Methods 3  
- **PSY 415** Advanced Research Methods 3  
- **SPMG 440** Data Analytics for Sport Management 3  
- **STAT 300** Statistical Methods II 3  
- **STAT 351** Regression and Analysis of Variance 3  
- **STAT 352** Categorical Data Analysis 3  
- **STAT 354** Probability with Applications 3  
- **STAT 355** Mathematical Statistics 3  
  other courses by advisement, with departmental approval: 3

**Subtotal: 6**

#### Note:
- Not all above courses are offered regularly

**Total Credit Hours: 25**

## EARTH SCIENCE MINOR

### Geology and Environmental Sciences

Office: 112 Jewett Hall  
(716) 673-3301  
**Justin Conroy, Chairperson**  
Email: physics.department@fredonia.edu  
Website: http://home.fredonia.edu/physics

### REQUIREMENTS FOR THE EARTH SCIENCE MINOR

Twenty-four (24) credit hours in Geosciences

#### Required Courses

Some courses require prerequisites. Click on any hyperlinked course for additional information.

- **GEO 165** Planet Earth 3  
- **GEO 169** Planet Earth Lab 1  
- **GEO 150** Moons and Planets 3  
- **GEO 160** Blue Planet 3  
- **GEO 210** Earth History 3  
- **GEO 215** Earth Materials 4  
- **GEO 311** Global Climate 3  
- **GEO** one GEO 300/400 level elective 4  

**Subtotal: 24**
Subtotal: 24
Total Credit Hours: 24

ECONOMICS MINOR

School of Business
Dr. Mojtaba Seyedian, Program Coordinator
E366E Thompson Hall
(716) 673-3505
mojtaba.seyedian@fredonia.edu

REQUIREMENTS FOR THE MINOR IN ECONOMICS (24 TO 25 HOURS)

Some courses require prerequisites. Click on any hyperlinked course for additional information.

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

Lower Level Economics Core Courses:
ECON 205 Principles of Microeconomics 3
ECON 210 Principles of Macroeconomics 3
Subtotal: 6

Upper Level Economics Core Courses:
ECON 305 Intermediate Microeconomic Theory 3
or
ECON 310 Intermediate Macroeconomic Theory 3
ECON 350 Managerial Economics 3
Subtotal: 6

Elective course requirements:
Any three Economics courses outside the core at 300 level or above 9
Subtotal: 9

Subtotal: 24-25
Total Credit Hours: 24-25

ENGLISH MINOR

English
Office: 278 Fenton Hall
(716) 673-3125
Bruce Simon, Chairperson
Email: english.department@fredonia.edu
Website: https://www.fredonia.edu/academics/colleges-schools/college-liberal-arts-sciences/english

REQUIREMENTS FOR THE MINOR IN ENGLISH

Some courses require prerequisites. Click on any hyperlinked course for additional information.

• A minimum of 21 credit hours of English coursework required
• All students must earn a grade of C or higher in all courses required for completion of the minor
• ENGL 106 may count towards completion of the minor
• Any one ENGL Fredonia Foundations Course at any level may count towards completion of the minor (excluding ENGL 100)
• At least four courses at the 300 level or above must be taken
• No more than 9 credit hours may be transferred from other institutions toward the minor
• No more than 3 credit hours earned in internships and independent study may be counted toward the minor
• Courses in the minor may be taken only once for credit, except for ENGL 299 or ENGL 399

Total Credit Hours: 21

ENVIRONMENTAL STUDIES MINOR

Geology and Environmental Sciences
Office: 112 Jewett Hall
(716) 673-3301
Justin Conroy, Chairperson
Email: justin.conroy@fredonia.edu

The Environmental Studies minor provides students with a broad interdisciplinary perspective on the relationship between humans and the natural world. Drawing equally on insights from the natural sciences, humanities, and social sciences, the program prepares students to address key environmental and social challenges of the 21st Century—unsustainable resources use, climate change, energy policies, ecosystem devastation, social justice issues, population growth and development, industrial food systems, pollution and waste, and human health problems, to name a few.

The Environmental Studies minor is open to all students, and it is particularly useful for students who are thinking about environmentally focused careers in the areas of advocacy and public policy, communication, economics, history, journalism, law, or writing. The breadth and interdisciplinary nature of the program provides a solid foundation in the multitude of perspectives from which to view the natural world, and the variety of independent but
interconnected paths from which to build a career focused on sustainability.

**REQUIREMENTS FOR THE INTERDISCIPLINARY STUDIES MINOR IN ENVIRONMENTAL STUDIES (20 CREDIT HOURS):**

**Required Core Courses (12 credit hours):**

Some courses require prerequisites. Click on any hyperlinked course for additional information.

Students will take at least one class from each of the four areas:

1. **Natural Science:**
   - BIOL 115  Environmental Biology  3
   - CHEM 113  Chemistry in the Environment: Issues and Solutions  3
   - GEO 175  Thirsty Planet  3

   **Subtotal: 3**

2. **Historical Contexts:**
   - HIST 310  World Environmental History  3
   - HIST 352  Environmental History of North America  3

   **Subtotal: 3**

3. **Social Science:**
   - POLI 387  Environmental Policy  3
   - ECON 380  Environmental/Natural Resource Economics  3

   **Subtotal: 3**

4. **Humanities:**
   - COMM 321  Environmental Communication  3
   - ENGL 333  Environmental Literature  3

   **Subtotal: 3**

**Electives (6 credit hours):**

Students will take at least two courses from two different disciplines, selected from the following list (or from the previous list of required core courses):

- ANTH 342  Food and Culture  3
- BIOL 222  Introduction to Tropical Biology  2
- BIOL 223  Introduction to Tropical Biology Study Abroad Costa Rica  1
- BIOL 421  Biological Conservation  3
- BIOL 426  Current Environmental Topics  3
- ECON 340  Urban and Regional Economics  3
- ENGL 374  Writing and Social Change  3
- ESCI 105  Global Environmental Issues  3
- GEO 359  Vanishing Earth Resources  3
- HIST 353  U.S. Consumer Culture  3
- POLI 240  Urbanization and Environmental Challenges  3
- SOC 215  Introduction to Public Health  3

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESCI 440</td>
<td>Environmental Sciences Seminar</td>
<td>1</td>
</tr>
<tr>
<td>ESCI 441</td>
<td>Environmental Sciences Senior Seminar</td>
<td>1</td>
</tr>
</tbody>
</table>

**Subtotal: 6**

**Capstone (2 credits):**

- ESCI 440  Environmental Sciences Seminar  1
- ESCI 441  Environmental Sciences Senior Seminar  1

**Subtotal: 2**

**Total Credit Hours: 20**

**FILM STUDIES MINOR**

Office: 275 Fenton Hall  
(716) 673-3848  
Shannon McRae, Coordinator  
Email: film.studies@fredonia.edu  
Website: http://home.fredonia.edu/interdisciplinary

The Film Studies minor considers a variety of approaches to understanding the role of film in all its different forms and intents. A film may have predominantly literary content or may be specifically engaged with historical, political, or cultural concerns. It may also be primarily an abstract, aesthetic work, exploring alternatives to traditional narrative filmmaking. It is fundamentally a medium used to examine and study human knowledge and exploration. It is tightly interwoven into cultural identity throughout the world.

The Film Studies minor acquaints students with these ideas and introduces key landmarks in the history of film while identifying and challenging the grounds on which landmark status has been recognized. The departments of Communication, English, History, World Languages and Cultures, Politics and International Affairs, and Visual Arts and New Media, and the Women's and Gender Studies, and Film Studies programs offer courses regularly that engage in the academic study of the medium.

This interdisciplinary collaboration between many different departments and programs provides a wide variety of course offerings that change each semester. A variety of special topics courses may be offered at any
time. In any given semester, as many as 200 students may be enrolled in courses in which film is the major vehicle for study. Always check with the Film Studies minor coordinator if you have any questions about course availability.

MINOR PROGRAM REQUIREMENTS

Some courses require prerequisites. Click on any hyperlinked course for additional information.

**Introductory Core:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMM 155</td>
<td>Rhetoric of Vision and Sound</td>
<td>3</td>
</tr>
<tr>
<td>or ENGL 280</td>
<td>Introduction to Film</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 380</td>
<td>Film: Silence to Sound</td>
<td>4</td>
</tr>
<tr>
<td>or ENGL 381</td>
<td>Narrative Film After 1940</td>
<td>4</td>
</tr>
<tr>
<td>or COMM 309</td>
<td>Film Analysis</td>
<td>3</td>
</tr>
</tbody>
</table>

**Subtotal:** 6

**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:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTS 222</td>
<td>Cinema Arts I</td>
<td>3</td>
</tr>
<tr>
<td>ARTH 276</td>
<td>Film Form</td>
<td>3</td>
</tr>
<tr>
<td>ARTH 345</td>
<td>Film Criticism</td>
<td>3</td>
</tr>
<tr>
<td>ARTH 359</td>
<td>New Media Writing</td>
<td>3</td>
</tr>
<tr>
<td>COMM 308</td>
<td>Documentary History and Criticism</td>
<td>3</td>
</tr>
<tr>
<td>COMM 361</td>
<td>Script Writing Video/Film/Radio</td>
<td>3</td>
</tr>
<tr>
<td>COMM 386</td>
<td>International Films</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 227</td>
<td>Stage/Screen</td>
<td>4</td>
</tr>
<tr>
<td>ENGL 387</td>
<td>American Film Directors</td>
<td>4</td>
</tr>
<tr>
<td>LANG 180</td>
<td>World in Cinema:Special Topics</td>
<td>3</td>
</tr>
<tr>
<td>LANG 385</td>
<td>German Film</td>
<td>3</td>
</tr>
<tr>
<td>FILM 399</td>
<td>Special Topics</td>
<td>1-4</td>
</tr>
</tbody>
</table>

Any J-term May-term or summer session course offered as Cinema courses
Transfer credits (permission of coordinator)
Any course from the core not taken to fullfill core requirements

**Subtotal:** 12

**NOTE:** Once the core requirement is fulfilled, any courses in the section may also count as an elective

**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.

Some courses require prerequisites. Click on any hyperlinked course for additional information.

• No more than four (4) courses in any one discipline may be taken for credit toward the film minor
• Faculty in various departments sometimes 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 of Film Studies: mcrae@fredonia.edu.

**Total Credit Hours:** 18
GEOGRAPHIC INFORMATION SYSTEMS MINOR

Geology and Environmental Sciences
Office: 112 Jewett Hall
(716) 673-3303
Justin Conroy, Coordinator
Email: geographicinformation.systems@fredonia.edu
Website: http://home.fredonia.edu/interdisciplinary

The objective of the Geographic Information Systems minor is to provide an interdisciplinary educational experience that prepares undergraduate students to use Geographic Information Systems (GIS) within their chosen fields of study. A GIS is a computer-based system, comprised of both hardware and software that enables the collection, integration, analysis, and graphic display of geographically referenced data. It is estimated that as much as 85 percent of a government agency’s data is geographic, including, at a minimum, street addresses, political boundaries, postal codes, and latitude and longitude coordinates. Private sector organizations also work with an overwhelming amount of similar kinds of data in their day-to-day operations. With so much geographically based information, GIS has become essential to the effective operation of both public and private organizations.

The minor will prepare students for careers or graduate study in virtually all areas of the public or private sector where GIS is increasingly in use and critical for efficient management, comprehensive policy analysis, cost-effective decision making, and GIS display and processing. The curriculum in the minor is multidisciplinary in content and interdisciplinary in approach, drawing on a variety of disciplines and departments. Service learning is incorporated into several GIS courses and can be a focus of the GIS practicum experience. Students are strongly encouraged to attend a regional and/or state GIS conference with the GIS faculty and other students in the minor.

REQUIRED COURSES FOR THE MINOR

Some courses require prerequisites. Click on any hyperlinked course for additional information.

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

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSIT 101</td>
<td>Programming with 3-D Graphics and Multimedia</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td>CSIT 105 Visual BASIC I</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td>CSIT 107 Web Programming I</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td>CSIT 121 Computer Science I</td>
<td>3</td>
</tr>
<tr>
<td>GIS 201</td>
<td>Geographic Information Systems I</td>
<td>3</td>
</tr>
<tr>
<td>GIS 301</td>
<td>Geographic Information Systems II</td>
<td>3</td>
</tr>
<tr>
<td>GEO 301</td>
<td>Cartography</td>
<td>4</td>
</tr>
<tr>
<td>GIS 450</td>
<td>Directed Study</td>
<td>1-3</td>
</tr>
<tr>
<td>or</td>
<td>GIS 480 Independent Study</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td>GIS 490 Internship</td>
<td>1-6</td>
</tr>
</tbody>
</table>

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:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 330</td>
<td>Ecology</td>
<td>3</td>
</tr>
<tr>
<td>CSIT 205</td>
<td>Visual BASIC II</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td>CSIT 207 Web Programming II</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td>CSIT 221 Computer Science II</td>
<td>3</td>
</tr>
<tr>
<td>ESCI 410</td>
<td>Environmental Assessment</td>
<td>3</td>
</tr>
<tr>
<td>GEO 330</td>
<td>Geomorphology</td>
<td>4</td>
</tr>
<tr>
<td>GIS 401</td>
<td>Special Topics in Geographic Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td>Statistics as advised</td>
<td></td>
</tr>
</tbody>
</table>

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:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUAD 325</td>
<td>Principles of Marketing</td>
<td>3</td>
</tr>
<tr>
<td>ECON 380</td>
<td>Environmental/Natural Resource Economics</td>
<td>3</td>
</tr>
<tr>
<td>GIS 401</td>
<td>Special Topics in Geographic Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>POLI 311</td>
<td>Fundamentals of Public Administration</td>
<td>3</td>
</tr>
<tr>
<td>SOC 215</td>
<td>Introduction to Public Health Statistics</td>
<td>3</td>
</tr>
</tbody>
</table>

Subtotal: 25

Total Credit Hours: 25

GEOLOGICAL SCIENCES MINOR

Geology and Environmental Sciences
Office: 112 Jewett Hall
(716) 673-3303
Justin Conroy, Coordinator
Email: geographicinformation.systems@fredonia.edu
Website: http://home.fredonia.edu/interdisciplinary

REQUIREMENTS FOR THE MINOR IN GEOLOGICAL SCIENCES

Twenty-three (23) credit hours in geosciences
### Required Courses

Some courses require prerequisites. Click on any hyperlinked course for additional information.

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEO 165</td>
<td>Planet Earth</td>
<td>3</td>
</tr>
<tr>
<td>GEO 169</td>
<td>Planet Earth Lab</td>
<td>1</td>
</tr>
<tr>
<td>GEO 210</td>
<td>Earth History</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Four 4-credit hour courses, as advised, from the 200-300-400 levels</td>
<td>16</td>
</tr>
</tbody>
</table>

Subtotal: 23

**Total Credit Hours: 23**

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### HISTORY MINOR

Office: E332A Thompson Hall  
(716) 673-3277  
**David Kinkela, Chairperson**  
Email: history.department@fredonia.edu  
Website: http://home.fredonia.edu/history

**REQUIREMENTS FOR THE MINOR IN HISTORY**

The program is designed to provide opportunities for students to study the past in a structured environment that offers flexible course options based on individual areas of interest.

Some courses require prerequisites. Click on any hyperlinked course for additional information.

The minor requires eighteen (18) credit hours of coursework in history with a grade of C- or better. Within those eighteen credit hours, students:

- may include up to two (2) 100-level courses (Fredonia Foundations courses)
- must take at least one (1) 200-level course
- must take at least three (3) courses at the 300- or 400-level
- Students may opt to take a research methodology course (HIST 201, 202, or 495) as part of the minor with permission of the instructor. (HIST 495 requires HIST 201 as a prerequisite.)

Students may elect to take a broad array of courses or could choose to focus on a concentration such as:

- Comparative (Global/Transnational History, History of Race, etc.)
- United States
- Europe

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**INDUSTRIAL-ORGANIZATIONAL PSYCHOLOGY MINOR**

Office: W357 Thompson Hall  
(716) 673-3129  
**Joseph McFall, Chairperson**  
Email: psychology.department@fredonia.edu  
Website: http://www.fredonia.edu/department/psychology/

**MINOR REQUIREMENTS:**

Transfer students must complete at least 9 credit hours in Psychology at Fredonia.

Some courses require prerequisites. Click on any hyperlinked course for additional information.

A minimum of 21 credit hours, distributed as follows:

**Core Courses (12 credit hours):**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSY 129</td>
<td>Foundations of Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSY 200</td>
<td>Statistics for Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSY 317</td>
<td>Psychological Assessment</td>
<td>3</td>
</tr>
<tr>
<td>PSY 347</td>
<td>Organizational Psychology</td>
<td>3</td>
</tr>
</tbody>
</table>

Subtotal: 12

**Three courses from the following:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSY 227</td>
<td>Careers in Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSY 355</td>
<td>Group Dynamics</td>
<td>3</td>
</tr>
<tr>
<td>PSY 373</td>
<td>Human Factors</td>
<td>3</td>
</tr>
<tr>
<td>PSY 447</td>
<td>Introduction to Counseling</td>
<td>3</td>
</tr>
<tr>
<td>BUAD 321</td>
<td>Management and Organizational Behavior</td>
<td>3</td>
</tr>
</tbody>
</table>

Subtotal: 9

NOTE: A minimum of 2.00 cumulative quality point average in all psychology courses is required.

Subtotal: 21

**Total Credit Hours: 21**

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### INTERNATIONAL STUDIES MINOR

**Politics and International Affairs**

Office: E390 Thompson Hall  
(716) 673-3887  
**Ivani Vassoler, Coordinator**  
Email: Ivani.Vassoler@fredonia.edu  
Website: http://home.fredonia.edu/interdisciplinary
REQUIREMENTS FOR THE MINOR IN INTERNATIONAL STUDIES (25 CREDIT HOURS)

Some courses require prerequisites. Click on any hyperlinked course for additional information.

Core Requirements (10 credit hours):
Core requirements are intended to introduce students to international studies from the perspective of history, politics, and culture.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTL 101</td>
<td>Introduction to International Studies</td>
<td>1</td>
</tr>
<tr>
<td>POLI 150</td>
<td>World Affairs</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 115</td>
<td>Introductory Anthropology</td>
<td>3</td>
</tr>
</tbody>
</table>

Upper Level Course Requirement (9 credit hours):
Three courses at the 300 or higher level.

NOTE:
- 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).

Total Credit Hours: 25

Foreign Language Requirement (minimum 3 credit hours):
The foreign language requirement may be completed via any of the following options:

1. Completion of course work through the 216 level (second-semester intermediate)
   Important note about this requirement:
   If a language is offered by Fredonia at the elementary (115-116) level only, then, after completing these two courses, a student has the following options for completing the foreign language requirement, with the approval of the program advisor:
   a. With courses taken during a study-abroad program in a country where that language is spoken;
   b. With intermediate-level language courses taken at an approved institution in the U.S., including courses offered online through the SUNY Learning Network;
   c. By taking an additional foreign language sequence at the 115-116 level.

2. Students with demonstrated proficiency in a foreign language must take a minimum of one course (3 credit hours) at the college level. Students may complete this requirement at Fredonia, in a program at an approved institution in the U.S., or in a foreign country.

3. Additional foreign language coursework at the 300- and 400-levels is strongly recommended.

International Experience (3 credit hours):
All International Studies minors must complete a 3-credit “international experience,” which can be fulfilled via enrollment in a short-term or long-term study-abroad program or the completion of an internship with an international agency.

INTERDISCIPLINARY STUDIES SELF-DESIGN MINOR

Office: 4th Floor Reed Library
Academic Advising / Liberal Arts
(716) 673-3188

Amy Marshall, Director of Academic Advising
Email: Interdisciplinary.studies@fredonia.edu
Website: http://home.fredonia.edu/interdisciplinary

Students who are currently in a departmental major may self-design an Interdisciplinary Studies minor combining courses from a minimum of two disciplines. Student will need to declare the minor with the Registrar’s Office using a Change of Major form. Students who are enrolled in any of the Interdisciplinary Studies majors may not declare a self-design minor.

REQUIREMENTS FOR MINOR IN INTERDISCIPLINARY STUDIES SELF DESIGN

Some courses require prerequisites. Click on any hyperlinked course for additional information.

- 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).

LATINX STUDIES MINOR

Office: E304 Thompson Hall
(716) 673-3274
Jennifer Hildebrand, Coordinator
Email: ethnicgender.studies@fredonia.edu
Website: http://home.fredonia.edu/interdisciplinary
Latinx Studies, an interdisciplinary minor, takes you *de la clase a la calle*—“from the classroom discussion to the realities in the streets of our diverse communities.” The program provides an overview of the historical, political, social, educational, economic and cultural developments that affect Latinxs in the Americas. “Latinx” has been defined broadly to include people of Latin American background who reside in the U.S., where they are the fastest growing ethnic population. At a time when “globalization” and “immigration” have become part of everyday political and social discourse, students gain an understanding of the complex dynamics of transnational communities and transculturation.

One of the strengths of Fredonia’s approach to the minor is our emphasis on the idea of “*de la clase a la calle*”—“from the classroom to the streets.” This program emphasizes taking the theoretical issues and discussions of the classroom and putting them into practical initiatives and strategies in our communities. This phrase also keeps us rooted in the origins of all Ethnic Studies programs, which emerged directly from the Civil Rights Movement and other social movements of the Sixties and Seventies. Diverse groups of students demanded a curriculum that addressed the different historical and cultural experiences of many groups in the United States. University administrators across the country, tired of the public demonstrations and sit-downs held in the middle of their campuses, allowed students and faculty to incorporate the discussions that had been taking place on the street into the curriculum.

**Latinx Studies is for everyone!** No matter your major or your future plans, the program will provide intellectual skills and cultural knowledge that will benefit you. A minor in Latinx Studies opens doors for careers in government, legislation, international organizations, international business and marketing, immigration laws, land management, urban planning, counseling and social work, the media, and many other fields.

**REQUIREMENTS FOR THE MINOR IN LATINX STUDIES (21 CREDIT HOURS)**

Students declaring a Latinx Studies minor may use past courses retroactively with approval of the coordinator.

Some courses require prerequisites. Click on any hyperlinked course for additional information.

<table>
<thead>
<tr>
<th>Core courses (12 credit hours):</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ETHN 202 Foundations of Social Justice</td>
<td>3</td>
</tr>
<tr>
<td>ETHN 225 Introduction to Latinx History and Culture</td>
<td>3</td>
</tr>
</tbody>
</table>

**Subtotal: 6**

<table>
<thead>
<tr>
<th>One Spanish language course from the following (3 credit hours):</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>SPAN 313 Spanish Conversation</td>
<td>3</td>
</tr>
<tr>
<td>or SPAN 314 Spanish Composition or Demonstrated proficiency at this level</td>
<td></td>
</tr>
</tbody>
</table>

**Subtotal: 3**

<table>
<thead>
<tr>
<th>One History course from the following (3 credit hours):</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ETHN 282 Pre-Columbian and Colonial Latin America</td>
<td>3</td>
</tr>
<tr>
<td>ETHN 283 Latin America: Revolution &amp; Reform</td>
<td>3</td>
</tr>
</tbody>
</table>

**Subtotal: 3**

<table>
<thead>
<tr>
<th>Electives (6 credit hours):</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 324 Caribbean Societies and Cultures</td>
<td>3</td>
</tr>
<tr>
<td>ARTH 280 Survey of Pre-Columbian Art: Mesoamerica</td>
<td>3</td>
</tr>
<tr>
<td>DANC 231 African-Caribbean Dance</td>
<td>2</td>
</tr>
<tr>
<td>ETHN 241 Introduction to Latino/a Literature</td>
<td>3</td>
</tr>
<tr>
<td>ETHN 304 Latina Literature and Cultural Studies</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 344 Contemporary Multiethnic American Literature</td>
<td>3</td>
</tr>
<tr>
<td>ETHN 359 Ethnicity and Race</td>
<td>3</td>
</tr>
<tr>
<td>INTL 303 Globalization in Latin America</td>
<td>3</td>
</tr>
<tr>
<td>LANG 327 Magic Realism in Latin American Literature</td>
<td>3</td>
</tr>
<tr>
<td>MUS 334 Music of Latin America</td>
<td>3</td>
</tr>
<tr>
<td>POLI 343 International Migration and Immigration Politics</td>
<td>3</td>
</tr>
<tr>
<td>POLI 351 The Inter-American System</td>
<td>3</td>
</tr>
<tr>
<td>POLI 371 Civil Rights and Liberties</td>
<td>3</td>
</tr>
<tr>
<td>SOC 275 Social Inequalities</td>
<td>3</td>
</tr>
<tr>
<td>SPAN 325 Survey of Spanish-American Literature</td>
<td>3</td>
</tr>
<tr>
<td>SPAN 340 Cultural Issues in the Hispanic World</td>
<td>3</td>
</tr>
<tr>
<td>SPAN 425 Spanish-American Fiction</td>
<td>3</td>
</tr>
<tr>
<td>WGST 203 Chicana Writers/Visual Artists</td>
<td>3</td>
</tr>
</tbody>
</table>

**Subtotal: 6**

**NOTE:**

- 6 credit hours earned in two courses, each in a different discipline; must not include a course that has been used for core course credit; other courses not listed may be included with approval of coordinator.

<table>
<thead>
<tr>
<th>Capstone (3 credit hours):</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ETHN 491 Social Change Capstone</td>
<td>3</td>
</tr>
</tbody>
</table>

**Subtotal: 3**

**Total Credit Hours: 21**

Students are encouraged to explore relevant Study Abroad courses to meet the elective requirements.
Study Abroad programs such as INED 399 J-Term in Puerto Rico, INED 399 Study Abroad in Oaxaca, Mexico and INED 399 Study Abroad in Puebla, Mexico are strongly recommended.

The Latinx Studies minor falls under the umbrella of the Ethnic Studies program, which also offers minors in African American Studies, Native American Studies, and Multi-Ethnic Studies.

LEADERSHIP STUDIES MINOR

Office: W315 Thompson Hall  
(716) 673-3898  
Sue McNamara, Coordinator
Website: http://home.fredonia.edu/interdisciplinary/leadership-studies

The 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 Enrollment and Student Services.

The goals of the Leadership Studies minor are:

• to introduce leadership as a recognized and well-documented set of concepts and ideas gleaned from designated courses that enhance leadership concepts;
• to provide the opportunity for an internship experience that documents appropriate leadership skills;
• to allow students to use this minor to complement a variety of major programs, including but not limited to, Business Administration, Communication, Social Work, or Education; and
• to offer a substantial menu of educational opportunities in an effort to enhance student potential as active and progressive individuals in a variety of diverse and competitive professional settings.

Requirements for consideration:

• Undergraduate student enrolled at Fredonia;
• Maintain a cumulative grade point average of 2.5;
• Consultation (and approval) with current Academic Advisor; and
• Application and consultation.

Affiliated Student Organizations and Activities

The Leadership Street Team 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 situational leadership.

The Leadership Awards Reception (co-sponsored by Leadership Street Team, Campus Life, Faculty Student Association, and University Advancement) provides an opportunity for recognition of our student leaders on campus, while allowing a reception for several scholarship announcements.

The Leadership Minor would also provide students with hand-on experience in the New York Leadership Educator’s Consortium (NYLEC). A yearly conference is planned in the summer to provide students and professionals in the field of leadership development an opportunity to learn new theories and present on current trends.

REQUIREMENTS FOR THE MINOR IN LEADERSHIP STUDIES

Completion of the minor requires a minimum of 21 credit hours.

Course work focuses on five basic components:

• theory of leadership development;
• leadership in a changing world;
• communication skills (oral and written);
• techniques for working with groups and organizations; and
• presentation skills.

The minor includes a required internship, scheduled in consultation with the program coordinator.

Some courses require prerequisites. Click on any hyperlinked course for additional information.

Core (6 credit hours):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>LEAD 201</td>
<td>Advanced Leadership Development</td>
<td>3</td>
</tr>
<tr>
<td>LEAD 490</td>
<td>Internship in Leadership</td>
<td>1-6</td>
</tr>
</tbody>
</table>

Electives (15 credit hours):

Must cover at least three of the following areas:

At least six (6) of these credit hours must be at the 300-400 level, and no more than three (3) of these credit hours may be from any one discipline. Many of these courses have prerequisites, but often the prerequisite is a course that could be taken to satisfy a requirement in the General Education Program.

Global Perspectives:

Courses that focus on effective and appropriate interaction with people from various cultural backgrounds, noting
different dimensions in both a domestic and international context.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMM 424</td>
<td>International Public Relations</td>
<td>3</td>
</tr>
<tr>
<td>COMM 465</td>
<td>Intercultural Communication</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 205</td>
<td>Epic and Romance</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 207</td>
<td>Drama and Film</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 209</td>
<td>Novels and Tales</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 211</td>
<td>World Poetry</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 303</td>
<td>Global Literary Landmarks</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 351</td>
<td>Language and Society</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 386</td>
<td>Women in Global Cinema</td>
<td>4</td>
</tr>
<tr>
<td>ENGL 391</td>
<td>Romanticism in World Literature</td>
<td>3</td>
</tr>
<tr>
<td>ECON 320</td>
<td>International Trade/Finance</td>
<td>3</td>
</tr>
<tr>
<td>ECON 345</td>
<td>Comparative Economic Systems</td>
<td>3</td>
</tr>
<tr>
<td>ETHN 225</td>
<td>Introduction to Latinx History and Culture</td>
<td>3</td>
</tr>
<tr>
<td>HIST 316</td>
<td>20th Century Russia</td>
<td>3</td>
</tr>
<tr>
<td>HIST 398</td>
<td>Themes in World History</td>
<td>3</td>
</tr>
<tr>
<td>INED 400</td>
<td>Study Abroad</td>
<td>1-23</td>
</tr>
<tr>
<td>LANG 322</td>
<td>French Civilization/Culture</td>
<td>3</td>
</tr>
<tr>
<td>LANG 388</td>
<td>Spanish Civilization/Culture</td>
<td>3</td>
</tr>
<tr>
<td>MUED 215</td>
<td>Music, Play &amp; Self</td>
<td>3</td>
</tr>
<tr>
<td>MUS 233</td>
<td>Musics of the World</td>
<td>3</td>
</tr>
<tr>
<td>POLI 344</td>
<td>Comparative Public Policy</td>
<td>3</td>
</tr>
<tr>
<td>POLI 352</td>
<td>World Political Geography</td>
<td>3</td>
</tr>
<tr>
<td>POLI 356</td>
<td>U.S. Foreign Policy</td>
<td>3</td>
</tr>
<tr>
<td>PSY 370</td>
<td>Cross-Cultural Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSY 391</td>
<td>Multicultural Counseling</td>
<td>3</td>
</tr>
<tr>
<td>SSED 204</td>
<td>World Regional Geography</td>
<td>3</td>
</tr>
<tr>
<td>WGST 201</td>
<td>Topics in Gender Studies</td>
<td>3</td>
</tr>
</tbody>
</table>

**Communication Skills:**

Courses that provide a wide range of opportunities to develop and enrich communication skills, including but limited to verbal, non-verbal and electrical. Skill base includes a focus on thinking critically about everyday interactions, including assessment of the content and contributions to creation of meaning. The student will also work on the shaping of personal and social realities.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMM 105</td>
<td>Public Speaking</td>
<td>3</td>
</tr>
<tr>
<td>COMM 221</td>
<td>Interpersonal Communication</td>
<td>3</td>
</tr>
<tr>
<td>COMM 251</td>
<td>Audio Production I</td>
<td>3</td>
</tr>
<tr>
<td>COMM 321</td>
<td>Environmental Communication</td>
<td>3</td>
</tr>
<tr>
<td>COMM 336</td>
<td>Introduction to Business Communication</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 260</td>
<td>Introduction to Creative Writing</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 352</td>
<td>History of the English Language</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 373</td>
<td>English Grammar for Everyone</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 374</td>
<td>Writing and Social Change</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 375</td>
<td>Writing for the Professions</td>
<td>3</td>
</tr>
<tr>
<td>THEA 130</td>
<td>Acting for Non-Majors</td>
<td>3</td>
</tr>
</tbody>
</table>

**Groups and Organizations:**

Courses that emphasize communication in small task groups involving decision making and problem solving.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUAD 323</td>
<td>Organizational Behavior</td>
<td>3</td>
</tr>
<tr>
<td>BUAD 378</td>
<td>Business and Ethics</td>
<td>3</td>
</tr>
<tr>
<td>COMM 222</td>
<td>Principles of Public Relations</td>
<td>3</td>
</tr>
<tr>
<td>COMM 301</td>
<td>Group Communication</td>
<td>3</td>
</tr>
<tr>
<td>COMM 373</td>
<td>Gender and Communication</td>
<td>3</td>
</tr>
<tr>
<td>COMM 460</td>
<td>Organizational Communication</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 314</td>
<td>Women Writers</td>
<td>3</td>
</tr>
<tr>
<td>HIST 359</td>
<td>Ethnicity and Race</td>
<td>3</td>
</tr>
<tr>
<td>SOC 275</td>
<td>Social Inequalities</td>
<td>3</td>
</tr>
<tr>
<td>SPMG 210</td>
<td>Principles of Sports Management</td>
<td>3</td>
</tr>
<tr>
<td>POLI 276</td>
<td>Law and Society</td>
<td>3</td>
</tr>
<tr>
<td>PSY 345</td>
<td>Social Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSY 347</td>
<td>Organizational Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSY 355</td>
<td>Group Dynamics</td>
<td>3</td>
</tr>
</tbody>
</table>

**Presentation Skills:**

 Courses that develop and enhance the student’s presentation abilities through the use of the microcomputer and its different programs and tools.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUAD 499</td>
<td>Strategic Management</td>
<td>3</td>
</tr>
<tr>
<td>CSIT 104</td>
<td>Introduction to Microcomputer Software</td>
<td>3</td>
</tr>
<tr>
<td>CSIT 107</td>
<td>Web Programming I</td>
<td>3</td>
</tr>
<tr>
<td>CSIT 120</td>
<td>Computer Science Overview</td>
<td>3</td>
</tr>
<tr>
<td>COMM 111</td>
<td>Web Design</td>
<td>1</td>
</tr>
<tr>
<td>COMM 112</td>
<td>Desktop Video</td>
<td>1</td>
</tr>
<tr>
<td>COMM 114</td>
<td>Electronic Darkroom</td>
<td>1</td>
</tr>
<tr>
<td>COMM 116</td>
<td>Desktop Publishing</td>
<td>1</td>
</tr>
<tr>
<td>GIS 201</td>
<td>Geographic Information Systems I</td>
<td>3</td>
</tr>
<tr>
<td>LEAD 101</td>
<td>Intro to Leadership Seminar</td>
<td>1</td>
</tr>
</tbody>
</table>

**NOTE:**

- Students may count no more than 3 credits from their major program to the minor in Leadership.
- Students that wish to declare a Leadership minor must do so prior to course selection for the second semester of their junior year.

Subtotal: 21

**Total Credit Hours: 21**
Mathematical Sciences
Office: Fenton Hall 223
(716) 673-3243
Julia Wilson, Chairperson
Email: mathematics.department@fredonia.edu
Website: https://home.fredonia.edu/math

MULTI-ETHNIC STUDIES MINOR

Office: E304 Thompson Hall
(716) 673-3274
Jennifer Hildebrand, Coordinator
Email: multiethnic.studies@fredonia.edu
Website: http://home.fredonia.edu/interdisciplinary

Multi-Ethnic Studies is an interdisciplinary program that encourages a broad, often comparative, study of race and ethnicity in the Americas and the larger world. As our society becomes increasingly diverse, a minor in Multi-Ethnic Studies helps students to understand the rich history of multiple groups in the United States while simultaneously preparing them to thrive in an increasingly diversified workplace and a globalized economy.

Students minoring in Multi-Ethnic Studies will engage in conversations about our similarities as human beings as well as the misunderstandings sometimes caused by our differences. The classroom will provide a safe space where the experiences and perspectives of the people we study as well as our own backgrounds and views can be explored and addressed intellectually and frankly.

Multi-Ethnic Studies is for everyone! No matter your major or your future plans, the program will provide intellectual skills and cultural knowledge that will benefit you. As the workplace and the world become more diversified, the ability to consider different perspectives and communicate across differences becomes increasingly valuable. Multi-Ethnic Studies coursework will challenge students to think critically and to write persuasively and thoughtfully, pushing them to seek innovative solutions to problems which they understand to be multifaceted. Students in the program will be well-prepared for careers in human services, museum curatorship, library science, teaching, journalism, scholarship, law, health, inter-ethnic relations, and many other fields.

**REQUIREMENTS FOR THE MINOR IN MULTI-ETHNIC STUDIES (21 CREDIT HOURS)**

Students declaring a Multi-ethnic Studies minor may use past courses retroactively with approval of the coordinator.

Some courses require prerequisites. Click on any hyperlinked course for additional information.

**Core courses (9 credit hours selected from the following):**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ETHN 202</td>
<td>3</td>
</tr>
<tr>
<td>ETHN 212</td>
<td>3</td>
</tr>
<tr>
<td>ETHN 220</td>
<td>3</td>
</tr>
<tr>
<td>ETHN 240</td>
<td>3</td>
</tr>
</tbody>
</table>

**Subtotal: 9**

**Two courses selected from the following three (6 credit hours):**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ETHN 205</td>
<td>3</td>
</tr>
<tr>
<td>ETHN 206</td>
<td>3</td>
</tr>
<tr>
<td>ETHN 225</td>
<td>3</td>
</tr>
</tbody>
</table>

**Subtotal: 6**

**Electives:**

Three courses (nine credit hours) must be taken, one each from African American Studies, American Indian Studies, and Latino Studies. Students may substitute one Multi-Ethnic Studies course; however, it cannot be from the area that they omitted when selecting two courses from ETHN 205, ETHN 206, or ETHN 225. (In other words, if you do NOT take ETHN 205, Introduction to African American Studies, you MUST take an elective in the African American Studies area.) Courses should be selected from at least two different disciplines. Must not include a course that has been used for core course credit, but students may take the third course from above (ETHN 205, ETHN 206, or ETHN 225) as an elective. Other courses not listed may be included with approval of the coordinator.

**African American Studies (3 credit hours):**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 324</td>
<td>3</td>
</tr>
<tr>
<td>DANC 231</td>
<td>2</td>
</tr>
<tr>
<td>ENGL 340</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 341</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 342</td>
<td>3</td>
</tr>
<tr>
<td>ETHN 240</td>
<td>3</td>
</tr>
<tr>
<td>ETHN 333</td>
<td>3</td>
</tr>
<tr>
<td>ETHN 334</td>
<td>3</td>
</tr>
</tbody>
</table>

**Subtotal: 18**

**Total Credit Hours: 25-26**

MATH 122 University Calculus I 4
MATH 123 University Calculus II 4
MATH 210 Mathematical Structures and Proof 4
MATH 223 University Calculus III 4

Plus three additional MATH or STAT courses chosen from:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 224</td>
<td>3</td>
</tr>
<tr>
<td>MATH 231</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Credit Hours: 25-26**
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST 336</td>
<td>African American Black Women's History</td>
<td>3</td>
</tr>
<tr>
<td>HIST 343</td>
<td>Civil Rights Movement</td>
<td>3</td>
</tr>
<tr>
<td>MUS 265</td>
<td>History of Jazz</td>
<td>3</td>
</tr>
<tr>
<td>MUS 267</td>
<td>African American Music</td>
<td>3</td>
</tr>
<tr>
<td>POLI 328</td>
<td>African American Politics</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Subtotal:</strong></td>
<td><strong>3</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Native American Studies (3 credit hours):</strong></td>
<td></td>
</tr>
<tr>
<td>ANTH 321</td>
<td>Anthropology of Indian America</td>
<td>3</td>
</tr>
<tr>
<td>ETHN 242</td>
<td>American Indian Literature</td>
<td>3</td>
</tr>
<tr>
<td>ETHN 282</td>
<td>Pre-Columbian and Colonial Latin America</td>
<td>3</td>
</tr>
<tr>
<td>ETHN 356</td>
<td>Native American History</td>
<td>3</td>
</tr>
<tr>
<td>ETHN 357</td>
<td>Indians and Europeans in Early America</td>
<td>3</td>
</tr>
<tr>
<td>ETHN 358</td>
<td>20th Century Native American Issues</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Subtotal:</strong></td>
<td><strong>3</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Latinx Studies (3 credit hours):</strong></td>
<td></td>
</tr>
<tr>
<td>ANTH 324</td>
<td>Caribbean Societies and Cultures</td>
<td>3</td>
</tr>
<tr>
<td>ETHN 241</td>
<td>Introduction to Latino/a Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 304</td>
<td>Latina Literature and Cultural Studies</td>
<td>3</td>
</tr>
<tr>
<td>ETHN 282</td>
<td>Pre-Columbian and Colonial Latin America</td>
<td>3</td>
</tr>
<tr>
<td>ETHN 283</td>
<td>Latin America: Revolution &amp; Reform</td>
<td>3</td>
</tr>
<tr>
<td>LANG 327</td>
<td>Magic Realism in Latin American Literature</td>
<td>3</td>
</tr>
<tr>
<td>MUS 334</td>
<td>Music of Latin America</td>
<td>3</td>
</tr>
<tr>
<td>SPAN 215</td>
<td>Intermediate Spanish I</td>
<td>3</td>
</tr>
<tr>
<td>SPAN 315</td>
<td>Readings in Spanish</td>
<td>3</td>
</tr>
<tr>
<td>SPAN 313</td>
<td>Spanish Conversation</td>
<td>3</td>
</tr>
<tr>
<td>SPAN 325</td>
<td>Survey of Spanish-American Literature</td>
<td>3</td>
</tr>
<tr>
<td>SPAN 425</td>
<td>Spanish-American Fiction</td>
<td>3</td>
</tr>
<tr>
<td>WGST 203</td>
<td>Chicana Writers/Visual Artists</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Subtotal:</strong></td>
<td><strong>3</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Multi-Ethnic Studies (3-6 credit hours):</strong></td>
<td></td>
</tr>
<tr>
<td>ETHN 359</td>
<td>Ethnicity and Race or</td>
<td>3</td>
</tr>
<tr>
<td>HIST 359</td>
<td>Ethnicity and Race and</td>
<td>3</td>
</tr>
<tr>
<td>SOC 275</td>
<td>Social Inequalities</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Subtotal:</strong></td>
<td><strong>3</strong></td>
</tr>
<tr>
<td></td>
<td><strong>NOTE:</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• New courses or special topics courses may be credited toward the minor with approval from the coordinator.</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Capstone (3 credit hours):</strong></td>
<td></td>
</tr>
<tr>
<td>ETHN 491</td>
<td>Social Change Capstone</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Subtotal:</strong></td>
<td><strong>3</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Total Credit Hours: 21</strong></td>
<td></td>
</tr>
</tbody>
</table>

Students are encouraged to explore relevant Study Abroad courses to meet the elective requirements.

The Multi-Ethnic Studies minor falls under the umbrella of the Ethnic Studies program, which also offers minors in African American Studies, Native American Studies, and Latinx Studies.

**MUSEUM STUDIES MINOR**

Office: E312 Thompson Hall  
(716) 673-3878  
Nancy Hagedorn, Coordinator  
Email: museum.studies@fredonia.edu  
Website: [http://home.fredonia.edu/history](http://home.fredonia.edu/history)

The Museum Studies minor provides an interdisciplinary introduction to the field of museum work. The minor will prepare students for graduate work in museum studies and for professional careers in history, art, anthropological, or science/natural history museums.

A minor in Museum Studies will uniquely qualify Fredonia students for this ever-expanding discipline, which includes positions in historic preservation, conservation, graphic design, public relations, social media, grant writing, curatorship, and other fields. The minor is congruent with majors in various areas, including Art History, History, Visual Arts & New Media, Natural Sciences (Geosciences, Biology, Physics, Chemistry), American Studies, and Communication, among others. The minor in combination with an education major will help prepare students to enter the rapidly growing field of Museum Education. Moreover, the minor provides opportunities for service learning through internships and the capstone and provides benefits to understaffed local cultural institutions.

**Required:** 21 credit hours from the following. Students declaring a Museum Studies minor may use past courses retroactively after consultation with the coordinator. Some courses require prerequisites. Click on any hyperlinked course for additional information.

**Required courses (9 credit hours):**
- IND 202 Introduction to Museum Studies  
- IND 302 Special Topics: Museum Studies  
- IND 494 Museum Studies Capstone  
- IND 495 Museum Studies Portfolio

**Electives (12 credit hours):**

to be chosen from History, Art History, Anthropology, Geosciences, Biology, Physics, Communication, American Studies, and other relevant disciplines, in consultation with
the coordinator. No more than 6 of the 12 credit hours may be in one discipline, and at least 6 credit hours must be at the 300 level or above.

Subtotal: 12

Optional/Recommended:
A museum internship or practicum for 1-3 credit hours. A 3-credit-hour internship may substitute for one of the elective courses. Possible internships include but are not limited to:

<table>
<thead>
<tr>
<th>Course</th>
<th>Internship</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTH 499</td>
<td>Internship</td>
<td>1-15</td>
</tr>
<tr>
<td>HIST 490</td>
<td>Public History Internship</td>
<td>1-6</td>
</tr>
<tr>
<td>ANTH 473</td>
<td>Museum Internship</td>
<td>3</td>
</tr>
<tr>
<td>GEO 445</td>
<td>Geosciences Internship</td>
<td>1-15</td>
</tr>
<tr>
<td>BIOL 450</td>
<td>Modern Concepts in Biology</td>
<td>1-4</td>
</tr>
<tr>
<td>SCI 491</td>
<td>Special Topics in Interdisciplinary Science</td>
<td>1-6</td>
</tr>
</tbody>
</table>

Subtotal: 1-3

Total Credit Hours: 21

MUSIC INDUSTRY MINOR

School of Business
Dr. Reneta Barneva, Program Coordinator
E336D Thompson Hall
(716) 673-4750
Reneta.Barneva@fredonia.edu

The Music Industry minor is designed to complement students' major coursework with specialized knowledge and experience in the various facets of the music industry. Specific areas covered include contracts, publishing, copyrights, intellectual property licensing, the record business, recording, artist management, licensing and distribution, tour management, self-employment business basics, marketing, business and legal affairs, public relations, promotion, sales and distribution, merchandising, artist relations and ethics in the music industry. An internship adds practical application and experience.

REQUIREMENTS

Some courses require prerequisites. Click on any hyperlinked course for additional information.

Required Courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSB 201</td>
<td>The Business of Music</td>
<td>3</td>
</tr>
<tr>
<td>MUSB 301</td>
<td>Music Copyrights</td>
<td>3</td>
</tr>
<tr>
<td>MUSB 320</td>
<td>Music Contracts</td>
<td>3</td>
</tr>
<tr>
<td>MUSB 465</td>
<td>Music Industry Internship</td>
<td>1-15</td>
</tr>
<tr>
<td></td>
<td>MUSB elective course by advisement</td>
<td>3</td>
</tr>
</tbody>
</table>

Subtotal: 18

• MUSB 465 Music Industry Internship is variable credit and must be completed for a minimum of 3 credits to satisfy the requirements of the minor

Subtotal: 18

Total Credit Hours: 21

MUSIC MINOR

School of Music
Office: 1151 Mason Hall
(716) 673-3151
Melvin P. Unger, Director
Laura Koepke, Associate Director and Graduate Coordinator
Barry M. Kilpatrick, Assistant Director
Email: music.school@fredonia.edu
Website: http://home.fredonia.edu/music

The Music Minor is designed for any undergraduate student not otherwise pursuing a degree in the School of Music. It is designed to be flexible such that it can serve a variety of interests, that is, one can focus on traditional, jazz, or world music studies. However, entry into some of the coursework requires prior knowledge and experience in music, so the student desiring a music minor must contact the School of Music Office for advice and placement.

REQUIREMENTS FOR THE MINOR IN MUSIC

Some courses require prerequisites. Click on any hyperlinked course for additional information.

Select between these options:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 101</td>
<td>Beginning Music Theory I</td>
<td>3</td>
</tr>
<tr>
<td>MUS 102</td>
<td>Beginning Music Theory II</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>OR ALL OF:</td>
<td></td>
</tr>
<tr>
<td>MUS 121</td>
<td>Aural Skills I</td>
<td>2</td>
</tr>
<tr>
<td>MUS 122</td>
<td>Aural Skills II</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>and</td>
<td></td>
</tr>
<tr>
<td>MUS 123</td>
<td>Music Theory I</td>
<td>3</td>
</tr>
<tr>
<td>MUS 124</td>
<td>Music Theory II</td>
<td>3</td>
</tr>
</tbody>
</table>

Subtotal: 6-10

Requirements:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 104</td>
<td>Applied Music Class for Non-Music Majors</td>
<td>1</td>
</tr>
<tr>
<td>MUS 104</td>
<td>Applied Music Class for Non-Music Majors</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Additional Performance Study, per advisement</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Ensembles, by advisement</td>
<td>2</td>
</tr>
<tr>
<td>MUS 264</td>
<td>Music History in Western Civilization II</td>
<td>3</td>
</tr>
</tbody>
</table>
Select one course from the following:

- MUS 233 Musics of the World 3
- MUS 263 Music History in Western Civilization I 3
- MUS 265 History of Jazz 3

Subtotal: 9

Electives:

- Electives in music theory, music history and literature, and music education 8-12

Subtotal: 8-12

NOTE:

- Students interested in Jazz should elect MUS 265 History of Jazz, MUS 361 Jazz Improvisation, and MUS 362 Jazz Theory.

Subtotal: 26-34

Total Credit Hours: 26-34

NATIVE AMERICAN STUDIES MINOR

Office: E304 Thompson Hall
(716) 673-3274

Jennifer Hildebrand, Coordinator
Email: ethnicgender.studies@fredonia.edu
Website: http://home.fredonia.edu/interdisciplinary

Native American Studies provides an interdisciplinary focus on the historical experiences, cultural traditions and innovations, and political status of Native American peoples across the Americas. Students are particularly encouraged to consider the significance of Native Americans’ prior presence on these lands. Important topics of exploration include Native American ways of living, understanding the world, and organizing their societies; courses will also examine the impact of invasion and colonization on Native America, discussions and debates about sovereignty, and the intersection of Native American and European histories and systems of knowledge.

Native American Studies emphasizes the importance of exploring and interpreting historical and contemporary events from Native American perspectives that consider the many nations’ unique history and experiences. Students completing a minor in Native American Studies will be strongly encouraged to engage with discussions and debates about how their academic knowledge relates to the lived experiences of Native American people and communities.

Native American Studies is for everyone. No matter your major or your future plans, the program will provide intellectual skills and cultural knowledge that will benefit you. As the workplace and the world become more diversified, the ability to consider different perspectives and communicate across differences becomes increasingly valuable. Native American Studies coursework will challenge students to think critically and to write persuasively and thoughtfully, pushing them to seek innovative solutions to problems which they understand to be multifaceted. Students in the program will be well-prepared for careers in human services, museum curatorship, library science, teaching, journalism, scholarship, law, health, inter-ethnic relations, and many other fields.

REQUIREMENTS FOR THE MINOR IN NATIVE AMERICAN STUDIES (21 CREDIT HOURS)

Students declaring an Native American Studies minor may use past courses retroactively with approval of the coordinator.

Some courses require prerequisites. Click on any hyperlinked course for additional information.

Core courses (9 credit hours):

- ETHN 202 Foundations of Social Justice 3
- ETHN 205 Native American Studies 3
- ETHN 242 American Indian Literature 3

Subtotal: 9

One History course chosen from the following (3 credit hours):

- ETHN 282 Pre-Columbian and Colonial Latin America 3
- ETHN 283 Latin America: Revolution & Reform 3
- ETHN 356 Native American History 3
- ETHN 357 Indians and Europeans in Early America 3
- ETHN 358 20th Century Native American Issues 3

Subtotal: 3

Electives (6 credit hours):

- ANTH 321 Anthropology of Indian America 3
- ENGL 331 American Literary Roots 3
- SOC 275 Social Inequalities 3

Subtotal: 6

NOTE:

- Any of the History courses listed above NOT taken as a core requirement may be used as an elective.

Capstone course (3 credit hours):

- ETHN 491 Social Change Capstone 3

Subtotal: 3

Total Credit Hours: 21

Students are encouraged to explore relevant Study Abroad courses to meet the elective requirements.
The Native American Studies minor falls under the umbrella of the Ethnic Studies program, which also offers minors in African American Studies, Latinx Studies, and Multi-Ethnic Studies.

PHILOSOPHY MINOR

Philosophy
Office: E370 Thompson Hall
(716) 673-3207
David Rankin, Chairperson
Email: political.science@fredonia.edu

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.

Some courses require prerequisites. Click on any hyperlinked course for additional information.

PHYSICS MINOR

Physics
Office: 112 Jewett Hall
(716) 673-3303
Justin Conroy, Coordinator
Email: justin.conroy@fredonia.edu

REQUIREMENTS FOR THE MINOR IN PHYSICS (38 CREDIT HOURS)

Some courses require prerequisites. Click on any hyperlinked course for additional information.

A minimum of 23 credit hours in physics, including

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 230</td>
<td>University Physics I</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 231</td>
<td>University Physics II</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 232</td>
<td>University Physics I Lab</td>
<td>1</td>
</tr>
<tr>
<td>PHYS 233</td>
<td>University Physics II Lab</td>
<td>1</td>
</tr>
<tr>
<td>PHYS 234</td>
<td>Modern Physics</td>
<td>4</td>
</tr>
</tbody>
</table>

Subtotal: 14

Additional Physics courses required (9 credit hours):

Physics courses numbered 311, 321 through 479, 490, as advised and approved by Physics department.

Subtotal: 9

Required Mathematics Electives (15 credit hours):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 122</td>
<td>University Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>MATH 123</td>
<td>University Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>MATH 223</td>
<td>University Calculus III</td>
<td>4</td>
</tr>
<tr>
<td>MATH 224</td>
<td>Differential Equations</td>
<td>3</td>
</tr>
</tbody>
</table>

Subtotal: 15

NOTE: Minimum cumulative GPA of 2.0 required in above courses for graduation.

Total Credit Hours: 38

POLITICAL SCIENCE MINOR

Politics and International Affairs
Office: E370 Thompson Hall
(716) 673-3207
David Rankin, Chairperson
Email: political.science@fredonia.edu
Website: http://home.fredonia.edu/polisci

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.

Some courses require prerequisites. Click on any hyperlinked course for additional information.

Total Credit Hours: 21

PSYCHOLOGY MINOR

Psychology
Office: W357 Thompson Hall
(716) 673-3129
Joseph McFall, Chairperson
Email: psychology.department@fredonia.edu
Website: http://www.fredonia.edu/department/psychology/

GENERAL PSYCHOLOGY MINOR REQUIREMENTS:

Transfer students must complete at least 9 credit hours in Psychology at Fredonia.

A minimum of 18 credit hours in psychology, with at least 9 credit hours at the upper level.

Some courses require prerequisites. Click on any hyperlinked course for additional information.
One course must come from the psychophysiology area or the cognitive area:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSY 342</td>
<td>Perception</td>
<td>3</td>
</tr>
<tr>
<td>PSY 343</td>
<td>Cognitive Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSY 344</td>
<td>Psychology of Language</td>
<td>3</td>
</tr>
<tr>
<td>PSY 351</td>
<td>Physiological Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSY 361</td>
<td>Cognitive Neuroscience</td>
<td>3</td>
</tr>
<tr>
<td>PSY 363</td>
<td>Psychopharmacology</td>
<td>3</td>
</tr>
<tr>
<td>PSY 364</td>
<td>Cognitive Development</td>
<td>3</td>
</tr>
</tbody>
</table>

Subtotal: 3

One course must come from the social area or the clinical/counseling area:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSY 246</td>
<td>Personality</td>
<td>3</td>
</tr>
<tr>
<td>PSY 345</td>
<td>Social Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSY 356</td>
<td>Abnormal Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSY 365</td>
<td>Social Development</td>
<td>3</td>
</tr>
<tr>
<td>PSY 379</td>
<td>Child Psychopathology</td>
<td>3</td>
</tr>
<tr>
<td>PSY 447</td>
<td>Introduction to Counseling</td>
<td>3</td>
</tr>
</tbody>
</table>

Subtotal: 3

NOTE:
- A minimum of 2.00 cumulative quality point average in all psychology courses is required.

Total Credit Hours: 18

PUBLIC HEALTH MINOR

Sociocultural and Justice Sciences
Office: W395 Thompson Hall
(716) 673-3469
Randolph Hohle, Coordinator
Email: publichealth.minor@fredonia.edu
Website: http://home.fredonia.edu/interdisciplinary

Public health incorporates nearly every aspect of health and perhaps is best defined by its mission: “Maximum health for all, via the prevention of disease, disability and unhealthful environmental conditions.” The focus of public health is on health conditions of people in social, geographic, economic or other types of communities, both local and global. In contrast, medicine focuses on the health conditions of the individual. Public health emphasizes prevention; in medicine, the emphasis is on treatment.

The Interdisciplinary Studies minor in Public Health offers students the opportunity to acquire knowledge and skills in the broad field of public health, incorporating emergent issues (e.g., new public health topics such as bioterrorism and emerging infectious diseases) along with more traditional topics such as: communicable and chronic diseases; maternal and child health; injuries; psychosocial issues and tobacco; mental health, substance abuse and social violence; and air, water and solid hazardous waste. The Public Health minor will facilitate private or public sector careers addressing physical, mental and/or environmental health concerns of communities and populations at risk for disease/injury, and graduate study in public health.

REQUIREMENTS FOR THE MINOR IN PUBLIC HEALTH

The minor requires successful completion of 19 credit hours.

Six (6) elective credit hours must be from 300-400 level courses.

Only six (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.

Some courses require prerequisites. Click on any hyperlinked course for additional information.

Required courses (10 credit hours):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOC 215</td>
<td>Introduction to Public Health</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 110</td>
<td>Human Biology</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td>Foundations of Biology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 133</td>
<td>Introductory Cell and Molecular Biology</td>
<td>3</td>
</tr>
<tr>
<td>SOC 300</td>
<td>Research Methods</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td>Analysis</td>
<td>3</td>
</tr>
<tr>
<td>ESCI 310</td>
<td>Methods in Environmental Analysis</td>
<td>3</td>
</tr>
<tr>
<td>PSY 315</td>
<td>Research Methods</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td>Research Methods</td>
<td>3</td>
</tr>
<tr>
<td>COMM 323</td>
<td>Research Methods</td>
<td>3</td>
</tr>
<tr>
<td>SOC 415</td>
<td>Seminar in Public Health</td>
<td>1</td>
</tr>
</tbody>
</table>

Electives (9 credit hours required):

At least 3 credit hours from the Biosciences and at least 3 credit hours from the Social and Behavioral Science. Six (6) elective credit hours must be at the 300 or higher level.

1. Biosciences (at least 3 credit hours required)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 105</td>
<td>Food Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>ESCI 105</td>
<td>Global Environmental Issues</td>
<td>3</td>
</tr>
<tr>
<td>ESCI 410</td>
<td>Environmental Assessment</td>
<td>3</td>
</tr>
<tr>
<td>GIS 201</td>
<td>Geographic Information Systems I</td>
<td>3</td>
</tr>
<tr>
<td>GIS 301</td>
<td>Geographic Information Systems II</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 131</td>
<td>Introductory Ecology and Evolution</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 220</td>
<td>Principles of Human Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
</tr>
<tr>
<td>------------</td>
<td>------------------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>BIOL 243</td>
<td>Organismal Biology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 245</td>
<td>Human Anatomy and Physiology I</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 246</td>
<td>Human Anatomy and Physiology II</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 336</td>
<td>Mammalian Physiology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 338</td>
<td>Microbiology</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 438</td>
<td>Molecules and Medicine</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 450</td>
<td>Modern Concepts in Biology</td>
<td>1-4</td>
</tr>
</tbody>
</table>

2. Social and Behavioral Sciences (at least 3 credit hours required)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 301</td>
<td>Plagues And Peoples</td>
<td>3</td>
</tr>
<tr>
<td>SOC 230</td>
<td>Our Populated Planet</td>
<td>3</td>
</tr>
<tr>
<td>SOC 345</td>
<td>Women, Health and Society</td>
<td>3</td>
</tr>
<tr>
<td>SOC 324</td>
<td>City and Community</td>
<td>3</td>
</tr>
<tr>
<td>SOC 340</td>
<td>Medical Sociology</td>
<td>3</td>
</tr>
<tr>
<td>SOC 350</td>
<td>Special Topics</td>
<td>1-3</td>
</tr>
<tr>
<td>PSY 247</td>
<td>Health Psychology</td>
<td>3</td>
</tr>
<tr>
<td>POLI 311</td>
<td>Fundamentals of Public Administration</td>
<td>3</td>
</tr>
<tr>
<td>POLI 382</td>
<td>Social Welfare Policy</td>
<td>3</td>
</tr>
<tr>
<td>POLI 387</td>
<td>Environmental Policy</td>
<td>3</td>
</tr>
<tr>
<td>HLTH 215</td>
<td>Personal and Community Health</td>
<td>3</td>
</tr>
<tr>
<td>HLTH 217</td>
<td>Fitness &amp; Wellness for Life: A Multidisciplinary Perspective</td>
<td>3</td>
</tr>
<tr>
<td>HLTH 303</td>
<td>Fitness and Wellness</td>
<td>3</td>
</tr>
<tr>
<td>HLTH 386</td>
<td>Wellness and Health Promotion</td>
<td>3</td>
</tr>
<tr>
<td>COMM 303</td>
<td>Health Communication</td>
<td>3</td>
</tr>
<tr>
<td>COMM 460</td>
<td>Organizational Communication</td>
<td>3</td>
</tr>
</tbody>
</table>

Note: SOC 350 Special Topics must be approved by program coordinator.

**Total Credit Hours: 19**

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### SCHOOL AND COUNSELING PSYCHOLOGY MINOR

**Psychology**  
Office: W357 Thompson Hall  
(716) 673-3129  
**Joseph McFall, Chairperson**  
Email: psychology.department@fredonia.edu  
Website: [http://www.fredonia.edu/department/psychology/](http://www.fredonia.edu/department/psychology/)

**SCHOOL AND COUNSELING PSYCHOLOGY MINOR REQUIREMENTS:**

Some courses require prerequisites. Click on any hyperlinked course for additional information.

Transfer students must complete at least 9 credit hours in Psychology at Fredonia.

A minimum of 18 credit hours, distributed as follows:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSY 129</td>
<td>Foundations of Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSY 200</td>
<td>Statistics for Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSY 317</td>
<td>Psychological Assessment</td>
<td>3</td>
</tr>
</tbody>
</table>

**Required courses (9 credit hours)**

**Subtotal: 9**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSY 364</td>
<td>Cognitive Development</td>
<td>3</td>
</tr>
<tr>
<td>PSY 365</td>
<td>Social Development</td>
<td>3</td>
</tr>
<tr>
<td>PSY 379</td>
<td>Child Psychopathology</td>
<td>3</td>
</tr>
<tr>
<td>PSY 447</td>
<td>Introduction to Counseling</td>
<td>3</td>
</tr>
</tbody>
</table>

**Subtotal: 9**

**NOTE:**

- A minimum of 2.00 cumulative quality point average in all psychology courses is required.

**Total: 18**

**Total Credit Hours: 18**

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### SOCIOLGY MINOR

**Sociocultural and Justice Sciences**  
Office: W363 Thompson Hall  
(716) 673-3205  
**Randolph Hohle, Chairperson**  
Email: sociocultural.justice@fredonia.edu  
Website: [http://home.fredonia.edu/sociocultural](http://home.fredonia.edu/sociocultural)

**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. Some courses require prerequisites. Click on any hyperlinked course for additional information.

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### SPORT MANAGEMENT MINOR

**School of Business**  
Dr. Reneta Barneva, Program Coordinator  
E336D Thompson Hall  
(716) 673-4750  
Reneta.Barneva@fredonia.edu

**REQUIREMENTS FOR SPORT MANAGEMENT MINOR (21 CREDIT HOURS)**

The minor in Sport Management incorporates in its core the social and cultural dimensions of sport, management, leadership, marketing, and public relations. A student can choose from a wide variety of elective courses to complement the minor. A pre-internship and internship are instrumental in gaining practical experience. Some courses require prerequisites. Click on any hyperlinked course for additional information.
Core Required Courses:
SPMG 210  Principles of Sports Management  3
SPMG 330  Leadership and Management in Sport  3
SPMG 428  Marketing and Public Relations in Sport  3
SPMG 398  Pre-Internship  1
SPMG 400  Sport Studies Internship .5-12

Subtotal: 12

NOTE:
• SPMG 400 is a variable 1-12 credit hour course. Students need to take the course for two credits to satisfy the core required courses.

Select three courses from the following list:
ACCT 201  Principles of Financial Accounting  3
PSY 237  Sport Psychology  3
SPMG 211  Facility Management  3
SPMG 212  Event Management  3
SPMG 230  Sport in Diverse Societies  3
SPMG 250  Digital Marketing for Sport Management  3
SPMG 440  Data Analytics for Sport Management  3

Subtotal: 9

Total Credit Hours: 21

STATISTICS MINOR

Mathematical Sciences
Office: Fenton Hall 223
(716) 673-3243
Julia Wilson, Chairperson
Email: mathematics.department@fredonia.edu
Website: https://home.fredonia.edu/math

Requirements for the Minor in Statistics

Students in the Statistics minor will take 19-21 credit hours to fulfill the requirements, distributed as follows:

Required Courses
MATH 120  Survey of Calculus I  3
or
MATH 122  University Calculus I  4
MATH 115  Survey of Matrix Algebra  3
or
MATH 231  Linear Algebra  4
or
CSIT 121  Computer Science I  3
or
CSIT 105  Visual BASIC I  3
XXXX 200  One 200 level Statistics course from one of the academic departments  3
or
STAT 250  Statistics for Scientists  3
or
STAT 350  Probability and Statistics  3
BUAD 300  Statistical Analysis  3
or
ECON 300  Statistical Analysis  3
or
STAT 351  Regression and Analysis of Variance  3
STAT 405  Statistics Seminar  1

Subtotal: 13-15

Electives
BIOL 457  Biostatistics  3
CSIT 473  Data Warehousing and Mining  3
PSY 415  Advanced Research Methods  3
SPMG 440  Data Analytics for Sport Management  3
BUAD 300  Statistical Analysis  3
or
ECON 300  Statistical Analysis  3
or
STAT 355  Mathematical Statistics  3
STAT 360  Topics in Data Science  3
STAT 408  Special Topics  3
or
or an additional course from the following:
BUAD 300  Statistical Analysis  3
ECON 300  Statistical Analysis  3
STAT 351  Regression and Analysis of Variance  3

Subtotal: 6

Total Credit Hours: 19-21

NOTE:
• In addition, independent Study or Research courses with substantial statistical content may be counted with approval from the department chair and the student's research or independent study advisor.
• At least 9 credit hours must be different from those taken for the student's major or other minors.
• BUAD 300 and ECON 300 cannot both be counted in this minor.
THEATRE MINOR

Department of Theatre and Dance
Office: 212 Rockefeller Arts
(716) 673-3596
Sam Kenney, Chairperson
Email: theatre.dance@fredonia.edu
Website: http://home.fredonia.edu/theatredance/

REQUIREMENTS FOR THE MINOR IN THEATRE (22 CREDIT HOURS):

Some courses require prerequisites. Click on any hyperlinked course for additional information.

Required Courses (16 credit hours):
- THEA 101 Theatre and Dance Productions 1
- THEA 102 Theatre and Dance Productions 1
- THEA 114 Introduction to the Performing Arts 3
- THEA 117 Script Analysis 3
- THEA 121 Introduction to Technical Theatre 3
- THEA 130 Acting for Non-Majors 3
- THEA 133 Introduction to Acting 3
- THEA 201 Theatre and Dance Productions 1
- THEA 202 Theatre and Dance Productions 1

Subtotal: 16

Elective Courses - two of the following (6 credit hours):
- THEA 325 History of Costume 3
- THEA 451 History of the Theatre I 3
- THEA 452 History of the Theatre II 3
- THEA 460 Performing Arts Organization and Management 3

Subtotal: 6

Total Credit Hours: 22

VISUAL ARTS AND NEW MEDIA MINOR

Visual Arts and New Media
Office: 217 Rockefeller Arts Center
(716) 673-3537
Michele Bernatz, Chairperson
Email: visualarts.newmedia@fredonia.edu
Website: http://home.fredonia.edu/art

Subtotal: 15

Total Credit Hours: 21

NOTE:
- The Visual Arts and New Media minor can easily be organized to complement any major. The minor may take a variety of Visual Arts and New Media courses or the courses may be in a specific area of study. However, due to enrollment demands, a minor may find it difficult to register for some studios, so flexibility is important.
- Students should consult with a department advisor in planning a course of study as a Visual Arts and New Media minor.
- A minimum of nine (9) credit hours must be taken at Fredonia.

WEB PROGRAMMING MINOR

Computer and Information Sciences
Office: 2148 Fenton Hall
(716) 673-4820
Junaid Zubairi, Chairperson
Email: csit@fredonia.edu
Website: http://home.fredonia.edu/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:

Subtotal: 12

Electives:
- Two courses from the following:
  - CSIT 151 Introduction to Information Systems 3
  - CSIT 203 Multimedia Systems 3
  - CSIT 251 Information Systems Structures 3
  - CSIT 307 Web and Mobile App Design 3
  - CSIT 462 Computer Graphics 3
CSIT 463  Introduction to Digital Image Processing and Computer Vision  3

Subtotal: 6

One course from the following

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSIT 425</td>
<td>Software Engineering</td>
<td>3</td>
</tr>
<tr>
<td>CSIT 455</td>
<td>Relational and Object Databases</td>
<td>3</td>
</tr>
<tr>
<td>CSIT 473</td>
<td>Data Warehousing and Mining</td>
<td>3</td>
</tr>
<tr>
<td>CSIT 475</td>
<td>Electronic Commerce</td>
<td>3</td>
</tr>
</tbody>
</table>

Subtotal: 3

Subtotal: 21

Total Credit Hours: 21

NOTE:
- 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 coordinator's approval.
- At least two of the elective courses counted toward the minor must be at the 300-400 level.
- 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).

WOMEN’S AND GENDER STUDIES MINOR

Office: E308 Thompson Hall
(716) 673-3883
Jeffry Iovannone, Program Coordinator
Email: Jeffry.Iovannone@fredonia.edu

Women’s and Gender Studies Program Office
Office: 171A Fenton Hall
(716) 673-3158
Email: womens.studies@fredonia.edu
Website: http://home.fredonia.edu/interdisciplinary

REQUIREMENTS FOR THE INTERDISCIPLINARY STUDIES MINOR IN WOMEN’S AND GENDER STUDIES (21 CREDIT HOURS):

Completion of the interdisciplinary minor requires a minimum of 21 credit hours. Up to 6 credit hours of transfer credit may be applied to the minor, based on approval by the coordinator. No more than 9 credit hours should be used to fulfill the requirements of the student’s major. Students declaring the Women’s and Gender Studies minor may use past courses retroactively after consultation with the coordinator. Some courses require prerequisites. Click on any hyperlinked course for additional information.

Required courses (9 credits):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>WGST 201</td>
<td>Topics in Gender Studies</td>
<td>3</td>
</tr>
<tr>
<td>WGST 202</td>
<td>Foundations of Social Justice</td>
<td>3</td>
</tr>
<tr>
<td>WGST 491</td>
<td>Social Change Capstone</td>
<td>3</td>
</tr>
</tbody>
</table>

Subtotal: 9

NOTES:
- WGST 202 is cross-listed with ETHN 202;
- WGST 491 is cross-listed with ETHN 491;
- An E-portfolio will be used for program assessment, initiated when the student enters the program and finalized in ETHN / WGST 491;
- WGST 201 is a prerequisite for the Theoretical Frameworks and Experiential Learning categories; Theoretical Frameworks course is a prerequisite to WGST 491. Departmental approval is required to register for ETHN / WGST 491.

Categories (at least 3 credit hours in FOUR of the following five each category - 12 credit hours):

Theoretical Frameworks

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 312</td>
<td>Women in the Economy</td>
<td>3</td>
</tr>
<tr>
<td>ENED 360</td>
<td>Multicultural English Education in Theory and Practice</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 296</td>
<td>American Identities</td>
<td>3</td>
</tr>
<tr>
<td>PSY 276</td>
<td>Human Sexuality</td>
<td>3</td>
</tr>
<tr>
<td>PSY 391</td>
<td>Multicultural Counseling</td>
<td>3</td>
</tr>
<tr>
<td>WGST 301</td>
<td>Theories of Gender</td>
<td>3</td>
</tr>
<tr>
<td>WGST 302</td>
<td>Sex and Gender</td>
<td>3</td>
</tr>
<tr>
<td>WGST 335</td>
<td>American Women</td>
<td>3</td>
</tr>
</tbody>
</table>

Subtotal: 3

NOTE:
- PSY 255 prerequisite;
- WGST 302 cross-listed with ANTH 300 and SOC 306.

Sexual Norms and Behaviors

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 360</td>
<td>AIDS and STDs</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 343</td>
<td>Queer Studies in Literature</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 313</td>
<td>Sex and Love</td>
<td>3</td>
</tr>
<tr>
<td>PSY 255</td>
<td>Psychology of Women</td>
<td>3</td>
</tr>
<tr>
<td>or PSY 276</td>
<td>Human Sexuality</td>
<td>3</td>
</tr>
<tr>
<td>SOC 320</td>
<td>Family Sociology</td>
<td>3</td>
</tr>
<tr>
<td>WGST 345</td>
<td>Women, Health and Society</td>
<td>3</td>
</tr>
</tbody>
</table>

Subtotal: 3

NOTE:
- PSY 255 cross-listed with WGST 255;
- WGST 345 cross-listed with SOC 345.
### Transnational Issues

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 342</td>
<td>Food and Culture</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 360</td>
<td>AIDS and STDs</td>
<td>3</td>
</tr>
<tr>
<td>COMM 465</td>
<td>Intercultural Communication</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 395</td>
<td>Non-Western Literature</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 313</td>
<td>Sex and Love</td>
<td>3</td>
</tr>
<tr>
<td>PSY 370</td>
<td>Cross-Cultural Psychology</td>
<td>3</td>
</tr>
<tr>
<td>SOC 230</td>
<td>Our Populated Planet</td>
<td>3</td>
</tr>
<tr>
<td>SOC 320</td>
<td>Family Sociology</td>
<td>3</td>
</tr>
<tr>
<td>WGST 301</td>
<td>Theories of Gender</td>
<td>3</td>
</tr>
<tr>
<td>WGST 359</td>
<td>Ethnicity and Race</td>
<td>3</td>
</tr>
</tbody>
</table>

**Subtotal: 3**

**NOTE:**
- WGST 359 cross-listed with ETHN 359 and HIST 359.

### Cultural Practices

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 342</td>
<td>Food and Culture</td>
<td>3</td>
</tr>
<tr>
<td>ARTH 230</td>
<td>Black Art and Visual Culture in the U.S.</td>
<td>3</td>
</tr>
<tr>
<td>COMM 465</td>
<td>Intercultural Communication</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 242</td>
<td>American Indian Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 296</td>
<td>American Identities</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 343</td>
<td>Queer Studies in Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 351</td>
<td>Language and Society</td>
<td>3</td>
</tr>
<tr>
<td>WGST 203</td>
<td>Chicana Writers/Visual Artists</td>
<td>3</td>
</tr>
<tr>
<td>WGST 205</td>
<td>Women in Art</td>
<td>3</td>
</tr>
<tr>
<td>WGST 302</td>
<td>Sex and Gender</td>
<td>3</td>
</tr>
<tr>
<td>WGST 304</td>
<td>Latina Literary and Cultural Studies</td>
<td>3</td>
</tr>
<tr>
<td>WGST 335</td>
<td>American Women</td>
<td>3</td>
</tr>
<tr>
<td>WGST 336</td>
<td>African American Women's History</td>
<td>3</td>
</tr>
<tr>
<td>WGST 314</td>
<td>Women Writers</td>
<td>3</td>
</tr>
<tr>
<td>WGST 340</td>
<td>Black Women Writers</td>
<td>3</td>
</tr>
<tr>
<td>WGST 377</td>
<td>Special Topics</td>
<td>.5-6</td>
</tr>
<tr>
<td></td>
<td>or</td>
<td></td>
</tr>
<tr>
<td>COMM 373</td>
<td>Gender and Communication</td>
<td>3</td>
</tr>
<tr>
<td>WGST 386</td>
<td>Women in Global Cinema</td>
<td>4</td>
</tr>
<tr>
<td>WGST 405</td>
<td>French Women Writers</td>
<td>3</td>
</tr>
<tr>
<td>WGST 406</td>
<td>Women in French Literature</td>
<td>3</td>
</tr>
</tbody>
</table>

**Subtotal: 3**

**NOTE:**
- ENGL 242 cross-listed with ETHN 242;
- WGST 205 cross-listed with ARTH 205;
- WGST 302 cross-listed with SOC 306 and ANTH 300;
- WGST 304 cross-listed with ENGL 304 and ETHN 304;
- WGST 335 cross-listed with HIST 335;
- WGST 336 cross-listed with HIST 336;

### Experiential Learning

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>WGST 430</td>
<td>Independent Study</td>
<td>1-3</td>
</tr>
<tr>
<td>WGST 450</td>
<td>Internship in Women's and Gender Studies</td>
<td>1-4</td>
</tr>
</tbody>
</table>

**NOTE:**
- Coordinator's approval is required prior to registration for Experiential Learning.
- WGST 201 prerequisite.

**Total credits selected from FOUR of the five fields above: 12**

**Total Credit Hours: 21**
WRITING AND RHETORIC MINOR

English
Office: 278 Fenton Hall
(716) 673-3125
Bruce Simon, Chairperson
Email: english.department@fredonia.edu
Website: https://www.fredonia.edu/academics/colleges-schools/college-liberal-arts-sciences/english

REQUIREMENTS FOR THE MINOR IN WRITING AND RHETORIC

The minor in Writing and Rhetoric requires a minimum of 21 credit hours of courses.

Some courses require prerequisites. Click on any hyperlinked course for additional information.

I. Three (3) core courses as follows (9 credit hours):
   - ENGL 271 Rhetoric for Writers 3
   - ENGL 369 Argumentative Writing 3
   - ENGL 372 Grammar and Style for Writers 3
   Subtotal: 9

   NOTE:
   • Completion of ENGL 373 English Grammar for Everyone is recommended prior to completion of ENGL 372 Grammar and Style for Writers.

II. Four (4) elective courses chosen from the following (12 credit hours):
   - ENGL 213 Texts and Contexts 3
   - ENGL 299 Special Topics 1-4
   - ENGL 366 Opinion in Journalism 3
   - ENGL 367 Advanced Composition 3
   - ENGL 373 English Grammar for Everyone 3
   - ENGL 374 Writing and Social Change 3
   - ENGL 375 Writing for the Professions 3
   - ENGL 377 Academic Writing 3
   - ENGL 378 Advanced Writing I: The Essay 3
   - ENGL 379 Writing in a Digital World 3
   - ENGL 399 Special Topics 1-4
   - ENGL 455 Writing Tutors 3
   - ENGL 465 English Internships 1-12
   - ENGL 490 Independent Study 1-6
   Subtotal: 12

   NOTE:
   • Courses in the minor may be taken only once for credit, except for ENGL 299 or ENGL 399.
   • Students may count ENGL 299 or ENGL 399 for credit in the minor only when the special topic focuses on writing.
   • ENGL 399, ENGL 465, and ENGL 490 are variable credit courses. No more than 3 credit hours in internships and/or independent studies may be counted toward the minor.
   Subtotal: 21

ADDITIONAL REQUIREMENTS

• All students must earn a grade of C or higher in all courses required for completion of the minor.
• The prerequisite for each core course is ENGL 100 Craft of Writing; the prerequisite may be waived by permission of instructor.
• A minimum of 15 credit hours counted toward the minor must be taken at Fredonia.
• Students may count 6 credit hours of courses for both an English major and the writing and rhetoric minor.
• Students should seek prior permission from the Chairperson to include courses from other departments as electives in the minor. No more than 6 credit hours will be accepted.
• Please note that core courses are typically offered once a year; students are advised to plan carefully to ensure they can complete the necessary coursework in a timely fashion.

Total Credit Hours: 21
AADM - Arts Administration

AADM 310 - Fundraising and Grant Writing for Non-Profits
This course provides an overview of contemporary American fundraising and grant writing for non-profit organizations. Topics include annual fund drives; direct mail, internet and phone-a-thon fund-raising; special events, major gifts, capital campaigns, endowment campaigns and grant writing. The history of philanthropy and ethical and legal issues pertaining to the field will be addressed, as will the role of volunteers, board members and professional staff members in an organization’s fundraising efforts.

Credits: 3
Offered: Every other year.

AADM 400 - Arts Administration Practicum
Supervised direct working experience serving on the support staff of the Michael C. Rockefeller Arts Center. Individual or team assignments may include front-of-house management, usher corps coordination, public relations, publicity, marketing research, database management, and project planning and implementation.

Credits: 1-3
Offered: Every semester.

AADM 410 - Ticket Office Practicum
Supervised direct working experience in the Michael C. Rockefeller Arts Center’s Ticket Office. Processing and sale of individual and subscription tickets, group sales, donations and related activities with an emphasis on customer service and customer relationship management. The course may be taken for a maximum of 3 credits; these credits may be done all in one semester or spread out during more than one semester.

Credits: 1-3
Offered: Every semester.

AADM 480 - Independent Study
Independent study of topics not covered in regular course offerings and pertinent to student’s program of study or future career.

Credits: 1-3
Offered: Offered on occasion.

AADM 490 - Arts Administration Internship
Upper level experiential learning opportunity through on-campus or off-campus placements. Nature of work will vary from placement to placement. This course is generally reserved for majors and students are responsible for finding and negotiating their own placement. Course requires students to complete a Learning Contract in accordance with college guidelines before the start of the internship.

Credits: 1-15
Offered: Every semester.

ACCT - Accounting

ACCT 201 - Principles of Financial Accounting
A study of the nature and purpose of accounting in modern business organizations with emphasis on business income and financial position measurement.

Credits: 3
Offered: Every semester.

ACCT 202 - Principles of Managerial Accounting
A study of the objectives, preparation and uses of managerial accounting information. Emphasis is on the measurement, allocation, and reporting of costs to identify and solve business problems.

Credits: 3
Prerequisite: ACCT 201. Offered: Every semester.

ACCT 301 - Intermediate Accounting I
An in-depth study of the theory and application of generally accepted accounting principles. Emphasis is given to the environment of financial accounting including the standard setting process and the conceptual framework. Specific topics include the time value of money, receivables, inventories, long-term assets, and current liabilities, intangibles, and contingencies.

Credits: 3
Prerequisite: ACCT 201 and ACCT 202. Corequisite: ACCT 307. Offered: Every year.

ACCT 302 - Intermediate Accounting II
A challenging course including the rigorous study of theory and application of generally accepted accounting principles to complex accounting topics including stockholders' equity, revenue recognition, earnings per share, pensions, leases, accounting for taxes, accounting changes and error analysis, and cash flows.
ACCT 303 - Cost Management
A study of the concepts and techniques of management and cost accounting including cost-volume-profit analysis, various product costing methods, cost behavior and allocation, and other internal accounting information needs for management decision-making. Computer software is used in solving application problems.
Credits: 3
Prerequisite: ACCT 301. Offered: Every year.

ACCT 304 - Taxation I
An in-depth study of U.S. taxation of individuals including tax policy considerations and the historical development of tax law. The provisions of the Internal Revenue Code and related regulations will be used extensively.
Credits: 3
Prerequisite: ACCT 201 and ACCT 202. Offered: Every year.

ACCT 305 - Taxation II
An in-depth discussion of federal income taxation of multinational corporations and partnerships. Tax issues connected to formation, operation, distributions, and liquidation will be examined. Other topics discussed include: special tax assessments like the alternative minimum tax, the personal holding company tax, and the accumulated earnings tax, S corporations, taxation of international transactions, and tax research.
Credits: 3
Prerequisite: ACCT 304. Offered: Every year.

ACCT 307 - Accounting Information Systems I
The course examines the relationship between economic events and the accounting view of those events. It emphasizes business processes, double-entry bookkeeping, and computer-based accounting information systems.
Note: Students must earn a minimum C- grade in the prerequisite course, ACCT 202.
Credits: 3
Prerequisite: ACCT 201 and ACCT 202. Offered: Every year.

ACCT 401 - Advanced Accounting
Extension of financial accounting to the study of additional accounting entities such as partnerships and consolidated and multi-national firms. Topics include accounting for mergers and acquisitions, consolidated financial statements, international transactions, and an introduction to fund accounting.
Credits: 3
Prerequisite: ACCT 301 and ACCT 302. Offered: Every year.

ACCT 405 - Auditing
A study of the standards, procedures, strategies, and reporting used in the financial audit process. The environment in which the auditor functions is considered, including regulatory requirements, professional ethics, legal liability, and the business entity. The completion of a computerized audit case is required in the course.
Credits: 3
Prerequisite: ACCT 301 and ACCT 302. Offered: Every year.

ACCT 407 - Accounting Information Systems II
A study of the concepts underlying Accounting Information Systems (AIS), including current developments in the information systems field, particularly with respect to databases, networking, and enterprise systems. Terminology, reports, documents, procedures, systems development and controls inherent in a modern AIS will be studied.
Credits: 3
Prerequisite: ACCT 301 and ACCT 307. Offered: Every year.
ACCT 430 - Independent Study
A course for highly motivated students to undertake, under guidance, special studies of areas of accounting which are not normally covered in other courses. Permission of instructor.
Credits: 1-3
Offered: Offered on occasion.

ACCT 440 - Accounting Theory & Research
A study of financial accounting designed to enhance the student's understanding of and appreciation for the evolution of contemporary financial accounting theory and contemporary financial report issues. Recent contributions to theory, research and practice will be investigated and discussed. Individual research will be conducted with results presented for critical analysis.
Credits: 3
Prerequisite: ACCT 301 and ACCT 302. Offered: Every year.

ACCT 450 - Senior Seminar
Seminar dealing with contemporary problems in the field of accounting. The course is designed so that students may utilize what they have learned in previous accounting courses. The seminar also serves to introduce students to interdisciplinary approaches in problem-solving and lead to possible areas of graduate or professional work. Topics will vary from semester to semester. Permission of instructor or senior standing.
Credits: 1-3
Offered: Offered on occasion.

ACCT 455 - Adv Auditing&Fraud Examination
A study of internal control in an information technology environment; audit sampling; integrated, internal, operational, and compliance audits; non-audit assurance services; and fraud examination.
Credits: 3
Prerequisite: ACCT 405 and ACCT 407. Offered: Every year.

ACCT 480 - Internship
The course provides credit to students for professional experiences which are closely related to their field of study. Enrollment is to be arranged with an appropriate instructor. Permission of departmental internship coordinator and junior standing.
Credits: 1-9
Offered: Every semester.

ACCT 500 - Accounting Theory
Seminar in financial accounting designed to enhance the student's understanding of and appreciation for the evolution of contemporary financial accounting theory and empirical research on financial reporting issues. Recent contributions to theory, research and practice will be investigated and discussed. Individual research will be conducted, with results presented for critical analysis.
Credits: 3
Prerequisite: ACCT 302. Offered: Every year.

ACCT 510 - Research Seminar in Accounting
Introduces students to accounting research by combining a study of the methodology, execution, statistical analysis and reporting of applied research and the practical application of research methods to a real-world business situation. The course provides a forum for exploration, discussion, and debate of current issues and events in the field. Students will propose, design, and execute an applied research project that will culminate with the presentation of the final research report.
Credits: 3
Prerequisite: (ECON 200 or BUAD 200) and ACCT 500. Offered: Every year.

ACCT 520 - Accounting Information Systems
An introduction to the concepts underlying Accounting Information Systems, especially those that relate to managerial decision-making and accounting. Students will discuss current developments in the information systems field particularly with databases, networking, and enterprise systems. Terminology, reports, documents, procedures, systems development and controls inherent in a modern AIS will be studied and practiced with hands-on applications.
Credits: 3
Prerequisite: BUAD 261 and ACCT 302 and ACCT 303. Offered: Every year.

ACCT 530 - Advanced Auditing
An advanced examination of the latest function of public accountants, focusing on technology, risk, and changing audit approaches, including statistical sampling, computer auditing, evaluation of audit risk, ethics, and international aspects of auditing. Generalized audit software will give students experience with applications relevant to applications used in the field.
Credits: 3
Prerequisite: ECON 200 and ACCT 405. Offered: Every year.
ACCT 540 - Tax Accounting
An introduction to the coordination of financial and tax accounting. Topics covered include cash and accrual methods, installment reporting, inventories, LIFO, changes in accounting methods, accounting periods, time value of money, and annual/transactional accounting concepts.
Credits: 3
Prerequisite: ACCT 302 and ACCT 305. Offered: Offered on occasion.

ACCT 550 - Advanced Cost Management
Applications-based analysis of current management accounting topics and techniques including activity-based management, value chain analysis, capacity management, quality control, target costing, and benchmarking. A case analysis approach is utilized.
Credits: 3
Prerequisite: ACCT 303. Offered: Offered on occasion.

ACCT 560 - Seminar in Accounting
An examination of problems and issues of current concern in accounting. Recent contributions to theory, research, and practice will be investigated and discussed.
Credits: 3
Prerequisite: ACCT 500. Offered: Offered on occasion.

ACCT 570 - Tax Procedure and Research
A survey of tax procedure topics including IRS and Treasury Department rulemaking, confidentiality and disclosure, audits and appeals, returns and statutes of limitations, civil tax litigation, penalties and interest, tax crimes, and the standards and hazards of tax practice. Research topics include sources of tax law (administrative, legislative and judicial) and research resources (public and private).
Credits: 3
Prerequisite: ACCT 305. Offered: Every year.

ACCT 580 - Internship in Accounting
An opportunity for students to gain professional experience in public, corporate, or not-for-profit accounting while completing the graduate degree. Internships must be approved and coordinated through the School of Business. No more than 3 hours of internship credit may be applied to the graduate degree.
Credits: 3
Prerequisite: ACCT 500. Offered: Every semester.

ANTH - Anthropology

ANTH 115 - Introductory Anthropology
An introduction to the basic concepts and findings of anthropology's four major subdivisions: physical anthropology, archaeology, linguistics, and cultural anthropology. Traces human biological and cultural evolution. Discusses and analyzes various cultural systems.
Credits: 3
Offered: Every semester.

ANTH 210 - Physical Anthropology
Anthropological view of human origins, the primate fossil record, biological aspects of humanity, non-human primates, human biological diversity, and the interplay between culture and biology.
Credits: 3
Prerequisite: ANTH 115. Offered: Offered on occasion.

ANTH 211 - Archaeology
Survey of archaeology, including major theories and methods. Emphasis upon interpretation of major findings, both prehistoric and historic.
Credits: 3
Prerequisite: ANTH 115. Offered: Offered on occasion.

ANTH 219 - Cultures of the World
This course employs the methods and concepts of Anthropology to understand humanity through the study of cultural practices such as religion, social organization, economies, politics, and the arts. Includes describing and comparing cultural groups to appreciate both the diversity and interconnections of humans. The course broadly examines cultural change and survival in the contemporary world.
Credits: 3
Prerequisite: ANTH 115 or SOC 116. Offered: Every other year.

ANTH 300 - Sex and Gender
Description and analysis of sex and gender roles and relationships from a variety of societies at different levels of socio-cultural complexity. Note: Also listed as SOC 306 and WOST 302.
Credits: 3
Prerequisite: ANTH 115 or SOC 116. Offered: Every other year.

ANTH 301 - Plagues And Peoples
Explores the impact of disease on human populations in terms of demographic, cultural and social changes. The rise
of health care delivery systems as a response to epidemics. Examples include the bubonic plague of the 14th and 17th centuries, cholera, influenza, polio and AIDS. Note: Also listed as SOC 312.

Credits: 3
Prerequisite: ANTH 115 or ANTH 219 or SOC 116.
Offered: Every year.

ANTH 311 - Anthropology of the Supernatural
Survey of various belief systems. Topics include: cults, sacred beings, rituals, shamanism, witchcraft, and magic.
Credits: 3
Prerequisite: ANTH 115 or ANTH 219 or SOC 116.
Offered: Offered on occasion.

ANTH 321 - Anthropology of Indian America
Survey of past and present Amerindian peoples and cultures of North America. Both aboriginal cultures and responses to European presence are emphasized for each region.
Credits: 3
Prerequisite: ANTH 115 or ANTH 219 or SOC 116.
Offered: Offered on occasion.

ANTH 322 - Anthropology of Africa
Survey course dealing with evolution of culture in Africa. Examination of range of variation of traditional African cultures and factors currently modifying them.
Credits: 3
Prerequisite: ANTH 115 or ANTH 219 or SOC 116.
Offered: Every year.

ANTH 324 - Caribbean Societies and Cultures
Survey of the prehistory, history, and present day nature of the various cultures of the Caribbean region. Special emphasis placed upon: economic life, family patterns, political movements, and expressive culture.
Credits: 3
Prerequisite: ANTH 115 or SOC 116. Offered: Every year.

ANTH 331 - American Utopian Communities
An examination of the background conditions producing utopias and an ethnographic/historical analysis of selected utopian ventures (e.g. Amish, Shakers, Counterculture Communes).
Credits: 3
Prerequisite: ANTH 115 or SOC 116. Offered: Every year.

ANTH 342 - Food and Culture
This course offers a critical look at the role of foodways in human prehistory, history, and contemporary life. Food is examined as an integral part of culture in terms of creating social bonds, identity, economies, and political systems. These issues are explored through diverse topics such as gender, food taboos, ethnicity, industrialization, human health, and the environment. The course includes discussion of attempts to address problems related to food by looking at policy, technologies, and movements towards sustainable food systems.
Credits: 3
Prerequisite: ANTH 115 or ANTH 219 or SOC 116.
Offered: Every year.

ANTH 350 - Special Topics
Special topics in anthropology not covered in detail by regular courses. Topic announced in online Course Offerings.
Credits: 1-3
Offered: Offered on occasion.

ANTH 470 - Independent Study
In-depth exploration of an anthropological topic under the direction of a anthropology department faculty member who is willing to sponsor the student. Students should have specific topics in mind before approaching an instructor. They are expected to complete a research project and present their findings to the professor on the agreed upon topic. Once an Independent Study has been arranged and prior to the semester beginning, the student must complete the Independent Study Contract with the sponsoring faculty member.
Credits: 1-3
Offered: Every semester.

ANTH 473 - Museum Internship
Supervised placement in a museum. Allows a limited number of advanced anthropology students to work with museum staff members on research, curation, and education projects. Permission of department.
Credits: 3
Offered: Offered on occasion.

ANTH 3SA - 300 Level Study Abroad Elective
A course taken during a study abroad experience that does not have a direct equivalency to a Fredonia course.
Credits: 0-15
Offered:
ARBC - Arabic

ARBC 100 - Introduction to Arabic
Students will be introduced to the language, familiarized with its basic vocabulary and grammar, and prepared to communicate at an elementary level. They will also be introduced to the distinctive features of the cultures where the language is spoken. The course is for students with none or very little background in the language.
Credits: 2
Prerequisite: Arabic Lang Placement Score of an 1 or better. Offered: Every semester.

ARBC 110 - Essential Arabic
Students develop essential communicative skills and cultural awareness necessary in order to interact with people from that culture, whether it is in their home country or in the United States. In order to take this course, students must have scored a level 2 or 3 in the approved placement test or have taken the introductory course ARBC 100 at Fredonia.
Credits: 3
Prerequisite: ARBC 100. Offered: Every semester.

ARBC 115 - Elementary Arabic I
For students with no previous preparation. Study of fundamental vocabulary and speech patterns. Initial stress on listening comprehension and oral ability. Progressively greater emphasis on reading and writing skills.
Credits: 3
Offered: Offered on occasion.

ARBC 116 - Elementary Arabic II
Study of fundamental vocabulary and speech patterns. Initial stress on listening comprehension and oral ability. Progressively greater emphasis on reading and writing skills.
Credits: 3
Prerequisite: ARBC 115. Offered: Offered on occasion.

ART - Art

ART 100 - Visual Concepts
The course is intended to introduce first-year visual arts and new media students to visual culture and the individual disciplines of the visual arts as well as develop and master personal study habits as they approach college-level learning. Topics will include art concepts, media techniques and terminology, and visual cultural analysis, as well as time-management, writing within the discipline, college resources and support networks.
Credits: 3
Offered: Every year.

ART 120 - Visiting Artists Program
Required for all art studio and art history majors each semester. Art faculty, guest artists and designers, and speakers provide lectures, and lead critiques and panel discussions relating to contemporary problems.
Credits: 1
Offered: Every semester.

ART 390 - Special Topics
Selected areas of art supplementing the regular program.
Credits: 1-6
Offered: Offered on occasion.

ARTH - Art History

ARTH 101 - Art in Culture from Prehistory to 1400
A chronological survey of art from prehistory to the end of the Middle Ages (c. 1400), with an emphasis on art in the western tradition. The course will focus on the dynamic relationship between artistic form and cultural context.
Credits: 3
Offered: Every semester.

ARTH 102 - Art in Culture from 1400 to the Present
A chronological survey of art from the Renaissance (c. 1400) to the present, with emphasis on the western tradition. The course will focus on the dynamic relationship between artistic form and cultural context.
Credits: 3
Offered: Every semester.

ARTH 175 - Computers and Society
Introduction to the role of modern microcomputers in personal, entertainment and corporate communications. Discussion of the role computers have played in social change and how this is reflected in popular culture. Also addresses the use of computers in the creative environment including digital audio, video, multimedia production, the Internet and the World Wide Web.
Credits: 3
Offered: Every semester.

ARTH 205 - Women in Art
A thematic and topical course exploring women's roles as both productive subjects and depicted objects in western visual culture.
Credits: 3
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Prerequisite: ART 115 or ARTH 101 or ART 116 or ARTH 102 or WOST 201. Offered: Every other year.

**ARTH 211 - Survey of Medieval Art**

An introduction to the history of western art from the late Roman Empire (c. 300) through the Middle Ages (c. 1400), including architecture, manuscript illumination, metalwork, sculpture, and textile production. The focus of the course is on the interactions of images and audiences in producing meaning within specific historical circumstances.

Credits: 3

Offered: Offered on occasion.

**ARTH 215 - Survey of Renaissance Art**

An introduction to the history of western art from the end of the Middle Ages (c. 1400) through the High Renaissance (c. 1600), focusing on painting, printmaking, and sculpture from Italy and the Netherlands. The course locates the artistic movement of the Renaissance within the dramatic cultural and social changes that mark the Early Modern period in European history and seeks to place the material within a global context.

Credits: 3

Offered: Offered on occasion.

**ARTH 220 - Survey of 19th Century Art**

A survey of 19th century European and American art and visual culture including such movements as Romanticism, Realism, Impressionism and Post-Impressionism.

Credits: 3

Offered: Offered on occasion.

**ARTH 225 - Modern Art 1900-1950**

The course will explore aesthetic responses to early-20th century political, industrial, social and economic change. Particular emphasis will be placed upon the production and reception of 20th century European and American “avant-garde” art including: Constructivism, Cubism, German Expressionism, Dadaism, Futurism and Surrealism.

Credits: 3

Offered: Every year.

**ARTH 229 - Art/Reality - 19th Century America**

Painting and sculpture between 1820 and 1920 - when it evolved from objective realism to modernist abstraction - is explored in the context of changing artistic and cultural values. Permission of the department.

Credits: 3

Offered: Offered on occasion.

**ARTH 230 - Black Art and Visual Culture in the U.S. 1850 - Present**

The course examines the shifting constructs of race, power, and representation in American art and mass media from the colonial era to the present day. Its primary focus will be an analysis of works produced by Black American artists, but students will also examine how white artists and intellectuals have attempted to define and represent “blackness” from the 19th to the 21st century.

Credits: 3

Prerequisite: ARTH 102 or ART 116. Offered: Offered on occasion.

**ARTH 276 - Film Form**

An introductory-level lecture course designed to introduce students to the formal issues involved in the production and perception of moving images. The course provides students with an understanding of aesthetic concepts that support the making of films, digital cinema, videos or video games. It reinforces the use of aesthetic vocabulary and demonstrates how audiences interact with, and are manipulated by, film language and syntax. Therefore, the course is useful for students who wish to enhance their skills in the making of films and videos as well as for students who wish to refine their ability to deconstruct motion pictures for critical and analytical purposes.

Credits: 3

Offered: Every year.

**ARTH 280 - Survey of Pre-Columbian Art: Mesoamerica**

An introduction to art and architecture produced by the Preclassic cultures of Mesoamerica. The course will survey the most important ancient civilizations of Middle America (Olmec, Monte Alban, Teotihuacano, Maya, Toltec, and Aztec) from the earliest complex settlements to the time of the Spanish conquest.

Credits: 3

Offered: Every other year.

**ARTH 290 - Art History Abroad**

An introduction to the history of art that examines a specific geographical area and chronological span during a study abroad experience. The course provides the student a thorough grounding in the major art works and artists involved, adding the concrete dimension of direct observation and personal experience of the places and motifs that informed various movements. The two to three week study/travel abroad includes readings, discussion, a daily journal, and a written interpretation of themes and ideas in art.

Credits: .5-3
Offered: Offered on occasion.

**ARTH 310 - Ancient Art**
A thematic or topical course on the art of the Mediterranean basin between 3000 BC and 300 AD. Specific course contents will vary and may include Egyptian funerary monuments, Greek and Roman sculpture, and topics such as ritual/magical uses of images, gender and sexuality in representations of the body, and the continuing legacy of the Classical tradition.

Credits: 3
Prerequisite: ART 115 or ARTH 101. Offered: Offered on occasion.

**ARTH 311 - Medieval Art**
A thematic or topical course in European art between 300 and 1400 AD: specific course contents will vary and may include medieval manuscripts, Byzantine icons, Gothic cathedrals, and topics such as the cult of the saints, the lives of medieval women, and interactions with the Islamic world.

Credits: 3
Prerequisite: ART 115 or ART 226 or ARTH 101 or ARTH 211. Offered: Offered on occasion.

**ARTH 315 - Renaissance Art**
A thematic or topical course on European art in the 15th and 16th centuries. Specific course contents will vary and may include early Netherlandish painting, Italian painting and sculpture, early print-making, and topics such as the changing social status of the artist, the impact of European exploration and conquest, and the lives of Renaissance women.

Credits: 3
Prerequisite: ART 227 or ART 102 or ARTH 215. Offered: Offered on occasion.

**ARTH 318 - Baroque Art**
Art and architecture of Baroque and Rococo Europe during the 17th and 18th centuries, with a focus on Italy, France, the Netherlands, and England.

Credits: 3
Prerequisite: ART 116 or ART 102. Offered: Offered on occasion.

**ARTH 329 - Art Since 1945**
An in-depth examination of art and related concepts and theories since the mid-20th century.

Credits: 3
Prerequisite: ART 116 or ART 221 or ART 102 or ART 225 or ARTH 101. Offered: Every other year.

**ARTH 345 - Film Criticism**
The course teaches students how to use qualitative methods in film criticism and analysis. Lectures are designed to provide students with an understanding of the role of the critic and the process of criticism. Among the methods taught are narrative criticism, contemporary non-narrative criticism, genre criticism, auteur criticism, evaluating issues when adapting a novel into film, and a method of identifying documentary styles and formulas (established by Eric Barnouw).

Credits: 3
Prerequisite: ARTH 276 or FILM 220 or COMM 155. Offered: Every year.

**ARTH 350 - Art History Theory and Methods**
An introduction to and examination of the various investigative and interpretive methods used by art historians. The course is divided into two equal parts, the first on traditional methodologies along with their contemporary critiques, and the second on a range of "new" art histories. At the end of the course, students will be both competent in traditional methods and cognizant of contemporary debates within art history as a discipline.

Credits: 3
Prerequisite: (ARTH 115 and ART 116) or (ARTH 101 and ARTH 102). Offered: Every other year.

**ARTH 351 - Readings in Art History**
The nature of art history, the themes and ideas it investigates, and readings in some key classic authors, are the main topics of the course.

Credits: 3
Prerequisite: (ARTH 115 and ART 116) or (ARTH 101 and ARTH 102). Offered: Offered on occasion.

**ARTH 355 - Writing About Art**
Offers studio art, design and art history majors practical experience in art-related research and writing. Students will be introduced to various methods of scholarly research and critical writing styles related to their individual interests within their major concentration.

Credits: 3
Prerequisite: (ARTH 115 and ART 116) or (ARTH 101 and ARTH 102). Offered: Every other year.

**ARTH 359 - New Media Writing**
The course will study writing for new media projects like web sites, CD-based interactive products and video games as well as traditional projects such as films. The course is designed to look at various structures and approaches that emphasize "visual writing". Students will devise, design, and "pitch" a project proposal.
Credits: 3
Offered: Every year.

ARTH 371 - History of Graphic Design

Graphic design from the 19th century to the present with emphasis on European and American sources. Discussion of illustration, photography and the impact of technology in design. Examination of events, ideas, movements, designers and other individuals that have historical significance and influence on contemporary graphic design. Students without prerequisite may enroll with instructor's permission.

Credits: 3
Offered: Every other year.

ARTH 376 - Film and Special Effects

Course examines both traditional and contemporary visual effects techniques including the creative and planning processes required for the execution of various types of effects, such as models and miniatures, mattes, composite effects, computer animation, and process projection. Course also provides a forum on the creative problem-solving and planning techniques used by effects makers, including a wide range of kinds of equipment and uses.

Credits: 3
Offered: Every year.

ARTH 380 - Topics: Ancient Mesoamerican Art

A thematic or topical course on the art of Ancient Mesoamerica. Specific course content will vary and may include focal issues related to art produced by the Olmec, Mixtec, Teotihuacano, Maya, Toltec, and Aztec civilizations. The time frame covered will vary from circa 1500 BCE to 1500 CE.

Credits: 3
Prerequisite: (ART 115 and ART 116) or (ARTH 101 and ARTH 102). Offered: Every other year.

ARTH 390 - Special Topics: Art History

Selected areas of history of art supplementing the regular program.

Credits: 1-3
Prerequisite: ART 115 or ART 116 or ARTH 101 or ARTH 102. Offered: Offered on occasion.

ARTH 399 - Art History Abroad

An introduction to the history of art that examines a specific geographical area and chronological span during a study abroad experience. The course provides the student a thorough grounding in the major art works and artists involved, adding the concrete dimension of direct observation and personal experience of the places and motifs that informed various movements. The two to three week study/travel abroad includes readings, discussion, a daily journal, and a written interpretation of themes and ideas in art.

Credits: 3
Offered: Summer, JTerm.

ARTH 440 - Visual Culture

An in-depth examination of 20th and 21st century visual culture and related concepts and theories. The specific period and thematic emphasis of this art history course may vary and include the study of one or more artistic forms such as painting, sculpture, architecture, photography, film, and design.

Credits: 3
Prerequisite: ART 116 or ART 221 or ARTH 102 or ARTH 225. Offered: Offered on occasion.

ARTH 460 - Gallery Practicum

The course allows the student firsthand knowledge of the duties involved in operating a gallery. Such duties may include but are not limited to assisting the director in picking a schedule, contacting artists, creating the advertising and mounting the exhibitions. Students may only enroll with instructor’s permission.

Credits: 1-4
Offered: Offered on occasion.

ARTH 490 - Learning Assistant - Art History

This course is designed for students to become familiar with the instructing process. The student will assist the instructor of an art history course in the classroom throughout the semester. Course work includes attendance at all scheduled classes for the course, assisting students during lab or study sessions as well as taking an active role in classroom critiques, discussions and studio maintenance. Permission of the instructor of the accompanying course is required.

Credits: 3
Offered: Every semester.

ARTH 494 - Directed Study: Art History

Directed research in specific areas of art history, stressing depth of inquiry. Subject of study chosen in consultation with department, and students may only enroll with instructor's permission.

Credits: 1-3
Offered: Every semester.
**ARTH 495 - Independent Study: Art History**

Independent research in specific areas of art history, stressing depth of inquiry and development of topic. Subject of study chosen in consultation with department, and students may only enroll with instructor's permission.

Credits: 1-3  
Offered: Every semester.

**ARTH 497 - Research Practicum in Art History**

Students work with Art History scholars and/or faculty to assist with on-going research projects. Students gain valuable research skills along with insights into the academic professions. Art History majors only and students may enroll with instructor's permission.

Credits: 1-3  
Prerequisite: (ARTH 101 and ARTH 102) or (ART 115 and ART 116). Offered: Every semester.

**ARTH 499 - Internship**

The course allows the student to receive credit for professional experiences related to some aspect of their field of study. Enrollment is to be arranged with an appropriate instructor, by permission only.

Credits: 1-15  
Offered: Offered on occasion.

**ARTH 3SA - 300 Level Study Abroad Elective**

A course taken during a study abroad experience that does not have a direct equivalency to a Fredonia course.

Credits: 1-15  
Offered:

**ARTS - Art - Studio**

**ARTS 1SA - 100 Level Study Abroad Elective**

A course taken during a study abroad experience that does not have a direct equivalency to a Fredonia course.

Credits: 1-15  
Offered:

**ARTS 2SA - 200 Level Study Abroad Elective**

A course taken during a study abroad experience that does not have a direct equivalency to a Fredonia course.

Credits: 0-15  
Offered:

**ARTS 102 - Foundations in 2-D Form and Content**

Introductory course investigating the principles and elements of visual design. Unity, emphasis, balance, scale, line, form, texture, rhythm and color are explored through two-dimensional studio problems.

Credits: 3  
Offered: Every semester.

**ARTS 105 - Foundations in Drawing**

Theory and practice in a variety of graphic media. Conte, ink, pencil, and charcoal used in studio problems to acquaint beginning student with full range of drawing possibilities.

Credits: 3  
Offered: Every semester.

**ARTS 120 - Multimedia Applications**

The course introduces students to the core applications used in creating multimedia content. The applications range from Microsoft applications to the Adobe suite of programs for video and graphics production. Alternative software will also be explored as the course will attempt to remain current with market and industry standards for personal and business use.

Credits: 3  
Offered: Offered on occasion.

**ARTS 150 - Camera Basics**

A practical introduction to the theory and application of 35 mm camera controls. Emphasis will be placed on the technical skills required to create imagery on 35mm film. Instructional methods will include lectures, field experience and laboratory work. No course prerequisites, but students must have a 35mm camera. Students must complete ARTS 150 AND ARTS 155 to enroll in any 300-level courses in Photography.

Credits: 1  
Offered: Offered on occasion.

**ARTS 155 - Introduction to Film Photography**

A practical introduction to the theory and application of 35 mm camera controls and black and white darkroom techniques. An emphasis will be placed on the technical skills required to visually express oneself through the photographic medium. Lectures, darkroom laboratory, and field experience. Students must have a 35mm camera.

Credits: 3  
Offered: Every semester.

**ARTS 156 - Introduction to Digital Photography**

A practical introduction to the aesthetic and technical theories and techniques of DSLR camera controls and imaging software. An emphasis will be placed on the technical skills required to visually express oneself through
the digital photographic medium. The course will consist of lectures, demonstrations, lab time, field experience and oral critiques. A DSLR with manual setting is required.

Credits: 3
Offered: Every semester.

**ARTS 159 - Photographic Explorations**

Photographic Explorations is an introduction to the workings of light and cameras, interpretation and perception, philosophical and psychological experience to explore image culture. In addition to learning techniques for producing light- and lens-based images, students will become acquainted with historical and contemporary uses of these techniques. Through a combination of classroom talks and hands-on projects, students will explore the principles of photography. The course is designed to serve students with no prior background in photography and is not intended for visual arts or photography majors. A camera that can take electronic still images is required (this can range from a digital SLR to camera phone).

Credits: 3
Offered: Every semester.

**ARTS 205 - Foundations in Drawing 2**

A continuation of ARTS 105 Foundations in Drawing with further emphasis on using learned skill sets to create visual content. Exploration of contemporary uses of drawing. Introduction to color.

Credits: 3
Prerequisite: ARTS 105. Offered: Every year.

**ARTS 212 - Life Drawing I**

Intensive drawing course related to the human figure. The figure is explored in various mediums and in both realism and abstraction. Research papers and readings out of the textbook are required.

Credits: 3
Prerequisite: ARTS 105 or ARTS 205. Offered: Every semester.

**ARTS 214 - Drawing and Painting I**

First course in the Drawing and Painting program which is structured to prepare students for lives as professional artists. The course expands on material included in the foundation courses. Students will explore more technical, aesthetic and conceptual approaches in both drawing and painting. Research papers are required.

Credits: 3
Prerequisite: ARTS 102 and ARTS 105 or ARTS 205. Offered: Every semester.

**ARTS 220 - Web Page Design**

The course is designed to introduce to the student the basic principles of designing web pages for the World Wide Web. Mixing traditional design concepts with web-based tools, students will learn how to code pages for the web across platforms. Students will also gain practice in the use of HTML, Java and CGI/Perl scripting.

Credits: 3
Prerequisite: MEDA 120 or ARTS 120. Offered: Offered on occasion.

**ARTS 221 - Foundations of Time-Based Media**

This Foundations of Time-Based Media course is designed to help students develop their aesthetic and technical understandings of time as a creative tool and medium. Fundamental principles of time including duration, sequencing and movement will be established through hands-on creative projects and exercises. Screenings of historical and contemporary examples will also be an informative aspect of the learning process. Development of effective art criticism skills will allow for creative group interactions and the defining of one’s personal aesthetic vision.

Credits: 3
Offered: Every semester.

**ARTS 222 - Cinema Arts I**

An introductory level, fine arts studio course that builds an understanding of cinematic arts through hands-on exercises and projects. Participants explore basic camera tools and techniques, sound design, and digital non-linear editing. The development of visual cinematic language and the creative/aesthetic and conceptual use of the medium are stressed. Analytical thinking and conceptual explorations are emphasized. Works of contemporary and historical video and film artists are viewed and discussed.

Credits: 3
Offered: Every year.

**ARTS 225 - Digital Foundations**

A studio production course that explores a variety of digital tools for art production. The course offers a broad overview of contemporary digital technologies using avant-garde art movements of the 20th century as a framework to explore digital tools. The course covers a variety of software applications used in contemporary artistic practices and may include image manipulation, digital painting, sound art, video art, and web design.

Credits: 3
Offered: Every year.
ARTS 239 - Contemporary Intaglio
An introduction to theory and application of contemporary intaglio printmaking utilizing etching, monoprinting, and digital imaging. Contemporary intaglio approaches utilize less toxic processes and techniques that have been developed recently. Emphasis is placed on the technical skills required to visually communicate utilizing the printmaking medium.

Credits: 3
Prerequisite: ARTS 105 or ART 150. Offered: Every year.

ARTS 240 - Foundations of 3-D Form and Content
An introductory course that explores basic design considerations, materials, and techniques relating to three-dimensional expression. Classroom discussion and studio projects stress an individual interpretive approach to concept development. Slide lectures and assigned reading expose students to a contemporary perspective of 3-D expression both past and present.

Credits: 3
Offered: Every semester.

ARTS 241 - Figure Modeling
A beginning course in methods and materials appropriate for sculptural expression of the human form. Clay, plaster, mold making, and casting techniques are covered. Technical and conceptual development of form is stressed. Theory and practice of the human form in art is introduced through lecture and research requirements.

Credits: 3
Offered: Every semester.

ARTS 250 - Photo Lighting Technique
An exploration of more advanced techniques of camera exposure, software development and lighting with special emphasis on tonal control exploring the effects of existing light: from sunlight in its many forms to the variety of artificial lights encountered in everyday image making. Increased emphasis is also placed on aspects of composition, perception, content, color temperature, and diffusion/concentration as well as ways to modify light through reflecting, filtering, filling, diffusing, and cutting. A DSLR camera with manual settings is required.

Credits: 3
Prerequisite: ARTS 156. Offered: Every year.

ARTS 255 - Color and Light
Explores aesthetic and technical knowledge necessary to understand the art of color photography including color perception, materials and processes, and aesthetics of color. Emphasis is placed primarily on aspects of color theory, the use of color in photographic and digital image creation, the implementation of color workflow and color management systems and color printing. Throughout the semester, issues of form, composition and light will be discussed in the context of students’ own production.

Credits: 3

ARTS 256 - The Photographic Narrative
Narrative photography visualizes the stories that surround us, inspiring contemplation and a genuine connection with one another. The course will focus on the art of visual storytelling through the medium of photography. All aspects of photographic narrative and image sequencing will be explored, from documentary to tableau vivant. Through focused investigation, students will explore the technical, historical and inherent narrative power of the photograph. A camera that can take electronic still images is required (this can range from a digital SLR to camera phone).

Credits: 3
Prerequisite: ARTS 156 or ARTS 159. Offered: Every year.

ARTS 260 - Graphic Design I
Introduction and orientation to concepts and skills necessary for visual communication. Fundamentals of language and principles of graphic design structure with an emphasis on media for development of ideas and imagery. Introduction to fundamentals and language of typography.

Credits: 3
Prerequisite: (ARTS 102 and ARTS 105) or (ARTS 205). Offered: Every year.

ARTS 261 - Graphic Design II
Continued exploration of formal creation and manipulation with an emphasis of systems. Emphasis on the visualization of abstract ideas using text, image and form as well as hierarchy of information. Introduction of role of research and audience in the creation of design solutions.

Credits: 3
Prerequisite: ARTS 260 or ART 259. Offered: Every year.

ARTS 270 - Foundations in Clay
The elements and principles of 3-D design are explored through introduction to basic techniques for the construction of ceramic objects without the use of the potters wheel. Projects in terra cotta clay explore the relationship of form and surface unique to the ceramic medium.

Credits: 3
Offered: Every semester.
ARTS 271 - Pottery on the Wheel

The rudiments of wheel forming pottery lead to the creation of bowls, vases, jars, and teapots in ceramics. Glazing and firing techniques for stoneware clay are covered.

Credits: 3
Offered: Every semester.

ARTS 280 - Introduction to Illustration

An introduction to editorial illustration. The class will explore technical, aesthetic and conceptual principles, as well as research and historical examples. Projects include thumbnail sketches, semi-comps, and refined drawings for final presentation on paper.

Credits: 3
Prerequisite: ARTS 102 or ARTS 105 or ARTS 205. Offered: Every year.

ARTS 285 - Introduction to 2-D Animation

A broad introduction to fundamental principles of motion utilizing traditional and digital 2D animation techniques. Topics explored include basic filmmaking terms and editing, a variety of traditional animation methods including flip books, line drawn, rotoscope, cutout, and collage animation as well as history of the medium.

Credits: 3
Prerequisite: ARTS 102 or ART 155. Offered: Every year.

ARTS 290 - Special Topics: Studio Art

Selected studio media and techniques.

Credits: 1-3
Offered: Offered on occasion.

ARTS 312 - Life Drawing II

Continued concentration on drawing the figure with more emphasis on use of color medium. Research papers will deal with contemporary and traditional artists whose work dealt with the figure.

Credits: 3
Prerequisite: ARTS 212 or ART 252. Offered: Every semester.

ARTS 314 - Drawing and Painting II

Students expand on theories explored in Drawing and Painting I. Assignments concentrate on the introduction of more personally significant content into the students' work. Thematic series are introduced as a way of exploring complex concepts. While there will be some flexibility between deciding whether to use drawing or painting, some assignments will require both. Research papers are required.

Credits: 3
Prerequisite: ARTS 115 or ARTS 214. Offered: Every semester.

ARTS 315 - Drawing and Painting III

Students begin to learn professional practices in application of their chosen medium, construction of support structures, creation of artwork reflecting their interpretation of their roles in society and preparation of their artwork for exhibitions. Students will also research, write and discuss historical and contemporary theories and trends in art. Students decide whether to work in drawing or painting or both.

Credits: 3
Prerequisite: ARTS 215 or ART 287. Offered: Every year.

ARTS 320 - Media Performance I

Course is designed to introduce students to the elements of live performance within a multimedia environment. Elements of live artistic performance (such as music, theatre, poetry, etc.) will be combined with computer-mediated elements to achieve a new style of interactive performance.

Credits: 3
Prerequisite: (MEDA 215 and MEDA 152) or (ARTS 222 and ARTS 225). Offered: Every year.

ARTS 321 - Installation Art

A studio-based course exploring the broad field of Installation Art as a means of visual expression. A range of materials and methods will be used to create installations that transform the viewer's experience of space. Lectures, demonstrations, and readings introduce students to Installation Art.

Credits: 3
Prerequisite: ARTS 240 or ARTS 270. Offered: Every year.

ARTS 322 - Cinema Arts II

An introductory level, fine arts studio course that builds an understanding of cinematic arts through hands-on exercises and projects. Participants explore basic camera tools and techniques, sound design, and digital non-linear editing. The development of visual cinematic language and the creative/aesthetic and conceptual use of the medium are stressed. Analytical thinking and conceptual explorations are emphasized. Works of contemporary and historical video and film artists are viewed and discussed.

Credits: 3
Prerequisite: MEDA 152 or ARTS 222. Offered: Every year.
ARTS 323 - Experimental Narrative
Students will explore techniques and theories of experimental narrative structure as a counter argument to the dominant and established Hollywood system. Students will gain a deeper understanding of processes and thematic structure that can help advance a narrative direction in their experimental work. Through a series of assignments and projects, students will explore techniques that bridge experimental and the traditional narrative experience. Screenings and readings will reinforce the course work.
Credits: 3
Prerequisite: ARTS 222. Offered: Every other year.

ARTS 324 - Special Effects for Experimental Video
An upper-level studio art course that introduces concepts and techniques of special effects to the experimental video making process. Hands-on assignments will cover practical effects in front of the camera and digital post-production effects including advanced compositing of video elements. Emphasis will be placed on obtaining professional results with minimal resources.
Credits: 3
Prerequisite: (ARTS 222 or MEDA 152) and (ARTS 322* or ARTS 422*). Cross-Listed as: * Indicates that the course can be taken in the same semester. Offered: Every other year.

ARTS 325 - Interactivity for the Web
A studio production course that offers the opportunity to investigate web art production methods with particular attention to interactivity, navigation, sequence and audience participation. Emphasizes the conceptual and creative potential of the web and the effects of virtual interactivity on the user.
Credits: 3
Prerequisite: MEDA 215 or ARTS 225. Offered: Every year.

ARTS 327 - Audio and Desktop Multimedia
A course designed for students with a strong interest and background in composition, multimedia, audio and MIDI. A project-oriented course focusing on audio design, analysis, and integration as it applies to multimedia authoring, motion video, and web content creation.
Credits: 3
Prerequisite: (MEDA 152 and MEDA 205) or (ARTS 222 and ARTS 225). Offered: Offered on occasion.

ARTS 330 - Relief Printing
An exploration of relief printing as a means of visual expression. Woodcut, Linocut and Japanese Moku Hanga skillsets will be developed. The development of individual expression is stressed.
Credits: 3
Prerequisite: ARTS 102 and ARTS 105 or ARTS 205. Offered: Every other year.

ARTS 333 - Paper Arts
An introduction to the various techniques and forms of paper arts. Students learn traditional Western and Eastern approaches to making paper, and use paper as an expressive medium for 2D and 3D art forms.
Credits: 3
Prerequisite: ARTS 102 or ARTS 105 or ARTS 205. Offered: Every other year.

ARTS 334 - Book Arts
An introduction to various techniques and forms of artist books. Students learn traditional binding as well as contemporary approaches for artist books
Credits: 3
Prerequisite: (ARTS 102 and ARTS 105) or ARTS 205.

ARTS 335 - Monotypes/Monoprints
An exploration of monotypes and the intaglio monoprint artistic medium. Students are directed to experiment with a wide range of approaches to the two techniques.
Credits: 3
Prerequisite: (ARTS 102 and ARTS 105) or ARTS 205.

ARTS 340 - 3-D Methods and Materials
This course offers an opportunity to investigate both traditional and innovative approaches to object making. Materials and processes may include hot and cold casting, welding, papermaking, and hand formed cement, among others. Cross-media explorations are encouraged. Technical exploration, craftsmanship, and underlying intent is scrutinized and fostered through class critique, peer review, and required research.
Credits: 3
Prerequisite: ARTS 240 or ARTS 241 or ART 257 or ART 258. Offered: Every semester.

ARTS 341 - Figure Modeling II
Continuation of ARTS 241 - Figure Modeling; increased emphasis on technique and expressive content.
Credits: 3
Prerequisite: ARTS 241 or ART 258. Offered: Every year.
ARTS 350 - Experimental Photography

Students will study the working methods of early pioneers of photography, as well as examine present-day software development that fabricates and alters these processes. Historical working methods and contemporary mimicking approaches will be discussed in lectures, examined through readings and will be put into practice through hands-on experience with the materials. Students will expand their photographic vision through the use of experimental photographic processes as well as broaden their knowledge of the history of photography as it has led to new creative processes in combination with digital technology.

Credits: 3
Prerequisite: ARTS 255. Offered: Every year.

ARTS 352 - Studio Lighting

An introduction to the use of artificial lighting in Photographic Illustration. This is a technical class where emphasis will be placed on the use and control of studio lighting equipment. It is accomplished by lecture, demonstration, practical experience and critique.

Credits: 3
Prerequisite: ARTS 156. Offered: Every other year.

ARTS 353 - Photographic Illustration

This course synthesizes previously introduced lighting skills for products and people in both the studio and on location. Emphasis is placed on conceptual problem solving as well as creative application of controlled lighting. Students will study contemporary trends in commercial photography and apply these techniques to a series of photographic assignments. Each assignment will begin with hand-drawn lighting schematics and progress through to the final image. Problem solving and working with a client will be stressed. A DSLR camera with manual setting is required.

Credits: 3
Prerequisite: ARTS 352. Offered: Every year.

ARTS 355 - Digital Imaging

Theoretical and practical introduction to electronic imaging as a creative medium. Understanding of the principals, methods, techniques and vocabulary of the most widely used digital imaging processes with an emphasis on personal expression. Topics explored will include photographic manipulation, collage, fabrication and experimental media as forms of visual expression. Lectures, laboratory work and individual and collaborative projects. Students with Macintosh imaging experience may enroll without the prerequisite with permission of the instructor.

Credits: 3

Prerequisite: ARTS 255. Offered: Every year.

ARTS 356 - The Photographic Narrative

Narrative photography visualizes the stories that surround us, inspiring contemplation and a genuine connection with one another. The course will focus on the art of visual storytelling through the medium of photography. All aspects of photographic narrative and image sequencing will be explored, from documentary to tableau vivant. Through focused investigation, students will explore the technical, historical and inherent narrative power of the photograph. A camera that can take electronic still images is required (this can range from a digital SLR to camera phone).

Credits: 3
Prerequisite: ARTS 156 or ARTS 159. Offered: Every year.

ARTS 360 - Graphic Design III

Introduction to the process of sequencing and organizing images and information across multiple platforms. Provides students with an understanding of tools and technologies used in the creation, reproduction, and distribution of visual messages including books, interfaces, and time based work.

Credits: 3
Prerequisite: ARTS 360 or ART 359. Offered: Every year.

ARTS 361 - Graphic Design IV

Emphasis is placed on conceptual development, symbolic language, and the design of systems across different media. Problem definition and content interpretation is focused on as is the role of the audience in design. Professional practices are introduced including collaboration in the creation of design solutions.

Credits: 3
Prerequisite: ARTS 360 or ART 359. Offered: Every year.

ARTS 365 - Typography I

Principles of typographic composition, structure and hierarchy. Terminology, typographic history, technical issues related to typography. Typography as a medium of visual communication. Student exercises focus on the relationship between visual and verbal language and technical details of typographic specification and computer layout. Advanced placement review; or permission of instructor.

Credits: 3
Prerequisite: ART 260 or ARTS 261. Offered: Every year.

ARTS 366 - Typography II

Exploration of design using text type and typographic technology. Students investigate narrative and expressive
use of typographic form and format/informational organization problems.

Credits: 3
Prerequisite: ARTS 365 or ART 361. Offered: Every year.

**ARTS 370 - Intermediate Ceramics**
Investigates the intermediate studio problems in the ceramics process. Hand-Building or wheel forming procedures are utilized to explore a variety of experimental approaches to the ceramic form, with a continued emphasis on the search for appropriate surface treatments and firing techniques.

Credits: 3
Prerequisite: ARTS 270 or ART 273 or ART 271 or ART 274 or ARTS 241 or ART 258. Offered: Every semester.

**ARTS 380 - Intermediate Illustration**
Exploration of visual narrative structure employed in sequential art such as comics, storyboard art, and graphic novels through interpretive exercises and history of the medium. Students will gain experience in visual editing, character and story development, and sequential drawing (both with traditional media and digital drawing tablets and software).

Credits: 3
Prerequisite: (ARTS 280 and ARTS 285) or (ART 380 and ART 252). Offered: Every year.

**ARTS 385 - Intermediate 2-D Animation**
An intermediate studio concentration on digital line drawn and cel animation, including motion graphics and compositing. Emphasis on story development, character realization, the lip-synch process, multi-layer animation, and title design will be explored through short animation exercises.

Credits: 3
Prerequisite: (ARTS 280 and ARTS 285) or (ART 281 and ART 282). Offered: Every year.

**ARTS 386 - 3D Modeling & Animation**
An intermediate-level studio course, which builds on Intermediate 2D Animation and Intermediate Illustration, with a concentration on modeling, lighting and some animation. In addition to exploration of 3D modeling and animation, the history of traditional 3D animation is investigated to further understand 3D space and design.

Credits: 3
Prerequisite: ARTS 385. Offered: Every other year.

**ARTS 390 - Special Topics: Studio Art**
Selected studio media and techniques.

Credits: 1-3
Offered: Offered on occasion.

**ARTS 396 - Studio Art Preliminary Internship**
The course allows the student to receive credit for introductory internship experiences, generally on-campus, related to some aspect of their field of study. Enrollment is to be arranged with an appropriate instructor, by permission only.

Credits: 1-3
Offered: Offered on occasion.

**ARTS 400 - Senior Exhibition**
Formal and technical preparation for senior exhibition. Career development includes a writing component to aid the student in developing a resume, cover letter and artist's statement. To enroll in the course students must have a minimum 3.5 GPA in all ARTS courses and/or area faculty permission.

Credits: 1
Offered: Every semester.

**ARTS 415 - Drawing and Painting IV**
Students continue to expand on the topics covered in Drawing and Painting III while fine-tuning technical and intellectual processes in clarifying their visual language. Students will learn processes in documenting and preparing artwork for graduate schools and exhibitions. Students will also continue to research, write and discuss historical and contemporary theories in art while researching issues related to their preparation as they begin their lives as professional artists. These concepts are expanded upon in Directed Study: Drawing and Painting.

Credits: 3
Prerequisite: ARTS 315 or ART 387. Offered: Every semester.

**ARTS 422 - Cinema Arts III**
An advanced studio art course where students continue the development of their own personal artistic voice through a complex series of cinematic projects. New production and post-production techniques will be explored as a class and independently. Development of skill sets required for an independent video artist will be emphasized.

Credits: 3
Prerequisite: ARTS 322. Offered: Every year.

**ARTS 425 - Advanced Interactivity**
Allows students time to expand upon the knowledge learned in Art and Interactivity for the Web. Independent projects will be produced to solidify knowledge of
interactive art, web development and multimedia production.

Credits: 3
Prerequisite: MEDA 265 or ARTS 325. Offered: Every year.

**ARTS 429 - Film and Video Arts Capstone**

An advanced course pursuing the refinement and execution of artistic cinematic projects. Further focus on the development of theory and context behind individual student projects will be stressed through discussion and writing. Development of professional practices, including artist statements and demo reels will be required.

Credits: 3
Prerequisite: ARTS 422. Offered: Every year.

**ARTS 440 - 3D Objects and Ideas**

An advanced sculpture course that allows students to define and develop a personal body of work representing a serious exploration in their chosen mediums. Emphasis is placed on the continued development of technical craft and the refinement of thematic concerns. Appropriate information pertaining to theory and practice is provided. Professional practices including portfolio preparation, resumes, and artist statements are discussed.

Credits: 3
Prerequisite: (ARTS 340 and ARTS 240 or ARTS 241) or (ART 357 and ART 257) or ART 258. Offered: Every semester.

**ARTS 459 - Photographic Inquiry**

Personal exploration in image development. Refinement of individual conceptual concerns and development of the professional portfolio. Issues will include professional practice, critical analysis and hybrid media. Students explore theoretical and critical concepts through relevant and interrelated readings, lectures, discussions, presentations along with individual and group critiques.

Credits: 3
Prerequisite: ARTS 350 or ARTS 352 or ARTS 355 or ARTS 356. Offered: Every year.

**ARTS 460 - Graphic Design V**

Emphasis is placed on conceptual development, symbolic language, and the design of systems across different media. Problem definition and content interpretation is focused on as is the role of the audience in design. Professional practices are introduced including collaboration in the creation of design solutions.

Credits: 3
Prerequisite: ARTS 361 or ART 360. Offered: Every year.

**ARTS 461 - Graphic Design VI**

Advanced problem solving in independent and investigative concepts. Exploration of actual, theoretical and conceptual concerns of visual communication. Professional practices and portfolio preparation are addressed, explored.

Credits: 3
Prerequisite: ARTS 460 or ART 401. Offered: Offered on occasion.

**ARTS 465 - Typography III**

Typographic theory exploring traditional and nontraditional forms, both historical and contemporary typographic achievements. Analysis of expressive characteristics and experimental uses of letter forms and text.

Credits: 3
Prerequisite: ARTS 366 or ART 362. Offered: Every year.

**ARTS 469 - Design Realities/Professional Practice**

Comprehensive investigation and research into topics of production and practice in design. Content directed in three primary areas: pre-press preparation and materials, legal affairs, and the professional studio. Issues to be addressed include electronic file management, paper specification, supplier relationships, copyright and plagiarism, business contracts, ethics, studio ownership, management and record keeping. Requires compilation of individual journal and written research/analysis of specific course topic.

Credits: 1-3
Prerequisite: ART 401 or ARTS 460. Offered: Every year.

**ARTS 470 - Advanced Ceramics**

Handbuilding or wheel forming procedures are utilized to explore a variety of sculptural approaches to the ceramic form with a continued emphasis on the search for appropriate surface treatments and firing techniques. Students are guided toward the identification and expression of personal ideas in the medium.

Credits: 3
Prerequisite: ARTS 370 or ART 373. Offered: Every semester.

**ARTS 485 - Advanced Animation/Illustration**

An upper level studio course under the Animation/Illustration sequence, which follows Intermediate 2-D Animation and Intermediate Illustration. Students will be encouraged as artists to produce a mature body of work through readings, technical exercises, oral and written presentations, and independent research. Work
produced in this class may or may not carry over to the Animation/Illustration Capstone (ARTS 489).

Credits: 3

Prerequisite: ARTS 380 and ARTS 385 or (ART 381 and ART 382). Offered: Every other year.

**ARTS 489 - Animation and Illustration Capstone**

An advanced class where students work individually or in teams on a semester-long animation or series of illustrations. In addition to the main project, the class will include readings, discussions and animation screenings. The course will also discuss resume and career preparation, portfolio and demo reel creation, graduate school application, and exhibiting work in a professional manner.

Credits: 3

Prerequisite: ART 481 or ARTS 485. Offered: Every year.

**ARTS 490 - Learning Assistant**

This course is designed for students to become familiar with the instructing process. The student will assist the instructor of an individual studio or art history course in the classroom throughout the semester. Course work includes attendance of all scheduled classes for the course, assisting students during lab or study sessions as well as taking an active role in classroom critiques, discussions and studio maintenance. Permission of the instructor of the accompanying course is required.

Credits: 3

Offered: Every semester.

**ARTS 491 - Workshops**

Workshops offered in specialized areas, such as ceramics or painting, primarily during the summer to give students an opportunity for intensive study in one aspect of a larger field.

Credits: 3

Offered: Offered on occasion.

**ARTS 494 - Directed Studio Projects**

Directed studio work in all media. Student meets with designated faculty member on a regular basis throughout the semester. Sound background in area of investigation required. Student must file acceptable plan for proposed project, and may only enroll with instructor's permission.

Credits: 1-3

Offered: Every semester.

**ARTS 495 - Independent Studio Projects**

Independent studio work in all media. Sound background in area of investigation required. Student must file acceptable plan or proposed project, and may only enroll with instructor's permission.

Credits: 1-6

Offered: Every semester.

**ARTS 496 - Studio Art Internship**

The course allows the student to receive credit for professional experiences related to some aspect of their field of study. Enrollment is to be arranged with an appropriate instructor, by permission only.

Credits: 1-15

Offered: Offered on occasion.

**ARTS 497 - Studio Practicum**

Students work with a professional artist or designer, which would include a Visual Arts and New Media faculty member, in a studio and/or office with ongoing research projects. Students gain valuable perspective into the work of a professional artist or designer along with insights into the professions. Open to Visual Arts and New Media studio majors only and students may only enroll with instructor's permission.

Credits: 1-3

Offered: Offered on occasion.

**ARTS 499 - Special Topics: Studio Art**

Selected studio media and techniques.

Credits: 1-3

Offered: Offered on occasion.

**ASL - American Sign Language**

**ASL 110 - Introduction to Sign Language**

Introduces the student to three major areas of learning to use a signed language. First, deaf culture is explored. Second, manual communications as a language is surveyed. Third, the practical application of sign language as a method of communication is stressed and practiced. In class and out of class practice is emphasized.

Credits: 3

Offered: Every year.

**ASL 215 - Intermediate Sign Language**

Credits: 3

Prerequisite: CDS 115 or ASL 110. Offered:
BIOL - Biology

BIOL 100 - Studying for Success-Biology

The 1-credit course is designed to provide science students with time-management and study skills as they make the transition to the college level learning environment. Properly implemented, the methods will provide freshmen with the opportunity to succeed and potentially excel in college science courses. Many of the skills will likely be applicable to other courses. The strategies introduced include: time-management, daily and weekly study plans, methods of reading text, how to effectively study for a test, and test taking strategies. Students will also be introduced to some of the basic concepts in biology.

Credits: 1
Offered: Every year.

BIOL 105 - Freshman Seminar on Sexual Concerns

Introductory course intended exclusively for freshmen of all majors. The course will include an overview of basic biological concepts related to human sexuality. Major topics of presentation will include information about the male and female reproductive systems, microbiology, immunology, pregnancy, sexually transmitted diseases, and a variety of approaches to protect against disease and unwanted pregnancy.

Credits: 1
Offered: Every year.

BIOL 109 - Biology, Health, and Medicine

The course will provide an introduction to biology as the cellular level with an emphasis on human biology. Students will learn the molecular basis of vaccines and pharmaceutical drugs. To understand vaccines and drugs, students will first learn basic principles of cell biology, biochemistry, genetics, microbiology, and immunology. The course will also incorporate discussions on ethical issues relating to medicine.

Credits: 3
Offered: Offered on occasion.

BIOL 110 - Human Biology

Overview of biological aspects of human nature. Survey of basic human physiology, reproduction, and development. Introduction to genetics and the record of human evolution provides starting point for discussion of adaptive significance of human intelligence and social organization.

Credits: 3
Offered: Every semester.

BIOL 111 - Foundations of Biology

Introductory course for non-science majors only. Intended to develop an understanding of the operation of biological systems and an acquaintance with basic biological concepts and principles.

Credits: 3
Offered: Every semester.

BIOL 115 - Environmental Biology

Study of basic relationships between the environment and humans. Discussion of constraints and relationships in nature from points of view of the physical and life sciences and investigation of how people make decisions to utilize the environment as a resource from the viewpoint of the social sciences. Attempts to link natural and social sciences for awareness of multifaceted nature of environmental problems.

Credits: 3
Offered: Every semester.

BIOL 131 - Introductory Ecology and Evolution

The course will introduce first semester life science majors to the main themes used to study biology. Three main themes that extend throughout the curriculum include a detailed investigation of the scientific method, evolutionary theory, the concepts of ecology and the diversity of life.

Credits: 3
Offered: Every year.

BIOL 132 - Introductory Ecology and Evolution Laboratory

Introductory Ecology and Evolution Laboratory is designed to complement the Introductory Ecology and Evolution lecture course. The lab exercises are designed to expose students to the main themes that are discussed in the lecture portion of the course: the scientific method, ecology, evolution and the diversity of life.

Credits: 1
Offered: Every year.

BIOL 133 - Introductory Cell and Molecular Biology

The course will provide an introduction to cell and molecular biology. The material in this course should complement the topics covered in BIOL 131. The course is also designed to prepare students for Genetics, Biochemistry, and other upper-level biology courses. Students are expected to learn the basic concepts of cellular chemistry, types of cells, cell division, and the central dogma of molecular biology.

Credits: 3
Offered: Every year.

**BIOL 134 - Introductory Cell and Molecular Biology Laboratory**

This course provides students with an introduction into the ways that scientists study questions in cell and molecular biology. This laboratory is designed to complement BIOL 133 and it is recommended that students take the lecture course.

Credits: 1

**BIOL 220 - Principles of Human Nutrition**

This course will cover the principles of biological science involving the interactions between macro- and micronutrients and human physiological processes. A special emphasis will be placed on how nutrition can have an impact on human health and disease. Topics discussed will come from the disciplines of biochemistry, human physiology, medicine and exercise physiology.

Credits: 3

Prerequisite: CHEM 116 and CHEM 125 and BIOL 133.

Offered: Every Spring Semester.

**BIOL 222 - Introduction to Tropical Biology**

We will explore the complex biology of the world's tropics and the critical environmental problems. We will also examine the history of Costa Rica and how the environment, natural history, culture, history and politics have shaped the country. This course is co-requisite with BIOL 223, in which you will spend 2 weeks in Costa Rica.

Credits: 2

Offered: Every other year.

**BIOL 223 - Introduction to Tropical Biology Study Abroad Costa Rica**

This course is a 2 week study abroad program in Costa Rica which must be taken after the completion of BIOL 222, which is the lecture portion of the course. In this field portion we will directly study the complex biology of the tropics and witness critical environmental problems. The student will be immersed in the environment, natural history, culture, history and politics of Costa Rica.

Credits: 1

Offered: Every other year.

**BIOL 237 - Genetics**

The principles of genetic analysis and the nature of the gene. The course will cover Mendelian and molecular genetics. Key concepts covered will include the chromosomal and molecular basis of inheritance and replication, mutation and expression of genetic information.

Credits: 3

Prerequisite: BIOL 133. Offered: Every year.

**BIOL 238 - Genetics Laboratory**

Exercises will focus on the analysis of the inheritance of genes. DNA isolation and manipulation experiments will be performed. Students will perform experiments in classical and molecular genetics.

Credits: 1

Prerequisite: BIOL 133. Corequisite: BIOL 237. Offered: Every year.

**BIOL 243 - Organismal Biology**

The goal of the course is to develop an expanded knowledge of organismal biology. Coverage will include evolution, population genetics, and taxonomy. The course will also take a comparative approach examining anatomical and physiological adaptations of organisms in Domain Eukarya.

Credits: 3

Prerequisite: BIOL 131. Offered: Every year.

**BIOL 244 - Organismal Biology Laboratory**

The laboratory course provides expanded knowledge of hypothesis testing, evolution, taxonomy, and phylogeny construction. The course will also take a comparative approach examining anatomical and physiological adaptations of organisms in Domain Eukarya.

Credits: 1

Prerequisite: BIOL 131. Corequisite: BIOL 243. Offered: Every year.

**BIOL 245 - Human Anatomy and Physiology I**

The first course in a two-course sequence. Examines the structural and functional characteristics of the human body. From discussions of concepts of physiological control and levels of organization, this course concentrates on the components of the musculoskeletal system, the integument and an extensive description and analysis of neural and endocrine systems of control. Lab exercises support lecture topics, and involve hands-on activities including dissection and physiological measurement. This course is required for medical technology majors and exercise science majors and is an appropriate course for students planning careers in postgraduate allied health careers (e.g. pharmacy, physician's assistant, physical therapy).

Credits: 4

Prerequisite: BIOL 133 and BIOL 134 and CHEM 125 and CHEM 115. Offered: Every Fall semester.
BIOL 246 - Human Anatomy and Physiology II

The second course in a two-course sequence, the first being BIOL 245 Human Anatomy Physiology I. Concentrates on discussions of the structural and functional characteristics of the major organ systems of the body, including cardiovascular, respiratory, digestive, urinary and reproductive. Emphasis on the integrative nature of these systems to the maintenance of physiological function. Lab exercises support lecture topics, and involve hands-on activities including dissection and physiological measurement.

Credits: 4

Prerequisite: BIOL 245. Offered: Every Spring Semester.

BIOL 250 - Basic Concepts in Biology

Examination of selected areas of general biology for interested lower division major or non-major. Emphasis on developing basic background in such areas as botany, zoology, and the relationships between these fields and human society. Examples of courses offered include Field Natural History and Fungal Pathogens. Course may not be used as Biology major elective. Topics are determined by student interests.

Credits: 1-3

Prerequisite: BIOL 111 or BIOL 131. Offered: Offered on occasion.

BIOL 251 - Basic Concepts in Biology

Examination of selected areas of general biology for interested lower division major or non-major. Emphasis on developing basic background in such areas as botany, zoology, and the relationships between these fields and human society. Examples of courses offered include Field Natural History and Fungal Pathogens. Course may not be used as Biology major elective. Topics are determined by student interests.

Credits: 1-3

Prerequisite: BIOL 111 or BIOL 131. Offered: Offered on occasion.

BIOL 256 - Introduction to Clinical Science

A course designed to acquaint sophomores with various career opportunities available in medical technology. Educational requirements and professional responsibilities are also discussed. Small group discussions of clinical literature, and a tour of a hospital lab are featured.

Credits: 1

Offered: Every year.

BIOL 275 - Health Professions Careers

The course is designed to assist students in learning the requirements for admission into health professional schools. We will review the admissions requirements for medical, dental, optometry and veterinary medical colleges and discuss how students can best develop a competitive admissions application. We will also discuss the history of the different health professions.

Credits: 1

Offered: Every year.

BIOL 296 - Ecology of National Parks

This course will utilize a national park and the surrounding ecosystem as a case study to explore the science of ecology and ecosystem biology. The course will address the methods scientists use to explore natural systems. The course will also engage students in the use of basic research techniques and data analysis. We will emphasize ecological issues that have meaning for the management of public lands and thus address the application of scientific models outside of the discipline.

Credits: 3

Corequisite: ENGL 296. Offered: Every other year.

BIOL 310 - The Human Genome

The course will focus on human genes, their inheritance and the Human Genome Project. The broad subject area of genetics will be covered including studies of genes and genomes in other species to facilitate a better understanding of human genetics. For non-majors only.

Credits: 3

Prerequisite: BIOL 110 or BIOL 111. Offered: Offered on occasion.

BIOL 330 - Ecology

Introduction to ecology emphasizing general principles at individual, population, and community levels. Examples of various approaches (observation and experimentation, field and laboratory studies, and modeling and computer simulations) are considered.

Credits: 3

Prerequisite: BIOL 243 or BIOL 144. Offered: Every year.

BIOL 331 - Ecology Laboratory

Laboratories designed to give a diversity of experience, building upon principles of individual, population, and community ecology. A quantitative approach to the study of ecology is emphasized. Labs include plant and animal studies and field and laboratory experiments, as well as long- and short-term studies.

Credits: 1

Offered: Every year.
BIOL 333 - Biochemistry
The structure and function of proteins and the regulation of metabolic pathways will be the central concepts presented in the course. Students should gain an understanding of the fundamental principles of the biology of protein molecules.
Credits: 3
Prerequisite: CHEM 215 and (CHEM 225 or CHEM 230).
Offered: Every year.

BIOL 334 - Biochemistry Laboratory
Introduction to laboratory practice using biochemical techniques to isolate and characterize proteins. Enzyme kinetics and bioinformatics are also covered.
Credits: 1
Prerequisite: BIOL 333*. Cross-Listed as: * Indicates that the course can be taken in the same semester. Offered: Every year.

BIOL 336 - Mammalian Physiology
An integrative approach to systems physiology. After an initial discussion on mechanisms of cellular regulation of homeostasis, individual physiological systems, e.g. respiratory, cardiovascular, are examined. Organ and system action are related to demonstrate integration of function within the body. Major emphasis will be on normal human functions.
Credits: 3
Prerequisite: BIOL 133 and CHEM 215. Offered: Every year.

BIOL 337 - Mammalian Physiology Lab
A laboratory course designed to complement BIOL 336 Mammalian Physiology. Laboratory exercises examine, through experimentation, the integrative functions of organs and systems within the body. Labs include excitable cell physiology, cardiovascular, excretory and exercise physiology. Wherever possible, human models are utilized.
Credits: 1
Corequisite: BIOL 336. Offered: Every year.

BIOL 338 - Microbiology
Microbiology is the study of microorganisms: bacteria, archaea, viruses, and eukaryotes. We will study the diversity, ecology, biochemistry, genetics, pathogenicity, and other areas of microorganisms. The laboratory will include basic techniques for the isolation and identification of bacteria based on their metabolic, physical and genetic properties.
Credits: 4
Prerequisite: BIOL 237 and BIOL 333. Offered: Every year.

BIOL 343 - Conservation
Study of relationships of people with nature; extensive treatment of world and national problems related to use of natural resources. Basic approach is ecological, but impact of economic, sociological, political, and ethical concepts on human ecology examined. Note: Students in any Biology degree program may earn elective credit for only one of BIOL 343, 345 or 360.
Credits: 3
Prerequisite: BIOL 111. Offered: Offered on occasion.

BIOL 344 - Parasitology
A survey of the more important protozoan and helminth parasites of humans. Special emphasis is given to epidemiology, pathogenesis, diagnosis, and treatment of common parasitic diseases.
Credits: 1
Prerequisite: BIOL 131 and BIOL 133. Offered: Every year.

BIOL 345 - Emerging Infectious Diseases
The course will examine infectious diseases whose incidence in humans has increased within the past two decades. The course will focus on the etiological agents, infectious disease process, epidemiology, and the factors associated with the emergence and reemergence of these infectious diseases.
Credits: 3
Offered: Offered on occasion.

BIOL 360 - AIDS and STDs
Discussion of the many ways AIDS and STDs (sexually transmitted diseases) have affected people and the societies in which they live. The course includes information about human physiology, immune defense mechanisms, and microbiology. Detailed biological discussions focus on the transmission of AIDS and STDs, disease symptoms, treatment, and prevention, as well as information on the historical accounts, global and regional impact, ethical, legal and public policy considerations, economic impact of AIDS and STDs, and the psychosocial impact on the individual, family and community. For non-majors only.
Credits: 3
Prerequisite: BIOL 111 or BIOL 131 or BIOL 110. Offered: Offered on occasion.

BIOL 365 - Bioethics and New Embryology
Bioethics is a multidisciplinary study that examines the ethical treatment of patients in a medical environment. The field of bioethics emerged in the 1960s and is an important facet of both biology and philosophy. The field of bioethics developed in an environment of mutual
discussion between people of faith and more secular philosophers. Technological advancements such as in vitro fertilization (IVF), genetic engineering, and stem cell research have opened the door to many healthy debates about technological capabilities and the development of the embryo. To make informed judgments and participate effectively in debating these issues each person should understand the science behind the ethical debates. Advances in biology and medicine mean that there are important personal issues that arise concerning questions about the start and end of life. The course is not about deciding what is right or wrong, but to stimulate a significant discussion about issues such as: Should we encourage/ regulate IVF? Should we allow individuals to choose the sex of their child before it is implanted? Should we test and alter genes of an embryo? When does human life begin? Should we be allowed to genetically engineer embryos to provide the characteristics we desire (eye color, intelligence, etc)? Is therapeutic cloning acceptable and reproductive cloning off limits?

Credits: 3
Prerequisite: BIOL 237. Offered: Every year.

**BIOL 375 - Genes, Health, and Society**

The genetic makeup and environment in which humans develop makes each person unique. How do variations in these factors contribute to our physical and mental health? From a historical perspective, students will discuss how scientists and physicians study genes and genomes as well as how society reacts to the hope, hype, and fear surrounding these breakthroughs.

Credits: 3
Prerequisite: BIOL 110 or BIOL 111 or BIOL 133. Offered: Every year.

**BIOL 380 - Cell and Molecular Biology**

This course is designed as an introduction to modern cell biology. Cell biology is the meeting point of biochemistry, genetics, cytology and physiology and is vital to anyone with an interest in molecular biology. A cell biologist must not only be able to examine structures within a cell, but must understand the underlying molecular processes that govern the formation and regulation of those structures, as well as the interaction of those structures with each other and the environment both inside and outside the cell.

Credits: 3
Prerequisite: BIOL 237 and BIOL 238. Offered: Every Fall semester.

**BIOL 381 - Cell and Molecular Biology Lab**

This laboratory course is designed to familiarize students with some of the techniques used in cell biology research. Much of the emphasis will be on the use of fluorescence microscopy, but will take advantage of many tools that have been developed for use on the fluorescent microscope. We will also use biochemical techniques to examine proteins and cellular contents. During the semester, students will learn to identify particular functions and processes within the eukaryotic cell.

Credits: 1
Prerequisite: BIOL 237 and BIOL 238. Corequisite: BIOL 380. Offered: Every Fall semester.

**BIOL 397 - Biochemistry Seminar I**

Current biochemical research papers are analyzed in a journal club (open discussion) format. This course will help students to develop critical reading skills and underscore how an array of biochemical techniques are applied to address a research problem. Faculty from both biology and chemistry participate in this seminar.

Credits: 1
Offered: Offered on occasion.

**BIOL 410 - Tropical Biology**

A lecture and field course on the natural history and ecology of the neotropics. Students examine several terrestrial and marine tropical ecosystems, including lowland rain forests, elfin forests, mangrove communities, and coral reefs. Each student completes a field project and journal. One lecture per week during the semester followed by a two-week field experience in Costa Rica during winter break. Students are responsible for travel expenses. Restricted to majors with junior or senior standing.

Credits: 3
Offered: Every other year.

**BIOL 412 - Sociobiology**

The course covers social behavior from the perspective of evolutionary theory. Topics include sex, aggression, altruism, parent-offspring conflict, and the origin of cooperative societies.

Credits: 3
Prerequisite: BIOL 330. Offered: Every other year.

**BIOL 417 - Comparative Animal Physiology**

How animals maintain homeostasis in a non-homeostatic world. After a general introduction to mechanisms of cellular regulation and energetics the class will discuss specific physiological systems (respiratory, cardiovascular, osmoregulatory, etc.) and compare the modes and strategies employed by different animal groups in responding to changes in external environment. Particular attention directed to adaptations to marginal habitats, e.g. marine intertidal, deep sea hydrothermal vents, hot desert.

Credits: 3
Prerequisite: BIOL 336. Offered: Offered on occasion.
BIOL 419 - Genes and Genomes
The course will focus on the study of DNA and genes from the paper by Watson and Crick to the Human Genome Project. The genetic and molecular approaches used to identify genes and the impact of genome study on society and current scientific research will be discussed.
Credits: 3
Prerequisite: BIOL 237 or BIOL 335. Offered: Every other year.

BIOL 420 - Population/Community Ecology
Reading and discussion of primary literature relating to population and community ecology. Topics include population growth, life history patterns, competition, plant-animal interactions, and community organization.
Credits: 3
Prerequisite: BIOL 330. Offered: Offered on occasion.

BIOL 421 - Biological Conservation
An examination of species diversity with an emphasis on human activities which affect these patterns. Major topics will include the effects of land use practices, habitat fragmentation, invasive species and pollution on the current distribution and extinction patterns of plants and animals.
Credits: 3
Prerequisite: BIOL 330. Offered: Every other year.

BIOL 422 - Physiological Ecology
Reading and discussion of primary literature relating to animal interactions with the environment. Examination of potential effects of specific habitats (e.g. deserts, deep sea) and the physiological responses of various animals to these environmental challenges.
Credits: 3
Prerequisite: BIOL 330. Offered: Offered on occasion.

BIOL 424 - Aquatic Biology
Classification and biology of major groups of organisms that inhabit freshwater environments, characteristics of aquatic habitats, pollution of aquatic environments, and the role of physical and chemical factors in aquatic ecosystems.
Credits: 3
Prerequisite: BIOL 243. Offered: Every other year.

BIOL 426 - Current Environmental Topics
The focus of the course is on global environmental issues. The issues examined have been making the news during the last year and at the time the course is taught. Changes in climate, overpopulation, pollution, conservation, development, genetically modified organisms, invasive species, illegal species trade, etc. are some of the ongoing issues that are covered in the course. The format of the course invites participation, discussion and critical thinking.
Credits: 3
Prerequisite: BIOL 243 or BIOL 144. Offered: Every year.

BIOL 427 - Fisheries Science
The course is an overview of ichthyology, fisheries biology, and fisheries conservation. Students will be introduced to the taxonomic diversity of fish, fish adaptations, techniques and models used in the study of fish populations, community interactions, and issues concerning fisheries conservation and management. Special emphasis will be placed on understanding Great Lakes fisheries.
Credits: 3
Prerequisite: BIOL 330. Offered: Every other year.

BIOL 431 - Senior Seminar
Reading, discussion, and analysis of current topics of biological significance using original source material from primary biological periodicals. Students prepare and present a seminar based on an extensive review of the available literature.
Credits: 1
Offered: Every semester.

BIOL 434 - Animal Behavior
The course will provide background to the discipline of animal behavior and examine the levels of questioning in this field. It will discuss the influence of genetics and the environment on behavior (nature vs. nurture). It will then magnify our focus to the roots of behavior, the proximate causes of behavior, specifically its neural and hormonal control. It will examine the cases of bird song, electric fish EODs, shark electroreception, moth hearing and bat echolocation. It will then focus on those behaviors that make up the many tasks animals must accomplish to survive and reproduce.
Credits: 3
Prerequisite: BIOL 243 or BIOL 144. Offered: Every year.
BIOL 435 - Developmental Biology
A study of animal development integrating descriptive, experimental, cellular, and molecular studies of gametogenesis, fertilization, cleavage, gastrulation, induction, and maturation. Labs examine development from an historical perspective including: descriptive, experimental and molecular embryology incorporating hypothesis testing through the use of micromanipulation, cell culture and immunohistochemistry. Two lectures, one laboratory.
Credits: 3
Prerequisite: BIOL 333 or CHEM 333. Offered: Every year.

BIOL 437 - Molecular Genetics Laboratory
Molecular genetics is a broad term that describes a collection of techniques that biologists use to study and manipulate the physiology, biochemistry, and genetics of a cell at a molecular level. This course is designed to help students build their molecular toolkit and teach them how to bring the concepts learned in lecture courses to bear on a research project.
Credits: 2
Prerequisite: BIOL 237 and BIOL 238 and BIOL 333 or CHEM 333 and BIOL 334 or CHEM 334. Offered: Every year.

BIOL 438 - Molecules and Medicine
The course will cover material on traditional drugs used in medicine and discuss the transition to new drugs that have been designed to interact with a specific target. An emphasis will be on understanding the molecular details of drug-target interactions and the mechanism of actions of pharmaceutical drugs. Students will discuss ethical issues relating to medicine and pharmaceuticals. Students will read primary literature and review articles as the primary sources of information in the course.
Credits: 3
Prerequisite: BIOL 333. Offered: Every other year.

BIOL 440 - Undergraduate Research
Independent study and research of mutual interest with faculty member in such areas as morphology, physiology, evolution, development, population dynamics, genetics, biochemistry, cell and subcellular biology, microbiology, ecology, behavior and conservation. Course may be repeated; maximum of 12 credits count toward the B.S. degree, only 3 of which may be included in a Biology major. Note: Students may earn Biology elective credit for only one of BIOL 440/1 or 458. Permission of department required.
Credits: 1-3
Offered: Every semester.

BIOL 441 - Undergraduate Research
Independent study and research of mutual interest with faculty member in such areas as morphology, physiology, evolution, development, population dynamics, genetics, biochemistry, cell and subcellular biology, microbiology, ecology, behavior and conservation. Course may be repeated; maximum of 12 credits count toward the B.S. degree, only 3 of which may be included in a Biology major. Note: Students may earn Biology elective credit for only one of BIOL 440/1 or 458. Permission of department required.
Credits: 1-3
Offered: Every semester.

BIOL 443 - Plant Physiology
Study of the life processes and responses of plants, including water relations and transport, photosynthesis and general metabolism, mineral and organic nutrition, photoperiodic responses and rhythms, growth and differentiation, and plant relationships with the environment.
Credits: 3
Prerequisite: BIOL 133. Offered: Offered on occasion.

BIOL 447 - Evolution
Consideration of the theoretical framework of evolutionary biology and the mechanisms of evolution. Special topics include microevolution, macroevolution, and coevolution.
Credits: 3
Prerequisite: BIOL 237 or BIOL 243 or BIOL 335. Offered: Every other year.

BIOL 450 - Modern Concepts in Biology
An in-depth examination of selected areas of biology for interested upper-division students. Topics are determined by faculty and student interests and emphasize methods and recent research developments. Examples of topics currently offered on a rotating basis include: Biomembranes, Hormone Mechanisms, Molecular Biology, Cell/Hybridoma Culture, and Biology of Terrestrial Vertebrates.
Credits: 1-4
Offered: Every semester.

BIOL 451 - Modern Concepts in Biology
An in-depth examination of selected areas of biology for interested upper-division students. Topics are determined by faculty and student interests and emphasize methods and recent research developments. Examples of topics currently offered on a rotating basis include: Biomembranes, Hormone Mechanisms, Molecular Biology, Cell/Hybridoma Culture, and Biology of Terrestrial Vertebrates.
Biology, Cell/Hybridoma Culture, and Biology of Terrestrial Vertebrates.

Credits: 1-3

Offered: Every semester.

**BIOL 453 - Basic Hematology**

Introduction to the study of blood, its cellular components, and various blood diseases. Laboratory exercises include a variety of manual techniques involved with blood cell counts and determinations.

Credits: 1

Prerequisite: BIOL 131 and BIOL 133. Offered: Every year.

**BIOL 457 - Biostatistics**

A review of statistical tests frequently used in the biological sciences. Emphasis is placed on understanding experimental design and what statistics can and cannot do. Uses of computer statistical packages are also considered.

Credits: 3

Prerequisite: STAT 250. Offered: Every other year.

**BIOL 458 - Lab Supervision in Biology**

A supervisory experience in teaching of the biology department's laboratories under the guidance of a faculty member. Student experiences may include; preparing materials for the lab, and demonstrating procedures and techniques to students. Note: Students may earn Biology elective credit for only one of BIOL 440/1 or 458. Permission of department required.

Credits: 1

Offered: Every semester.

**BIOL 461 - Immunology and Serology**

Study of the mechanisms of the immune response including cellular basis of immunity and molecular basis of antigen-antibody reactions. Regulation of antibody production and cell-mediated reactivity examined. Current clinical applicability considered in discussion of tumor, transplantation, allergy-related, and autoimmune immunobiology. Several laboratory exercises included involving serological/immunological determinations detecting antigen-antibody interactions. Three lectures.

Credits: 3

Prerequisite: BIOL 333* and (BIOL 237 or BIOL 335). Cross-Listed as: * Indicates that the course can be taken in the same semester. Offered: Every year.

**BIOL 465 - Advanced Experimental Biochemistry**

State-of-the-art biochemical and molecular techniques are taught within this hands-on, laboratory-based course.

Potential topics include the polymerase chain reaction (PCR), oligonucleotide synthesis, DNA/protein sequencing and analysis (BLAST, DNASIS), pulse-field gel electrophoresis, gas chromatography-mass spectroscopy (GC-MS), nuclear magnetic resonance (NMR) spectroscopy, high performance liquid chromatography (HPLC), immunochemistry, and/or other contemporary techniques.

Credits: 2

Prerequisite: BIOL 334 or CHEM 334. Offered: Every year.

**BIOL 466 - Current Issues in Developmental Biology**

Course focuses on recent developments in the rapidly expanding field of developmental biology. With the advent of the tools available to molecular biologists, the course will study recent advances in the genetic understanding of various aspects of embryological development and regeneration. The course will present a variety of topics including: fertilization, gastrulation, maternal effect genes, pattern formation, and evolutionary aspects of development. Junior standing in major required.

Credits: 3

Offered: Every other year.

**BIOL 468 - Biomembranes**

The objectives of the course include: identification of different types of membranes based upon composition, morphology and cellular functions, and examination of experiments which have provided understanding of how membranes function in cells and organisms. Topics include membrane composition, electron microscope techniques, membrane transport, membrane proteins and enzymes, receptors, hormone interaction, cell recognition, secretion, and biogenesis of membranes.

Credits: 3

Prerequisite: BIOL 333. Offered: Every other year.

**BIOL 469 - Eukaryotic Gene Regulation**

In-depth examination of the ways in which eukaryotic cells regulate their protein composition at the levels of genome replication, transcription, post-transcriptional modifications, and translations. Topics include chromatin structure, transcription factors, and DNA sequence elements, several cell-type specific transcriptional events and how they are regulated, as well as how transcriptional regulation gone awry can cause cancer.

Credits: 3

Prerequisite: BIOL 237 or BIOL 335. Offered: Offered on occasion.
**BIOL 470 - Hormone Mechanisms**
Course will examine the basic physiological, cellular and molecular pathways which regulate metabolism, growth, and neurological activities of organisms, especially mammals. Discussions will follow text information and general models will be supported with primary research literature to show developments from recent experiments.
Credits: 3
Prerequisite: BIOL 333. Offered: Every other year.

**BIOL 472 - Microbial Pathogenesis**
Course focuses on the molecular basis of microbial pathogenesis. Through the application of molecular techniques to the study of the microbe-host interaction, scientists are gaining a fundamental understanding of the virulence mechanisms of microbial pathogens. Using primary literature the course will illustrate how the integration of the molecular basis of virulence mechanisms with the clinical aspects of disease has enhanced understanding of the pathogenesis of infectious diseases.
Credits: 3
Offered: Offered on occasion.

**BIOL 473 - Animal Communication**
The course will provide a background for the field of animal communication including a discussion of definitions of animal communication. It will then survey the production, transmission and reception of auditory, visual, and chemical signals. Optimality theory and signal detection theory will be introduced as they apply to animal communication. It will spend some time on how signals come to be and why they have the design they do (signal evolution). Finally, it will investigate signaling in a variety of situations such as between potential mates, other conspecifics, as well as environmental and autocommunication signaling.
Credits: 3
Prerequisite: BIOL 243. Offered: Every other year.

**BIOL 475 - Advanced Biochemistry**
A continuation of BIOL 333, the course explores biochemical concepts and pathways with an emphasis on problem solving. Cellular control and coordination of biochemical pathways is emphasized in light of an advanced understanding of protein biochemistry. Lecture only.
Credits: 3
Prerequisite: BIOL 333 or CHEM 333. Offered: Every year.

**BIOL 480 - Molecular Biology of Disease**
The course will cover topics relating to the genetic and biochemical etiology of human disease. Through examination of the primary literature, students will become familiar with the techniques used to study and treat diseases at the molecular level. Specific topics covered include inborn errors in metabolism, cholesterol homeostasis, protein folding diseases, cancer, gene therapy, and stem cell therapy. Students will formulate an independent research proposal based on examination of current literature on a disease of their choosing.
Credits: 3
Prerequisite: BIOL 333. Offered: Every year.

**BIOL 490 - Biology Internship**
Approved biology-related experiences in academia, government, industry or other foundations. Requires the permission of the department and faculty sponsor.
Credits: 1-15
Offered: Every semester.

**BIOL 491 - Senior Capstone - Research**
BIOL 491-Senior Capstone Each Biology major will perform a capstone experience in their senior year. The experience can take the form of research, an internship or course, and will provide significant learning experiences in problem solving and written and oral communication.
Capstone Research: The student will fulfill expectations for capstone research via two semesters of UGR (3 credits/semester) during the senior year, or a 10 week summer research position during the summer before the senior year. The faculty mentor will bear responsibility for the evaluation of the learning and inquiry experience. A formal paper will be expected. Oral presentation will occur during a capstone UGR/internship symposium. Note: Students opting for a capstone experience that does not involve significant laboratory or field work will be required to take at least one lab or field course as part of their 12 hours of upper level Biology electives.
Credits: 1-3
Offered: Every semester.

**BIOL 492 - Senior Capstone - Internship**
BIOL 492-Senior Capstone Each Biology major will perform a capstone experience in their senior year. The experience can take the form of research, an internship or course, and will provide significant learning experiences in problem solving and written and oral communication.
Capstone Internship: The student will fulfill expectations for capstone internship via a 3 credit internship experience (120 hours). Acceptable experiences include job apprenticeships (not unlike the clinical internships of MT students) involving very active learning. Research projects
performed off-campus (not including REUs) are also acceptable as capstone internship experiences. A site supervisor will provide evaluations to the faculty mentor; the faculty mentor will bear responsibility for the final evaluation of the learning experience. A formal paper will be expected. Oral presentation will occur during a capstone UGR/internship symposia. Note: Students opting for a capstone experience that does not involve significant laboratory or field work will be required to take at least one lab or field course as part of their 12 hours of upper level Biology electives.

Credits: 1-3

Offered: Every semester.

BIOL 493 - Senior Capstone - Course

BIOL 493-Senior Capstone Each Biology major will perform a capstone experience in their senior year. The experience can take the form of research, an internship or course, and will provide significant learning experiences in problem solving and written and oral communication. Capstone Course: We will offer capstone 'sections' of UL courses on a rotating basis. Some of these courses will be modifications of currently existing courses; other will be new courses. Examples may include Molecular Biology of Disease, Cancer Biology, and Evolution. Courses will be designed to include significant inquiry based learning, problem solving, and written and oral presentation® enrollment will be limited and carefully controlled. Students will write a formal paper and offer a formal presentation. Note: Students opting for a capstone experience that does not involve significant laboratory or field work will be required to take at least one lab or field course as part of their 12 hours of upper level Biology electives.

Credits: 3

Offered: Every semester.

BIOL 497 - Biochemistry Seminar II

Students prepare oral presentations based on an assessment of current biochemical research papers. The course will help students to further develop critical reading and scientific communication skills. Faculty from both biology and chemistry participate in the seminar.

Credits: 1

Prerequisite: BIOL 397. Offered: Every year.

BIOL 499 - Independent Study - Undergraduate

In Independent Study, students will perform literature reviews and learn how to design experiments and collect and analyze data. Student expectations will vary based upon the biological discipline and the number of credits. Junior/Senior standing in the major.

Credits: 1-3

Offered: Every semester.

BIOL 501 - Biochemistry

Advanced discussion of biological chemistry; chemistry of carbohydrates, lipids and proteins, and nucleic acids; bioenergetics; the structure and mechanism of enzyme action; protein biosynthesis; molecular genetics; selected topics in immunochemistry, and biochemical endocrinology.

Credits: 3

Prerequisite: CHEM 216. Offered: Offered on occasion.

BIOL 502 - Methods in Biochemistry

Theory and laboratory experiments demonstrating the techniques and applications of contemporary biochemistry including electrophoresis, chromatography, centrifugation, radioisotope methods, DNA sequencing, enzymology, spectrophotometry and gas chromatography.

Credits: 3

Prerequisite: BIOL 501. Offered: Offered on occasion.

BIOL 510 - Tropical Biology

A lecture and field course on the natural history and ecology of the neotropics. Students examine several terrestrial and marine tropical ecosystems, including lowland rain forests, elfin forests, mangrove communities, and coral reefs. Each student completes a field project and journal. One lecture per week during the semester followed by a two-week field experience in Costa Rica during winter break. Students are responsible for travel expenses.

Credits: 3

Offered: Every other year.

BIOL 511 - Graduate Research Methods

This course is required for all M.S. students in the Department of Biology and aims to prepare students with the essentials of doing science, from formulating questions through data analysis and interpretation. We will address the nature of scientific reasoning, principles of research design, elements of scientific data, statistical analyses, and effective presentation of results.

Credits: 3

Offered: Every year.

BIOL 512 - Sociobiology

The course covers social behavior from the perspective of evolutionary theory. Topics include sex, aggression, altruism, parent-offspring conflict, and the origin of cooperative societies. Graduate students will write a research intensive review article, using primary literature. Papers should provide a thorough review of a specific sociobiological hypothesis applied to limited taxa. I expect
you to cover all up-to-date primary sources that pertain to your topic. The paper should be about 10 pages long. Topics must be approved by the instructor. Graduate students will present their term papers to the class during the final two class periods. Presentations should use PowerPoint and last 15 minutes plus 3-5 minutes for questions.

Credits: 3
Offered: Every other year.

**BIOL 517 - Comparative Animal Physiology**

How animals maintain homeostasis in a non-homeostatic world. After a general introduction to mechanisms of cellular regulation and energetics, discussion will include specific physiological systems (respiratory, cardiovascular, osmoregulatory, etc.) and compare the modes and strategies employed by different animal groups in responding to changes in external environment. Particular attention directed to adaptations to marginal habitats, e.g. marine intertidal, deep sea hydrothermal vents, hot desert.

Credits: 3
Prerequisite: BIOL 336. Offered: Offered on occasion.

**BIOL 519 - Genes and Genomes**

The course will focus on the study of DNA and genes from the paper by Watson and Crick to the Human Genome Project. The genetic and molecular approaches used to identify genes and the impact of genome study on society and current scientific research will be discussed.

Credits: 3
Offered: Every other year.

**BIOL 520 - Population and Community Ecology**

Reading and discussion of primary literature relating to population and community ecology. Topics include population growth life history patterns, competition, plant-animal interactions, and community organization.

Credits: 3
Prerequisite: BIOL 330. Offered: Offered on occasion.

**BIOL 521 - Graduate Science Communication**

This course is required for all M.S. students in the Department of Biology and aims to prepare graduate students for the various kinds of science communication that they will be engaged in. This includes preparation and submission of scientific manuscripts for publication, review of manuscripts, preparation of grant proposals, and communicating with the public.

Credits: 3
Offered: Every year.

**BIOL 522 - Physiological Ecology**

Reading and discussion of primary literature relating to physiological and ecosystem ecology. Topics include resource acquisition, energetics, nutrient cycling, and energy flow.

Credits: 3
Prerequisite: BIOL 330. Offered: Offered on occasion.

**BIOL 524 - Aquatic Biology**

The course covers the classification and biology of major groups of organisms found in fresh water, characteristics of aquatic habitats, pollution of aquatic environments, and the role of physical and chemical factors in aquatic ecosystems.

Credits: 3
Prerequisite: BIOL 330. Offered: Every other year.

**BIOL 526 - Current Environmental Topics**

The focus of the course is on global environmental issues. The issues examined have been making the news during the last year and at the time the course is taught. Changes in climate, overpopulation, pollution, conservation, development, genetically modified organisms, invasive species, illegal species trade, etc. are some of the ongoing issues that are covered in the course. The format of the course invites participation, discussion and critical thinking.

Credits: 3
Offered: Every year.

**BIOL 527 - Fisheries Science**

The course is an overview of ichthyology, fisheries biology, and fisheries conservation. Students will be introduced to the taxonomic diversity of fish, fish adaptations, techniques and models used in the study of fish populations, community interactions, and issues concerning fisheries conservation and management. Special emphasis will be placed on understanding the Great Lakes fisheries.

Credits: 3
Prerequisite: BIOL 144. Offered: Every other year.

**BIOL 534 - Animal Behavior**

The course will first provide background to the discipline of animal behavior and examine the levels of questioning in this field. The class will discuss the influence of genetics and the environment on behavior (nature vs. nurture). It will magnify its focus to the roots of behavior, the proximate causes of behavior, specifically its neural and hormonal control. The class will examine the cases of bird song, electric fish EODs, shark electoreception, moth hearing and bat echolocation, and then focus on those
behaviors that make up the many tasks animals must accomplish to survive and reproduce.

Credits: 3
Offered: Offered on occasion.

**BIOL 538 - Molecules and Medicine**

The course will cover material on traditional drugs used in medicine and discuss the transition to new drugs that have been designed to interact with a specific target. An emphasis will be on understanding the molecular details of drug-target interactions and the mechanism of actions of pharmaceutical drugs. Students will discuss ethical issues relating to medicine and pharmaceuticals. Students will read primary literature and review articles as the primary sources of information in the course.

Credits: 3
Prerequisite: BIOL 501. Offered: Every other year.

**BIOL 543 - Plant Physiology**

Study of the life processes and responses of plants, including water relations and transport, photosynthesis and general metabolism, mineral and organic nutrition, photoperiodic responses and rhythms, growth and differentiation, and plant relationships with the environment. Laboratory includes problems and exercises in whole plant physiology as well as at the molecular level. The laboratory stresses methods rather than results. Two lectures, one laboratory.

Credits: 3
Offered: Offered on occasion.

**BIOL 544 - Radiation Biology**

Lectures on techniques required for application of radioactive isotopes to biological research. Experimental isotope tracer techniques deal with in vitro and in vivo labeling as well as autoradiographic studies. Variety of living systems used.

Credits: 3
Offered: Offered on occasion.

**BIOL 547 - Evolution**

Consideration of the theoretical framework of evolutionary biology and the mechanisms of evolution. Special topics include microevolution, macroevolution and coevolution.

Credits: 3
Offered: Every other year.

**BIOL 550 - Current Concepts in Biology**

An in-depth examination of selected areas of biology for interested upper-division students. Topics are determined by faculty and student interests and emphasize methods and recent research developments. Examples of topics currently offered on a rotating basis include: Biomembranes, Molecular Genetics, Cell and Hybridoma Culture, Enzymes, Ethology, Hormone Mechanisms, Bioenergetics, Microbial Genetics, Field Biology, and Advanced Developmental Biology, PCR, DNA Synthesis and Immunology.

Credits: 1-4
Offered: Offered on occasion.

**BIOL 551 - Current Concepts in Biology**

An in-depth examination of selected areas of biology for interested upper-division students. Topics are determined by faculty and student interests and emphasize methods and recent research developments. Examples of topics currently offered on a rotating basis include: Biomembranes, Molecular Genetics, Cell and Hybridoma Culture, Enzymes, Ethology, Hormone Mechanisms, Bioenergetics, Microbial Genetics, Field Biology, and Advanced Developmental Biology, PCR, DNA Synthesis and Immunology.

Credits: 1-3
Offered: Offered on occasion.

**BIOL 557 - Biostatistics**

Statistical tests frequently used in the biological sciences. Emphasis is placed on understanding what statistics can and cannot do, the meaning of a statistical test, and how to choose an appropriate statistical test. Uses of microcomputer and mainframe statistical packages (SPSS or MINITAB) are also considered.

Credits: 3
Offered: Every other year.

**BIOL 564 - Mammalogy**

Consideration of taxonomy, ecology, and physiology of mammals; world fauna examined although emphasis on local species. Field population studies, collection and preservation of specimens, and studies in physiological adaptations of mammals.

Credits: 3
Offered: Offered on occasion.

**BIOL 566 - Current Issues in Developmental Biology**

Course focuses on recent developments in the rapidly expanding field of developmental biology. With the advent of the tools available to molecular biologists, the course will study recent advances in the genetic understanding of various aspects of embryological development and regeneration. The course will present a variety of topics including: fertilization, gastrulation, maternal effect genes, pattern formation, and evolutionary aspects of development.
BIOL 567 - Biomembranes
The objectives of this course include: identification of different types of membranes based upon composition, morphology and cellular functions, and examination of experiments which have provided understanding of how membranes function in cells and organisms. Topics include membrane composition, electron microscope techniques, membrane transport, membrane proteins and enzymes, receptors, hormone interaction, cell recognition, secretion, and biogenesis of membranes.
Credits: 3
Prerequisite: BIOL 333. Offered: Every other year.

BIOL 569 - Eukaryotic Gene Regulation
In-depth examination of the ways in which eukaryotic cells regulate their protein composition at the levels of genome replication, transcription, post-transcriptional modifications, and translation. Topics include chromatin structure, transcription factors, and DNA sequence elements, several cell-type specific transcriptional events and how they are regulated, as well as how transcriptional regulation gone awry can cause cancer.
Credits: 3
Prerequisite: BIOL 241 and BIOL 335. Offered: Offered on occasion.

BIOL 570 - Hormone Mechanisms
The course will examine the basic physiological, cellular and molecular pathways which regulate metabolism, growth, and neurological activities of organisms, especially mammals. Discussions will follow text information and general models will be supported with primary research literature to show developments from recent experiments.
Credits: 3
Prerequisite: BIOL 333. Offered: Every other year.

BIOL 572 - Microbial Pathogenesis
The course focuses on the molecular basis of microbial pathogenesis. Through the application of molecular techniques to the study of the microbe-host interaction, scientists are gaining a fundamental understanding of the virulence mechanisms of microbial pathogens. Using primary literature the course will illustrate how the integration of the molecular basis of virulence mechanisms with the clinical aspects of disease has enhanced understanding of the pathogenesis of infectious diseases.
Credits: 3
Prerequisite: BIOL 333 and BIOL 335. Offered: Offered on occasion.

BIOL 573 - Animal Communication
The course will first provide a background for the field of animal communication including a discussion of definitions of animal communication. The class will then survey the production, transmission and reception of auditory, visual, and chemical signals. Optimality theory and signal detection theory will be introduced as they apply to animal communication. The class will spend some time on how signals come to be and why they have the design they do (signal evolution), and will investigate signaling in a variety of situations such as between potential mates, other conspecifics, and autocommunication signaling.
Credits: 3
Offered: Every other year.

BIOL 580 - Molecular Biology of Disease
The course will cover topics relating to the genetic and biochemical etiology of human disease. Through examination of the primary literature, students will become familiar with the techniques used to study and treat diseases at the molecular level. Specific topics covered include inborn errors in metabolism, cholesterol homeostasis, protein folding diseases, cancer, gene therapy, and stem cell therapy. Students will formulate an independent research proposal based on examination of current literature on a disease of their choosing.
Credits: 3
Offered: Every year.

BIOL 590 - Graduate Seminar
Presentation of detailed study of topic of current interest in the biological literature. Attendance and one seminar presentation required for three semesters of all candidates for the master's degree. Students completing thesis research must present their results orally prior to their scheduled thesis defense.
Credits: 1
Offered: Every semester.

BIOL 600 - Seminar
Presentation of detailed study of topic of current interest in the biological literature. Attendance and one seminar presentation required for three semesters of all candidates for the master's degree. Students completing thesis research must present their results orally prior to their scheduled thesis defense.
Credits: 1-3
Offered: Every other year.
BIOL 601 - Seminar
Presentation of detailed study of topic of current interest in the biological literature. Attendance and one seminar presentation required for three semester of all candidates for the master’s degree. Students completing thesis research must present their results orally prior to their scheduled thesis defense.
Credits: 1
Offered: Every other year.

BIOL 611 - Cell Regulation
Integrated study of regulation at various levels within the cell. Molecular control of cellular activity and its interconnection with biochemistry including regulation of enzyme activity, nucleic acid and protein biosynthesis, metabolic control by hormones, and membrane regulatory functions.
Credits: 3
Prerequisite: BIOL 501. Offered: Offered on occasion.

BIOL 646 - Reproductive Physiology
Treatment of reproductive mechanisms in higher vertebrates; particular attention to mammals. Topics include biology of sex, structure-function relationship in male and female reproductive systems, gametogenesis, gonadal steroids, nongonadal endocrine control mechanisms, cyclic reproductive phenomena, insemination and fertilization, biparity, pregnancy, parturition and lactation, fertility and sterility, and effects of environment and nutrition on reproductive processes.
Credits: 3
Prerequisite: BIOL 501. Offered: Offered on occasion.

BIOL 650 - Special Topics in Biology
Comprehensive reviews of current state of biological investigation for advanced graduate students. Analysis of frontiers of scientific advancement in molecular biology, quantitative ecology, and physiology.
Credits: 1-3
Offered: Offered on occasion.

BIOL 680 - Graduate Research
Research conducted by a graduate student in the Comprehensive Exam option of our MS programs under the supervision of a member of the Biology Department faculty
Credits: 1-3
Offered: Offered on occasion.

BIOL 690 - Thesis Research
Directed research culminating in the preparation of a thesis.
Credits: 1-9
Offered: Every semester.

BIOL 691 - Thesis
Directed research culminating in the preparation of a thesis.
Credits: 1-9
Offered: Every semester.

BIOL 695 -
Graduate students are required to remain continuously enrolled until completion of thesis/capstone work in order to allow continuing usage of university resources and to accurately account for faculty involvement.
Credits: 1
Offered: Every semester.

BIOL 699 - Independent Study - Graduate
Primarily intended for thesis graduate students wishing to perform a thorough and directed literature review in support of their graduate research. Graduate students will develop the independent study activities with the assistance and approval of their research professor; formal assessment mechanisms to be determined by the professor. May be appropriate for non-thesis graduate students wishing to perform a thorough and directed literature review under the supervision of a professor, leading to the development of a formal paper.
Credits: 1-3
Offered: Every semester.

BIOL 3SA - 300 Level Study Abroad Elective
A course taken during a study abroad experience that does not have a direct equivalency to a Fredonia course.
Credits: 0-12
Offered:

BUAD - Business Administration

BUAD 100 - Pathway to Success: Business
An introductory forum providing the information, knowledge, skills and strategies for success in Business Administration and Accounting at Fredonia and beyond. The course provides an introduction to education and careers in business, and an orientation to the functions and resources provided by the Business Administration department and the university as a whole.
BUAD 101 - Understanding Business
An introduction to the art and science of mobilizing, in pursuit of profit, scarce resources in order to satisfy customers' demand for quality products and services. Topics such as evolution of American business enterprises, social responsibility, production management, human resource management, marketing, accounting, and international business will be introduced. The course is designed primarily for non-majors, although open to Business Administration freshman/sophomore students.

BUAD 200 - Fundamentals of Statistics for Business and Economics
An introductory study of statistical methods as applied to business and economic problems. Topics covered include: frequency distributions, measures of central tendency, measures of dispersion, probability, probability distributions, sampling distributions, estimation, and statistical inference. Note: Credit for at most one of the following courses may be applied towards a student's requirements for graduation: BUAD 200, ECON 200, EDU 200, POLI 200, SOC 200, and STAT 200.

BUAD 310 - Legal Environment of Business
A one semester survey course of legal issues affecting individuals and businesses. Topics covered include dispute resolution, contract law, torts, agency law, and laws governing the creation, operation, and termination of business organizations. Various public law topics will be examined, as well as principles of international law, and theoretical considerations.

BUAD 315 - Principles of Business Finance
An examination of the conceptual and institutional framework within which the financial manager operates. Topics cover management and valuation of assets, including management of funds and working capital, financial planning and capital budgeting in a national and global environment.

BUAD 319 - Health Care Finance
An introductory course on the application of financial management techniques in the health care industry. Particular emphasis is placed on understanding the unique problems facing the industry in the financial relationships among hospitals, patients, physicians and other providers, insurance, capital suppliers and governmental agencies.

BUAD 320 - Managerial Finance
The techniques of managerial finance as a decision science, in the context of owner wealth maximization and alternative business goals, are presented. The topics include time value of money, risk analysis, capital budgeting, capital structure, dividend theory, financial analysis, working capital management and foreign exchange risk management. NOTE: Students must earn a minimum C- grade in the prerequisite courses.

BUAD 321 - Introduction to Business Communication
The highly practical course focuses on the critical communication skills involved in effective written and oral communication while emphasizing applications of communication concepts in the world of business. Students will be able to engage in application exercises, build their exploratory skills, and confront problems of diversity. The course is cross listed with COMM 235.

BUAD 322 - Statistical Analysis
A study of the techniques and tools used in analyzing business and economic data with equal emphasis on estimation techniques and interpretation of results. Simple and multiple regression methods, simple time series analysis, non-parametric techniques, analysis of variance, and surveying are reviewed. Use of computer software for statistical analysis is included. Note: Students must earn a minimum C- grade in the prerequisite courses.

BUAD 325 - Legal Environment of Business
A one semester survey course of legal issues affecting individuals and businesses. Topics covered include dispute resolution, contract law, torts, agency law, and laws governing the creation, operation, and termination of business organizations. Various public law topics will be examined, as well as principles of international law, and theoretical considerations.

BUAD 330 - Managerial Finance
The techniques of managerial finance as a decision science, in the context of owner wealth maximization and alternative business goals, are presented. The topics include time value of money, risk analysis, capital budgeting, capital structure, dividend theory, financial analysis, working capital management and foreign exchange risk management. NOTE: Students must earn a minimum C- grade in the prerequisite courses.

BUAD 331 - Health Care Finance
An introductory course on the application of financial management techniques in the health care industry. Particular emphasis is placed on understanding the unique problems facing the industry in the financial relationships among hospitals, patients, physicians and other providers, insurance, capital suppliers and governmental agencies.

BUAD 332 - Managerial Finance
The techniques of managerial finance as a decision science, in the context of owner wealth maximization and alternative business goals, are presented. The topics include time value of money, risk analysis, capital budgeting, capital structure, dividend theory, financial analysis, working capital management and foreign exchange risk management. NOTE: Students must earn a minimum C- grade in the prerequisite courses.

BUAD 333 - Health Care Finance
An introductory course on the application of financial management techniques in the health care industry. Particular emphasis is placed on understanding the unique problems facing the industry in the financial relationships among hospitals, patients, physicians and other providers, insurance, capital suppliers and governmental agencies.

BUAD 334 - Managerial Finance
The techniques of managerial finance as a decision science, in the context of owner wealth maximization and alternative business goals, are presented. The topics include time value of money, risk analysis, capital budgeting, capital structure, dividend theory, financial analysis, working capital management and foreign exchange risk management. NOTE: Students must earn a minimum C- grade in the prerequisite courses.

BUAD 335 - Health Care Finance
An introductory course on the application of financial management techniques in the health care industry. Particular emphasis is placed on understanding the unique problems facing the industry in the financial relationships among hospitals, patients, physicians and other providers, insurance, capital suppliers and governmental agencies.

BUAD 336 - Managerial Finance
The techniques of managerial finance as a decision science, in the context of owner wealth maximization and alternative business goals, are presented. The topics include time value of money, risk analysis, capital budgeting, capital structure, dividend theory, financial analysis, working capital management and foreign exchange risk management. NOTE: Students must earn a minimum C- grade in the prerequisite courses.

BUAD 337 - Health Care Finance
An introductory course on the application of financial management techniques in the health care industry. Particular emphasis is placed on understanding the unique problems facing the industry in the financial relationships among hospitals, patients, physicians and other providers, insurance, capital suppliers and governmental agencies.

BUAD 338 - Managerial Finance
The techniques of managerial finance as a decision science, in the context of owner wealth maximization and alternative business goals, are presented. The topics include time value of money, risk analysis, capital budgeting, capital structure, dividend theory, financial analysis, working capital management and foreign exchange risk management. NOTE: Students must earn a minimum C- grade in the prerequisite courses.

BUAD 339 - Health Care Finance
An introductory course on the application of financial management techniques in the health care industry. Particular emphasis is placed on understanding the unique problems facing the industry in the financial relationships among hospitals, patients, physicians and other providers, insurance, capital suppliers and governmental agencies.

BUAD 340 - Managerial Finance
The techniques of managerial finance as a decision science, in the context of owner wealth maximization and alternative business goals, are presented. The topics include time value of money, risk analysis, capital budgeting, capital structure, dividend theory, financial analysis, working capital management and foreign exchange risk management. NOTE: Students must earn a minimum C- grade in the prerequisite courses.
BUAD 311 - Management and Organizational Behavior
An in-depth study of the theories and processes of management focusing on organizational behavior, hierarchical versus network organizational structure, and organizational culture. Issues within the organization such as motivation and leadership, diversity and group dynamics, and external environmental influences including technology, ethics, diversity and global considerations, are examined.

Credits: 3
Offered: Every semester.

BUAD 312 - Organizational Behavior
The historical and current development of management principles is covered including theories of motivation for individuals, groups and organizations, leadership, organizational design and performance evaluation. NOTE: Students must earn a minimum C- grade in the prerequisite courses listed below.

Credits: 3
Prerequisite: ACCT 201 and ACCT 202 and (ECON 201 or ECON 210) and (ECON 202 or ECON 205) and (BUAD 200 or ECON 200 or POLI 200 or PSY 200 or SOC 200 or STAT 200). Offered: Every semester.

BUAD 325 - Principles of Marketing
An introduction to the field of marketing and marketing management. Emphasis on the marketing function of pricing, promotion, distribution, and product design both domestically and internationally. Students will learn to employ state-of-the-art information to plan, price, distribute, advertise, and promote products and services in the 21st century global economy as symbolic analysts and knowledge workers. The course will focus on how skilled marketers apply their knowledge and creative ideas to insures competitive success and market position and to fuel the high-tech information society.

Credits: 3
Prerequisite: (ECON 201 or ECON 210) and (ECON 202 or ECON 205). Offered: Offered on occasion.

BUAD 327 - Operations Management
A fundamental course providing insight into the broad body of knowledge that informs operations management in today's diverse work environments. The concepts of operations management (OM), including both the application of qualitative and quantitative decision making tools, computer models, and effective control applications of operational systems will be explored. Note: Students must earn a minimum C- grade in the prerequisite courses listed below.

Credits: 3
Prerequisite: (ECON 200 or BUAD 200 or EDU 200 or POLI 200 or SOC 200 or PSY 200 or STAT 200) and ACCT 201 and ACCT 202 and (ECON 201 or ECON 210) and (ECON 202 or ECON 205) and (MATH 120 or MATH 122). Offered: Every semester.

BUAD 328 - Marketing Foundations
The course develops an understanding of the marketing environment of business, and explores the interrelationships between product, price, promotion, the global marketplace and how they affect business decisions. NOTE: Students must earn a minimum C- grade in the prerequisite courses listed below.

Credits: 3
Prerequisite: ACCT 201 and ACCT 202 and (ECON 201 or ECON 210) and (ECON 202 or ECON 205) and (ECON 200 or BUAD 200 or POLI 200 or PSY 200 or SOC 200 or STAT 200 or EDU 200). Offered: Every semester.

BUAD 330 - Human Resource Management
A study of the Human Resource function. Topics covered include recruitment, selection, hiring, performance evaluation, compensation, motivation, training and development, legal environment such as Occupational Safety and Health Administration, Equal Employment Opportunity Commission and sexual harassment issues, and industrial relations. Emphasis on how managers can deal with and use the Human Resources function.

Credits: 3
Prerequisite: BUAD 323. Offered: Every year.

BUAD 335 - Business Consulting
This course provides an opportunity for students to apply business administration theories and practices learned in the classroom to real life business situations. Acting as consulting firms, student groups will provide professional advice to the management of their chosen local, small-business establishments regarding any actual problems facing their operations. Senior standing is required for enrollment.

Credits: 3
Prerequisite: BUAD 320 and BUAD 323 and BUAD 327 and BUAD 328. Offered: Every year.

BUAD 340 - Marketing Research
This specialized marketing methodology course helps students understand the fundamentals and techniques of marketing research, and conduct, analyze and present market studies by using various analytical tools. Emphasis is placed on building the student's ability to (1) use statistical software, such as SPSS, to analyze collected data; and (2) interpret the results and provide business
decision alternatives based on their analyses. The classes are held in the classroom and/or computer labs.

Credits: 3
Prerequisite: BUAD 300 and BUAD 328. Offered: Every year.

BUAD 342 - Consumer Behavior
An integrative marketing course that examines individual psychological and social environments in which consumers attempt to satisfy felt needs and wants. Both marketing and personal perspectives are explored in class resulting in greater student appreciation and understanding of the complexity of human behavior in the new high-tech cross-cultural setting around the world.

Credits: 3
Prerequisite: BUAD 328. Offered: Every year.

BUAD 350 - Special Topics
Topics in Business Administration not covered in detail by regular courses and not offered on a regular basis. Junior/Senior standing required.

Credits: 1-3
Offered: Offered on occasion.

BUAD 354 - Entrepreneurship
Investigation of the components, tools and practices of entrepreneurship. The course focuses on identifying new venture opportunities (both private and non-profit); evaluating the viability of a new venture; writing a business plan; building an "E-team" that possesses the attributes necessary for success; understanding value propositions, strategic market entry, competitive positioning, and business models necessary to achieve business goals.

Credits: 3
Prerequisite: BUAD 320 and BUAD 328. Offered: Every year.

BUAD 372 - Financial Investments
Characteristics of bonds, stocks, securities market, investment banking are reviewed. Sources of investment information; analysis of securities; and efficient market theory are also reviewed.

Credits: 3
Prerequisite: BUAD 320 and BUAD 300*. Cross-Listed as: * Indicates that the course can be taken in the same semester. Offered: Every year.

BUAD 374 - Small Business Finance
Explorations are presented of the appropriate internal controls, working capital management, owner distributions, operating and capital budgets in pursuit of alternative small business goals. A project requiring valuation of either a small business expansion or acquisition is included.

Credits: 3
Prerequisite: BUAD 320. Offered: Offered on occasion.

BUAD 376 - Business and Culture
A survey of various aspects of culture and their impact on doing business in the international arena. Topics include verbal and non-verbal communication, negotiation, foreign exchange, and country-specific research. Emphasis on cultural awareness and understanding in business.

Credits: 3
Offered: Offered on occasion.

BUAD 378 - Business and Ethics
The ethical problems and responsibilities faced by business managers acting as agents are investigated. Various ethical constructs such as utilitarianism, intuitionism, the social contract, naturalism and virtue ethics are used for this exploration. Particular problems of deception, coercion and social responsibility are examined.

Credits: 3
Prerequisite: ACCT 202 and (ECON 201 or ECON 210) and (ECON 202 or ECON 205) and (BUAD 200 or STAT 200 or ECON 200 or EDU 200 or SOC 200 or PSY 200 or POLI 200). Offered: Every year.

BUAD 411 - Marketing Management
This course focuses on developing integrated marketing programs that address customer needs, competitive activities, channel and supplier behaviors, macro environmental factors, and market evolutions. Emphasis is placed on decision making related to marketing segmentation and a responsive marketing mix. Three major course components serve as a bridge to the marketing profession: the analysis of contemporary marketing cases, evaluation of alternative marketing strategies and the preparation of a comprehensive marketing plan for a client.

Credits: 3
Prerequisite: BUAD 328. Offered: Every year.

BUAD 416 - Portfolio Management
Portfolio formation as based upon various objectives, notions of market efficiency and the associated empirical investigations that underlie modern portfolio theory, and differing methods of portfolio measurement are presented.

Credits: 3
Prerequisite: BUAD 372. Offered: Every other year.
BUAD 417 - Corporate Finance I
An examination of problems related to the investment, acquisition, and distribution of financial resources. Stress is placed upon integrating the areas into one system to facilitate and evaluate the operation of the finance function. Topics include cash flows, risk analysis, capital budgeting and structure, and international financial management.

Credits: 3
Prerequisite: BUAD 320. Offered: Every semester.

BUAD 418 - Corporate Finance II
A continuation of the study of problems related to the management of financial resources. Topics such as capital budgeting and cost of capital are covered in greater depth. Other topics such as leasing and mergers which are not covered in prior courses are introduced.

Credits: 3
Prerequisite: BUAD 317 or BUAD 417. Offered: Every year.

BUAD 427 - Applied Quality Operations
This course applies the concepts learned in BUAD 327 with an emphasis on systematic problem solving in various areas of organizational operations. The course uses discussions concerning contemporary quality operation techniques and concerns, problems, computer applications, and a live project to understand a variety of qualitative and quantitative methods and tools of analysis currently used to manage and improve operations. Students are expected to apply relevant aspects of their operational knowledge to a live project and present their findings to a course client.

Credits: 3
Prerequisite: BUAD 327 and BUAD 300. Offered: Every semester.

BUAD 430 - Independent Study
Under faculty guidance, this course allows a student to independently study a subject or research a specific topic in business administration.

Credits: 1-6
Offered: Offered on occasion.

BUAD 440 - Advanced Human Resource Management

Credits: 3
Prerequisite: BUAD 330. Offered: Offered on occasion.

BUAD 445 - Integrated Marketing Communications
This advanced marketing course analyzes the components of integrated marketing communications which includes all communication functions, both internal and external, of an organization employing new information technologies. Class discussions will explore determining domestic and international consumer needs and wants, creating advertising and promotional messages, media strategy, and message strategy. Students will gain practical experience in developing a comprehensive marketing plan.

Credits: 3
Prerequisite: BUAD 328. Offered: Every year.

BUAD 446 - Sales Management
This advanced marketing course of study includes how modern sales managers employ state-of-the-art technology to identify, process, and solve sales management problems. Class assignments and discussions reveal contradictory perspectives to complex marketing problems. The course will also cover sales force structure in new lean-management organizations, determining needed characteristics and recruiting of new sales representatives, and processing, hiring, training, and ethically managing a multi-national sales force in the 21st century. Individual and group presentations, both written and oral, will be required.

Credits: 3
Prerequisite: BUAD 328. Offered: Every year.

BUAD 450 - Senior Seminar
This course provides students an opportunity for in-depth exploration of specific contemporary topics/issues in business administration. Students are expected to make class presentations of their assigned study. Departmental permission or senior standing is required for enrollment.

Credits: 1-3
Offered: Offered on occasion.

BUAD 463 - Information Technology Project Management
A survey of general management processes for planning, managing and controlling IT projects. Both technical and behavioral aspects of project management are discussed. The focus is on management of development for enterprise-level systems. Topics include defining project scope, cost and resource management, scheduling using PERT/CPM, quality management, risk management and project integration management. Lab instruction in a modern project management software tool complements the course.

Credits: 3
Prerequisite: BUAD 363. Offered: Every year.
BUAD 472 - International Finance
Reviews the financial risks associated with international business, especially risks caused by floating exchange rates. The review includes classifications of risks, the hedging strategies used to manage them, and international institutional arrangements that result.
Credits: 3
Prerequisite: BUAD 300 and BUAD 417. Offered: Offered on occasion.

BUAD 474 - Financial Intermediaries Management
Explorations of the historical function of bank-type financial intermediaries, the associated regulation-deregulation-reeregulation cycle, and associated current management issues and techniques.
Credits: 3
Prerequisite: (BUAD 300 or ECON 300) and BUAD 417. Offered: Offered on occasion.

BUAD 480 - Internship
This course provides academic credit for professional experiences in the field of business administration. Departmental approval, senior/junior standing, and minimum 2.0 cumulative grade point average are required for enrollment. Grading mode is S/U.
Credits: 1-9
Offered: Every semester.

BUAD 499 - Strategic Management
A capstone course emphasizing top multi-national management issues through utilization of knowledge and skills developed in previous courses. Problem analysis and decision-making in case studies and group projects simulate the process of strategy formulation in the firm.
Credits: 3
Prerequisite: BUAD 320 and BUAD 323 and BUAD 327 and BUAD 328. Offered: Every semester.

BUAD 510 - Modern Financial Instruments
Explores modern financial instruments - stocks, bonds, options, futures, swaps - and the financial environment thereof. Discusses the forces that determine changes in financial markets and institutions, and the implications for the utilization of financial instruments for the management of funds in firms and/or financial institutions.
Credits: 3
Prerequisite: BUAD 317. Offered: Every year.

BUAD 520 - Information Technology Management and E-Commerce
The course focuses on technology management and development of an Internet-based business or extension of an existing business. The course integrates concepts from economics, organizational strategy, entrepreneurship, and Web design.
Credits: 3
Prerequisite: BUAD 261. Offered: Offered on occasion.

BUAD 530 - Advanced Financial Management
An introduction of the concepts, frameworks, tools, and techniques employed in financial analysis, forecasting and planning, working capital management, valuation, capital budgeting, cost of capital, and mergers. Topics also include sources and methods of financing, types of securities, financial strategy, and the timing of financial policies in domestic and international settings.
Credits: 3
Prerequisite: BUAD 317. Offered: Offered on occasion.

BUAD 550 - Organizational Communication
A course in organizational communication to provide extensive theoretical background upon which to examine, evaluate, diagnose, and recommend solutions to organizational communication problems. The course allows students to explore particular areas of interest and encourages the critique of existing theories while applying them to real-world situations in order to frame sets of practical skills.
Credits: 3
Prerequisite: BUAD 321. Offered: Every year.

BUAD 560 - Marketing Strategy
An introduction to marketing strategy and the elements of marketing analysis: customer, competitor, and company analysis. Students will enhance their problem-solving and decision-making abilities utilizing the elements of marketing mix: product strategy, pricing, advertising and promotion, and distribution. A case study approach is employed.
Credits: 3
Prerequisite: BUAD 325. Offered: Offered on occasion.

BUAD 570 - Advanced Corporate Management
A study of the Modern Theory of Organization. The nature of organizational theory, traditional theories, and the evolution of modern systems theory are explored. Factors related to formal and informal organizational processes and the basic linking process of Decision Theory are analyzed.
Credits: 3
Prerequisite: BUAD 499. Offered: Offered on occasion.

**BUAD 590 - Business Ethics**
A study of the concept of an ethic and the nature of a corporation's relation to an ethic. The course explores the nature of ethics in a corporation functioning in a competitive global environment. Case studies are utilized to understand ethics in a practical environment.

Credits: 3
Prerequisite: BUAD 321. Offered: Every year.

**CDS Comm Disorders Sciences**

**CDS 100 - Freshman Seminar in Speech Language Pathology**
Freshman Seminar in Speech Pathology is a 1 credit course that is intended to help incoming Communication Disorders and Sciences freshmen succeed at SUNY Fredonia and become lifelong learners. The course introduces first year students to the academic and social aspects of college life, and is designed to empower students to become successful learners at the collegiate level. Freshman Seminar in Speech Pathology provides both an introduction to the nature of college education and a general orientation to the functions and resources of the college as a whole.

Credits: 1
Offered: Every year.

**CDS 150 - Introduction to Communicative Disorders**
Introduction to and overview of the field of communicative disorders (speech, language and hearing). Interactions with related disciplines in the humanities, and in the behavioral, biological and physical sciences, as well as study of the normal communication processes.

Credits: 3
Offered: Every year.

**CDS 201 - Voice/Articulation/Resonance**
Survey of voice and speech production. Introduction to International Phonetic Alphabet. Techniques of analysis and improvement of simple deviancies of voice, articulation, and resonance. Vocal hygiene is stressed.

Credits: 3
Offered: Offered on occasion.

**CDS 206 - Fundamentals of Acoustics**
The course is designed to introduce Communication Disorders and Sciences students to the fundamental concepts of general acoustics. The nature of sound waves, simple harmonic motion, relative measure of power, complex waves, Fourier analysis, resonance and filtering distortion and sound transmission will be covered. Emphasis will be placed on the analysis and measurement of speech production and perception. High school physics and/or PHYS 120 is recommended.

Credits: 3
Offered: Every year.

**CDS 208 - Geriatric Communication Disorders**
Provides students in related programs with information about the communication problems and disorders associated with aging. Focuses on the normal communication process, speech, language and hearing disorders of the aged and the psychosocial consequences of disordered communication. Management approaches, services available and the evolving role of the health professional are discussed.

Credits: 2
Offered: Offered on occasion.

**CDS 225 - Introduction to Language**
This course introduces linguistics as the scientific study of language. Topics include: how languages differ from other systems of communication, the sound systems, word formation, grammar, and meaning. Students will be introduced to the phenomena found in languages, to the ways we can best describe these phenomena in order to explain them, and to the insights such linguistic descriptions can give us into the nature of language in general.

Credits: 3
Offered: Every year.

**CDS 250 - Speech and Language Development**
Introduction to normal language and speech development in children. Provides theoretical and practical frame of reference for students entering child-centered professions. Foundations of language and speech acquisition, developmental processes requisite to normal speech and language, and means of facilitating normal communicative abilities.

Credits: 3
Offered: Every year.

**CDS 268 - Phonetics**
Study of general articulatory phonetics, introduction to acoustic phonetics and phonology. Students transcribe English and non-English sounds following International Phonetic Alphabet (IPA).

Credits: 3
Offered: Every year.
CDS 280 - Speech-Language Pathology I
An overview of the neural bases of speech/language and neurogenic communication disorders such as aphasia, right hemisphere syndrome, dementia, traumatic brain injury, dysarthria, and apraxia of speech (specific disorders covered may vary from semester to semester). Fluency disorders, both developmental and acquired, will also be included. Emphasis will be on etiology and characteristics of these disorders, and assessment and treatment applications.
Credits: 3
Prerequisite: (SPA 250 and CDS 250) and (SPA 268 and CDS 268). Offered: Every year.

CDS 310 - Speech and Hearing Mechanism
Examines the anatomical and physiological characteristics of the speech and hearing mechanisms. Specific focus on the integration of the respiratory, phonatory, supraglottal and hearing systems as they relate to speech production and perception.
Credits: 3
Offered: Every year.

CDS 316 - Speech Science
Study of the interrelationships between acoustic, physiological, and aerodynamic factors influencing voice and speech production, including study of processes of respiration, phonation, resonation, articulation, and their interrelationships.
Credits: 3
Prerequisite: (CDS 268 or SPA 268) and (CDS 310 or SPA 310). Offered: Every year.

CDS 322 - Hearing Problems and Tests
Introduction to acoustics, anatomy, physiology and pathology of the auditory system. Study and performance of audiology as applied in clinical environments. Emphasis on theoretical and applied research to differentiate normal from abnormal audition.
Credits: 3
Prerequisite: SPA 310 or CDS 310. Offered: Every year.

CDS 323 - Speech Sound and Language Disorders
Assessment and intervention principles and practices appropriate for working with articulation and language problems of children.
Credits: 3
Prerequisite: SPA 250 or CDS 250. Offered: Every year.

CDS 376 - Literacy Development
This course provides an overview of the field of literacy including literacy acquisition processes, theoretical approaches to the acquisition of literacy and the social implications of being literate. Students will be able to identify cultural, educational, and linguistic issues related to the acquisition of literacy.
Credits: 3
Offered: Every year.

CDS 390 - Designing Surveys
Survey design and methodology will be presented via lectures, discussions, and in-class activities. Topics covered will include initiating a survey, planning the project, designing the sample, composing questions, creating item scales, building questionnaires, self administered surveys, collecting interview data, processing the data, and analyzing survey data. It is expected that students have had an introductory course in statistics, e.g., STAT 200 or STAT 250. Junior or senior standing or permission of the instructor.
Credits: 3
Prerequisite: STAT 250 or ECON 200 or PSY 200 or SOC 200. Offered: Offered on occasion.

CDS 398 - Clinical Methods in Evaluation
An introduction to diagnostic methodologies for management of the communicatively impaired. Students will gain knowledge with a variety of published standardized tests with respect to the following areas: appropriate test selection, knowledge of test rationale/content, administration procedures and recording test responses, accurate scoring and interpretation, diagnosis, informal assessment, goal development and report writing. In addition, students will gain knowledge in the referral process and qualification criteria for services.
Credits: 3
Prerequisite: SPA 250 and SPA 268 and SPA 310 or CDS 250 or CDS 268 or CDS 310. Offered: Every year.

CDS 399 - Clinical Methods in Intervention
Students will gain knowledge with a variety of therapy models with respect to various disorder types, settings, and methodologies for management of the communicatively impaired. Course content will include therapy implementation, goal/objective selection, lesson plan writing, charting progress, progress report writing, Individual Education Plan (IEP) writing, behavior management, collaboration, team meetings, and criteria for dismissal.
Credits: 3
### CDS 400 - Foundations of Speech Language Pathology in Educational Settings

Study of the legal bases, common practices, principles, and issues related to the effective delivery of speech and language services in educational settings.

Credits: 2

Offered: Every year.

### CDS 410 - Clinical Procedures: Observation and Analysis

Guided observation and study of assessment and intervention procedures for children and adults with a variety of communication disorders. Videotaped and real-time sessions will be utilized for demonstration and analysis. Written projects will prepare the student to analyze methodologies and develop therapeutic goals, objectives, procedures and materials. The course will fulfill the American Speech Language-Hearing Association (ASHA) requirement for a minimum of 25 observation hours.

Credits: 3

Prerequisite: SPA 398 and SPA 399 or CDS 398 and CDS 399. Offered: Every year.

### CDS 418 - Speech-Language Pathology II

The study and application of assessment procedures and intervention strategies of speech and swallowing communication disorders including cleft lip and palate, voice and dysphagia. Case study discussions and collaborative learning will be emphasized.

Credits: 3

Prerequisite: SPA 310 or CDS 310. Offered: Every year.

### CDS 419 - Aural Habilitation and Rehabilitation

Application of therapeutic measures and strategies to optimize the communication ability of the hearing impaired. Emphasis is on fetal development, genetics, psychosocial and counseling issues, amplification, visual and auditory training and third part reimbursement.

Credits: 3

Prerequisite: SPA 322 or CDS 322. Offered: Every year.

### CDS 420 - Advanced Speech Pathology

Seminar devoted to assigned readings and to approved individual research. Strengthens student knowledge in specific areas in preparation for more advanced studies.

Credits: 3

Prerequisite: SPA 280 and SPA 418 or CDS 280 and CDS 418. Offered: Offered on occasion.

### CDS 490 - Independent Study

Study of a particular problem in speech pathology and audiology. Periodic meetings with instructor; writing a substantial paper.

Credits: 1-3

Offered: Every semester.

### CDS 495 - Seminar in Speech-Language Pathology/Audiology

Detailed study of selected topics in speech pathology or audiology. Content will change from semester to semester but will focus on a relatively narrow topic or issue of current interest.

Credits: 1-3

Offered: Every other year.

### CDS 500 - Child Language Disorders

This course examines the development, and assessment of language in infants, toddlers, preschoolers, and school age children; including an introduction in language intervention.

Credits: 3

Offered: Every year.

### CDS 501 - Professional Seminar

The student will gain knowledge of and experience with current clinical approaches, strategies, new regulations and writing skills. Each fall semester the course will address content identified from assessment data collected from students and supervisors in the spring and summer semesters.

Credits: 0

Offered: Every year.

### CDS 502 - Clinical Practice, Communication Disorders

An application of the student’s knowledge from the classroom to a clinical situation. Students are assigned to speech-language assessment and therapy sessions on a rotation basis at the university clinic and local off campus clinics, under the supervision of an ASHA certified speech-language pathologist. Attendance at periodic staff meetings required. Completion of minimal three sections of CDS 502 are required.

Credits: 3

Offered: Every semester.

### CDS 510 - Pediatric Audiology

An introduction to pediatric parameters as they relate to clinical audiology. Study and performance of audiology as applied in pediatric, clinical environments. Emphasis of
theoretical and applied research to differentiate normal from abnormal pediatric audition.

Credits: 3
Offered: Every year.

**CDS 520 - Multicultural Issues in Communication Disorders**

Attempts to prepare the speech/language pathologist to fairly and effectively understand cultural constraints involved in communication disorders, to learn culturally sensitive diagnostic procedures and to determine therapeutic techniques that are consistent with minority populations and their beliefs and values about communication.

Credits: 3
Offered: Offered on occasion.

**CDS 525 - Speech and Hearing Problems in the Classroom**

Methods to assist classroom teacher to improve speech habits and correct minor defects. Recognition of speech defects, cooperation with speech pathologist, medical personnel, and family. Demonstration and lectures of classroom management of speech and hearing problems. Not open to majors in Speech-Language Pathology.

Credits: 3
Offered: Offered on occasion.

**CDS 530 - Augmentative and Alternative Communication**

Assessment and therapy techniques for augmentative/alternative communication (AAC). Overview of diagnoses that often require AAC. Assessment and therapy considerations for motoric, linguistic, cognitive and sensory skills and for communicative, language and literacy needs in context. Specific high and low tech systems will be explored.

Credits: 3
Offered: Offered on occasion.

**CDS 540 - Diagnostic Theories and Practices**

A study of assessment models, strategies, and rationales employed in speech-language pathology and audiology. An application of student's knowledge base to the assessment process.

Credits: 3
Offered: Every year.

**CDS 551 - Neuroscience for Communication Disorders**

An introduction to neuroanatomy, neurophysiology and neuropathology of speech, language, swallowing, and hearing will be presented via lectures, discussions, videos, and CD-ROMs. The course will provide students with a solid foundation for further course work, as well as for clinical practice with neurologically-impaired populations.

Credits: 3
Offered: Every year.

**CDS 552 - Medical Speech-Language Pathology**

The roles, responsibilities, and essential skills of speech-language pathologists employed in medical settings will be presented via lectures, discussions, videos, CD-ROMs, and in-class activities. Topics covered will include medical settings and personnel, medical examination, neurological assessment, imaging studies, speech-language assessment, tracheotomy and ventilator-dependent patients, and head/neck cancer.

Credits: 3
Prerequisite: SPA 551 and SPA 598 or CDS 551 and CDS 598. Offered: Every year.

**CDS 554 - Early Intervention**

An in-depth review of recommended practices in assessment and treatment for the birth to 3 year-old population and the role of the speech-language pathologist as a team member. The student will gain experience with approaches and strategies to be utilized in the neonatal unit, the home and other natural environments.

Credits: 3
Offered: Every year.

**CDS 555 - Dysphagia**

This course will cover the assessment, treatment, and prevention strategies for swallowing disorders (dysphagia) in the pediatric and adult populations.

Credits: 3
Offered: Every year.

**CDS 556 - Corporate Speech Pathology**

Roles, responsibilities, and essential skills of corporate speech-language pathologists will be presented via lectures, discussions, demonstrations, videos, CD-ROMs, in-class activities. Topics covered will include starting a practice, essential business vocabulary, traditional speech-language pathology in corporate settings, marketing plans, billing and paperwork, essential equipment, cross-cultural communication, diagnostics in corporate settings, corporate speech training, pronunciation training, and accent reduction.

Credits: 3
Offered: Offered on occasion.
CDS 557 - Counseling for the Speech Language Pathologist
Examines principles and theories of counseling for working with persons with communication disorders and their families throughout the lifespan and from varied cultural backgrounds. Students will learn how to structure and conduct interviewing and counseling, as practiced by speech language pathologists. Emphasis is placed on helping students to gain comfort and skill in coping with their clients' emotions and giving clients constructive feedback. Students demonstrate their understanding of the counseling process through case study presentations.
Credits: 3
Offered: Every year.

CDS 558 - Seminar: Traumatic Brain Injury
The study of Traumatic Brain Injury (TBI) is an important area of focus with significant differences to other neurological communication disorders. It is a seminar course with focus on assessment and remediation of language and cognitive problems for children and adults with TBI.
Credits: 3
Offered: Offered on occasion.

CDS 560 - Studies in Hearing Research
Advanced study of acoustics, anatomy and physiology, and pathology of auditory system. Study of classic, historical, and contemporary theoretical and applied research germane to the basis and development of audiology. Emphasis of reported research to differentiate normal from abnormal audition.
Credits: 3
Offered: Every year.

CDS 565 - Instrumentation in Communicative Disorders
The course will focus on the application of instrumentation in the assessment and treatment of various communicative disorders. Appropriate measurement technique and interpretation of results will be covered. Focus on "hands-on" experience with current instrumentation and software will be emphasized.
Credits: 3
Offered: Every year.

CDS 570 - Contemporary Issues with the Hearing Impaired
The course will assess contemporary issues related to testing, evaluating and resolving educational and social issues with hearing-impaired children and adults. Field experiences, guest speakers, selected video tapes and other varied course strategies will, where appropriate, be used in the course.
Credits: 3
Offered: Every year.

CDS 575 - Craniofacial Anomalies
Etiology, symptomatology and management of communication disorders related to cleft lip, cleft palate and associated disorders. Focus on interdisciplinary management.
Credits: 3
Offered: Every year.

CDS 582 - Fluency Disorders
Indentifying aspects of fluent speech, normally nonfluent speech and disfluent speech. Discussion and application of parameters addressing the nature, characteristics, prevention, etiology, treatment, and contributing factors of stuttering. Addresses both the physiological and psychological aspects of stuttering.
Credits: 3
Offered: Every year.

CDS 583 - Speech Sound Disorders and Language Intervention
This course is a continuation of CDS 500 Child Language Disorders. The course is divided into two modules: Speech Sound Disorders and Language Intervention. The Speech Sound Disorders module covers assessment and intervention of phonological and articulation disorders. The language intervention module will explore the various approaches to language intervention and evidence base practice.
Credits: 3
Prerequisite: CDS 500. Offered: Every year.

CDS 584 - Speech Sound Disorders and Language Intervention
The course is divided in two modules: Speech Sound Disorders and Language Intervention. The Speech Sound Disorders module includes the assessment and intervention of phonological and articulation disorders. The language intervention module includes various approaches to language intervention and evidence base practice.
Credits: 3
Offered: Every year.

CDS 585 - Auditory Processing Disorders
Auditory Processing Disorders (APD) is a specialty area that remains novel to most professionals and students in speech pathology and audiology. The course will illustrate
how APDs impact the accurate perception of auditory information, and reading/language skills. Course materials include the neurology of central auditory nervous system, definitions/etiologies of APD, evaluation and remediation strategies, and how coexisting disorders such as Attention, Learning and Language Disorders may influence an individual's auditory processing abilities.

Credits: 3
Offered: Every year.

**CDS 589 - Professional Issues**

The course is aimed at preparing graduate students to understand factors that influence professional practice, including government and economic, professional delivery, setting-specific, and quality service. Standards of ethical conduct, certification, specialty recognition, licensure, and other relevant professional credentials are covered.

Credits: 2
Offered: Offered on occasion.

**CDS 595 - Graduate Seminar in Speech**

Detailed study of selected graduate topics in speech pathology and audiology. Content will change from semester to semester but will focus on a relatively narrow topic or issue of current interest.

Credits: 3
Offered: Offered on occasion.

**CDS 598 - Voice Disorders**

Course will cover assessment and treatment strategies for benign, malignant and neurogenic vocal pathologies. Case study format will be emphasized.

Credits: 3
Offered: Every year.

**CDS 599 - Experimental Phonetics**

Measurement, description, and analysis of speech, its production and perception. Students become familiar with sound spectrograph as well as other research instrumentation typically employed in research. Designed for students in speech pathology and audiology, and linguistics.

Credits: 3
Offered: Every year.

**CDS 602 - Topical Seminar in Speech Language Pathology and Audiology**

Detailed study of selected topics in speech pathology or audiology. Content will change from semester to semester but will focus on a relatively narrow topic or issue of current interest. May be repeated for credit.

Credits: 1-3
Offered: Every year.

**CDS 605 - Advanced Clinical Methods and Practice**

A speech-language pathology externship in which graduate students are assigned to a health care facility, rehabilitation center, speech and hearing clinic or an educational setting. Students perform diagnostics and therapy with patients at the facility under the supervision of a licensed and ASHA certified staff speech language pathologist. Students enrolled in CDS 605 must have completed all CDS 502 clinical courses.

Credits: 6-12
Offered: Every semester.

**CDS 606 - Research Design in Communication Disorders and Sciences**

An introduction to research design and statistical methods necessary to critically read and evaluate research. Study of scientific principles, methods and controls used in research, and design and evaluation of group and single-subject studies. Emphasis will be placed on the application of evidence-based practice in clinical settings.

Credits: 3
Offered: Every year.

**CDS 608 - Neurogenic Language Disorders**

The etiology, characteristics, assessment, prevention, and treatment of neurogenic language and cognitive-communication disorders (e.g., aphasia, right hemisphere syndrome, traumatic brain injury, dementia) will be presented via lectures/discussions, demonstrations and in-class activities. Emphasis will be placed on differential diagnosis and treatment planning.

Credits: 3
Offered: Every year.

**CDS 609 - Independent Study**

Provides advanced graduate students the opportunity to work individually on problems of special concern not available through other course offerings under direction of qualified department member.

Credits: 1-3
Offered: Every semester.

**CDS 611 - Motor Speech Disorders**

The etiology, characteristics, assessment, and treatment of the dysarthrias and apraxia of speech will be presented during lectures/discussions, videos, CD-ROMs, demonstrations, and in-class activities. The course will provide Speech-Language Pathology students with a solid foundation in normal motor speech processes, which will
serve as a basis for the assessment and treatment of disordered speech production.

Credits: 3
Offered: Every year.

**CDS 619 - Comprehensive Exam**

A written comprehensive exam evaluating knowledge base in assessment, intervention, etiologies, prevention and characteristics of ASHA standard courses.

Credits: 0
Offered: Every year.

**CDS 629 - Directed Studies in Research Methodology - Thesis Research**

A minimum acceptable for the degree is 3 credit hours

Credits: 1-6
Offered: Every semester.

**CDS 632 - Graduate Student Teaching**

Field based clinical practicum in a public school, rehabilitation center, Board of Cooperative Educational Services (BOCES) or other appropriate educational setting. Cooperating speech-language pathologists supervise students in providing assessment and treatment services to clients with communication disorders.

Credits: 6
Offered: Offered on occasion.

**CHEM - Chemistry**

**CHEM 100 - Chemistry Freshmen Seminar**

The course is designed for Freshmen Chemistry majors in order to help them develop the skills required to succeed as a science major and get the most out of their college experience. Students will be introduced to the Chemistry faculty and staff, current chemistry majors and the department facilities in addition to career options and campus resources. A major emphasis will be focused on effective learning styles and study skills.

Credits: 1
Offered: Every year.

**CHEM 105 - Food Chemistry**

Introductory course for non-science majors only. Chemical aspects of the collection, preparation, storage, cooking, and consumption of food. Not applicable toward a major or minor in Chemistry.

Credits: 3
Offered: Every year.

**CHEM 107 - Chemistry for Consumers**

Introductory course for non-science majors; emphasis in practical aspects of chemistry in everyday life. Topics include nuclear chemistry, foods, gardening, pest control, health chemistry, and home products. Not applicable toward a major or minor in Chemistry.

Credits: 3
Offered: Every year.

**CHEM 113 - Chemistry in the Environment: Issues and Solutions**

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. This course focuses on the innovative and creative processes scientists use to address these issues. Students are provided with a creative opportunity for addressing these issues as citizens.

Credits: 3
Offered: Every semester.

**CHEM 114 - Introduction to Chemistry**

An introduction to chemical principles, emphasizing formulas, equations, bonding, atomic structure, nomenclature, periodic properties, and chemical calculations. Intended for students who have not taken chemistry in high school and/or who plan to take CHEM 115-116 but feel unprepared to do so. Not applicable toward a major or minor in Chemistry.

Credits: 3
Offered: Offered on occasion.

**CHEM 115 - General Chemistry Lecture I**

Nuclear, electronic, and molecular composition and structure and principles of chemical bonding used to describe nature and reactivity of atoms, ions, and molecules. Includes laws governing behavior of gases, liquids, and solids.

Credits: 3
Offered: Every semester.

**CHEM 116 - General Chemistry Lecture II**

Continuation of CHEM 115. Thermodynamics, chemical kinetics, chemical equilibrium, properties of acids and bases, aqueous solutions, electrochemistry, and nuclear chemistry.

Credits: 3
Prerequisite: CHEM 115. Offered: Every semester.
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CHEM 125 - General Chemistry Laboratory I

Some fundamental principles in experimental investigation of chemical substances and phenomena. Includes consideration of chemical and physical properties and typical reactions of inorganic and organic compounds. Equilibria, thermochemistry, oxidation-reduction, rates of chemical reactions, and volumetric, gravimetric, and qualitative analysis investigated. One laboratory period per week.

Credits: 1

Offered: Every semester.

CHEM 126 - General Chemistry Laboratory II

Some fundamental principles in experimental investigation of chemical substances and phenomena. Includes consideration of chemical and physical properties and typical reactions of inorganic and organic compounds. Equilibria, thermochemistry, oxidation-reduction, rates of chemical reactions, and volumetric, gravimetric, and qualitative analysis investigated. One laboratory period per week.

Credits: 1

Offered: Every semester.

CHEM 130 - Honors General Chemistry Laboratory

Directed studies designed to foster independence of thought and improve laboratory technique. Emphasis on quantitative determinations by acid-base, complexation, and spectroscopic methods. Open to Chemistry majors and others by permission of department. One laboratory period per week.

Credits: 1

Prerequisite: CHEM 115 and CHEM 125. Offered: Every year.

CHEM 154 - Nature of Science

The aim of the introductory course is to increase student understanding of how scientists think and work. Discussions will focus on the hows, whys, scope, and limits of today's scientific methodology. It will also explore famous experiments from the history of science, including those described by Galileo, Newton, Cavendish, and Young. The course fulfills one of the Part 7 Natural Sciences requirements of the College Core Curriculum, but is not applicable toward a major or minor in Chemistry.

Credits: 3

Offered: Every year.

CHEM 170 - Scientific Revolutions

Examines the role of science in Western European culture from roughly 1540-1905. Focuses mainly on the lives and the scientific and cultural contributions of six revolutionary figures of science: Copernicus, Galileo, Newton, Lavosier, Darwin, and Einstein.

Credits: 3

Offered: Every year.

CHEM 215 - Organic Chemistry Lecture I

Structure and reactions of the most important classes of organic compounds: hydrocarbons and principal functional groups of the compounds of carbon. Structure, occurrence, properties of organic compounds of biological significance.

Credits: 3

Prerequisite: CHEM 116. Offered: Every semester.

CHEM 216 - Organic Chemistry Lecture II

Structure and reactions of the most important classes of organic compounds: hydrocarbons and principal functional groups of the compounds of carbon. Structure, occurrence, properties of organic compounds of biological significance.

Credits: 3

Prerequisite: CHEM 116. Offered: Every year.

CHEM 225 - Organic Chemistry Laboratory I

Techniques for determination of physical and chemical properties, synthesis, and isolation from natural sources, of organic compounds. Nuclear magnetic resonance and infrared spectroscopy incorporated in experiments. One laboratory period per week.

Credits: 1

Offered: Every year.

CHEM 226 - Organic Chemistry Laboratory II

Techniques for determination of physical and chemical properties, synthesis, and isolation from natural sources, of organic compounds. Nuclear magnetic resonance and infrared spectroscopy incorporated in experiments. One laboratory period per week.

Credits: 1

Prerequisite: CHEM 215 and CHEM 225. Corequisite: CHEM 216. Offered: Every year.

CHEM 230 - Advanced Organic Laboratory

The utilization of instrumental methods and advanced laboratory techniques in organic chemistry. Includes hands-on use of various instrumental methods including infrared, nuclear magnetic resonance, and gas chromatography. One three-hour laboratory period per week.

Credits: 1
Prerequisite: CHEM 225. Offered: Every year.

**CHEM 291 - Directed Laboratory Research**

This course provides an entry-level research experience for students having freshman or sophomore standing. Study and research areas include analytical, inorganic, organic, physical, and polymer chemistry, as well as biochemistry. Permission of a faculty mentor is required. Prerequisites vary depending upon the specific areas of study and research, and are determined by the supervising faculty mentor.

Credits: 1-3

Offered: Every semester.

**CHEM 292 - Directed Laboratory Research**

This course provides an entry-level research experience for students having freshman or sophomore standing. Study and research areas include analytical, inorganic, organic, physical, and polymer chemistry, as well as biochemistry. Permission of a faculty mentor is required. Prerequisites vary depending upon the specific areas of study and research, and are determined by the supervising faculty mentor.

Credits: 1-3

Offered: Every semester.

**CHEM 295 - Introduction to Research**

This one-credit course is intended to provide students with a sense of how contemporary scientific research is carried out, with special emphasis on the chemical literature. Course topics to be emphasized include: the primary chemical literature; the plagiarism and citation; organizing, preparing and presenting a scientific seminar; and procuring the laboratory chemicals and equipment needed for a research project. One lecture per week.

Credits: 1

Prerequisite: CHEM 215. Offered: Every year.

**CHEM 302 - Chemistry in Today’s Society**

For non-majors only. Discussion of chemistry topics of major relevance to society, including some useful industrial processes, pollution, energy sources, and the detection of hazardous materials, especially those of local concern. Not applicable toward a major or minor in Chemistry.

Credits: 3

Offered: Offered on occasion.

**CHEM 305 - Laboratory Supervision in Chemistry**

Students enrolling in this course serve as laboratory assistants under supervision of a faculty member. Students selected by department after completing application form (available from chairperson). Four hours of work per week expected for each hour of credit elected; may be taken more than once. Does not count toward major requirements.

Credits: 1-2

Offered: Every semester.

**CHEM 314 - Principles of Physical Chemistry**

A one semester introduction to physical chemistry intended primarily for Biology and Biochemistry majors. It emphasizes thermodynamics and kinetics, especially as applied to biological phenomena. Also included will be discussions of transport processes, solutions and electrolytes. Quantum chemistry will be briefly discussed. The course is only for biochemistry majors pursuing the biological emphasis track.

Credits: 3

Prerequisite: MATH 121 or MATH 123 and CHEM 116. Offered: Offered on occasion.

**CHEM 315 - Introduction to Physical Chemistry**

An introductory course that provides an overview of the sub-disciplines of physical chemistry, specifically thermodynamics, kinetics, and quantum mechanics. Such topics are relevant to a vast array of scientific endeavors including such multidisciplinary areas as biochemistry and environmental sciences. The course is intended to provide an understanding of the relevant topics without in-depth analyses and discussions.

Credits: 3

Prerequisite: CHEM 116 and MATH 123 and PHYS 231 and PHYS 233. Offered: Every year.

**CHEM 316 - Advanced Physical Chemistry**

An in-depth treatment of physical chemistry topics including derivations, analysis, and discussion within the areas of kinetics, thermodynamics, and quantum mechanics. Applications to chemical systems and implications for spectroscopic analysis of molecular structure.

Credits: 3

Prerequisite: CHEM 116 and MATH 123 and PHYS 231 and PHYS 233. Offered: Every year.

**CHEM 317 - Analytical Chemistry, Quantitative Analysis**

Gravimetric, volumetric, and elementary instrumental determinations. Emphasis on volumetric analysis. neutralization, oxidation-reduction, complexometric, and electrochemical methods. Introduction to computer methods in chemistry.

Credits: 3

Prerequisite: CHEM 116. Offered: Every year.
CHEM 318 - Analytical Chemistry, Instrumental Analysis
Continuation of CHEM 317. Application of instrumental methods to quantitative chemical analysis, including spectroscopy, potentiometry, chromatography, nuclear and chemical methods.
Credits: 3
Prerequisite: CHEM 317. Offered: Every year.

CHEM 325 - Physical Chemistry Laboratory I
Laboratory experiments designed to accompany CHEM 315. One laboratory period per week.
Credits: 1
Offered: Every year.

CHEM 326 - Physical Chemistry Laboratory II
Laboratory experiments designed to accompany CHEM 316. One laboratory period per week.
Credits: 1
Offered: Every year.

CHEM 327 - Analytical Chemistry I Laboratory
Laboratory experiments designed to accompany CHEM 317.
Credits: 1
Offered: Every year.

CHEM 328 - Analytical Chemistry II Laboratory
Laboratory experiments designed to accompany CHEM 318.
Credits: 2
Offered: Every year.

CHEM 333 - Biochemistry
The structure and function of proteins and the regulation of metabolic pathways will be the central concepts presented in the course. Students should gain an understanding of the fundamental principles of the biology of protein molecules. BIOL 237 Genetics recommended as prerequisite.
Credits: 3
Prerequisite: CHEM 215 and (CHEM 225 or CHEM 230). Offered: Every year.

CHEM 334 - Biochemistry Laboratory
Introduction to laboratory practice using biochemical techniques to isolate and characterize proteins. Enzyme kinetics and bioinformatics are also covered.
Credits: 1

CHEM 391 - Independent Lab Research
For students having junior standing. See CHEM 491-492 for list of study and research areas.
Credits: 1-3
Offered: Every semester.

CHEM 392 - Independent Lab Research
For students having junior standing. See CHEM 491-492 for list of study and research areas.
Credits: 1-3
Offered: Every semester.

CHEM 397 - Biochemistry Seminar I
Current biochemical papers are analyzed in a journal club (open discussions) format. The course helps students to develop critical reading skills and underscore how an array of biochemical techniques are applied to address a research problem. Faculty from both departments participate in the seminar.
Credits: 1
Offered: Every year.

CHEM 341 - Introduction to Environmental Chemistry
This course provides an introduction to the underlying chemistry occurring within natural systems. The course will cover topics in air, water, and soil chemistry, including discussions of anthropogenic impacts to established dynamics.
Credits: 3
Prerequisite: CHEM 215*. Cross-Listed as: * Indicates that the course can be taken in the same semester. Offered: Every other year.

CHEM 371 - Internship in Chemistry
Approved practical experience in industrial, environmental, commercial, forensic, or other laboratories. Internships may accompany paid working time arrangements.
Credits: 1-3
Offered: Every semester.

CHEM 372 - Internship in Chemistry
Approved practical experience in industrial, environmental, commercial, forensic, or other laboratories. Internships may accompany paid working time arrangements.
Credits: 1-3
Offered: Every semester.

CHEM 391 - Independent Lab Research
For students having junior standing. See CHEM 491-492 for list of study and research areas.
Credits: 1-3
Offered: Every semester.

CHEM 392 - Independent Lab Research
For students having junior standing. See CHEM 491-492 for list of study and research areas.
Credits: 1-3
Offered: Every semester.
CHEM 405 - Industrial Chemistry
Application of chemical principles to chemical and environmental processes. Topics include mass and energy balances over complex systems, reaction kinetics and thermodynamics, combustion, behavior of real gases, and waste minimization. Directed toward students with career interests in industry and/or chemical or environmental engineering.
Credits: 3
Prerequisite: CHEM 315. Offered: Offered on occasion.

CHEM 407 - Organometallics
Introduction to the chemistry of transition metal organometallics. Descriptions of the bonding, synthesis, structures, and reactions of major classes of organometallic compounds, as well as their role in organic synthesis and catalysis.
Credits: 3
Prerequisite: CHEM 216. Offered: Every other year.

CHEM 412 - Advanced Organic Chemistry
The discussion of certain types of reactions for the synthesis of compounds having significance to organic or bioorganic chemistry. Examples include addition/elimination; oxidation/reduction; free radical; carbanionic; pericyclic; and other types of reactions.
Credits: 3
Prerequisite: CHEM 215 and CHEM 216. Offered: Every other year.

CHEM 417 - Polymer Chemistry
An overview of polymers, with an emphasis on their chemistry, properties, and significance. Focus on the synthesis, characterization, and fabrication, and physical chemistry of polymers.
Credits: 3
Prerequisite: CHEM 216 and CHEM 315. Offered: Every other year.

CHEM 462 - Inorganic Chemistry
Topics include introduction to molecular symmetry and group theory. Discussions of electronic structure of atoms and their periodic properties followed by detailed considerations of ionic and covalent bonding. Acid-base theories presented in addition to general chemistry of the elements with emphasis on transition metals. Introduction to organometallic chemistry and bio-inorganic chemistry included.
Credits: 3
Prerequisite: CHEM 315. Offered: Every year.

CHEM 465 - Advanced Experimental Biochemistry
State-of-the art biochemical and molecular techniques are taught within the hands-on, laboratory-based course. Potential topics include the polymerase chain reaction (PCR), oligonucleotide synthesis, DNA/protein sequencing and analysis (BLAST, DNASIS), pulse-field gel electrophoresis, gas chromatography-mass spectroscopy (GC-MS), nuclear magnetic resonance (NMR) spectroscopy, high performance liquid chromatography (HPLC), immunochrometry, and/or other contemporary techniques. Minimum of 2 credits of this course.
Credits: 2
Prerequisite: BIOL 334 or CHEM 334. Offered: Every year.

CHEM 472 - Inorganic Chemistry Laboratory
Laboratory studies of inorganic and organometallic compounds and ions. Synthetic experiments require inert atmosphere (vacuum line, dry box, and Schlenk) techniques; characterization by spectral, solid-state, and electrochemical methods. One laboratory period per week.
Credits: 1
Prerequisite: CHEM 315 and CHEM 325. Offered: Every year.

CHEM 473 - Environmental Aquatic Chemistry
Explores the interrelationships of chemistry within the aquatic environment. Topics will include (1) energy flow and transformations, (2) chemical cycles in the environment, (3) fate and transport of chemical in surface and subsurface water, soil, and air, (4) aquatic chemistry, including the carbon dioxide cycle, precipitation reactions, complexation reactions, and redox chemistry, (5) phase interactions, (6) aquatic microbial biochemistry, (7) water pollution, and (8) water treatment.
Credits: 3
Prerequisite: CHEM 215. Offered: Every other year.

CHEM 474 - Environmental Atmospheric Chemistry
Introduces the chemistry occurring within both natural and polluted atmospheres, with an emphasis on fundamental principles. Topics include: gas-phase chemistry, aerosol formation and heterogeneous chemistry, meteorology, and current environmental issues (ozone holes, global warming, etc.). Class activities will include discussions of technical papers drawn from contemporary scientific literature and simulations of environmental problems through computer models.
Credits: 3
Prerequisite: CHEM 215. Offered: Every other year.
CHEM 475 - Advanced Biochemistry
A continuation of BIOL 333, the course explores biochemical concepts and pathways with an emphasis on problem solving. Cellular control and coordination of biochemical pathways is emphasized in light of an advanced understanding of protein biochemistry. Lecture only.
Credits: 3
Prerequisite: BIOL 333 or CHEM 333. Offered: Every year.

CHEM 481 - Special Topics in Chemistry
Topics of special or current interest offered periodically.
Credits: 1-3
Offered: Every year.

CHEM 490 - Independent Study
Topics of special interest. Non-laboratory work in association with faculty supervisor. May require course prerequisites as determined by instructor.
Credits: 1-3
Offered: Every year.

CHEM 491 - Independent Laboratory Research
For students having senior standing. Study and research areas include analytical, inorganic, organic, physical, and polymer chemistry. Prerequisites depend upon areas of study and research.
Credits: 1-3
Prerequisite: CHEM 395. Offered: Every semester.

CHEM 492 - Independent Laboratory Research
For students having senior standing. Study and research areas include analytical, inorganic, organic, physical, and polymer chemistry. Prerequisites depend upon areas of study and research.
Credits: 1-3
Prerequisite: CHEM 395. Offered: Every semester.

CHEM 495 - Seminar: Advances in Chemistry
Topics of current research interest; presentations by seniors, graduate students, faculty, and visitors. Every student is required to present one seminar during one of the two semesters. Emphasis on detailed knowledge of subject matter, techniques for searching the professional literature and procedures for the preparation and presentation of a professional seminar. Majors only.
Credits: 1
Prerequisite: CHEM 216. Offered: Every semester.

CHEM 496 - Seminar: Advances in Chemistry
Topics of current research interest; presentations by seniors, graduate students, faculty, and visitors. Every student is required to present one seminar during one of the two semesters. Emphasis on detailed knowledge of subject matter, techniques for searching the professional literature and procedures for the preparation and presentation of a professional seminar. Majors only.
Credits: 1
Prerequisite: CHEM 216. Offered: Every semester.

CHEM 497 - Biochemistry Seminar II
Students prepare oral presentations based on an assessment of current biochemical research papers. The course will help students to further develop critical reading and scientific communication skills. Faculty from both biology and chemistry participate in the seminar.
Credits: 1
Offered: Every year.

CHEM 498 - Senior Thesis
Preparation of an extensive written account of the student's original laboratory research including an in-depth literature survey, background discussion, presentation of data and results, and conclusions. Open to majors only.
Credits: 1
Offered: Every year.

CHEM 507 - Organometallics
Introduction to the chemistry of transition metal organometallics. Descriptions of the bonding, synthesis, structures, and reactions of major classes of organometallic compounds, as well as their role in organic synthesis and catalysis.
Credits: 3
Prerequisite: (CHEM 215 and CHEM 216) and (CHEM 315 and CHEM 316). Offered: Offered on occasion.

CHEM 511 - Physical Organic Chemistry
Molecular orbital theory, resonance, acid-base theory and mechanisms of organic reactions including unimolecular and bimolecular substitution reactions and intramolecular rearrangements.
Credits: 3
Prerequisite: (CHEM 215 and CHEM 216) and (CHEM 315 and CHEM 316). Offered: Offered on occasion.

CHEM 512 - Advanced Organic Chemistry
The utilization of certain types of reactions for the synthesis of compounds having significance to organic or bioorganic chemistry. Examples include
addition/elimination; oxidation/reduction; free radical; carbanionic; pericyclic; and other types of reactions.

Credits: 3

Offered: Offered on occasion.

**CHEM 515 - Applied Spectroscopy**

Detailed studies of the use of modern instrumental methods for the identification of organic and organometallic compounds. Emphasis on mass, nuclear magnetic resonance, infrared, and electronic spectroscopies.

Credits: 3

Offered: Offered on occasion.

**CHEM 521 - Advanced Physical Chemistry - Thermodynamics**

Application of theory of thermodynamics to chemical systems, including methods of quantum statistics.

Credits: 3

Prerequisite: CHEM 326 and (MATH 121 or MATH 123).

Offered: Offered on occasion.

**CHEM 522 - Advanced Physical Chemistry - Quantum Chemistry**

Basic concepts of wave mechanics and the application to topics of interest to chemists.

Credits: 3

Offered: Offered on occasion.

**CHEM 530 - Understanding Chemistry**

Students will broaden and deepen their understanding of some of the fundamental concepts in chemistry and also explore how these concepts are best learned by adolescents.

Credits: 3

Offered: Summer, JTerm.

**CHEM 562 - Advanced Inorganic Chemistry**

Advanced discussion of topics of importance to contemporary inorganic and organometallic chemistry, including group theory; acid-base behavior; structure, bonding, and reaction mechanisms of metal complexes; and bio-inorganic chemistry.

Credits: 3

Offered: Offered on occasion.

**CHEM 573 - Environmental Aquatic Chemistry**

Explores the interrelationships of chemistry within the aquatic environment. Topics will include (1) energy flow and transformations, (2) chemical cycles in the environment, (3) fate and transport of chemical in surface and subsurface water, soil, and air; (4) aquatic chemistry, including the carbon dioxide cycle, precipitation reactions, complexation reactions, and redox chemistry; (5) phase interactions, (6) aquatic microbial biochemistry, (7) water pollution, and (8) water treatment.

Credits: 3

Offered: Offered on occasion.

**CHEM 574 - Environmental Atmospheric Chemistry**

Introduces the chemistry occurring within both natural and polluted atmospheres, with an emphasis on fundamental principles. Topics include: gas-phase chemistry, aerosol formation and heterogeneous chemistry, meteorology, and current environmental issues (ozone holes, global warming, etc.). Class activities will include discussions of technical papers drawn from contemporary scientific literature and simulations of environmental problems through computer models.

Credits: 3

Offered: Every other year.

**CHEM 581 - Special Topics in Chemistry**

Topics of special or current interest offered periodically. Credit and prerequisite vary with nature of course offerings which may include physical inorganic chemistry, organometallic chemistry, spectroscopy, photochemistry, heterocyclic chemistry, synthesis, polymer chemistry, topics in biochemistry, quantum chemistry, computers, or selected topics in chemical education.

Credits: 1-3

Offered: Offered on occasion.

**CHEM 690 - Independent Study**

Extensive study on advanced level of chemistry not covered in detail in formal courses. Paper or other demonstration of accomplishment required.

Credits: 1-3

Offered: Offered on occasion.

**CHEM 691 - Research I**

Projects in areas of analytical, physical, organic, inorganic, and biochemistry.

Credits: 1-3

Offered: Offered on occasion.

**CHEM 692 - Research II**

Projects in areas of analytical, physical, organic, inorganic, and biochemistry.

Credits: 1-3
Offered: Offered on occasion.

**CHEM 693 - Research III**
Projects in areas of analytical, physical, organic, inorganic, and biochemistry.
Credits: 1-3
Offered: Offered on occasion.

**CHEM 694 - Research IV**
Projects in areas of analytical, physical, organic, inorganic, and biochemistry.
Credits: 1-3
Offered: Offered on occasion.

**CHNS - Chinese**

**CHNS 100 - Introduction to Chinese**
Students will be introduced to the language, familiarized with its basic vocabulary and grammar, and prepared to communicate at an elementary level. They will also be introduced to the distinctive features of the cultures where the language is spoken. The course is for students with none or very little background in the language.
Credits: 2
Offered: Every semester.

**CHNS 110 - Essential Chinese**
Students develop essential communicative skills and cultural awareness necessary in order to interact with people from that culture, whether it is in their home country or in the United States. In order to take this course, students must have scored a level 2 or 3 in the approved placement test or have taken the introductory course CHNS 100 at Fredonia.
Credits: 3
Prerequisite: CHNS 100. Offered: Every semester.

**CHNS 115 - Elementary Chinese I**
For students with no previous preparation. Study of fundamental vocabulary and speech patterns. Initial emphasis on listening comprehension and oral ability. Progressively greater emphasis on reading and writing ability. Discussion of selected cultural aspects.
Credits: 3
Prerequisite: CHNS 115. Offered: Every year.

**COMM - Communication**

**COMM 101 - Fundamentals of Communication**
The course provides a broad introduction to the field of communication focusing on both interpersonal and mediated communication. The course goal is to help one think critically about everyday interactions and to "discover" the degree in which the content and forms of communication contribute to creating meaning, and shaping personal and social realities. The process of meaning-making will be examined to help one become a more effective communicator, especially in situations where communicators experience "difference" with others within and across cultures.
Credits: 3
Offered: Every semester.

**COMM 102 - Mass Media and Society**
An introductory course dealing, humanistically, with the process and effects of mass communication. Topics include: (1) a description of the industries of mass communication based on their mutual dependence; (2) related media industries such as advertising, public relations, news services; and (3) the influence and results of mass communication studying mass media research. Consideration of the ethical standards for the media.
Credits: 3
Offered: Every year.

**COMM 105 - Public Speaking**
Basic principles involved in public communication. Emphasis on the techniques involved in audience analysis, critical thinking and argumentation, listening, ethics, and message structure and delivery for public presentations.
Credits: 3
Offered: Every semester.

**COMM 111 - Web Design**
Five week mini-course dealing with the skills and concepts involved in creating and publishing pages on the World Wide Web. Emphasis is placed on learning Adobe Dreamweaver, one of the most commonly used HTML editors. Students will also become familiar with techniques to incorporate other media into a web page.
Credits: 1
Offered: Every semester.
COMM 112 - Desktop Video

Five week mini-course dealing with skills and concepts involved in preparing video for computer multimedia presentation. Digitizing, non-linear editing of video and sound, effects and transitions, incorporation of computer graphics, and computer animation.

Credits: 1
Offered: Every semester.

COMM 113 - Flash

Five week mini course introducing students to Adobe Flash, a vector based multimedia web design application. Students will learn to create projects for the web incorporating animated graphics, photographs, audio and video.

Credits: 1
Offered: Every semester.

COMM 114 - Electronic Darkroom

Five week mini-course covering the basics of computer imaging, retouching, and color painting. Emphasis is placed on learning the powerful features of Adobe Photoshop for manipulating images and ways to integrate image editing into multimedia applications.

Credits: 1
Offered: Every semester.

COMM 115 - Advanced Electronic Darkroom

Five week mini-course in advanced techniques for manipulating still images using Adobe Photoshop. Topics covered include using the pen tool, special effects, creative layering, masks, paths and shapes.

Credits: 1
Prerequisite: COMM 114. Offered: Every year.

COMM 116 - Desktop Publishing

Five week mini-course introducing the use of desktop computers to prepare and produce print and electronic publications such as newsletters, brochures, charts, magazines, and books. Material covered includes page design and layout, typography, integrating graphics and text software, pre-press, and professional publishing practices.

Credits: 1
Offered: Every semester.

COMM 118 - Desktop Audio

Learn to create and edit audio using relevant software. Students will learn the tenets of recording sound, storytelling using sound, and producing projects suitable for broadcast.

Credits: 1

COMM 120 - WCVF/WDVL/WNYF/Applied Communication Association/PRSSA Operations

Extracurricular participation in the staffing of the college's radio station, WCVF, and WDVL; television station, WNYF; or department societies.

Credits: 0
Offered: Every semester.

COMM 130 - Foundations in Journalism

The study of multiple forms of journalism expression with emphasis on print, radio, television and Internet news coverage. Strengths and weaknesses of each medium are examined. Multiple communication theories applicable to journalism and media convergence are emphasized.

Credits: 3
Offered: Every semester.

COMM 155 - Rhetoric of Vision and Sound

A foundational course for communication majors. Explores the ways the elements of production (lighting, color, framing, sound) are used in media to shape the meaning of the content and communicate ideas and emotions.

Credits: 3
Offered: Every semester.

COMM 199 - Communication Orientation

A course designed to introduce new majors to the department and faculty, and to suggest areas of study and activity.

Credits: 1
Offered: Every semester.

COMM 200 - Electronic Media Writing

Writing for the ear and writing in relation to visual images. Weekly writing exercises and discussions relative to audio and video news, documentary, sports, advertising and other non-fiction formats.

Credits: 3
Prerequisite: ENGL 100. Offered: Every semester.

COMM 221 - Interpersonal Communication

The course focuses on the description, explanation and analysis of communicative behavior related to interpersonal relations. As a skills-based course, the students will apply the course concepts to aid in comprehension and appreciation of how communication works in relationship development, maintenance, and termination.
COURSES

COMM 222 - Principles of Public Relations
Students learn the basic theories, history, ethical codes, and practices of public relations; how to write according to Associated Press style; and also how to prepare basic written documents such as news releases and news advisories.

Credits: 3
Prerequisite: COMM 101. Offered: Every year.

COMM 224 - Introduction to Social Media
This course will introduce students to the various means of social networking and its effect on the practice of public relations. Students will engage in hands-on applications.

Credits: 3
Prerequisite: COMM 222. Offered: Every year.

COMM 230 - News Gathering
The course will emphasize the news gathering process/reporting across media, as well as some basic news writing. Areas covered will include identifying subjects for stories/research, basic research techniques, interviewing, beat coverage, computer-assisted/data-based research, background, special considerations of various coverage areas, and challenges specific to individual media. Special emphasis will also be given to the ethical and legal implications of various news gathering methods.

Credits: 3
Prerequisite: COMM 130. Offered: Every year.

COMM 231 - Storytelling: Words, Images, Sound
Storytelling will emphasize the presentation aspect of journalism: how information is conveyed to the reader/viewer/listener. Among the topics covered will be identifying good stories, leads and story structures across media, identifying the heart of a story and the best way to tell it, how words, images and sounds interact, and how to engage the audience. Special emphasis will also be given to fairness and ethical implications of how a story is told.

Credits: 3
Prerequisite: COMM 130. Offered: Every year.

COMM 232 - Critical Analysis of Journalism
Introduces students to terms, issues and debates in contemporary media theory. Students will read theoretical texts exploring, for example, the nature of truth, the rise of objectivity, and ambiguity of signs (language, image, sound). The relationship of U.S. journalism to global media will also be a focus in the course, allowing students to understand the functions of critique in contemporary journalism. Additional topics include an exploration of alternative journalism practices in the U.S. and globally such as the impact of the community and public journalism movements, the role of the feminist and ethical press, and the impact of the Internet.

Credits: 3
Prerequisite: COMM 130 or COMM 102. Offered: Every year.

COMM 233 - Audio Production I
Introduction to audio production equipment and its operation. Focus on listening skills; sound design; developing an ability to understand and use sound effectively and the ethical use of persuasive techniques. Principles of writing for the ear examined and practiced; editing, announcing, and interviewing introduced.

Credits: 3
Prerequisite: COMM 155*. Cross-Listed as: * Indicates that the course can be taken in the same semester. Offered: Every semester.

COMM 235 - Digital Audio Production
Students in this class will master the basics of Pro Tools, Soundtrack Pro, and Adobe Audition. Students will learn to utilize the audio software systems to produce audio productions for radio television and video productions.

Credits: 3
Prerequisite: COMM 251. Offered: Every year.

COMM 236 - Video Field Production
Basic skills and techniques for shooting video outside the studio in ENG and EFP configurations, and for editing on non-linear video editing systems, camera lighting, sound and editing skills applicable to news, commercials, documentary, narrative, and art of music video.

Credits: 3
Prerequisite: COMM 155. Offered: Every semester.

COMM 237 - Studio Production
Basic skills in studio production techniques: lighting, camera work, shading, film-chain operation, audio setup and monitoring, videotape recorder operation, floor management, and technical directing. Final projects require students to work in teams to produce and direct their own programs.

Credits: 3
Prerequisite: COMM 155*. Cross-Listed as: * Indicates that the course can be taken in the same semester. Offered: Every semester.
COMM 257 - Video Games: Their Evolution and Impact
In this class, we explore all of these dynamics, studying the history of video games and the impact games have had culturally. Modes of instruction will include historical readings, literature on the impacts of video games, and online discussion. As games represent a personal textual experience, students will be required to play video games from different historical eras and keep an online journal detailing their playing experiences. Links to websites hosting these historically significant games will provided in class (i.e. Zork, Pong, Pac-Man, Pitfall, the Mario games, etc.). Students will also be expected to submit an substantial research paper at the end of the course exploring some aspect of the history and cultural impact of video games.

Credits: 3
Offered: Summer, JTerm.

COMM 259 - Special Topics in Communication
A 200-level course focusing on a topic not covered in the existing curriculum. Topic(s) announced by the department each semester.

Credits: 1-3
Offered: Offered on occasion.

COMM 301 - Group Communication
The course will study communication in the small task group emphasizing communication in decision-making and problem solving. Course instruction will review theories that explain the role of communication in group maintenance, cohesion, conflict management, leadership, socialization, and personality management. Attention will be given to the communication practices for conducting meetings, idea generation, goal setting, project analysis and group discussion formats. The goal of the course is to develop proficiency in assessing group situations by applying communication theory and practices to maximize group effectiveness, productivity, and member satisfaction.

Credits: 3
Prerequisite: COMM 101. Offered: Every year.

COMM 302 - Rhetoric and Criticism
The study of human discourse with a focus on how oral and written language is used to influence audiences in public venues such as politics, advertising, and social movements. The main goal of the course is to develop critical thinking skills using traditional and contemporary rhetorical theories and methods of analysis. Developments in rhetorical and western intellectual thought will be examined for their influence and contributions to rhetorical theory. Students will acquire skills that prepare them to be active consumers of persuasive messages and effective, ethical creators of such messages.

Credits: 3
Prerequisite: COMM 101 and ENGL 100. Offered: Every semester.

COMM 303 - Health Communication
This is a Communication Studies course, and as such its goal is to familiarize students with the broader discipline of Health Communication so that they will gain a greater understanding of health and medical interactions, become more savvy health communication consumers, and be more knowledgeable in providing social support in the care of others. The course will explore the major domains within the discipline and highlight a number of different approaches to studying the subject matter. It will examine health campaigns in the interpersonal, organizational, and mass communication contexts.

Credits: 3
Offered: Every Spring Semester.

COMM 307 - History of Television
This course will take a look at American life in the last six decades through an analysis of the medium of television. From its origins in radio to its future in digital convergence, we will examine television as it both shapes and reflects American society. Discussions will include television genres, history, structure, technological advancements and its impact on society and democracy.

Credits: 3
Prerequisite: COMM 102. Offered: Every year.

COMM 308 - Documentary History and Criticism
The course introduces students to the historical development and critical theories of the documentary genre. Students will be exposed to the different modes of documentary representation and the theoretical implications of each style.

Credits: 3
Prerequisite: COMM 155 or FILM 220. Offered: Every year.

COMM 309 - Film Analysis
A study of contemporary filmmakers' work in feature length films. Particular focus on production elements that create aesthetic values and reflect current times and concerns.

Credits: 3
Prerequisite: COMM 155. Offered: Every year.
COMM 312 - Multimedia Integration
Course concentrates on authoring multimedia projects which integrate graphics, animation, digital video, and audio. It combines both multimedia theory and production. Students will learn how to structure information, anticipate user experience and create transparent interfaces.
Credits: 3
Prerequisite: COMM 110 or COMM 111 or COMM 112 or COMM 114 or COMM 115 or COMM 116 or COMM 118 or COMM 354 or COMM 351 or MEDA 120. Offered: Every semester.

COMM 313 - Political Communication
This course addresses U.S. politics as a communication process. It examines the communication of campaigns as well as the communication of governance at all levels. The course addresses the evolution of political communication practices throughout history and the critical analysis of speeches, debates, ads, news, entertainment, social media and other types of political communication. The primary goals of this course are to equip students to become more critical consumers of political communication and to encourage and prepare students to become more civically engaged through the use of effective communication practices.
Credits: 3
Offered: Offered on occasion.

COMM 315 - Selected Topics in Journalism
This course will focus on special areas within the field of journalism such as arts, sports, governmental affairs, investigative journalism, and science. A different topic will be offered each semester. Each student will develop a portfolio or substantial collection of work, which will be included in a class compilation that will be produced digitally for public consumption. Community engagement will be a regular and required aspect of this course.
Credits: 3
Offered: Every semester.

COMM 320 - WCVF/WDVL/WNYF/ACA/PRSSA Management
Extracurricular participation as a manager on the elected board of directors of the university's radio stations, television station, Applied Communication Association, or Public Relations Student Society of America.
Credits: 0
Offered: Every semester.

COMM 321 - Environmental Communication
Environmental Communication investigates communication about the environment, focusing on ways that organizations, corporations, politicians, advocacy leaders, scientists, citizens, and so on describe, persuade, and shape human interactions with the environment. Students study foundational environmental communication theories, worldviews, and processes, examining how these influence speakers', listeners', producers' & consumers' attitudes and actions toward the natural world. In our current cultural setting, it is crucial that citizens are able to assess competing claims and appeals about the environment; consequently, students will learn to become more critical producers and consumers of a broad range of environmental discourses.
Credits: 3
Offered: Every Spring Semester.

COMM 322 - Public Relations Writing
Students learn basic research and planning principles associated with public relations writing and how to prepare an assortment of public relations documents. Associated Press (AP) style is reinforced and students learn how to construct news releases, media advisories, fact sheets, position statements, features and fliers. Students will begin portfolio building.
Credits: 3
Prerequisite: COMM 222. Offered: Every year.

COMM 323 - Research Methods
Study of both qualitative and quantitative approaches to inquiry and their applications in theoretical and applied communication research. Emphasis will be effective quantitative survey construction and basic summary statistical analysis, and qualitative interview and coding analysis. These will be applied to evaluating communication practices and assessing communication needs.
Credits: 3
Prerequisite: COMM 101. Offered: Every year.

COMM 336 - Introduction to Business Communication
The highly practical course focuses on the critical communication skills involved in effective written and oral communication while emphasizing applications of communication concepts in the world of business. Students will be able to engage in application exercises that will prepare them for the job search as well as their first years on the job, build their creative and critical thinking skills, and explore the value of team diversity.
Credits: 3
Offered: Every year.
COMM 342 - Presidential Campaign Communication

This course offers an in-depth understanding of the when, where, why, and how communication affects candidates, media, and voter strategies and outcomes during presidential elections. In an effort to paint a comprehensive picture of presidential campaigns in the modern era, course content asks students to investigate the evolution of a presidential candidate's communication environment, resources, and strategies. Students apply practitioner and academic literature to understand real time political processes. Students also utilize examples from past presidential elections to illustrate a variety of lessons related to launching candidacies, attacking opponents, cultivating ads, and image creation among other topics. In the process, students create descriptive accounts of campaigns and candidates and their media use and seek to infer campaign strategy.

Credits: 3
Prerequisite: COMM 101. Offered: Every other year.

COMM 344 - Public Relations Case Analysis

Analysis of classic and contemporary public relations cases in industry, labor, education, government, social welfare and trade associations.

Credits: 3
Prerequisite: COMM 222. Offered: Every semester.

COMM 345 - Broadcast Writing and Presentation

This course will help students develop their broadcast journalism skills with an emphasis on scriptwriting/producing and on-camera presentation. Students will learn to write for broadcast news and also how to do stand-ups, report and anchor for newscasts.

Credits: 3
Prerequisite: COMM 230 and COMM 231. Offered: Every Fall semester.

COMM 346 - Editing and Design

This course emphasizes editing skills, including copy editing, content editing, and page design. Students will learn to use professional-level software to create publications (both print and online) from scratch, developing photo editing, graphics creation, and design skills as well as line editing.

Credits: 3
Offered: Every year.

COMM 347 - Social Media Practicum

This course emphasizes effective use of social media, particularly in journalistic arenas. Students create and design their own content and use social media to engage an audience. Students will learn social media concepts and study analytics, applying them to their work in the class.

Credits: 3
Offered: Every year.

COMM 350 - Media Technology

Examination of the historical, technical, economic and regulatory status of communications technologies such as cable television, satellites, telephone, and computer communications. Discussion of general communication systems theory of video, audio and data communication including analog and digital signal transmission.

Credits: 3
Prerequisite: COMM 102. Offered: Every other year.

COMM 351 - Audio Production II

Refining skills and techniques acquired in COMM 251; more emphasis on announcing and interviewing; understanding the ethical and legal perspectives of audio material; introduction to the design, scripting, production and promotion of audio content for any application (e.g. radio, TV, film, web).

Credits: 3
Prerequisite: COMM 251. Offered: Every semester.

COMM 358 - Television News

Electronic news gathering and studio news techniques in the context of a weekly news program. Legal and ethical issues in news gathering.

Credits: 4
Prerequisite: (COMM 255 and COMM 254) or COMM 354. Offered: Every year.

COMM 359 - Special Topics in Communication

A 300-level course focusing on a topic not covered in the existing curriculum. Topic(s) announced in online Course Offerings each semester.

Credits: 1-3
Offered: Offered on occasion.

COMM 361 - Script Writing Video/Film/Radio

Techniques of developing concepts, treatments, outlines and scripts for dramatic fictions in the media of video, film and radio. Emphasis on traditional, modern and post-modern dramatic structure with units on character, dialogue, setting, visual narration, etc.

Credits: 3
Prerequisite: (COMM 251 and COMM 255) or COMM 354 or COMM 254. Offered: Every semester.
COMM 362 - Nonverbal Communication
This course explores the ways we communicate without using words, including our gestures, facial expressions, posture, and even our physical appearance. We will especially focus on how to read nonverbal cues from others and how to become more aware of what you are really saying with your own nonverbal cues. These skills are applicable anywhere from the job interview and work environment to interpersonal relationships.
Credits: 3
Prerequisite: COMM 101 and COMM 323. Offered: Every other year.

COMM 365 - Communication and Leadership
Communication and Leadership is designed to develop students' knowledge and communication skills pertaining to leadership. The course presents students with information concerning professional interaction, leadership perspectives, and the role communication, particularly public speaking, plays in effective leadership strategies. Communication and Leadership will help students embark on paths of personal leadership development. Specifically, since effective leaders must be strong communicators, students will be introduced to speaking situations that they may encounter in the workplace, such as the speech of introduction, crisis speeches, technical briefings, and civic appeals. In an effort to develop these skills, students will learn how to tailor messages to different audiences, connect authentically with their audience through their unique leadership style, and create compelling presentations and written pieces.
Credits: 3
Prerequisite: COMM 105. Offered: Every year.

COMM 366 - Postproduction
A balance between editing concepts such as continuity, pacing, dramatic focus, etc. and editing skills such as SMPTE code, signal monitoring, and digitized non-linear techniques. Students will learn the rules and methods by which an editor constructs fiction or a representation of actual events. Applicable to video or digital film. Weekly editing assignments. Lab required.
Credits: 3
Prerequisite: COMM 254 or COMM 354. Offered: Every semester.

COMM 368 - Video Camera and Lighting Techniques
A course that covers knowledge, methods and techniques essential to the work of a director of photography. Covers concepts of directing the camera, visual techniques, compositional methods and technical aspects of videography and lighting.
Credits: 3

COMM 367 - Communication and Leadership
Using a variety of theoretical models and critical approaches, students examine everyday communication practices to identify how gender, communication and culture create a complex and dynamic web of meaning with significant implications for individuals and society.
Credits: 3
Prerequisite: COMM 101 or WOST 201. Offered: Offered on occasion.

COMM 375 - Mass Media Theory
The course will examine the historical context of media theory covering the emergence of United States media technology, economics, cultural implications, and political influences to provide a basis for examining the evolution of media theories. Emphasis will be placed on mass media theories and address their implications to the media industry, the influences on American society and culture, and the evolution of democratic institutions. The course will be taught as a seminar involving readings, group discussions, and a research report.
Credits: 3
Prerequisite: COMM 102. Offered: Every other year.

COMM 379 - Persuasion
Examination of a wide body of humanistic, and social scientific literature concerning persuasion and persuasive techniques. Emphasizes evaluation and potential application of persuasion theory in communicative transactions.
Credits: 3
Prerequisite: COMM 101. Offered: Every year.

COMM 385 - International Media
An introduction to the study of international and domestic media systems around the world. Students will understand and appreciate how different countries and cultures use the media in unique ways and learn of different systems of ownership, financing, regulation, and programming. Key international media issues will also be discussed. Media examples (primarily films) will be used to show how cultures are portrayed by their media.
Credits: 3
Prerequisite: ENGL 100. Offered: Every year.

COMM 386 - International Films
Students will view, discuss, and critique a variety of contemporary films from a variety of countries. Emphasis will be placed on examining how contemporary cultures
are portrayed through film. Films will be compared and contrasted.

Credits: 3
Offered: Every year.

**COMM 395 - Radio News and Podcasting**

Theory and practice of radio journalism including writing and reporting news and journalism law and ethics. Students produce weekly radio newscasts during the second half of the semester.

Credits: 4
Prerequisite: COMM 351 or COMM 230 or COMM 231. Offered: Every other year.

**COMM 400 - Media Industry Management**

Analysis of the various techniques and problems involved in management of media companies. Topics examined include general theories of management, ethics, audience research, programming/content, sales/revenue, and business practices.

Credits: 3
Prerequisite: COMM 102. Offered: Every other year.

**COMM 401 - Television Studio Production II**

This course is designed to advance student skills beyond basics in television studio production. The class will attempt to convey the excitement -- and the reality -- of the community networking movement through productions specifically designed for broadcast on the FSU campus closed circuit channel, as well as on the village of Fredonia cable access television channel. It will convey a semester-long, realistic simulation of a working production house. The types of programming will be determined through collaboration between the students and the instructor. All projects will require students to work as a team to produce their own programs.

Credits: 4
Prerequisite: COMM 358 and COMM 307*. Cross-Listed as: * Indicates that the course can be taken in the same semester. Offered: Every year.

**COMM 420 - Communication Law and Ethics**

Assessment of the regulatory framework and major legal issues of the mass media. Examination of ethical issues in the media as well as principles and concepts of ethical theory.

Credits: 3
Prerequisite: COMM 102 or COMM 130. Offered: Every semester.

**COMM 422 - Public Relations Campaigns**

This capstone experience focuses on strategic public relations management. Students will develop a campaign for a real client, with an emphasis on formative research, objectives, strategy, tactics, and evaluation, as well as engage in a news conference and client presentation.

Credits: 3
Prerequisite: COMM 322 and COMM 344 and (COMM 295 or COMM 323). Offered: Every year.

**COMM 424 - International Public Relations**

This course provides a structured and practical framework for understanding the complexities of international public relations. In an increasingly multinational and multicultural economy, the course will guide students through the challenges of communication and problem solving across a range of organizations in cross-cultural settings. General course principles will include foundational theories to draw upon when considering public relations in a global context, strategies for effective intercultural communication in reaching diverse publics, and trends affecting the public relations profession throughout the world. The course will make extensive use of international public relations cases and utilize the international community of Fredonia to allow for direct exploration of the values and interests of diverse publics. This course also highlights the different approaches professionals must consider in specific global PR contexts.

Credits: 3
Prerequisite: COMM 222. Offered: Every year.

**COMM 430 - Communication Theory**

Provides a comprehensive investigation into various theoretical and metatheoretical perspectives which currently direct theory building and research in communication. Emphasis on critical thinking as literature in the field is investigated and evaluated in light of accepted scientific criteria.

Credits: 3
Prerequisite: COMM 105 and COMM 101 and (COMM 295 or COMM 323) or (COMM 295* or COMM 323*). Cross-Listed as: * Indicates that the course can be taken in the same semester. Offered: Every year.

**COMM 440 - Journalism Convergence Capstone**

The capstone experience will encourage students to put together everything they have learned in the journalism major and to do it across media. Students will prepare a project for their portfolio emphasizing the media track and the subject areas of emphasis they have chosen, but will work with other students to integrate their work across print, broadcast and Internet platforms. The work will also
be posted on a departmental web site, where the resulting work will be available to the general public.

Credits: 3
Prerequisite: (COMM 346 and COMM 347) or (COMM 345 and COMM 395). Offered: Every year.

COMM 441 - Multitrack Radio Production
Examination and practice of advanced sound design, production with ancillary equipment, and multitrack recording techniques for broadcast applications.

Credits: 3
Prerequisite: COMM 351. Offered: Offered on occasion.

COMM 451 - Audio Documentaries/Soundscapes
Exploration and execution of steps involved in writing and producing a documentary: preliminary research, program concept, aesthetic and ethical issues, target audience, outline, research, interviews, treatment, script, and production.

Credits: 4
Prerequisite: COMM 351. Offered: Every other year.

COMM 454 - Fiction I
A production course focused on fiction from script analysis to production of videos representing several genres from traditional to post modern. Units on directing, script breakdowns, pre-production and production of several short fiction video programs.

Credits: 4
Prerequisite: COMM 251 and COMM 361 and COMM 366. Offered: Every Fall semester.

COMM 456 - Radio Programming/Production
Theory and practice of programming and promoting a radio station: formats, sources, techniques; and development and production of a weekly radio series.

Credits: 4
Prerequisite: COMM 351. Offered: Every other year.

COMM 457 - Television Apprenticeship
Provides a variety of experience in both studio and field production. Simulation of actual work situation with weekly assignments. Requires commitment to responsibilities and substantial production skills.

Credits: 1-3
Prerequisite: COMM 255. Offered: Every semester.

COMM 459 - Special Topics in Communication
A 400-level course focusing on a topic not covered in the existing curriculum. Topic(s) announced in Course Offering Bulletin each semester.

Credits: 1-3
Offered: Offered on occasion.

COMM 460 - Organizational Communication
An advanced study of communication patterns in social organizations. In particular, communication environments within business and industry are analyzed. Application of procedures commonly used to evaluate and improve communication in organizations.

Credits: 3
Prerequisite: COMM 101. Offered: Every year.

COMM 462 - Documentary II
Second semester of a two-semester capstone course. In small groups, students produce well-crafted documentaries incorporating the theoretical, technical and practical skills learned in COMM 452. Must be taken immediately after COMM 452.

Credits: 4
Prerequisite: COMM 308 and COMM 452. Offered: Every Spring Semester.

COMM 464 - Fiction II
A course on fiction videos including pre-production, production, post-production and distribution of longer fiction videos. Emphasis on single camera, multiple take methods. Students all execute one or more production roles for a complex digital video with high production values. Must be taken immediately after COMM 454.

Credits: 4
Prerequisite: COMM 454. Offered: Every Spring Semester.

COMM 465 - Intercultural Communication
The course focuses on assisting students in interacting effectively and appropriately with people from various cultural backgrounds and on understanding dimensions of intercultural communication related to domestic and international contexts. Students will explore the formation of their own cultural identity and examine the complex relationship between culture, communication, context and power in intercultural communication.

Credits: 3
Offered: Every year.
COMM 466 - Sound Design

Students will study the technical and creative audio components needed to create the audio elements for mass media projects, focusing on audio production for video projects. The class will use several softwares including Pro Tools, Final Cut Pro, and Sound Track Pro, and Quicktime movies in the audio projects. Units will include audio and video field production techniques, post production techniques, Foley, and ADR (Looping).

Credits: 4

Prerequisite: COMM 251. Offered: Every year.

COMM 470 - Fredonia Radio Systems/WNYF/Leader Practicum

The practicum is for students interested in gaining practical journalism experience working at various campus news outlets. With a focus on convergence, students will work news editorial positions, producing product for either the Fredonia Radio Systems, WNYF-TV or The Leader campus newspaper. Teamwork and management skills are emphasized. Students are expected to write a paper highlighting their experience and present a portfolio of practical work at the end of the practicum.

Credits: 3

Prerequisite: COMM 230. Offered: Every semester.

COMM 475 - Communication/Studio Supervision

Advanced students are given opportunities to demonstrate knowledge of and practice application of skills in educational setting or specific subjects.

Credits: 1-3

Offered: Every semester.

COMM 480 - Communication Internship

Participation in off-campus professional, subject-related experience. Requires a Learning Contract proposal prepared in consultation with agency representative and with faculty sponsor describing experience, its relationship to course of study, and how it will be monitored and evaluated. Internships are graded using a letter grade. Proposal must be approved in advance by internship coordinator in communication department. Appropriate courses in specialization are required.

Credits: 1-15

Offered: Every semester.

COMM 490 - Independent Study

Approved study of particular aspect of communication, or participation in approved project not otherwise available through course work. A lab fee may be assessed if project is using department equipment.

Credits: 1-15

Offered: Every semester.

COMM 590 - Independent Study

Approved study of particular aspect of communication, or participation in approved project not otherwise available through course work. A lab fee may be assessed if project is using department equipment.

Credits: 1-6

Offered: Offered on occasion.

COMM 1SA - 100 Level Study Abroad Elective

A course taken during a study abroad experience that does not have a direct equivalency to a Fredonia course.

Credits: 1-15

Offered:

COMM 3SA - 300 Level Study Abroad Elective

A course taken during a study abroad experience that does not have a direct equivalency to a Fredonia course.

Credits: 1-15

Offered:

CRMJ - Criminal Justice

CRMJ 100 - Introduction to Criminal Justice

An introduction to the organization and activities of the U.S. criminal justice system. Topics include: criminal law, policing, courts, and corrections.

Credits: 3

Offered: Every semester.

CRMJ 230 - Criminal Law

The course will consist of a general approach to legal principles of statutory interpretation of Criminal Law applicable in all United States jurisdictions. Students will learn the elements of criminal offenses including mens rea, actus reus, concurrence, causation and proximity. Students will study statutory definitions of crimes, (e.g. murder, sexual assault, burglary, and robbery). Inchoate crimes and defenses will also be considered.

Credits: 3

Prerequisite: CRMJ 100. Offered: Every year.

CRMJ 240 - Policing

An examination of the structure and functioning of police and police organizations in the United States. Topics covered include patrol, police discretion, ethics, police community relations and police accountability.

Credits: 3
Prerequisite: CRMJ 100. Offered: Every semester.

**CRMJ 250 - Transnational Crime**

This course will examine the topic of transnational crime in our globalized world. Students will be introduced to various types of transnational crimes including drug trafficking, stolen property, counterfeiting, human trafficking, fraud and cyber-crime, commercial vices, extortion and racketeering, money laundering and corruption, and international terrorism.

Credits: 3

Offered: Every other year.

**CRMJ 331 - Criminal Procedure**

The course studies the criminal law processes necessary for successful criminal investigation including physical and testimonial evidence gathering, arrest, and presentation of an accused to court for trial proceedings. Students are required to apply contemporary U.S. Supreme Court decisions relevant to such topics as arrest, search and seizure, and interrogations.

Credits: 3

Prerequisite: CRMJ 100. Offered: Every year.

**CRMJ 332 - Homeland Security**

The course involves the study of homeland security, mission and composition. Students will examine the various methods and institutions implicated in the quest to increase security and defend against terrorism. Consideration of the methods and practices for border security in the United States will be included.

Credits: 3

Prerequisite: CRMJ 100. Offered: Every year.

**CRMJ 333 - Criminal Investigations**

This course involves the study of crime scene investigations. The course will not involve students in actual investigations (and therefore does not require a science background) but rather the procedural structure and strategic steps to be taken in securing the crime scene in developing a checklist of factors to be considered in a comprehensive investigation.

Credits: 3

Prerequisite: CRMJ 100. Offered: Every year.

**CRMJ 340 - Introduction to Corrections**

A study of societal reactions to crime from an historical, socio-political, social psychological and economic perspective. The functions of retribution, rehabilitation, incapacitation and deterrence are examined.

Credits: 3

Prerequisite: CRMJ 100 and SOC 116. Offered: Every semester.

Prerequisite: CRMJ 100. Offered: Every semester.

**CRMJ 350 - Special Topics**

Special topics in Criminal Justice not covered in detail by regular courses.

Credits: 3

Offered: Offered on occasion.

**CRMJ 355 - Organized Crime**

This course will explore the evolution of and theories behind organized crime. We will look at different organized crime groups such as Colombian drug cartels, Mexican drug trafficking organizations, the Russian Mafia, the Italian-American Mafia, Yakuza, Triads, Tongs, Motorcycle Gangs as well as Hispanic and African-American Gangs. At the conclusion we will also look into legislative responses to organized crime and how intelligence may help in combating organized crime groups.

Credits: 3

Prerequisite: CRMJ 100. Offered: Every other year.

**CRMJ 356 - Criminal Justice Ethics**

The course will consider ethics as it relates to the criminal law. The definition of justice and the application of the definition will be discussed. Honor, integrity, and individual responsibility will be considered as these concepts relate to policy formulation and application of laws in the criminal justice system.

Credits: 3

Prerequisite: CRMJ 100. Offered: Every other year.

**CRMJ 360 - Criminal Justice Ethics**

The course will consider ethics as it relates to the criminal law. The definition of justice and the application of the definition will be discussed. Honor, integrity, and individual responsibility will be considered as these concepts relate to policy formulation and application of laws in the criminal justice system.

Credits: 3

Prerequisite: CRMJ 100. Offered: Every other year.

**CRMJ 361 - Capital Punishment**

This course provides an introduction to the theory and practice of capital punishment (aka the death penalty) in the United States. More specifically the course will look at the history of the death penalty in the United States, punishment philosophies behind the use of this form of punishment, methods of execution, and legal issues regarding capital punishment in general.

Credits: 3

Prerequisite: CRMJ 100. Offered: Every other year.

**CRMJ 370 - Criminology**

The course will examine the types of criminal behavior and crime patterns, the social and organizational context of crime, statistical information about crime and various theories of crime.

Credits: 3

Prerequisite: CRMJ 100 and SOC 116. Offered: Every semester.
CRMJ 375 - Serial and Mass Murder in the U.S.
This course will examine the topic of serial and mass murder in the United States. It will cover some history of the phenomenon but its main focus will be on contemporary events. Serial murder will be distinguished from other forms of multiple homicides. Various forms of serial and mass murder will be described utilizing specific instances of serial and mass murder. Problems associated with addressing the problems of serial and mass murder, beginning with their definitions, will be recognized. Other topics that will be covered include female serial murderers, killing cults, health care professionals and serial murder, and serial murderers in foreign countries.
Credits: 3
Prerequisite: CRMJ 100. Offered: Every other year.

CRMJ 400 - Senior Seminar
A capstone course in which students will do readings, discussions, and analysis of current topics of interest in the field of criminal justice. Using primary sources, students will prepare and present in-depth examinations of specific issues. Senior standing in the major is required. This course will be taught using a blended course format. Instruction for one third of this course will be delivered online.
Credits: 3
Prerequisite: SOC 300 and (CRMJ 370 or CRMJ 320). Offered: Every semester.

CRMJ 440 - Corrections Administration
Course examines the organization and administration of correctional institutions and programs. Management concepts and elements of the administration process are presented. Attention is given to the problems of staffing and personnel management and development, implementing correctional policy and ideology, and responding to client needs during their incarceration.
Credits: 3
Prerequisite: CRMJ 100 and CRMJ 340. Offered: Every other year.

CRMJ 441 - Police Administration
This course familiarizes students with the principle issues facing contemporary American police administration. Students will gain an appreciation of the complex responsibilities associated with administering a police organization in a free society.
Credits: 3
Prerequisite: CRMJ 100 and CRMJ 240. Offered: Every other year.

CRMJ 470 - Criminal Justice Internship
Supervised placement in legal and/or criminal justice work setting. On a limited basis, opportunity to observe and engage in various facets of criminal justice system. Permission of department.
Credits: 1-15
Offered: Every semester.

CRMJ 472 - Independent Study
In-depth exploration of a criminal justice topic under the direction of a criminal justice department faculty member, who is willing to sponsor the student. Students should have specific topics in mind before approaching an instructor and are expected to complete a research project and present his or her findings to the professor on the agreed upon topic. Once an Independent Study has been arranged and prior to the semester beginning, the student must complete the Independent Study Contract with the sponsoring faculty member.
Credits: 1-3
Offered: Every semester.

CSIT  Computer Info Sciences

CSIT 100 - Freshman Seminar
Introduction to computing environments available on campus; e-mail, Internet access and web; campus computing policies; computing and information technology ethics; other campus resources and their effective use; building a support network with faculty, staff and peers; improving study skills inside and outside the classroom. Corequisite: Freshman standing.
Credits: 1
Offered: Every year.

CSIT 101 - Programming with 3-D Graphics and Multimedia
Introductory programming course using a high-level, object -oriented language, such as ALICE. The course covers object-oriented and event driven programming concepts, in addition to algorithms and elementary programming techniques that are needed to develop elementary graphics and multimedia applications. Prerequisite: N.Y.S. Algebra II and Trigonometry (or Math B), or equivalent.
Credits: 3
Offered: Every year.

CSIT 104 - Introduction to Microcomputer Software
Introduction to microcomputers; elementary concepts and operations of spreadsheets and database management systems; analysis of a variety of problems, their design,
and implementation of solutions using commercially available window-based software. Three units of high school mathematics required.

Credits: 3
Offered: Every semester.

**CSIT 105 - Visual BASIC I**

This is a Fredonia Foundations lab-based course that fulfills 3-credit hour mathematics and quantitative reasoning requirement. This is an introductory course in high level programming language, Visual Basic (VB), which introduces elementary ideas of object-oriented and event-driven programming, concepts using VB.

Credits: 3
Offered: Every semester.

**CSIT 106 - Scientific Programming Using C/C++**

Scientific problem solving; structured program development: simple algorithm design, arithmetic operations, data types and their declarations; control statements, loops, input and output including text files; arrays, functions, mathematical functions and round off error estimation. Applications to engineering, sciences and mathematics. Credit will not be given for both CSIT 106 and 121. Background assumed: N.Y.S. Algebra II and Trigonometry (or Math B), or equivalent.

Credits: 3
Prerequisite: MATH 120 or MATH 122. Offered: Offered on occasion.

**CSIT 107 - Web Programming I**

An introductory course in client-side web technologies: HTML, cascading style sheets and JavaScript; designing and publishing a web site. Other topics include history of the Internet and World Wide Web, HTML editors, and graphics.

Credits: 3
Offered: Every semester.

**CSIT 120 - Computer Science Overview**

A comprehensive overview of the scope and dynamics of computer science. Survey of the field of computer science. Topics include: history of computing, computer organization and components, operating systems, programming languages, introduction to programming and program development, data structures, problem solving, software engineering, computer ethics, and computer applications. Background assumed: N.Y.S. Algebra II and Trigonometry (or Math B), or equivalent.

Credits: 3
Offered: Every semester.

**CSIT 121 - Computer Science I**

Hands-on exposure to the following major topics: Problem solving, algorithm design and development, structure of the program, top-down design and functional decomposition, debugging, elementary data types, expressions, I/O functions and formats, repetition and control structures, user-defined functions, pass by value, pass by reference, built-in functions, arrays, strings.

Credits: 3
Offered: Every semester.

**CSIT 151 - Introduction to Information Systems**

The course introduces information technology used in day-to-day business operations. It covers business applications software for office management, communication, project management, relational databases, eCommerce, web development, data transmission and networks, etc. The course also covers such basic information systems concepts as querying simple databases, data analysis and database design. Laboratory instruction is used to complement the course with hands-on experience with a set of above applications. The course is designed for students who will work as end-users, user-managers, leaders, or information systems professionals.

Credits: 3
Offered: Every semester.

**CSIT 201 - Computer Security and Ethics**

Introduces desktop, internet, and network security issues and how they interact with the ethical values of individuals, organizations, and society. Includes methods of avoiding, detecting, and analyzing network intrusions as well as the ethics related to computer security and privacy. Background assumed: N.Y.S. Integrated Algebra and Geometry, or Math A, or equivalent.

Credits: 3
Offered: Every year.

**CSIT 203 - Multimedia Systems**

The course introduces multimedia systems from a theoretical and practical perspective. Topics covered include: computer manipulation of images, music, animation, and video, including theoretical aspects of lighting, color, elementary acoustics principles, motion, perspective, graphical and sound file formats, and network transmission. Various software packages will be introduced: for raster and vector graphics; for 2-D and 3-D modeling and animation; for sound recording and editing. Using these software packages and applying the principles learned in the course, students will practice creating, processing, and modifying graphics and sound. Students will gain practical hands-on experience through the course work and understand the operating principles of
multimedia systems. No programming background is assumed.

Credits: 3

Offered: Offered on occasion.

**CSIT 205 - Visual BASIC II**

Advanced visual Basic programming techniques with graphical user interface and Active X controls. Topics include: multiple forms and other GUI elements, database concepts and interacting with databases, server side web programming, dynamic and static data types, arrays, files, lists, stacks and queues, concept of classes and related notions, designing Windows API calls and Windows registry functions and advanced event-driven business applications. The course provides a computer laboratory component to ensure practice with the above concepts.

Credits: 3

Prerequisite: CSIT 105 or CSIT 121. Offered: Every year.

**CSIT 207 - Web Programming II**

An advanced course in server-side web programming. Topics include: cookies, file and database access, portals and web applications; server side scripting. Knowledge of HTML, and of C++, Java, or Visual Basic are required.

Credits: 3

Prerequisite: CSIT 107 and (CSIT 105 or CSIT 121). Offered: Every semester.

**CSIT 208 - Computer Game Design and Implementation**

This course will provide an introduction to current and future techniques for computer game design and implementation. Topics will cover graphics game engines, motion generation, behavioral control for autonomous characters, layered game architecture, interaction structure, and interface issues of multi-user play. The course will emphasize a practical approach to the development of games. A variety of game development technologies will be considered. No programming background is assumed.

Credits: 3

Offered: Offered on occasion.

**CSIT 221 - Computer Science II**

Hands-on exposure to major topics in data structures and control, including file I/O; abstract data types; static and dynamic data structures; pointers and pointer operations; templates, memory addresses; garbage collection; memory leak; function and operator overloading; constructors and destructors; deep and shallow copying; class concepts; multi-dimensional and dynamic arrays; linked lists; doubly-linked lists; stacks, queues and their implementations and applications. The course provides a computer laboratory component to ensure practice with the above concepts.

Credits: 3

Prerequisite: CSIT 121. Offered: Every semester.

**CSIT 224 - Problem Solving Using Objects**

Object-oriented design methodologies; object-oriented programming; class concepts, encapsulation; operator overloading, polymorphism, inheritance; virtual, constant and friend functions; constructors and destructors; dynamic and delayed binding; abstract classes and interfaces; function overloading; and exception handling; advanced OO programming and applications.

Credits: 3

Prerequisite: CSIT 221. Offered: Every year.

**CSIT 225 - Java Programming**

Basic programming constructs: primitive types, expressions, and statements; class hierarchies; elementary predefined classes such as String and Math; object-oriented programming; packages and interfaces; exception handling; I/O and file access; graphics; applets; studio processing and other applications.

Credits: 3

Prerequisite: CSIT 221. Offered: Offered on occasion.

**CSIT 231 - Systems Programming**

UNIX commands, shells, utilities, editors; file types and modes; shell scripts; make-files; memory and storage management; C programming tools; processes, IPC (signals, sockets, pipes); development tools; streams; networking; UNIX internals, system administration and other topics as time permits.

Credits: 3

Prerequisite: CSIT 221. Offered: Every semester.

**CSIT 232 - Introduction to Robotics**

Students will study the history of robots, understand the differences in types of robots, explore artificial intelligence through readings and lab work with the Raspberry Pi microcomputer and python programming language, work with sensors, where necessary work with servos and motors, demonstrate understanding of electrical components involved in physical computing, design and attempt construction of programmable and autonomous robots using the Raspberry Pi as a foundation. Working in teams, the students will demonstrate their successes and describe and demonstrate their efforts in a final project.

Credits: 3

Offered: Every year.
CSIT 241 - Discrete Mathematics I

Study of mathematical topics needed for further study of computer science at the advanced undergraduate level, including: logic, sets, proof techniques, matrices, basic number theory, modular arithmetic, functions, linear transformations, relations, basic combinatorics.

Credits: 3
Prerequisite: (MATH 108 or MATH 120 or MATH 122) and (CSIT 105 or CSIT 121). Offered: Every semester.

CSIT 242 - Discrete Mathematics for Computer Science II

A continuation of CSIT 241. Topics include combinatorics, digraphs, and trees; recurrence relations; switching circuits and logic gates; automata, grammars and languages; other topics as time permits.

Credits: 3
Prerequisite: CSIT 221 and CSIT 241. Offered: Every year.

CSIT 251 - Information Systems Structures

Overview of information systems (IS) for operational, tactical and strategic functions of business organizations; IS practices and challenges for business competitiveness; data, information and knowledge processing; information systems theory and quality decision, systems analysis and design, database management, network and network management; electronic commerce and social and ethical issues; IS and IT planning and implementation.

Credits: 3
Prerequisite: CSIT 151 or BUAD 161 or CSIT 104. Offered: Every semester.

CSIT 291 - Special Topics

Selected topics in computer and information sciences based on instructor or student interest requiring basic understanding of computer information systems operations.

Credits: 0-3
Offered: Offered on occasion.

CSIT 300 - Internship

Participation in an approved professional experience in the area of computer science. Students must submit a proposal describing the work experience, its relationship to subject matter in computer science, and how it will be monitored and evaluated. Permission of the department required.

Credits: 1-12
Offered: Every semester.

CSIT 308 - Computer Game Design and Implementation

This course will provide an introduction to current and future techniques for computer game design and implementation. Topics will cover graphics game engines, motion generation, behavioral control for autonomous characters, layered game architecture, interaction structure, and interface issues of multi-user play. The course will emphasize a practical approach to the development of games. A variety of game development technologies will be considered. Programming background is expected.

Credits: 3
Prerequisite: CSIT 203 or CSIT 221. Offered: Every semester.

CSIT 324 - Object Oriented Programming

Object-oriented design methodologies; object-oriented programming; class concepts, encapsulation; operator overloading, polymorphism, inheritance; virtual, constant and friend functions; constructors and destructors; dynamic and delayed binding; abstract classes and interfaces; function overloading; and exception handling; advanced OO programming and applications.

Credits: 3
Prerequisite: CSIT 221. Offered: Every year.

CSIT 391 - Special Topics

This course is designed to introduce and explore new subjects in Computer and Information Sciences at 300-level based on faculty and student interest. Topics will vary and may include: New Programming Languages, Advanced Web Development topics, Project Management Controlling, Risk Management, Project Teams, Communication and Documentation, Organizational Structures, Introduction to MS Project, or other relevant topics as they arise.

Credits: 3
Prerequisite: CSIT 221. Offered: Offered on occasion.

CSIT 305 - Computer Laboratory Assistantship

Non-credit course for students interested in performing computer-related services for the Computer and Information Sciences program. Duties include: proctoring in computing laboratories; assisting with the labs in CSIT 121 or CSIT 221; helping the faculty director and/or systems manager with basic laboratory maintenance. Grading is on an S/U basis. Permission of the department required.

Credits: 0
Offered: Every semester.
CSIT 307 - Web and Mobile App Design
An introduction to cross platform and hybrid mobile application aesthetic design. This course emphasizes prototyping mobile applications and powering their functionality through iterative development. The course includes a comprehensive project including the design and implementation of a web-based software product based on predefined specifications.

Credits: 3
Prerequisite: CSIT 107 and CSIT 207. Offered: Offered on occasion.

CSIT 311 - Assembly Language and Computer Organizations
Introduction to the basic concepts of computer organization, digital logic, data representation, and machine instructions repertoire; memory access and storage; instruction execution; assembly language; computer organization; levels of computer structures; data representation and transfer; digital arithmetic; memory structure and addressing methods; cache; secondary memory structure and organization.

Credits: 3
Prerequisite: CSIT 121. Offered: Every semester.

CSIT 312 - Computer Structures
Introduction to basic concepts of computer system and architecture; internal and external memories, I/O and operating system support; instruction execution; computer structure, organization and function; digital arithmetic; memory structure and addressing methods; cache; secondary memory structure and organization; system software structure; purpose and functions of system programs; file systems; process and resource management.

For Computer Information Systems majors; Computer Science majors may not count this course to meet major requirements.

Credits: 3
Prerequisite: CSIT 105 or CSIT 121. Offered: Every semester.

CSIT 316 - Introduction to Human-Computer Interaction
The course introduces techniques, ideas, and models involved in designing, implementing, and evaluating interactive technologies for human use. It explores principles of design and usability, with an emphasis on the human-side of interaction. Accordingly, in addition to human and computing factors, the role of task (goals) and context are highlighted as key to understanding interaction phenomena at the individual, group, organizational, and societal levels. These include issues related to internationalization, such as cultural, ethical, and social aspects of interaction. Students will learn how to gather requirements, to design usable interfaces, and both implementation and evaluation processes. They will gain hands-on experience with contemporary interaction design techniques, and will have the opportunity to analyze and critique various computing interfaces including web sites, computer systems, video games, mobile devices, and more.

Credits: 3
Prerequisite: CSIT 121 or CSIT 151. Offered: Offered on occasion.

CSIT 321 - Paradigms of Programming Languages
Brief history of programming languages; language design issues; syntax and translation; data types; sequence control; the procedural paradigm; the object-oriented paradigm; the functional paradigm; the logical paradigm.

Credits: 3
Prerequisite: CSIT 224 or CSIT 324. Offered: Every semester.

CSIT 333 - Mobile Applications Development
This course introduces system development for the Android, iPhone or Windows mobile operating systems from both the practical software implementation and the theoretical software design perspectives. Topics covered include: Overview of mobile systems development, scope of mobile software, mobile development environments, user interface design, receivers/alerts and services coordination, hardware interaction, multimedia integration, and networking/location-based services utilization.

Credits: 3
Prerequisite: CSIT 205 or CSIT 221. Offered: Offered on occasion.

CSIT 335 - Data Communication and Networks I
Computer networking overview; OSI model and network layers; Ethernet and other local area network technologies; routing and data flow control; point-to-point, broadcasting, local and wide area networks; internetworking; modern network management protocols; network administration. Some programming assignments and practical work may be assigned to gain understanding of the network protocols.

Credits: 3
Prerequisite: CSIT 205 or CSIT 221. Offered: Every year.

CSIT 341 - Data Structures
Review of basic data structures and algorithmic complexities; recursion; topological order; Sorting and searching; Huffman codes; tries; binary trees; binary search trees; tree traversals; general trees, heaps, balanced trees; priority queues; hashing; graphs, graph algorithms.
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Credits: 3
Prerequisite: CSIT 205 or CSIT 221. Offered: Every semester.

CSIT 351 - Business Systems Development
Review of business programming language principles and techniques; interfacing with computing environment; sorting, table handling, indexing and searching; preparation and handling of data; file organization, and file update; business system analysis, design and implementation; introduction to business information systems.
Credits: 3
Prerequisite: CSIT 205 or CSIT 221. Offered: Every year.

CSIT 390 - Directed Study
An intensive project-oriented course utilizing emerging technologies. Departmental approval is required.
Credits: 1-3
Offered: Offered on occasion.

CSIT 400 - Directed Independent Study
Independent study of a selected list of readings approved by a faculty advisor. Permission of the department required.
Credits: 1-3
Offered: Offered on occasion.

CSIT 411 - Programming for Embedded Microcontrollers
Programming and development for embedded microcontrollers. Embedded architecture, programming considerations related to embedded systems development. Memory utilization, I/O, synchronous and asynchronous serial communication. Utilization of timers, and interrupts. Development considerations for comparators, A/D converters, USARTs and other on-board peripheral devices. Debugging, and utilization of test equipment such as multimeters and oscilloscopes. Students will build a series of embedded projects of increasing complexity. Some very basic electronic design principles are also included.
Credits: 3
Prerequisite: CSIT 221. Offered: Every other year.

CSIT 413 - Computer Architecture
Review of computer organization and digital logic principles; system buses and peripherals, main and cache memory overview; pipelined processing; RISC and CISC concepts; Superscalar and IA-64 architecture; performance evaluation; microarchitecture level and the control unit. Term projects in digital system design are emphasized.
Credits: 3
Prerequisite: CSIT 221 or CSIT 205. Offered: Every other year.

CSIT 425 - Software Engineering
Basic concepts and major issues of software engineering; current tools and techniques providing a basis for analysis, design, development, maintenance, and evaluation of software systems; structured walkthrough and software testing; verification and validation; technical, managerial, administrative, and operating issues; privacy, security, and legal issues; developing a team project using software engineering principles.
Credits: 3
Prerequisite: CSIT 311 or CSIT 312. Offered: Every year.

CSIT 431 - Introduction to Operating Systems
System software organization, purpose and functions of computer operating systems, batch processing systems: translation, loading and execution; serial and parallel I/O processing; spooling; interrupt facilities; memory protection and management; file systems; multi-access and special-purpose systems; process scheduling; accounting procedures and resource management; classical and popular operating systems.
Credits: 3
Prerequisite: (CSIT 311 or CSIT 312) and CSIT 341 and CSIT 231. Offered: Every semester.

CSIT 433 - Compiler Construction
Finite automata; languages and grammars; review of language structure, translation, linking, loading, execution; run-time storage organization; compilation of simple structures; compiler design principles, organization and implementation; lexical analysis; symbol tables; parsers and semantic analysis; code generation and optimization; error diagnostics.
Credits: 3
Prerequisite: (CSIT 311 or CSIT 312) and CSIT 341. Offered: Every other year.

CSIT 435 - Data Communication and Networks
Network protocol stack layers, network bandwidth and traffic management, data transmission fundamentals; data encoding and multiplexing, switching and error handling; ATM, DiffServ, RSVP, MPLS and related modern protocols; network applications; carrier transport networks, reliability and security, encryption and compression; wireless networks; advanced network programming. Term projects are emphasized for network performance analysis and QoS application design.
Credits: 3
Prerequisite: CSIT 311 or CSIT 312. Offered: Every semester.

**CSIT 436 - Advanced Network Programming**
Designing client-server applications with sockets; traffic analysis; building concurrent and multi-service servers; designing network protocols; measuring and analyzing performance of protocols. Students will complete a number of programming and network analysis experiments during the semester.

Credits: 3
Prerequisite: CSIT 435. Offered: Offered on occasion.

**CSIT 437 - Advanced Operating Systems**
Review of contemporary operating systems, OS design principles and strategies; examination of communication and synchronization protocols; concurrent processes and process scheduling including their statistical analysis; distributed operating systems; client-server computing model; distributed resource management; multiprocessor OS; failure recovery and fault tolerance; data security; applications.

Credits: 3
Prerequisite: CSIT 431. Offered: Every year.

**CSIT 441 - Analysis and Design of Algorithms**
Introduction to design and analysis of algorithms: time and space complexity, verification of correctness; advanced algorithm design strategies: iterative, divide and conquer, greedy method, dynamic programming, branch and bound, etc.; specific examples drawn from sorting, searching, string searching, graph problems, matrices, polynomial arithmetic, cryptography; hard problems and approximation algorithms: Knapsack, bin packing, and graph coloring problems, etc.

Credits: 3
Prerequisite: CSIT 242 and CSIT 341. Offered: Every other year.

**CSIT 443 - Theory of Computation**
Regular expressions and finite automata; context-free grammars and pushdown automata; pumping arguments; closure properties; decision algorithm; Turing machines; computability and decidability; halting problem; and elementary complexity theory.

Credits: 3
Prerequisite: CSIT 242 and CSIT 341. Offered: Every other year.

**CSIT 451 - Introduction to Files and Databases**
Large scale information organization; basic concepts and terminologies of file management techniques; storage hierarchies, external storage devices; mass storage systems; common file structures and organization methods; physical file organization; list, inverted, and tree structured file organization methods; file systems; concepts of data modeling; data languages; search, retrieval and processing methods; introduction to relational databases and database management systems.

Credits: 3
Prerequisite: CSIT 341. Offered: Offered on occasion.

**CSIT 455 - Relational and Object Databases**
Review of data modeling and databases (DB); entity/relationship and relational models; relational algebra; relational databases; database architecture; data integrity; SQL design; SQL and QBE languages; functional dependencies; normalization; data protection and SQL concurrency; data and database security; object-oriented databases; distributed and client/server systems; introduction to DB administration.

Credits: 3
Prerequisite: CSIT 121. Offered: Every year.

**CSIT 456 - Information and Decision Support Systems**
Information and computer information systems; information hierarchy; decisions and decision-making; functional components of a decision support system; intelligent/knowledge-based decision-making and knowledge management; architecture of decision systems; distributive and group decision-making; executive information systems; expert and fuzzy systems; reasoning and explanation; knowledge elicitation and representation; logistics and long-term decision-making.

Credits: 3
Prerequisite: CSIT 341 and CSIT 351. Offered: Every other year.

**CSIT 458 - Lab Supervision in Computer and Information Sciences**
A supervisory experience working in the Computer and Information Sciences department's laboratories under the guidance of a faculty member. Student experiences may include preparing and handling lab materials, help students needing guidance in completing assignments, and demonstrating procedures and techniques to students. Student must have Junior/Senior Standing and Departmental Approval is needed.

Credits: 1
Offered: Every semester.

**CSIT 461 - Introduction to AI and Knowledge Engineering**
Overview of artificial intelligence tools and techniques; searching methods; applications of AI; game playing, expert systems and knowledge-based systems; components
of a knowledge-based system; knowledge acquisition, representation, and formalization; numerical and symbolic processing; information theoretic and decision theoretic algorithms; inference engine; machine learning; reasoning and explanation; basic concepts and major issues of knowledge engineering; current tools and techniques for analysis, design, development of the knowledge based systems; applications in robotics, medical diagnosis, smart decision systems, etc.

Credits: 3
Prerequisite: (CSIT 205 or CSIT221) and CSIT 241. Offered: Every other year.

CSIT 462 - Computer Graphics
Introduction to computer graphics; graphics hardware, systems and APIs; raster and vector graphics; basic 2D primitives; points, lines, arcs, polygons and poly-lines; basic 3D shapes; raster algorithms for drawing 2-D primitives; 2D and 3-D geometrical transformations; projections; rendering, lighting, and animation; representation of curves and surfaces; solids modeling; applications of the above concepts.

Credits: 3
Prerequisite: CSIT 221 or CSIT 205. Offered: Every other year.

CSIT 463 - Introduction to Digital Image Processing and Computer Vision
Introduction to digital image and signal processing, computer vision and pattern recognition; image acquisition, registry and display; elementary image processing algorithms: sampling, preprocessing, smoothing, segmentation, and sharpening; transformations; filtering; image coding and restoration; analog and digital images and image processing systems; feature extraction and selection; elementary pattern classification and vision systems; robotics; machine learning.

Credits: 3
Prerequisite: CSIT 205 or CSIT 221. Offered: Every other year.

CSIT 471 - Information Systems Management
Overview of information systems (IS) for business organizations; IS systems management; strategic uses of IT, and E-commerce; IS planning, using and managing essential technologies: databases, distributed systems, telecommunications, information resources; managing IS operations; managing systems development; systems for supporting knowledge-based work; practices and challenges for business competitiveness; information systems theory and quality decision theory; electronic and mobile commerce; social and ethical issues; IS and IT implementation.

Credits: 3
Prerequisite: CSIT 205 or CSIT 221. Offered: Every other year.

CSIT 473 - Data Warehousing and Mining
Overview of data and information sharing; principles of information sharing; information security; data mining, data warehousing, and data marts; data modeling; data collection, problems, quality, and integrity; databases and content management; business intelligence; online analytical processing; data visualization, multidimensionality, and real-time analytics; examples of data warehousing and data mining - geographic information systems, web intelligence, resource management, multimedia-based databases, knowledge bases, etc. CSIT 121 is a prerequisite. CSIT 221 is recommended but not required.

Credits: 3
Prerequisite: CSIT 121. Offered: Every other year.

CSIT 475 - Electronic Commerce
Topics include Internet technology for business advantage, managing e-commerce funds transfers, business opportunities in e-commerce, Website development, social, political and ethical issues associated with e-commerce, and business plans for technology ventures. The purpose of the course is to educate the students about the technology required of e-commerce. Lab instruction in Internet application development complements the course.

Credits: 3
Prerequisite: (CSIT 205 or CSIT 221) and CSIT 207. Offered: On occasion.

CSIT 490 - Seminar on Selected Topics
Studies, discussions, workshops and seminars on selected topics in computer science. Written reports and a formal presentation are required.

Credits: 1-3
Offered: Offered on occasion.

CSIT 496 - Special Topics
A variable-topics course in computer and information sciences. Topics normally not covered in the Computer Science or Computer Information Systems degree programs, but suitable to explore at length at the senior level. Project and a formal presentation are required.

Credits: 1-3
Offered: Offered on occasion.

CSIT 497 - Thesis
Faculty-supervised research on a computer and information sciences topic of interest to the faculty
member and the student. Minimum of 80 hours of productive work required. A thesis documenting problem statement, approach, methodology, and results will be submitted upon completion.

Credits: 3
Prerequisite: CSIT 341 or CSIT 351. Offered: Offered on occasion.

**CSIT 499 - Senior Project**

Faculty-directed work on a computer and information sciences project of interest to the faculty member and student. Minimum of 80 clock hours of productive work required. A report of presentation discussing approach, methodology, and results will be submitted upon completion.

Credits: 3
Prerequisite: CSIT 341 or CSIT 351. Offered: Offered on occasion.

**CSIT 536 - Advanced Network Programming**

Designing client-server application with sockets; traffic analysis; building concurrent and multi-service servers; designing network protocols; measuring and analyzing performance of protocols. Students will complete a number of programming and network analysis experiments during the semester. Background assumed: Data Communication and Networks II or equivalent.

Credits: 3
Offered: Offered on occasion.

**CSIT 537 - Advanced Operating Systems**

Review of contemporary operating systems (OS), OS design principles and strategies; examination of communication and synchronization protocols; concurrent processes and process scheduling including their statistical analysis; distributed operating systems; client-server computing model; distributed resource management; multiprocessor OS; failure, recovery and fault tolerance; data security; applications. Background assumed: Introduction to Operating Systems or equivalent.

Credits: 3
Offered: Offered on occasion.

**CSIT 541 - Algorithms**

Topics include: time and space complexity; verification of correctness; advanced algorithm design strategies (iterative, divide-and-conquer, greedy methods, dynamic programming, branch-and-bound, etc., with specific examples drawn from sorting, searching, graph theory, matrix and polynomial arithmetic, and cryptography); hard problems and approximation algorithms, with examples such as napsack, bin-packing, and graph coloring problems; introduction to parallel algorithms as time permits. Background assumed: Mathematical Structures and Proof and Data Structures.

Credits: 3
Offered: Offered on occasion.

**CSIT 542 - Advanced Data Structures**

Typical topics include: Red-Black trees; AVL trees; B trees; B+ trees; B* trees; tries; splay trees; spatial data structures; self-organizing lists; summation techniques; recurrence relations, including establishing bounds and expanding recurrences; hashing and other complex indices; complexity of searching on various structures. Background assumed: Data Structures.

Credits: 3
Offered: Offered on occasion.

**CSIT 580 - Computational Biology**

The course exposes students to a wide range of state-of-the-art research and techniques in the field of computational biology. This is a modern discipline dealing with the discovery and implementation of algorithms facilitating the understanding of biological processes. Various statistical, heuristic, and machine learning methods are used for this purpose, as well as graphical tools to visualize the objects. The course is intended to present some biological problems related to the human genome and the computational methods to resolve them. It will cover an introduction to computational biology, the use of computational methods to search for, classify, analyze, and model protein sequences, i.e. to convert the masses of information from biochemical experiments into useful information.

Credits: 3
Offered: Offered on occasion.

**CSIT 591 - Selected Topics in Computer Science**

A variable topics course in computer science. Topics normally not covered in Computer Science or Computer Information Systems undergraduate degree programs but suitable to explore at length at graduate and senior level. Project and a formal presentation are required. Background assumed: CSIT 341 or equivalent background knowledge and permission of instructor.

Credits: 3
Offered: Offered on occasion.

**CSIT 613 - VLSI Design**

The course focuses on the design of CMOS VLSI (Very Large Scale Integrated) chips using integrated circuit cells as building blocks and employing hierarchical design methods. Focus will be on the design of digital systems. Design issues at layout, schematic, logic and RTL levels will be studied. Shareware and freely available design...
software will be used for laboratory exercises. An overview of VLSI computer-aided design (CAD) tools and theoretical concepts in VLSI architectures will also be discussed. Prerequisite: Completed at least one course in logic design or computer architecture at the undergraduate level.

Credits: 3
Offered: Offered on occasion.

**CSIT 625 - Advanced Topics in Software Engineering**

The course focuses on modern software project development techniques. Topics include Universal Modeling Language (Use Case, Sequence, and Class diagrams), code reusability, design patterns, component development and versioning software. Students will produce a significant, multifaceted software product.

Credits: 3
Prerequisite: CSIT 425. Offered: Offered on occasion.

**CSIT 636 - Network Security**

The course deals with the security aspect of information and data exchange on shared internetworks. The requirements of secure transfer include secrecy, integrity, authentication and non-repudiation. The mechanisms to fulfill these requirements are introduced including encryption algorithms that provide privacy, message authentication, and non-repudiation. Practical implementation of security on top of the three layers of the OSI reference model is highlighted. The various forms of attacks including intrusions, worms, viruses, Trojan horses and distributed attacks are discussed along with the defense mechanisms of firewalls and intrusion detection and prevention techniques. Background assumed: Data Communication and Networks II.

Credits: 3
Offered: Offered on occasion.

**CSIT 639 - Special Topics: Systems Structures**

The advances in computer science are rapid. The course is designed to cover current issues in computer systems structures. Current topics in one or more fields of computer architecture, system software, network, wireless computing, etc. will be covered in detail.

Credits: 3
Offered: Offered on occasion.

**CSIT 649 - Selected Topics in Theory of Computation**

The course is designed to cover current issues in theory of computations. Current topics of instructor's choice in the field of computer systems theory, computations and algorithms, will be selected. Background assumed: Theory of Computation

Credits: 3
Offered: Offered on occasion.

**CSIT 665 - Pattern Recognition**

Statistical pattern recognition; syntactic pattern recognition; neural networks; applications. Topics include: Bayesian classifiers; linear classifiers; nonlinear classifiers; context-dependent classification; system evaluation; feature selection; clustering. Background assumed: Probability and Statistics.

Credits: 3
Offered: Offered on occasion.

**CSIT 669 - Selected Topics in Information Structures and Systems**

Designed to cover current issues in information systems and structures. Current topics in one or more fields of computer architecture, computer information architecture, artificial intelligence and knowledge engineering, databases, systems and systems software, software engineering, data protection, concurrency and security, etc.

Credits: 3
Offered: Offered on occasion.

**CSIT 670 - Data Compression for Multimedia Applications**

Introductory course on data compression, which is an essential concept for communication and networking, with specific emphasis on multimedia. Topics include: information theory, source coding, dictionary and quantization techniques, image and sound compression.

Credits: 3
Prerequisite: CSIT 341. Offered: Offered on occasion.

**CSIT 672 - Multimedia Systems**

Topics may include: basic multimedia concepts; human perception; hardware requirements for multimedia applications; creating and processing images and sound by computer; multimedia and web compression; main features of a graphical modeling language (e.g., VRML language); authoring tools, principles of working with an authoring system; creating an interactive multimedia application. Background assumed: Computer Graphics course or approval of instructor.

Credits: 3
Offered: Offered on occasion.
DANC - Dance

DANC 100 - Introduction to Dance

DANC 100 - Introduction to Dance is an entry-level course which will provide the student with an understanding of the multi-faceted aspects of dance as a global performing art. Students will acquire basic knowledge and skills in at least three distinctly diverse styles of concert dance and will, through creative thinking and innovation, approach numerous dance related topics from the perspective of a practitioner as well as a critical observer of dance. No previous experience with dance is required to succeed in this course.

Credits: 3
Offered: Every semester.

DANC 104 - Dance Majors Seminar

A comprehensive informational course for first-year Dance majors. Includes an introduction to Department policies and procedures, program expectations, campus resources, academic advising, registration, time and stress management, and preparation for success in the professional world.

Credits: 1
Offered: Every Fall semester.

DANC 160 - Somatics

An introductory-level course that explores various movement techniques that are complementary to training in dance, such as yoga, Pilates, Alexander Technique, Feldenkrais Technique, Klein Technique, etc. Course content will vary by instructor.

Credits: 2
Offered: Every Fall semester.

DANC 101 - Theatre and Dance Productions

Designed to give practical experience in all aspects of dance and theatre productions including rehearsals, lighting and costume design, crew work, and stage management. Offered in coordination with THEA 101 and 102.

Credits: 1
Offered: Every semester.

DANC 112 - Ballet I

An introduction to classical ballet technique. The course covers the basics of barre and center floor work, as well as terminology and history. Emphasis is on correct alignment, coordination, and the quality of movement. May be repeated once for credit.

Credits: 2
Offered: Every year.

DANC 113 - Jazz Dance I

The course covers the basic principles, technique, and history of jazz dance including traditional techniques, Fosse style, and a focus on jazz dance for Musical Theatre. May be repeated once for credit.

Credits: 2
Offered: Every year.

DANC 105 - Folk Dance

Designed to cover the basics of folk dancing in many countries of the world.

Credits: 1
Offered: Offered on occasion.

DANC 106 - Square Dance

An introductory course for the beginning square dancer. Emphasis is on modern square dancing, although other forms are covered.

Credits: 1
Offered: Offered on occasion.

DANC 110 - Dance Productions

Designed to give practical experience in all aspects of dance and theatre productions including rehearsals, lighting and costume designs, crew work, and stage managing. Offered in coordination with Theatre Practice. May be repeated for credit.

Credits: 1
Offered: Every semester.

DANC 111 - Contemporary Technique I

An introduction to the fundamental principles and movement modalities of contemporary dance. Course content will vary by instructor.

Credits: 2
Offered: Every year.

DANC 112 - Ballet I

An introduction to classical ballet technique. The course covers the basics of barre and center floor work, as well as terminology and history. Emphasis is on correct alignment, coordination, and the quality of movement. May be repeated once for credit.

Credits: 2
Offered: Every year.

DANC 113 - Jazz Dance I

The course covers the basic principles, technique, and history of jazz dance including traditional techniques, Fosse style, and a focus on jazz dance for Musical Theatre. May be repeated once for credit.

Credits: 2
Offered: Every year.
DANC 114 - Tap Dance I
An introductory course in tap dance. Emphasis on correct execution of single movements and combinations of steps, with proper timing and terminology. May be repeated once for credit.
Credits: 2
Offered: Every year.

DANC 111 - Modern Technique I
Introductory course in modern dance for the novice, covering various techniques. Attendance at all dance concerts on campus required.
Credits: 2
Offered: Every year.

DANC 113 - Jazz Dance I
The course covers the basic principles, technique, and history of jazz dance including traditional techniques, Fosse style, and a focus on jazz dance for Musical Theatre. May be repeated once for credit.
Credits: 2
Offered: Every year.

DANC 112 - Ballet I
An introduction to classical ballet technique. The course covers the basics of barre and center floor work, as well as terminology and history. Emphasis is on correct alignment, coordination, and the quality of movement. May be repeated once for credit.
Credits: 2
Offered: Every year.

DANC 211 - Contemporary Technique II
Continued exploration of a wide range of contemporary dance aesthetics and movement principles. Course content will vary by instructor.
Credits: 2
Prerequisite: DANC 111. Offered: Every year.

DANC 212 - Ballet II
Continuation of the classical ballet technique at the intermediate level, with attention to the execution and mastery of the classical movement repertoire. The course focuses on adagio, allegro, and center floor work, as well as on the performance aspect of this discipline. May be repeated twice for credit.
Credits: 2
Prerequisite: DANC 112. Offered: Every year.

DANC 213 - Jazz Dance II
The course explores styles in jazz technique (e.g., Luigi, Giordana, Fosse) at the intermediate level. Emphasis will be on proper technique and performance, as well as vocabulary, and history. May be repeated twice for credit.
Credits: 2
Prerequisite: DANC 113. Offered: Every year.

DANC 214 - Tap Dance II
The course explores styles of tap dance technique at the intermediate level. Emphasis will be on proper technique and performance, as well as vocabulary, and history. May be repeated twice for credit.
Credits: 2
Prerequisite: DANC 114. Offered: Every year.

DANC 231 - African-Caribbean Dance
An introductory course in the structure and design of African and Caribbean dance techniques. This course will illustrate the linkage between African and Afro-American dance, music, and rhythmic styles. May be repeated twice for credit.
Credits: 2
Offered: Offered on occasion.

DANC 241 - Dance Improvisation
The course involves creative movement problem-solving through the study of basic elements in dance and choreography. Attendance at some campus productions is required. May be repeated twice for credit.
Credits: 2
Prerequisite: DANC 111. Offered: Every year.

DANC 250 - Dance Ensemble
Designed to develop proficiency in dance performance through the rehearsal and presentation of various dance forms. At least one departmental concert is presented annually. Admission is by permission of instructor following audition. May be repeated for credit for a maximum of 8 semester hours. Student must also be registered in a Dance Technique class (Ballet, Modern Jazz, or Tap).
Credits: 1
Offered: Every semester.

DANC 251 - Dance Repertory
Designed to develop proficiency in dance performance through the presentation of various dance forms choreographed by invited guest artists. (At least one departmental concert is presented annually.) Admission is
DANC 260 - Dance Kinesiology
A study of the sensory, skeletal, and muscular structures of the dancer's body, and their use in the development of dance technique. Particular attention is given to the student's understanding of their own structural attributes, and prevention of injury. Alternative training methods will also be explored.
Credits: 3
Prerequisite: DANC 111 or DANC 112 or DANC 113 or DANC 114. Offered: Every other year.

DANC 264 - Choreography I
An introduction to the content and structure of solo dance composition as an art form. Improvisation and compositional devices including rhythm, dynamics, space, design, phrasing, and production are covered.
Credits: 3
Prerequisite: DANC 211 or DANC 241. Offered: Every year.

DANC 300 - Company Class
A weekly class taught by visiting dance artists representing a wide range of disciplines within the field. The master class format will require dancers to develop the advanced visual, aural, physical, spatial, musical, and contextual assimilation and retention skills necessary for success as a contemporary dance artist.
Credits: .5
Offered: Every semester.

DANC 311 - Contemporary Technique III
An investigation of advanced contemporary dance principles, practices, and techniques. Course content will vary by instructor.
Credits: 2
Prerequisite: DANC 211. Offered: Every year.

DANC 312 - Ballet III
Continuation of classical ballet technique at the intermediate/advanced level, with attention to the execution and mastery of the classical movement repertoire. The course intensifies the work covered in DANC 212 with the addition of variations and beginning pointe shoe work. May be repeated twice for credit.
Credits: 2
Prerequisite: DANC 212. Offered: Every year.

DANC 313 - Jazz Dance III
The course explores styles in jazz technique at an intermediate/advanced level. It is a continuation of DANC 213 and covers technique, vocabulary, and history, with emphasis on mastery of execution and artistic expression. May be repeated twice for credit.
Credits: 2
Prerequisite: DANC 213. Offered: Every other year.

DANC 321 - Dance for the Musical Theatre
Designed to familiarize the intermediate dancer with the techniques of musical theatre dance for the stage. Jazz, ballroom, and tap techniques are also covered. Classic musical theatre choreography is explored.
Credits: 2
Prerequisite: (DANC 114 or DANC 121) and DANC 211. Offered: Every other year.

DANC 341 - Selected Topics in Dance
Directed or Independent Study in dance-related topics. By advisement only. May be repeated for credit.
Credits: .5-3
Offered: Every semester.

DANC 353 - Contemporary Dance History
A survey of the evolution of global modern, post-modern, and contemporary dance from the late 19th century to the present. Particular focus will be paid to how dance has both influenced and been influenced by the social, political, and economic climates of the times and places in which it was created. Students will be challenged to develop their critical thinking, writing, and research skills, to clearly define their personal aesthetics, and to hone their ability to watch dance with a scholar's eye.
Credits: 3
Offered: Every other year.

DANC 360 - Dancer Wellness
This lecture course will cover the foundations of dancer wellness, including mental, physical wellness, and assessment methods for overall dancer health. All coursework is designed to improve a dance student's mental and physical wellness, and ability to assess and implement holistic living through participation and academic study. Written assignments, quizzes, exams, online discussions, and daily participation (movement and verbal) are required. Course methods include blended learning platforms.
Credits: 3
Offered: Every other year.

**DANC 364 - Choreography II**

An introduction to the content and structure of group dance composition as an art form. Improvisation and compositional devices including rhythm, dynamics, space, design, phrasing, and production elements are covered.

Credits: 3

Prerequisite: DANC 264. Offered: Every other year.

**DANC 370 - Dance Studio Management**

The course provides students with a road map for the annual cycle of a dance studio and other various aspects of this community-oriented enterprise. The focus will be on the administrative portion of the operation as opposed to the artistic side. Etiquette, communication skills, procedures, and financial aspects of the dance studio business will be discussed in detail. In addition, other useful applications such as drafting a business plan, developing policies, completing tax forms and other hands-on exercises will be put into practice. At the end of the course the student will have a clear understanding of the timeline and the dynamics of a dance studio business. This course is not recommended for first-year students.

Credits: 3

Offered: Every other year.

**DANC 375 - Dance Pedagogy**

A course in Dance Pedagogy provides students with the methods and skills for teaching dance by studying diverse teaching and learning techniques in theory and practice. Students will explore evidence based methods in effective teaching and will learn how to be a competent teacher through observation, role play and practice. Aside from building lesson plans and curricula, monitoring dance technique classes, providing teaching samples and framing a personal teaching philosophy, students are required to study writings from a variety of sources dealing with day-to-day societal challenges in dance education such as culture, diversity, acceptance, collaboration, etc. in preparation for class discussions and writing assignments.

Credits: 3

Offered: Every other year.

**DANC 453 - Forces and Figures in American Jazz Dance**

This lecture course will examine and discuss the culturally diverse social, vernacular and popular dances jazz dance draws upon through readings, video viewings, in-class and online discussions. Classes will pay particular attention to the influences of African American contributions to social, studio, commercial and musical theater traditions of American Jazz Dance, and their impacts on the evolution of jazz dance in society. Student will develop advanced critical thinking and writing and research skills in this course.

Credits: 3

Offered: Every other year.

**DANC 460 - Senior Project**

A capstone course for graduating dance majors. Students will propose to the faculty a senior project that will take place over a two-semester time period. Possible senior projects include performance or choreographic projects, research projects, dance videography projects, or other topics upon advisement. Students will take this course twice in subsequent semesters.

Credits: 1

Offered: Offered on occasion.

**DANC 464 - Choreography III**

In this course, students continue their exploration of various elements of the craft of choreography: space, time, force and motivation. These are concepts that can be applied to any genre of dance when choreographing. Movement invention will be approached through improvisation, movement studies, readings, performance viewings, video viewings and written assignments. An emphasis will be placed upon discovering your own unique expressive movement vocabulary and deepening your powers of observation of self, others and the world around you. Dancers will learn how to investigate movement and to probe and manipulate movement materials. Concepts will be explored as soloists and group works. In preparing for a final composition showing, dancers will investigate issues that are important and use their findings to create a final work, a solo either set on themselves or someone else, or a group work. Choreographers can not be in their own group work. As a class we will decide what work will be shown or create a work together for the TADA Informal Class Showing that happens at the end of each semester. Dancers will leave this class with different methods of how to generate movement for themselves, and how to describe their movement using language to others. Above all, a spirit of inquiry will be cultivated in this final level of choreography course.

Credits: 3

Prerequisite: DANC 264 and DANC 364. Offered: Every year.

**DANC 485 - Senior Project Seminar**

This course will prepare senior dance majors for the production of their capstone concert in the Spring of their senior year. The course will focus on the development of creative work, as well as the administrative activities essential to concert production.

Credits: 1
Offered: Every year.

**DANC 461 - Practicum in Dance**
Teaching of a beginning technique class for returning professionals or graduate students. By audition only.
Credits: 3
Offered: Offered on occasion.

**DANC 462 - Practicum in Dance**
Teaching of a beginning technique class for returning professionals or graduate students. By audition only.
Credits: 3
Offered: Offered on occasion.

**DANC 460 - Senior Project**
A capstone course for graduating dance majors. Students will propose to the faculty a senior project that will take place over a two-semester time period. Possible senior projects include performance or choreographic projects, research projects, dance videography projects, or other topics upon advisement. Students will take this course twice in subsequent semesters.
Credits: 1
Offered: Offered on occasion.

**DANC 490 - Senior Project**
This course encompasses the second semester of the capstone experience for BFA Dance majors. After a prerequisite semester of research and creative process, majors will produce their Senior Project concert in the Merrins Studio Theatre. Students will also be required to author a post-mortem reflection on their creative process as well as a self-assessment of their development as a creative artist through the capstone experience.
Offered: Every spring.

**DANC 561 - Practicum in Dance**
Internship in dance teaching for graduate dance students. By audition only. May be repeated.
Credits: 3
Offered: Offered on occasion.

**DANC 562 - Practicum in Dance II**
Internship in dance teaching for graduate dance students. By audition only. May be repeated.
Credits: 3
Offered: Offered on occasion.

**DIST - Distance Learning**

**DIST 499 - Distance Learning Special Topics**
This distance learning course is offered via transmission from another institution and is synchronous instruction.
Credits: 1-3
Offered: Offered on occasion.

**ECON - Economics**

**ECON 101 - Introductory Economics**
An introductory study of the workings of economic society. Provides an overview of the conditions and problems of the American and other economic systems. Encompasses both microeconomics (e.g., supply and demand, cost and profit, competition and monopoly) and macroeconomics (e.g., unemployment and inflation, fiscal and monetary policies). Emphasis is on basic economic concepts, institutions, and broad historical sweep.
Credits: 3
Offered: Offered on occasion.

**ECON 102 - Current Economic Issues**
An introduction to current economic problems and public policy issues and the techniques used by economists to address the issues. The topics covered in a semester may vary, but will include issues such as: environmental quality and pollution control; poverty and welfare reform; big business and government regulation; labor market discrimination; health care reform; taxation, government spending, and the national debt; international trade policy; inflation and unemployment.
Credits: 3
Offered: Offered on occasion.

**ECON 200 - Fundamentals of Statistics for Business Administration and Economics**
An introductory study of statistical methods as applied to business and economic problems. Topics covered include: frequency distributions, measures of central tendency, measures of dispersion, probability, probability distributions, sampling distributions, estimation, statistical inference, and simple linear regression. Emphasis on the use and abuse of statistics. Note: Credit for at most one of the following courses may be applied towards a student's requirements for graduation: BUAD 200, ECON 200, EDU 200, POLI 200, SOC 200, and STAT 200.
Credits: 3
Offered: Every semester.
ECON 205 - Principles of Microeconomics
Study of the organization and functioning of the contemporary American economic system with emphasis on the problems of resource allocation. Topics covered include supply and demand, elasticity, price and output determination in various market situations, competition and public policy, income distribution, and alternative economic systems.
Credits: 3
Offered: Every semester.

ECON 210 - Principles of Macroeconomics
Study of the organization and functioning of the contemporary American economic system. Topics covered include national income, aggregate demand, aggregate supply, unemployment, inflation, money and banking, monetary and fiscal policies, and international trade and finance.
Credits: 3
Offered: Every semester.

ECON 300 - Statistical Analysis
Continuation of ECON 200. A study of the techniques and tools used in analyzing business and economic data with equal emphasis on estimation techniques and interpretation of results. Topics covered include simple and multiple regression, time series analysis, non-parametric techniques, analysis of variance, and surveying. Use of computer software for statistical analysis is included.
Credits: 3
Prerequisite: ECON 200 or BUAD 200 or EDU 200 or POLI 200 or SOC 200 or PSY 200 or STAT 200. Offered: Every semester.

ECON 305 - Intermediate Microeconomic Theory
Analysis of economic behavior of consumers, producers, and markets. Major topics include utility maximization and production theories, market structures (pure competition, monopoly, monopolistic competition, and oligopoly) and theories of factors of production, income distribution, resource allocation, and economic efficiency.
Credits: 3
Prerequisite: (ECON 201 or ECON 210) and (ECON 202 or ECON 205) and (MATH 120 or MATH 122). Offered: Every year.

ECON 310 - Intermediate Macroeconomic Theory
A theoretical analysis of the determinants of employment, income, consumption, investment, the general price level, wage rates and interest rates; the role of government, the impact of monetary and fiscal policies within the framework of various contemporary aggregate models of closed and open economies.
Credits: 3
Prerequisite: (ECON 201 or ECON 210) and (ECON 202 or ECON 205) and (MATH 120 or MATH 122). Offered: Every year.

ECON 312 - Women in the Economy
Exploration of the economic status of women, particularly in the United States. Emphasis is placed on women's labor market experiences and how the experiences are explained by economic theory. A major part of the course stresses current economic issues and policies specifically aimed at women including poverty, welfare, labor market mobility, and the status of the family.
Credits: 3
Prerequisite: (ECON 201 or ECON 210) or (ECON 202 or ECON 205). Offered: Offered on occasion.

ECON 315 - Money/Banking/Monetary Economics
Study of money and the financial system. In particular, the operation, functions, structure and regulations of the banking system, and organization and functions of central banking. Special emphasis given to the study of monetary theories, monetary management, and the effectiveness of monetary policy.
Credits: 3
Prerequisite: (ECON 201 or ECON 210) and (ECON 202 or ECON 205). Offered: Every year.

ECON 320 - International Trade/Finance
Study of international economic relations and international finance - determination of trade patterns and competitiveness, tariff and non-tariff barriers, economic integration, multinational corporations, exchange rates, balance of payments problems and policies, and international monetary system.
Credits: 3
Prerequisite: (ECON 201 or ECON 210) and (ECON 202 or ECON 205). Offered: Every year.

ECON 321 - Multinational Corporations
Economic analysis of the operations of multinational corporations and the implications of global production, resource allocation, and distribution of goods and services. Emphasis on capital and technology transfer, intercontinental flow of information, transaction costs, transfer pricing and tax policies.
Credits: 3
Prerequisite: ECON 201 or ECON 210. Offered: Offered on occasion.
ECON 325 - Labor and Employment
Applications of microeconomic theory to labor markets. Topics include labor supply and demand, investment in education and training, wage determination, working conditions, non-wage compensation, racial and gender discrimination, unions, and government regulation of wage-setting institutions.
Credits: 3
Prerequisite: ECON 202 or ECON 205. Offered: Every other year.

ECON 330 - Public Sector Economics
Analysis of governmental policies involving taxes and expenditures and how effectively these policies attain their objectives. Topics include externalities and public goods, income redistribution, health and unemployment insurance, and the impact of taxes on labor supply, savings and wealth.
Credits: 3
Prerequisite: (ECON 201 or ECON 210) and (ECON 202 or ECON 210). Offered: Offered on occasion.

ECON 335 - Economic Development
Problems of economic growth and development of less developed countries with emphasis on economic and non-economic obstacles to growth and development, financing of development, strategy of development policy, development planning and project evaluation, industrial and agricultural development, and the role of international trade in growth and development.
Credits: 3
Prerequisite: (ECON 201 or ECON 210) and (ECON 202 or ECON 205). Offered: Offered on occasion.

ECON 340 - Urban and Regional Economics
Study of the economics of urban and regional development. Emphasis on principles of regional analysis, location theories, population movements, urban base, problems of urban renewal, economics of poverty, transportation, pollution, and housing.
Credits: 3
Prerequisite: ECON 202 or ECON 205. Offered: Offered on occasion.

ECON 345 - Comparative Economic Systems
Comparative study of organization, operation and performance of some important economic systems. Emphasis on the socio-cultural and political environment, and on the institutional factors explaining the differences in the performance of various systems.
Credits: 3
Prerequisite: (ECON 201 or ECON 210) or (ECON 202 or ECON 205). Offered: Every other year.

ECON 350 - Managerial Economics
Microeconomic analysis applicable to the problems of businesses with emphasis on the determination of prices, outputs and inputs. Other topics include demand and cost measurements, forecasting, and cash flow analysis. The course utilizes different constrained optimization and quantitative techniques. Note: Credits for this course may not be applied towards the economics major requirements.
Credits: 3
Prerequisite: (MATH 120 or MATH 122) and (BUAD 200 or ECON 200 or EDU 200 or POLI 200 or PSY 200 or SOC 200 or STAT 200). Offered: Every semester.

ECON 360 - Health Care Economics
Application of economic analysis to the health care industry. Emphasis on the demand and supply of health care services, and private and group health insurance (HMO, PPO, Medical Care, Medicaid). Analysis of for-profit and non-profit production of health care services under different market structures. Other topics include problems of allocation of medical care resources and analysis of health care policies.
Credits: 3
Prerequisite: (ECON 201 or ECON 210) and (ECON 202 or ECON 205). Offered: Offered on occasion.

ECON 363 - Game Theory
The course will use rational choice theory to analyze how individuals and groups make decisions in strategic and non-strategic situations. Strategic situations are the result of the interdependent decisions of several individuals, e.g., nuclear deterrence or business competition. Problems covered include how computers beat humans at chess to the evolution processes of society. How do group norms arise where individual competition is the usual course of action? A low level of mathematical background is required.
Credits: 3
Prerequisite: POLI 200 or BUAD 200 or ECON 200 or EDU 200 or POLI 200 or PSY 200 or SOC 200 or STAT 200. Offered: Every other year.

ECON 370 - Evolution of Economic Thought
Study of the historical development of those ideas intended to provide a deeper understanding of present economic realities. Emphasis is placed on fundamental areas such as the economist's methodology, value and distribution theory, free trade, economic growth, and macroeconomics, and how the topics have been addressed by major thinkers in the field of economics.
Credits: 3
Prerequisite: (ECON 201 or ECON 210) and (ECON 202 or ECON 205). Offered: Offered on occasion.

**ECON 380 - Environmental/Natural Resource Economics**

Economic analysis of natural resource and environmental issues and policies. Social cost-benefit analysis, theories of externalities and intertemporal resource allocation and their application to renewable and exhaustible natural resources are emphasized. Topics include pollution control, efficient and equitable resource management, energy issues, ecological and environmental quality, and global sustainability.

Credits: 3
Prerequisite: ECON 202 or ECON 205. Offered: Every other year.

**ECON 381 - Special Topics in Economics**

Examination of topics in economic issues, problems, theory and policy not covered in any other course offered by the department.

Credits: 1-3
Prerequisite: (ECON 201 or ECON 210) and (ECON 202 or ECON 205). Offered: Offered on occasion.

**ECON 395 - Comparative Human Resources**

Comparative study of labor market characteristics among U.S., Canada, Mexico, Japan, OECD countries and a selection of emerging market economies. Emphasis on those factors that enhance economic integration and influence human resource policies. Comparative policy analysis of medical care, immigration, education and employment training, minimum wages, work standards, unemployment insurance, retirement systems and collective bargaining.

Credits: 3
Prerequisite: (ECON 201 or ECON 210) or (ECON 202 or ECON 205). Offered: Offered on occasion.

**ECON 400 - Econometrics and Business Applications**

Analysis and application of regression covering topics on econometric problems and techniques of estimation (both single and multi-equation models). The science and art of econometric model building and forecasting with its wide application in finance, marketing, banking, and other fields in business and economics are discussed. Use of the computer is an integral part of the course.

Credits: 3
Prerequisite: BUAD 300 or ECON 300. Offered: Every other year.

**ECON 405 - Industrial Organization**

Study of the sources and consequences of market power in the U.S. economy. Deals with economic definitions, measures of market power and legal standards for monopoly and oligopoly; examines major court decisions that have shaped antitrust policy; also covers economic regulation as a response to market power.

Credits: 3
Prerequisite: ECON 305 or ECON 350. Offered: Offered on occasion.

**ECON 410 - Mathematical Economics**

Introduces students to mathematical techniques used in economic analysis, including optimization theory, consumer and producer problems and general equilibrium models.

Credits: 3
Prerequisite: ECON 305 or ECON 350 or MATH 223. Offered: Offered on occasion.

**ECON 425 - Financial Markets/Institutions**

Study of the operation of the capital and money markets, determinants and structure of interest rates. Broad analysis of financial intermediaries, and regulation of the financial systems.

Credits: 3
Prerequisite: ECON 315. Offered: Every other year.

**ECON 430 - Independent Study**

Individualized study under the supervision of a faculty member.

Credits: 1-3
Offered: Every semester.

**ECON 450 - Senior Seminar**

Application of research and writing skills to the critical analysis of selected broad current economic problems and issues, integrating several areas of study in economics and other disciplines.

Credits: 3
Prerequisite: ECON 305 or ECON 310. Offered: Every year.

**ECON 480 - Internship**

Provides students the opportunities to earn credits for professional experience gained through learning-by-doing techniques.

Credits: 1-6
Offered: Every semester.
ECON 481 - Internship

Provides students the opportunities to earn credits for professional experience gained through learning-by-doing techniques.

Credits: 1-6
Offered: Every semester.

EDU - Education

EDU 100 - Tutoring Theory Practice

The course is designed to lead practicing tutors into an examination, through readings and discussion of what tutoring is, why and how it works and what tutoring can and cannot accomplish in a college setting. Because the course is designed to run concurrently with practical tutoring, candidates need to apply to and be accepted by College Tutoring Services. Acceptance is based on transcript, faculty evaluation and interviews and takes place during the semester prior to that during which the course is taken. In order to earn 2 credit hours, students must attend a series of five workshops with planned activities and discussion designed to lead to greater cultural self-awareness and therefore awareness of other peoples' cultural selves.

Credits: 1-2
Offered: Every semester.

EDU 101 - First Field Experience

Adolescence Education majors are introduced to teaching by enrolling in a 25-hour observation participation experience.

Credits: 0
Offered: Offered on occasion.

EDU 102 - Reading Tutor Training I

EDU 102 is a one credit course designed to familiarize students with the educational setting of tutoring and with the requirements of being a reading tutor. This training program is designed to develop the range of skills needed to help children learn how to read at the independent level, to improve their reading skills, and to become confident in their reading abilities. The focus of the early training sessions will be on gaining knowledge of basic components of the reading process as well as specific reading strategies used by children at different ages, and activities tutors can use with elementary school children. Tutors will work with school children at least two hours a week. Eligible tutors may receive Work Study funding for their tutoring.

Credits: 1
Prerequisite: EDU 105. Offered: Every year.

EDU 103 - Reading Tutor Training II

EDU 103 is a one credit course designed to provide students with some advanced training as reading tutors. This advanced training reviews all aspects of being a tutor and reading tutor as presented in Training 1, and adds the component of systematic assessment for progress monitoring of reading development. The focus of the course will continue to be learning and selecting reading strategies for use by elementary school children at different ages and ability levels. Tutors will work with school children at least two hours a week. Eligible tutors may receive Work Study funding for their tutoring.

Credits: 1
Prerequisite: EDU 102. Offered: Every year.

EDU 105 - Introduction to Contemporary Inclusive Education

Introduction to childhood and early childhood education, its principles and practices. Organization of elementary schools, planning, teaching styles, classroom management, and instructional materials are among the topics considered. Direct teaching experiences with children are an integral part of the course.

Credits: 3
Corequisite: EDU 106. Offered: Every semester.

EDU 106 - Practicum in Inclusive Education I

Provides participants an opportunity to observe classroom operations, observe and describe the many roles of teachers, conduct focused observations and interviews, conduct two formal lessons with individuals, and small or large groups of children on a teaching learning project.

Credits: 1
Corequisite: EDU 105. Offered: Every semester.

EDU 110 - Education Literature/Composition

An integration of how one writes and how one can effectively teach writing to students. Using the writing workshop approach, the courses examines principles, teaching methodologies, and techniques pertaining to the writing process from both the perspective of writer and teacher.

Credits: 3
Offered: Offered on occasion.

EDU 200 - Statistics

Elements of probability theory; fundamental concepts and techniques of statistics with application. May not be repeated for credit. Note: Credit for at most one of the following courses may be applied towards a student's requirements for graduation: BUAD 200, ECON 200, EDU 200, POLI 200, SOC 200, and STAT 200.
COURSES

Credits: 3
Offered: Offered on occasion.

EDU 214 - Introduction to Children's Literature
Designed to assist students in becoming widely acquainted with the great wealth of trade (library) books and media available for today's children, preschool through middle school. Course content includes all literary types.
Credits: 3
Offered: Offered on occasion.

EDU 215 - Education in American Society
Foundations course in the study of education. Introduction to social, historical, and philosophical foundations of education and the relationship between school and society.
Credits: 3
Offered: Offered on occasion.

EDU 218 - Children's Literature in Literacy Instruction
This course is an introduction to Children's Literature in Reading and includes a study of genre as well as discussion of literacy acquisition, reading instruction and use of children's literature for evaluation and remediation of reading difficulties.
Credits: 3
Offered: Offered on occasion.

EDU 220 - Child Development
Development of the child from beginning of life: prenatal development through age 12. Study of physical, cognitive, social, emotional, and moral development of the child.
Credit will not be given for both EDU 220 and EDU 225.
Credits: 3
Offered: Offered on occasion.

EDU 221 - Introduction to Early Childhood Education
The course examines early childhood care and education with particular emphasis on center-based settings for children Birth-5 years. Topics include theories of child development that inform best practices, characteristics of quality care and education ("educare"), developmentally appropriate curriculum (with an emphasis on how children learn through play in well-prepared environments), appropriate assessment for young children (with an emphasis on observation), and strategies to build strong family partnerships.
Credits: 3
Prerequisite: (EDU 105 and EDU 106) and (EDU 220 or EDU 225). Corequisite: EDU 222. Offered: Every year.

EDU 222 - Practicum in Early Childhood
The field experience explores early childhood care and education with particular emphasis on center-based settings for children Birth-5 years. Early Childhood and Early Childhood/Childhood majors will gain experience interacting with and guiding the youngest children in early learning settings. The primary purpose of the early field experience is to provide teacher candidates with a carefully mentored experience to help develop and enhance the knowledge, skills, and dispositions necessary to positively impact student learning and development. This experience is for two hours, twice a week, for eight weeks. The placements are in high quality educare settings.
Credits: 1
Corequisite: EDU 221. Offered: Every semester.

EDU 224 - Adolescent Development
Physical, mental, and emotional influences on adolescent development in terms of habits, interests and social adjustment. Factors in home and school that influence adolescent behavior and personality, and procedures for evaluating relevant research.
Credits: 3
Offered: Every semester.

EDU 225 - Child Development
In this course, students explore the natural sequence of growth and development from birth through pre-adolescence, with emphasis on the physical, cognitive, emotional, and social dimensions. Students also investigate why and how we study children: research issues and themes, research designs and methodologies, and research evaluation and ethics in the social sciences.
Credits: 3
Offered: Every semester.

EDU 226 - The Earth As A System
In today's world, with increasing global population, shifting climate and a growing demand for raw materials and energy, a basic understanding of the earth as a system is more important than ever. Earth as a System aims to illustrate the interconnectedness and complexities of the planet's principal subsystems of hydrologic, atmospheric, biologic and geologic processes and their impact on shaping the planet and the lives of humans.
Credits: 3
Offered: Every semester.

EDU 227 - The Electronic Classroom
An introduction to computer managed instruction, computer based instruction, and the design and use of multimedia resources in the classroom.
EDU 250 - Introduction to the Exceptional Learner

Introductory survey of nature, needs, and education of children who are exceptional because of intelligence, behavioral disorders, and/or physical development.

Credits: 3

Prerequisite: (EDU 105 and EDU 106) or (MAED 105 and MAED 106) or (SCED 105 and SCED 106) or ENED 101 or ENGL 101. Corequisite: EDU 251. Offered: Every semester.

EDU 251 - Practicum in Inclusive Education II

Candidates work directly with pupils with learning difficulties in area schools and agencies.

Credits: 1

Corequisite: EDU 250. Offered: Every semester.

EDU 275 - Introduction to the Teaching of Reading in the Elementary School

Introduction to techniques, activities, and materials employed in teaching elementary school candidates how to read. Focuses on traditional texts and reading materials, as well as hands-on experience in applying microcomputers in the teaching of reading. The use of writing as a technique in the teaching of reading will also be employed. Specifically designed to prepare students for participation in elementary school classrooms.

Credits: 3

Offered: Offered on occasion.

EDU 276 - Literacy and Technology in Inclusive Educational Settings

Overview of the processes involved in literacy acquisition and the instructional approaches that acknowledge current thinking. Relationship of reading and writing, and aspects of writing development and writing process appropriate to each stage of reading development. Topics: models of reading and writing conceptual and methodological issues related to instruction and acquisition of reading, the role and use of technology in literacy instruction, assessment of candidates' reading and writing, diversity in reading acquisition - the role of technology in facilitating reading and writing for diverse learners.

Credits: 3

Offered: Every semester.

EDU 295 - Introduction to Educational Assessment

This Assessment Course is intended to introduce teacher candidates to concepts and vocabulary of assessment, as well as the assessment process from choice of assessment through to interpreting and reporting of results. The course is part of the undergraduate education sequence. It should be taken early in the education program, preferably the first semester of the sophomore year either prior to or at same time as EDU 250 or EDU 221. Later courses in the sequence contain more discipline-specific components of assessment: EDU 355 examines assessment for inclusive education, EDU 405 and 406 for literacy, and EDU 221 for early childhood.

Credits: 3

Prerequisite: EDU 105 and EDU 106. Offered: Every semester.

EDU 300 - Safe Schools/Healthy Students

Identifying and reporting suspected child abuse and maltreatment; preventing child abduction; preventing alcohol, tobacco, and other drug abuse; providing safety education; providing instruction in fire and arson prevention; and preventing and intervening in school violence. The course meets the requirements for New York State certification based on the statutory requirements found in the Commissioner's Regulations subdivision 52.21.

Credits: 3

Offered: Every year.

EDU 303 - Safe Schools/Healthy Students-DASA: Safety Education/Fire and Arson/School Violence

The course is designed to provide pre-service teachers (B-12) with an introduction to essential concepts in fire safety, school violence prevention, and the social patterns of harassment, bullying and discrimination. Students will develop their knowledge through Internet assignments, assigned readings, situational analysis, group discussion, video and lecture.

Credits: 1

Offered: Every year.

EDU 304 - Safe Schools & Healthy Students

The course provides mandated information and instruction regarding school violence prevention and intervention, regarding child abuse detection and reporting, child abduction prevention, and regarding alcohol, tobacco, drug abuse prevention at the local, state, and federal levels of education and the law. The course also examines the role of the classroom teacher in all such reporting and prevention efforts.

Credits: 1

Offered: Every semester.
EDU 305 - Cultural & Linguistic Diversity of Students and Families
An introduction to basic concepts, theories, and issues involving multicultural education, cultural diversity, and the educational system. Emphasis is on the development of a sound theoretical framework from which practical application to classroom situations will evolve. Candidates will teach, interact with, and/or observe children and youth from diverse cultural and linguistic backgrounds and employ a variety of teaching strategies.
Credits: 3
Prerequisite: EDU 250 and EDU 105. Corequisite: EDU 313. Offered: Every semester.

EDU 312 - Infant and Toddler Care and Education
The course examines learning environments for children ages Birth to 3 with particular emphasis on center based settings. Topics include a review of infant/toddler development, characteristics of quality education, developmentally appropriate curriculum in developmental areas, guidance based on observation and family dynamics and relations affecting infant development and growth, and parenting/teaching strategies.
Credits: 3
Prerequisite: EDU 105. Offered: Offered on occasion.

EDU 313 - Practicum in Inclusive Education III
Required for students enrolled in EDU 305 Cultural and Linguistic Diversity. Students spend seven to eight weeks in elementary and secondary classrooms, in traditional and/or non-traditional settings. Students will be paired to enable peer coaching and peer assisted learning to occur. Students will develop an instructional unit, and teach sample lessons; for small groups or entire classes, and incorporate multicultural concepts, including culture awareness; tolerance and acceptance; cooperative learning; multiple intelligence theory; and multicultural literature, among others.
Credits: 1
Corequisite: EDU 305. Offered: Offered on occasion.

EDU 314 - Developmental Learning
The course is designed to familiarize the beginning teacher with various developmental and learning theories, instructional implications relating to each theory, and classroom application of relevant principles.
Credits: 3
Offered: Offered on occasion.

EDU 315 - Early Childhood Curriculum Development
A methods class designed to help candidates further their knowledge and skills to plan and implement developmentally appropriate learning activities for young children (birth - age 8). Emphasis on integrated curriculum planning to meet developmental needs of young learners.
Credits: 3
Prerequisite: EDU 221 or EDU 312. Offered: Every year.

EDU 321 - Teaching in the Middle School
Principles, materials, curriculum, and methods for teaching in the middle school. Required for certificate extension to middle school grades.
Credits: 3
Offered: Every year.

EDU 326 - Elements of Public School Law
Basic study of school law as applied to the organization of education from the federal and state perspective. Special attention is focused on the teacher and the law with respect to tort liability, due process, rights and responsibilities of teachers, students and parents. Impact of court decisions on the school.
Credits: 3
Offered: Offered on occasion.

EDU 349 - Educational Psychology
Areas of psychology utilized in the teaching and learning processes. Analyzing and interpreting scientific data related to individual differences, growth, learning, group processes, systematic assessment, measurement, and evaluation.
Credits: 3
Prerequisite: EDU 349. Offered: Offered on occasion.

EDU 351 - Classroom Management and Learning Principles
Examination of significant research in areas of human learning and motivation as they relate to effective instructional strategies. An investigation into how teachers can translate theories and research from such areas as achievement motivation, learner cognitive style, emotional climate of the classroom, concept learning, creativity, and problem-solving into constructive classroom action.
Credits: 3
Prerequisite: EDU 349. Offered: Offered on occasion.

EDU 355 - Assessment & Instruction of Students with Learning & Behavior Disorders in Inclusive Ed Settings
Critical examination of students with special needs in inclusive educational settings with an emphasis on the connections between core curriculum, ongoing assessment,
and varied instructional strategies. Principles, procedures, and the application of various assessment techniques will be discussed. Organization, development, implementation, modification, and evaluation of instruction across the curriculum will be presented.

Credits: 3
Prerequisite: EDU 250. Corequisite: EDU 356. Offered: Every semester.

**EDU 356 - Practicum in Inclusive Education IV**

This course is required for students enrolled in EDU 355 Assessment Instruction of Students with Learning Behavior Disorders in Inclusive Ed Settings. Students spend seven to eight weeks in a special education setting. Students will develop a Functional Behavioral Assessment (FBA), Behavior Intervention Plan (BIP) and Individual Education Plan (IEP) for a pupil.

Credits: 1
Prerequisite: EDU 250. Corequisite: EDU 355. Offered: Every semester.

**EDU 360 - Developmental Disabilities**

An examination of the etiology, characteristics, and psychological development associated with developmental disabilities. While focusing largely on mental retardation, the course is non-categorical in orientation. Particular attention is paid to techniques and strategies for integration of developmentally disabled children into the mainstream of education.

Credits: 3
Prerequisite: EDU 250. Offered: Offered on occasion.

**EDU 376 - Early Childhood Emergent Literacy**

Designed to provide knowledge of emergent literacy (reading writing) development and some early language development in children from birth to 8 year olds. Course also teaches methods and strategies for teaching literacy to all birth to 8 year olds to increase school readiness. Course is open to all Fredonia students interested in helping young children develop literacy skills.

Credits: 3
Offered: Every year.

**EDU 380 - Working with Children Outside the Classroom**

In this service learning course, college students will serve as mentors for K-5 pupils outside the classroom (12-15 hours). Critical issues regarding working with youth, particularly in urban schools, will be addressed and explored through professional development sessions (3-6 hours).

Credits: 1
Offered: Every semester.

**EDU 390 - Special Topics in Education: Curriculum and Instruction**

Study of special areas in education not covered by existing courses, with special emphasis on Curriculum and Instruction. Content varies from semester to semester. Students should consult the appropriate online Course Offerings and department notices.

Credits: 0-3
Offered: Offered on occasion.

**EDU 391 - Special Topics in Education: Language, Learning, and Leadership**

Study of special areas in education not covered by existing courses, with special emphasis on Language, Literacy, and Leadership. Content varies from semester to semester. Students should consult the appropriate online Course Offerings and department notices.

Credits: 3
Offered: Offered on occasion.

**EDU 395 - Belize Project Orientation**

This 2 credit course is a pre-requisite for the Belize Service Learning Project (INED 499). It provides an orientation to the elementary schools, students and teachers in Belize and to Belizian culture in general. It prepares participants to work with cooperating teachers in Belizian schools. Participants design instructional activities and create educational materials that will be donated to cooperating schools and the Belizian Scouts Organization after INED 499. Open to all students in Early Childhood, Childhood, and Childhood Inclusive Education, Adolescence Education, Social Work, Communication Disorders, Music Education, Music Therapy, graduate students in the COE, and other interested students. (Students may take EDU 395 for their own enrichment without participating in the January trip to Belize.)

Credits: 2
Offered: Every year.

**EDU 402 - Teaching Mathematics in Inclusive Educational Settings**

Content, curriculum, materials, and procedures in teaching mathematics in the elementary school based on the National Council of Teachers of Mathematics (NCTM) recommendations and standards.

Credits: 3
Prerequisite: MAED 302 and EDU 305 and EDU 313 and EDU 349. Offered: Every year.
EDU 403 - Teaching Science in Inclusive Educational Settings

Materials and procedures in a process-centered science curriculum. Investigation of new curricula illustrating guided discovery approach to teaching sciences.

Credits: 3
Prerequisite: EDU 305 and EDU 313 and EDU 349.
Offered: Every year.

EDU 404 - Teaching Social Studies in Inclusive Educational Settings

Curriculum, materials, and procedures in teaching social studies in the elementary school.

Credits: 3
Prerequisite: EDU 305 and EDU 313 and EDU 349.
Offered: Every year.

EDU 405 - Teaching Literacy in Inclusive Educational Settings

Candidates will explore and critique aspects of effective reading and writing programs for elementary and early childhood children who are in inclusive settings. Course content will enable candidates to review and select research-based materials, strategies, and assessments that promote learning to read and write reading and writing to learn. Course connections to EDU 305 will enable candidates to reflect on and critique reading and writing curriculum practices that are culturally relevant and lead to successful literacy learning in balanced, comprehensive programs.

Credits: 3
Prerequisite: EDU 305* and (EDU 276 or SCED 276 or MAED 276). Cross-Listed as: * Indicates that the course can be taken in the same semester. Offered: Every year.

EDU 406 - Literacy and Assessment in Inclusive Educational Settings

Candidates will demonstrate their understanding of literacy assessment and instruction by critically exploring assessments, instructional practices, and programs for diverse learners and struggling readers and writers in elementary and early childhood inclusive settings. Using case study and assessment results, candidates will develop and recommend effective, balanced strategies and approaches to literacy instruction that are culturally responsive and meet the needs of all students.

Credits: 3
Prerequisite: (EDU 405*) and EDU 305* and EDU 313* and EDU 349 and (EDU 276 or MAED 276 or SSED 276). Cross-Listed as: * Indicates that the course can be taken in the same semester. Offered: Every year.

EDU 412 - Integrated Methods for Early Childhood Education

Prepares students to teach in early childhood classrooms. Information on the national and state learning standards in science, social studies, and the creative arts. Topics include constructivist curriculum planning, preparing the teaching/learning environment, the anti-bias curriculum, project work, authentic assessment, and the role of play in the early childhood classroom.

Credits: 3
Prerequisite: EDU 315. Corequisite: EDU 432. Offered: Every year.

EDU 416 - Capstone Seminar - Advanced Study in Classroom Organization, Management, and Instruction

Focus on extending candidates' knowledge and skills in classroom management and organizational methods, as well as instructional strategies and content. The course also assists candidates in the successful completion of the applied teaching and learning project in their student teaching experiences.

Credits: 3
Offered: Every semester.

EDU 417 - Middle School (Grades 5-9) Methods in Mathematics

Principles, materials, and methods for teaching middle school (grades 5 to 9) mathematics. The course serves as the primary methods course for students pursuing initial certification in Middle Childhood Education - Mathematics Specialist.

Credits: 3
Offered: Every year.

EDU 419 - Secondary School (Adolescence) Methods

Principles, materials, and methods for teaching English, foreign languages, mathematics, science, or social studies in the secondary school. Assignment to sections according to subject matter. Note: must be taken before senior student teaching. Required for Adolescence Education.

Credits: 3
Offered: Every year.

EDU 420 - Student Teaching Grades 1-3

A field assignment to teach in Childhood Education. Assignments provided in grades 1 to 3; arrangements made by the Office of Field Experiences. Open only to candidates accepted in Childhood Education. Prerequisites: Enrollment and satisfactory progress in professional education courses; ongoing recommendation of the College of Education.
Credits: 6
Offered: Every semester.

**EDU 421 - Student Teaching in Early Childhood Education - Pre-Kindergarten**

A field assignment to teach in Early Childhood Education. Assignments in Pre-Kindergarten; arrangements made by the Office of Field Experiences. Open only to candidates accepted in Early Childhood Education. Prerequisites: Enrollment and satisfactory progress in professional education courses; ongoing recommendation of the College of Education.

Credits: 6
Offered: Every semester.

**EDU 422 - Student Teaching Childhood: Grades 4-6**

A field assignment to teach in Childhood Education. Assignments provided in grades 4 to 6; arrangements made by the Office of Field Experiences. Open only to candidates accepted in Childhood Education. Prerequisites: Enrollment and satisfactory progress in professional education courses; ongoing recommendation of the School of Education.

Credits: 6
Offered: Every semester.

**EDU 423 - Student Teaching in Early Childhood Education - Kindergarten**

A field assignment to teach in Early Childhood Education. Assignments in a kindergarten; arrangements made by the Office of Field Experiences. Open only to candidates accepted in Early Childhood Education. Prerequisites: Enrollment and satisfactory progress in professional education courses; ongoing recommendation of the College of Education.

Credits: 6
Offered: Every semester.

**EDU 424 - Student Teaching in the Elementary School - Primary (Hamburg)**

A field assignment to teach on the primary level in the elementary school. Open only to candidates accepted into the Fredonia-Hamburg Program. Prerequisites: Enrollment and satisfactory progress in professional education courses; ongoing recommendation of the College of Education.

Credits: 3
Offered: Offered on occasion.

**EDU 425 - Student Teaching in Early Childhood Education - Grades 1 or 2**

A field assignment to teach in Early Childhood Education. Assignments in a grade 1 or 2 classroom; arrangements made by the Office of Field Experiences. Open only to candidates accepted in Early Childhood Education. Prerequisites: Enrollment and satisfactory progress in professional education courses; ongoing recommendation of the College of Education.

Credits: 6
Offered: Every semester.

**EDU 426 - Student Teaching in the Elementary School - Intermediate (Hamburg)**

A field experience assignment to teach in the intermediate level in the elementary school. Open only to candidates accepted into the Fredonia-Hamburg Program. Prerequisites: Enrollment and satisfactory progress in professional courses; ongoing recommendation of the College of Education.

Credits: 3
Offered: Offered on occasion.

**EDU 429 - Student Teaching in Middle Childhood Education - Mathematics Specialist**

A field assignment to teach middle school mathematics. Assignments provided in grades 5 through 9; arrangements made by the Office of Field Experiences. Open only to students accepted into SUNY Fredonia's Middle Childhood Education - Mathematics Specialist Program. Prerequisite: EDU 417 or MAED 417. Offered: Every year.

**EDU 430 - Student Teaching 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. Open only to students accepted in Adolescence Education Certification. Prerequisite: EDU 419 or MAED 419 or SCED 419 or SSED 419. Offered: Every year.

**EDU 432 - Home/School Partnerships in a Diverse Society**

Prepares the preservice teacher with strategies for facilitating family involvement in the education process. The course will place emphasis on the skills of communication (both personal and written). Topics covered include: parent conferences, volunteers in the classroom, barriers to parent involvement and one-way and two-way communication strategies. Corequisite: EDU 412. Offered: Every year.
EDU 435 - Student Teaching: Pre-K/Kindergarten
A field assignment to teach in Early Childhood Education. Assignments in Pre-Kindergarten or Kindergarten; arrangements made by the Office of Field Experiences. Open only to candidates majoring in Dual-Certification Early Childhood/Childhood Education who have been admitted to the professional sequence.
Credits: 3-6
Offered: Every semester.

EDU 436 - Student Teaching: Grades 1-3
A field assignment to teach in primary grades, 1-3. Assignments in grades 1, 2 or 3; arrangements made by the Office of Field Experiences. Open only to candidates majoring in Dual-Certification Early Childhood/Childhood Education who have been admitted to the professional sequence.
Credits: 3-6
Offered: Every semester.

EDU 437 - Student Teaching: Grades 4-6
A field assignment to teach in intermediate grades, 4-6. Assignments in grades 4, 5, or 6; arrangements made by the Office of Field Experiences. Open only to candidates majoring in Dual-Certification Early Childhood/Childhood Education who have been admitted to the professional sequence.
Credits: 3-6
Offered: Every semester.

EDU 438 - Student Teaching: Birth-Grade 2
Student Teaching is a full-semester, full-time, full-day, clinical component of the teacher preparation program for State University of New York at Fredonia students seeking initial teacher certification. The primary purpose of the student teaching experience is to provide you with a carefully mentored experience to help you develop and enhance the knowledge, skills, and dispositions necessary to positively impact student learning and development.
Credits: 6
Offered: Every semester.

EDU 439 - Student Teaching: Grades 3-6
Student Teaching is a full-semester, full-time, full-day, clinical component of the teacher preparation program for State University of New York at Fredonia students seeking initial teacher certification. The primary purpose of the student teaching experience is to provide you with a carefully mentored experience to help you develop and enhance the knowledge, skills, and dispositions necessary to positively impact student learning and development.
Credits: 6

EDU 440 - Student Teaching Inclusive/Special Education: Grades 1-3
A field assignment to teach in Childhood Inclusive Education. Assignments provided in grades 1 - 3; arrangements made by the Office of Field Experiences. Open only to candidates accepted in Childhood Inclusive Education. Prerequisites: Enrollment and satisfactory progress in professional education courses; ongoing recommendation of the College of Education.
Credits: 6
Offered: Every semester.

EDU 441 - Student Teaching Inclusive/Special Education: Grades 4-6
A field assignment to teach in Childhood Inclusive Education. Assignments provided in grades 4 - 6; arrangements made by the Office of Field Experiences. Open only to candidates accepted in Childhood Inclusive Education. Prerequisites: Enrollment and satisfactory progress in professional education courses; ongoing recommendation of the College of Education.
Credits: 6
Offered: Every semester.

EDU 480 - Internship - Curriculum and Instruction
Participation in a professional, subject related experience, with emphasis on Curriculum and Instruction. The student must submit a proposal stating what the experience is, how it relates to their course of study, and how it will be monitored and evaluated. The instructor will be responsible for the supervision of the intern. The proposal must be approved one month in advance by the advisor, instructor, and chairperson prior to registration.
Credits: 1-15
Offered: Every semester.

EDU 481 - Internship: Language, Learning, and Leadership
Participation in a professional, subject related experience, with emphasis on Language, Learning, and Leadership. The student must submit a proposal stating what the experience is, how it relates to their course of study, and how it will be monitored and evaluated. The instructor will be responsible for the supervision of the intern. The proposal must be approved one month in advance by the advisor, instructor, and chairperson prior to registration.
Credits: 1-15
Offered: Every semester.
EDU 490 - Independent Study: Curriculum and Instruction
Study of a particular problem in education, with emphasis on Curriculum and Instruction. Periodic meetings with instructor and the writing of a substantial paper.
Credits: 1-4
Offered: Every semester.

EDU 491 - Independent Study: Language, Learning, and Leadership
Study of a particular problem in education, with emphasis on Language, Learning, and Leadership. Periodic meetings with instructor and the writing of a substantial paper.
Credits: 1-15
Offered: Every semester.

EDU 501 - Child Development
In this course, students explore and analyze the natural sequence of growth and development from birth through pre-adolescence, with emphasis on the physical, cognitive, emotional, and social dimensions. Students also investigate why and how we study children, with students researching issues and themes, and learn about research designs and methodologies related to child development.
Credits: 3
Offered: Every semester.

EDU 504 - Intro to the Exceptional Learner
Credits: 3
Corequisite: EDU 558. Offered: Every semester.

EDU 505 - The Process of Writing: K-12
Examination of the writing process with emphasis on the theoretical and practical issues in the teaching of composition. Details the importance and role of audience, voice, focus, prewriting, conferencing, peer editing, assessment, purpose, and mechanics. Participants write in several modes as part of observation and study of their own composing strategies, including an investigation of the stage or step model of writing.
Credits: 3
Offered: Offered on occasion.

EDU 506 - Group Processes in Education
Implications of individual group relationships for teachers and administrators with respect to more effective teaching, higher student motivation, leadership identification and development, school climate and organizational development.
Credits: 3
Offered: Offered on occasion.

EDU 507 - Teaching Exceptional Learners in Inclusive Settings
Addresses evidence-based instructional approaches, curriculum adaptation, placement options, and effective
use of support services for exceptional learners, with an emphasis on instructional approaches to support them in inclusive settings and in the general education curriculum.

Credits: 3
Offered: Offered on occasion.

EDU 509 - Teaching of Thinking
Study of an overall framework of teaching of and about thinking and teacher behaviors which create classroom conditions for thinking. Basic approaches to the teaching of thinking skills are explored through current programs, systems, and resources.

Credits: 3
Offered: Offered on occasion.

EDU 513 - Literacy in the Content Areas
The course explores reading and writing in discipline-specific areas including science, social studies, and mathematics. The course also places a strong emphasis on close reading of expository texts and analysis of test data as a tool for planning instruction.

Credits: 3
Offered: Every year.

EDU 514 - Assessment and Instruction of Diverse Learners I
Addresses proven formal and informal approaches to be used by educators and related services professionals in identifying and teaching exceptional learners, with an emphasis on measurement strategies that inform their effective instruction.

Credits: 3
Prerequisite: EDU 508*. Cross-Listed as: * Indicates that the course can be taken in the same semester. Offered: Offered on occasion.

EDU 515 - Dramatic Experiences in Elementary School
The course will examine the history of dramatic experiences in the K-6 public school system, including oral and dramatic traditions in cultures around the world. Children's/adolescent literature titles will be the catalyst to develop projects that include storytelling and dramatic activities.

Credits: 3
Offered: Offered on occasion.

EDU 516 - Improving Educational Outcomes: Working with Children and Families from Poverty
This Linking Content to Pedagogy course provides an in-depth study of the culture of poverty (in contrast to middle class) using research-based frameworks. Candidates will explore characteristics of poverty and social class and relate these characteristics to academic readiness and success in order to develop classroom tools, interventions, and resources for use with P-12 children and their families.

Credits: 3
Offered: Offered on occasion.

EDU 517 - Types of English Language Learners
In this special topics course, participants will have the chance to learn about the various "types" of English language learners (ELLs). Often, people assume that ELLs are children who just need to learn the English language and are in K-12 school settings. While this definition can be true, it is limited in its scope for its lack of recognizing the various influences and contexts in which people are and can be classified as ELLs. Further, not all ELLs have had or are in K-12 settings. Therefore, this course is designed to introduce students to the various types of ELLs. This may include all or most of the following: (a) long-term ELLs; (b) (im)migrants; (c) adults; and (d) refugees, newcomers and students with interrupted formal education (SIFE). The goal of this course is to introduce anyone interested in learning about these various "types" of ELLs to the defining characteristics of each group, to rectify any myths and misunderstandings about who ELLs are while digging into the controversial group labeling that can exist, and to examine and discover pertinent influences which may impact language acquisition and ELLs' ability to be included as full members of society (whether in school or workplace environments).

Credits: 3
Offered: Every year.

EDU 518 - Second Language Acquisition and Development
This course will help teacher educators better understand 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 social, psychological, and linguistic theories and approaches to SLA and be able to apply this knowledge to their teaching practices. This course will also explore first language acquisition, developmental stages of SLA, as well as present the various individual factors which help to explain differences between and within language learners. 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 and acquired in order to be reflective, responsive practitioners.

Credits: 3
Offered: Every year.
EDU 519 - Curriculum Theory for the Second Language Classroom - ESL I

Discusses basic curriculum theory, providing models of curriculum development and their application to Pre K-12 classrooms, with an emphasis on constructivist, student-centered theories. Emphasizes basic curriculum theory for the English as a Second Language (ESL) classroom, providing an analysis of curriculum models for ESL and bilingual education. Basic methods of ESL are used, as students apply theory to classroom practice through research and projects. N.Y.S.E.D. Standards for ESL and the N.Y.S.E.D. ELA Standards applied to ELL students provide the basis for curriculum work. Infuses technology and Computer Assisted Language Learning (CALL) in methodology.

Credits: 3

Corequisite: EDU 521. Offered: Every year.

EDU 520 - Curriculum Framework Theory/Development

Core graduate course for the Curriculum and Instruction master's degree specialization explores the people and changes impacting the history of curriculum in the U. S. Students will develop a usable curriculum/instructional framework following acceptable curriculum development practice.

Credits: 3

Offered: Every year.

EDU 521 - Practicum in TESOL I

Required for students enrolled in EDU 519 Curriculum Theory for the Second Language Classroom-ESL 1. Students will complete 25 hours of clinical field experience in an elementary, secondary or adult classroom, in traditional and/or non-traditional settings, to work closely with English language learners in some capacity.

Credits: 0

Corequisite: EDU 519. Offered: Every Fall semester.

EDU 525 - Curriculum Framework Integration/Innovation

Builds on EDU 520. Curriculum issues and development course, students analyze current developments in the field of curriculum and instruction. Students develop an innovative curriculum framework integrating many content frameworks and innovative techniques.

Credits: 3

Offered: Every year.

EDU 526 - Middle School Curriculum

Study of the philosophy, organization, and curriculum of the middle school. Emphasis on the role of the teacher in the middle school. Research and experimental models are examined.

Credits: 3

Offered: Offered on occasion.

EDU 528 - Technology in the Schools

The course is designed to introduce education personnel to the techniques and equipment involved in the use and development of computer-assisted instruction (CAI). A preliminary introduction to the microcomputer will be a part of the course. The role of both CAI and computer-managed instruction will be explored, including the possibilities of record management, analysis of student performance, and the development of original CAI materials. Emphasis will be placed on the use of "high level, user-friendly" languages such as PILOT and LOGO.

Credits: 3

Offered: Offered on occasion.

EDU 529 - Proactive Approaches to Classroom Management in Inclusive Settings

Focus on research-based positive approaches to the prevention of and intervention on academic and social challenges of P-12 students with disabilities. Principles of classroom structure and organization, classroom management, positive proactive behavior management, and school-wide discipline plans are emphasized, with a basis in current research.

Credits: 3

Prerequisite: EDU 508 and EDU 514. Offered: Offered on occasion.

EDU 530 - Assessment and Instruction of Diverse Learners II

Case study-based approach to issues of instructional planning, instructional delivery, analysis of student performance, and teacher reflection and response. Incorporates the "Planning, Instructing, Reflecting, Responding model" adopted by Fredonia's Professional Education Unit.

Credits: 3

Prerequisite: EDU 508 and EDU 514. Offered: Offered on occasion.

EDU 531 - Philosophy of Education

This course will provide candidates in a variety of content areas with the opportunity to explore the philosophical, historical, cultural and social foundations of educational thought relevant to their areas of pedagogical focus.

Credits: 3

Offered: Every other year.
EDU 535 - School and Society
Analysis of the school in relation to other socializing influences. Examines cultural change and its effect upon education; the school in relation to specific problems of changing American communities; and research on teaching as an occupation.
Credits: 3
Offered: Offered on occasion.

EDU 536 - Adolescent Literacies, Literature and Technology
The course provides an overview of multiple literacies associated with adolescents, including the theory and research base. It examines young adult literature from the perspectives of critical literacy and censorship, and it explores media literacy and technology, with a special emphasis on computers and writing. The course also develops means for assisting struggling adolescent readers, especially those from diverse cultural and linguistic backgrounds.
Credits: 3
Offered: Every year.

EDU 538 - Cultural Literature
The course takes a transcultural/global approach to the promotion of literacy. Focusing on juvenile and children's literature - as well as on literature applicable to adolescents - the course exposes course participants to world literature. Within an in-depth global exploration of culture and values, students will glean intercultural awareness, stretching literacy beyond U.S. national borders. Using sound instructional practice and theory, participants will read novels written by international child protagonists. Participants will generate annotated bibliographies that will enrich classroom libraries and promote literacy at the elementary, middle, and high school levels.
Credits: 3
Offered: Offered on occasion.

EDU 539 - Current Issues and Problems in Education
Addresses identification, definition, and analysis of problems and issues facing education today; current criticisms of public schools; responsibilities of the schools; questions of curriculum development; and how well schools are teaching basic skills.
Credits: 3
Offered: Offered on occasion.

EDU 540 - Content Area English as a Second Language
This course explores Sheltered English Instruction by studying and using the Sheltered Instruction Observation Protocol (SIOP) as a model for sheltered instruction. 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 ultimate 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. Studying sheltered instruction offers teacher candidates a model for lesson planning and implementation that provides English learners with access to grade-level content standards. Emphasis will be placed on the academic language demands required by the state of New York as articulated in the Common Core and English Language Proficiency Standards documents. This course has a co-requisite.
Credits: 3
Prerequisite: EDU 519. Corequisite: EDU 541. Offered: Every year.

EDU 541 - Practicum in TESOL II
Required for students enrolled in EDU 540 Content Area English as a Second Language. Students will complete 25 hours of clinical field experience in an elementary, secondary or adult classroom, in traditional and/or non-traditional settings, to work closely with English language learners in some capacity.
Credits: 0
Corequisite: EDU 540. Offered: Every year.

EDU 542 - Evidence-Based Practices for Inclusive Settings
Evidence-Based Practices for Inclusive Settings meets new legislative and legal mandates for educators to provide their students with "scientifically-based" instructional practices for improving academic and behavioral performance. This course will help practitioners to link their respective academic "content" with "evidence-based" pedagogical practices.
Credits: 3
Offered: Every year.

EDU 543 - Education for Gifted and Talented Students
Focuses on development and implementation of educational programs for optimum growth of gifted/talented students, inclusive of curriculum content; organization of special schools and classes; teaching materials and methods; and the evaluation and administrative adjustments.
Credits: 3
Offered: Offered on occasion.

EDU 544 - Secondary School (Adolescence) Curriculum
Study of secondary curriculum, inclusive of new mandates; emerging practices; varied viewpoints; relevant research;
programs; and the roles of classroom teacher and school administrator in curriculum development.

Credits: 3
Offered: Offered on occasion.

**EDU 545 - History of American Education**

Historical interpretation of American education. Characteristics of American colonial education and significant developments in American elementary, secondary, and higher education during the 19th and 20th centuries.

Credits: 3
Offered: Offered on occasion.

**EDU 546 - Models of Classroom Management**

Designed to expand traditional understanding of classroom management that focuses on discipline and behavioral problems. The course follows a comprehensive classroom management approach, focusing on areas of knowledge and skills that teachers need in order to be effective classroom managers.

Credits: 3
Offered: Offered on occasion.

**EDU 548 - Practicum in International Teaching**

The course provides an opportunity to expand and practice teaching skills in an international setting. Participants will gain information on an educational system different from their own, gain experiences with the traditions and cultural values of the host country, and participate in classrooms where they can observe, assist, and teach. On-site U.S. faculty will assign readings to complement the practical experiences and will lead discussion seminars on topics and themes associated with the international experience.

Credits: 3
Offered: Offered on occasion.

**EDU 551 - Foundations of Teaching Indigenous Languages: Theory, History, Programs**

Foundations of Teaching Indigenous Languages: Theory, History, Programs provides the basic history, theories, issues, and concepts related to teaching Indigenous languages. This course will cover varieties of language reclamation models, history, policy and politics of Indigenous language, as well as issues in teaching and learning Indigenous languages. This course focuses both on international and national perspectives by providing examples of endangered and reclaimed languages from around the world. This course flows from the topic of language endangerment to language reclamation in the Americas to a local New York perspective on indigenous language endangerment/reclamation. Topics such as policies and politics, linguistic human rights, and new domains for Indigenous languages will be a focus of this course.

Credits: 3
Offered: Every year.

**EDU 552 - Introduction to Literacy Assessment**

The course investigates the nature and process of literacy assessment, with an eye to the diagnosis of literacy difficulties. The course requires Candidates to develop competence in using a wide variety of literacy assessments and analyzing data in order to identify reading and writing problems.

Credits: 3
Offered: Every year.

**EDU 553 - Citizenship Education: Moral-Legal Education**

Curriculum planning and revision, kindergarten through twelfth grade, as it relates to the moral-legal dilemmas facing teachers and students today. Elements include: (1) law-related education; (2) various theoretical positions regarding moral development; (3) moral dilemmas (case studies) drawn from schools; and (4) curricular implications and revisions needed.

Credits: 3
Offered: Offered on occasion.

**EDU 555 - Methods of Bilingual Education**

Reviews, discusses, and analyzes teaching methods and techniques used in core subject areas (mathematics, science, and social studies) in bilingual education classrooms in the United States. Assessment strategies as integral parts of teaching methodology are discussed (e.g., portfolios will develop and teach reading and/or writing lessons using strategies, peer groups and self-assessments). Emphasis is on methods and techniques using the language in which the bilingual extension is sought. The course includes suggestions for coordination with ESL content area instruction. Students produce and carry out lessons in the various subject areas. Required course for candidates pursuing a New York State Bilingual Education Extension; recommended for teachers working with English Language Learners.

Credits: 3
Offered: Every other year.

**EDU 556 - Teaching Language Arts in Spanish**

Focuses on teaching approaches and methodology used in the development of literacy skills by Spanish speaking students in the U.S. Emphasizes the understanding of the active interaction of reading, writing, listening, and speaking in the process of acquiring and mastering communication skills. Reviews and analyzes current
technology and curricular materials used to teach the language arts. Students will develop and teach reading and/or writing lessons using course materials. Required for teachers pursuing a New York State Bilingual Education extension.

Credits: 3
Offered: Every other year.

**EDU 557 - Methods of Instruction and Assessment for Teaching Indigenous Languages**

Methods of Instruction for Teaching Indigenous Languages provides students with the opportunity to learn about the various methods and practices related to teaching Indigenous/endangered and less commonly taught languages. Participants will learn about program models and methods which have been used in successful language reclamation situations, as well as practices which are currently being used today for those languages which are considered endangered and in need of reclamation. Models discussed will include, but are not limited to, the following: immersion, intergenerational and Master-Apprentice models, bi/multilingual programs, summer institutes, and other school or community-based initiatives used by Indigenous People throughout the United States and the world.

Credits: 3
Offered: Every year.

**EDU 561 - Contemporary Issues in Parent/Teacher Relationships**

Focuses on building successful partnerships with families with diverse structures. Identifies models of family involvement in schools; strategies for increasing family involvement in classrooms; current educational mandates; implications for schools; and relevant research.

Credits: 3
Offered: Offered on occasion.

**EDU 562 - Infant Development and Education**

Focuses on nutritional and psychological influences on prenatal, infant, and toddler growth and development, inclusive of current research in infant development; childbirth; breastfeeding; infant simulation; intellectual development; attachment behavior; and infants in group care.

Credits: 3
Offered: Every other year.

**EDU 563 - Cultural Perspectives**

Explores cultural awareness and diversity-related issues both in classrooms and the workplace, with a social sciences approach. Uses ethnographic investigations, document-based analysis, and cultural instruments to explore the diverse reality of today's classrooms and schools. Explores constructivist, student-centered, and equitable learning formats.

Credits: 3
Offered: Every other year.

**EDU 564 - Linguistics for ESL Educators**

Educating English language learners (ELLs) is complex, and having a further understanding of linguistics will help teacher educators to enhance their lesson planning and delivery in instructing ELLs of various backgrounds. Educational professionals will most likely encounter situations where having familiarity with aspects of linguistics will better enable one to practice one's profession. This course presents the 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). Other aspects of linguistics, such as language change, language processing (psycholinguistics) and elements of linguistics which impact language acquisition will also be explored. Further, the concept of Academic Language (AL) is discussed and the implications of AL on teaching practices is explored in relation to ELLs across the core content areas. Overall, this course will explore the core areas of linguistics, help educators make linguistics applicable to a language learning classroom via activities, exercises, and projects. Students will be able to apply this new linguistic knowledge to their teaching practices, particularly when working with ELLs.

Credits: 3
Offered: Every year.

**EDU 565 - Language and Learning: Psycho- and Sociolinguistic Considerations for Educators of ELL Students**

This course will help teacher educators in understanding how language is used and how language functions both within and outside of classroom walls. The course will investigate topics such as globalization and the relationship between language and social settings, including language and gender, identity, ethnicity, and culture. The course will study how language is used globally, in a variety of local/global situations (e.g., World English, language variation), and will examine language use critically (e.g., power, discourse, policy). A wide range of topics in this course will address many of the sociolinguistic phenomena described above, and may include 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 and outside of the classroom. Educators will come to understand the broad spectrum of English language 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
Offered: Every other year.

EDU 567 - Practicum in TESOL III
Required for students enrolled in EDU 569 Assessment and Evaluation of English Language Learners (ELLs). Students will complete 25 hours of clinical field experience in an elementary, secondary or adult classroom, in traditional and/or non-traditional settings, to work closely with English language learners in some capacity.

Credits: 0
Corequisite: EDU 569. Offered: Every Spring Semester.

EDU 568 - Foundations of Bilingual Education
This course provides the basic theories, issues, and concepts related to teaching in culturally diverse classrooms where students’s first language is not English. Focuses on U.S. bilingual education in terms of historical, theoretical, and practice/methods used in schools. This course explores 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, Bilingual Special Education, and other legal aspects. Emphasis is placed on the design and effectiveness of a variety of bilingual education program models such as one-way and two-way immersion, indigenous language immersion, and other program models of bilingual education. Participants apply knowledge of the relevant federal and state standards documents pertaining to the education of culturally and linguistically diverse populations such as the NYS Bilingual Common Core Standards, and conduct independent field and library research.

Credits: 3
Offered: Every other year.

EDU 569 - Assessment and Evaluation of English Language Learners (ELLs)
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, data driven instruction (DDI), consequences of assessments, test score interpretation, state and federal assessment policies, and those assessments unique for ELLs. Teacher candidates learn how to develop assessment instruments aligned with Bilingual Common Core and English Language Proficiency Standards as well as 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. This course has a co-requisite 25-hour field placement practicum.

Credits: 3
Prerequisite: EDU 519. Corequisite: EDU 567. Offered: Every year.

EDU 570 - Using Educational Research to Improve Instruction
Assists educational practitioners to become knowledgeable consumers of research and evaluation reports by helping them critically analyze and evaluate research. It examines the nature of reasoning in educational research, the use of measurement procedures in quantifying traits, the role of design in testing hypotheses, the role of statistics in analyzing data, and the limitations inherent in generalizing the results of research studies. Should be taken in the first 9 hours of graduate study.

Credits: 3
Offered: Every semester.

EDU 574 - Multicultural Children's Literature & Technology
The course provides an overview of children's literature from the perspectives of genre, critical literacy, censorship, readability, instructional resource, and multiculturalism. The course also examines literature in non-print forms both for reading and as a product of student writing. The course emphasis is on using a variety of materials and multicultural texts to assist student readers and writers from diverse cultural and linguistic backgrounds.

Credits: 3
Offered: Every year.

EDU 576 - Practicum in Literacy for All Students
The course is a field-based practicum taken at the same time as the Social Foundations of Literacy course. It provides Candidates with a minimum of 25 hours of practicum in intervention and coaching within formal educational settings wherein Candidates apply and practice what they learn in the co-requisite course about identifying ad assisting all types of diverse students.

Credits: 1
Prerequisite: EDU 552. Corequisite: EDU 579. Offered: Every year.
EDU 579 - Foundations of Literacy
The course presents knowledge about basic psychological and social foundations of reading, writing, spelling, speaking, listening, and viewing. It addresses linguistic, cognitive, psychological, and sociological components that are essential for Candidates to know in order to provide literacy instruction and intervention to the increasingly diverse group of learners in today's classrooms. The course also prepares Candidates to take the New York State Content Specialty Test (CST) for Literacy.
Credits: 3
Offered: Every year.

EDU 580 - Teaching Grades 7-12
Practical suggestions for teacher working in secondary school, with a focus on materials and teaching procedures for specific units of work such as: teaching as problem-solving, evaluation strategies, instructional techniques, and recent developments in educational thinking and practice that have affected the curriculum. Special attention to selected topics according to the needs and interest of participants. Note: A selected area is to be designated: General, English, Mathematics, Foreign Languages, Science, or Social Studies.
Credits: 3
Offered: Offered on occasion.

EDU 583 - Literacy Interventionist Practicum I
The course is one of four practicum courses to train Candidates as reading specialists who provide reading intervention through individualized, assessment-based and learner-orientated instruction. Candidates learn to administer literacy assessments, track results, and use the data to develop interventions, write lesson plans, and work with struggling readers.
Credits: 3
Prerequisite: EDU 506 and EDU 552. Offered: Every year.

EDU 585 - Adolescent Literature
The course provides an overview of critical issues on various types of young adult literature, including forms of media that represent literature. Candidates will examine historical and contemporary literature, both fiction and non-fiction. They will also identify and select appropriate reading materials, and teaching strategies to meet diverse needs of adolescent students, based on socio-cultural and academic backgrounds.
Credits: 1.5
Offered: Every year.

EDU 588 - Learning to Write: Pre K - Grade 6
Candidates engage interactively in various activities, discussions and readings about the development of writing skills and strategies in Pre K - 6. Current state standards, text types, appropriate teaching strategies for diverse learners, and assessment will be addressed.
Credits: 3
Offered: Offered on occasion.

EDU 589 - Writing in the Middle and Secondary Schools
Candidates engage interactively in various activities, discussions and readings about the development of writing skills and strategies in secondary schools. Current state standards, text types, appropriate teaching strategies for diverse learners, and assessment will be discussed.
Credits: 3
Offered: Offered on occasion.

EDU 591 - Special Topics: Curriculum and Instruction
In-depth exploration of selected topics in professional education, with emphasis on Curriculum and Instruction. Principal focus of the course varies.
Credits: 3
Offered: Every year.

EDU 592 - Special Topics: Language, Learning, and Leadership
In-depth exploration of selected topics in professional education, with emphasis on Language, Learning, and Leadership. Principal focus of the course varies.
Credits: 3
Offered: Every year.

EDU 598 - Special Education Considerations for Assessment of English Language Learners
This course presents current research in the identification of English Language Learners (ELLs) with special needs. The main focus of this course is the use of appropriate language development and disability. Participants will make appropriate intervention, referral, and placement decisions regarding ELLs. Participants will also be able to list key legal restraints on assessing ELLs for Special Education placements. A broad context of legal, historical, sociopolitical and out of school factors (OSFs) affecting the schooling of culturally and linguistically diverse students will be explored. All participants will develop a portfolio of assessment methods for the use in describing student performance in both content areas and language development before diagnosis.
Credits: 3
EDU 599 - edTPA Development and Support

This variable credit course is offered as a support course for post-baccalaureate applicants who need to complete all or part of the Education Teacher Performance Assessment (edTPA) for Initial Teacher Certification in New York State. Enrollees will be provided with supports sanctioned by the Stanford Center for Assessment, Learning, and Equity (SCALE) in completing edTPA and submitting to Pearson for evaluation. Enrollees planning to submit an entire edTPA will enroll for three credits, whereas those who enroll to resubmit a single task for edTPA will enroll for one credit.

Credits: 1-3

Offered: Every year.

EDU 683 - ESOL Practicum & Supervision Grades 7-12 (40 day)

This course provides a supervised student teaching experience for graduate students earning initial certification in ESOL pre-K-12. To be recommended for this certification, students must be placed in an approved ESOL classroom at appropriate grade levels to ensure they have experience across the pre-K-12 levels. This course will involve a field placement in the adolescent setting (grades 7-12). The field placement shall be for five days per week until placement requirements have been fulfilled. Classroom theory is applied to field practice. Students will be observed by a field supervisor a minimum of three times in this placement.

Credits: 1.5

Prerequisite: EDU 569. Offered: Every semester.

EDU 601 - Issues, Trends, and Research in Autism

This course provides an overview of the needs and education of children diagnosed with Autism Spectrum Disorder (ASD). Among the areas explored in this course are: a review of the historical background; causes and diagnosis; signs, symptoms, and characteristics; strategies in education, social interactions, and language development; education-related laws and rights; impact on family dynamics and parent support. In addition the course will include current trends pertaining to Autism Spectrum Disorder.

Credits: 3

Offered: Every year.

EDU 603 - Issues, Trends, and Research in Elementary (Childhood) Science

Focuses on issues, trends, and research in teaching science in the elementary school. Emphasis on individual readings and seminar discussions, using primary and secondary sources of research.

Credits: 3

Offered: Every other year.

EDU 605 - Issues, Trends, and Research in Elementary (Childhood) Language

Focuses on the structure and organization of English language arts programs; examination of past and current research; and evaluation of current programs. Emphasis on individual readings and seminar discussions, using primary and secondary sources of research.

Credits: 3

Offered: Every year.

EDU 611 - Advanced Seminar in Elementary Education

Individual research on problems of special interest, under the guidance of one or more faculty members.

Credits: 3

Offered: Offered on occasion.

EDU 613 - Literacy Interventionist Practicum II

The course is the another of four practicum courses to train Candidates as reading specialists who provide reading intervention through individualized, assessment-based and learner-orientated instruction. Candidates move to mastery of interventionist skills as the course emphasizes impact on student learning. Candidates also practice their literacy coaching and leadership skills with classroom teachers and parents.

Credits: 3

Prerequisite: (EDU 552 or EDU 652) and (EDU 554 or EDU 653) and EDU 583. Offered: Every year.

EDU 614 - Principles of School Administration and Leadership

The first level administrative course is designed to provide students with an introduction to school leadership theory and practice and the structure of education at the local, state and national level. The role of the administrator as a service agent for instruction and his/her function as the coordinator of school programs will be emphasized. Students will construct their perception of the role of the principal with an emphasis on the diverse and sometimes conflicting responsibilities. The paradox of the principalship, the need to be both an effective leader and manager, will be emphasized.

Credits: 3

Offered: Every year.

EDU 615 - School Building Leader

The course explores the nature, responsibilities, and developing status of elementary and secondary principals and supervisors. The course is designed to provide an
exploration of the issues of school culture, leadership, change theory, and data analysis as they relate to school leadership in P-12 education. Course content will focus on creating a culture of learning, investigating the elements of effective leadership, and planning for school improvement.

Credits: 3
Offered: Every year.

EDU 616 - Supervision I: Theory/Practice

The course is designed to provide an introduction to the theory and practice of supervision. Course content will focus on developing the skills an effective supervisor uses in recruiting, selecting, observing, evaluating, and conferencing with teachers in order to improve instruction. In addition, students will explore models of effective teaching and critically review laws, policies, and administrative regulations regarding teacher supervision and evaluation.

Credits: 3
Offered: Offered on occasion.

EDU 617 - Supervision II: Supervision to Improve Instruction

The course provides an overview of the theory and practice of supervising instructional programs with an emphasis on reviewing data and revising curriculum to improve student outcomes. Course content focuses on developing the skills an effective supervisor uses in organizing and working with groups to improve instruction. The role of the school leader in building learning communities that support instructional improvement will be emphasized. The course content and activities will focus on the curriculum revision process with an emphasis on the role of standards, best practice, professional development and assessment. Students will review the history of curriculum in the United States. In addition the need for curriculum to be responsive to the special needs presented by students' background will be investigated.

Credits: 3
Offered: Every year.

EDU 618 - Internship I: Educational Leadership

The field experience provides the opportunity to directly participate in the activities related to the functions of a school administrator/supervisor/leader with an emphasis on community, district policy, board of education, legislation, evaluation and communication. Candidates attend seminars to discuss leadership issues and explore topics raised by their experiences in the field.

Credits: 3
Offered: Every semester.

EDU 620 - Public School Finance

The course focuses on the factors associated with the financial support of public education at the local, state and national levels. The analysis and study of legislation, Commissioner's Decisions, Board of Cooperative Education (BOCES) and regulations as they pertain to the support of programs that lead to the development of local budgets as an educational objective of the school district, Board of Education and the community will be studied.

Credits: 3
Offered: Every year.

EDU 623 - Advanced Literacy Assessment

The course is a continuation of EDU 552, the first assessment course. This course requires Candidates to develop competence in using and analyzing the results of more formalized and norm-referenced assessments such as the Peabody and Woodcock Johnson. The course also enables the Candidates to develop their literacy coaching skills as they assist teachers and others with data analysis and assessment issues.

Credits: 3
Prerequisite: EDU 552. Offered: Every year.

EDU 624 - Contemporary Problems in School Leadership

The course is devoted to the intensive study of selected current or emerging problems in administration, supervision and leadership. The course will explore significant issues involving: the Politics of Education; studies in Administrative Leadership; School - Community Relations; Collective Negotiations; School Personnel; Curriculum, Instruction and Assessment.

Credits: 3
Offered: Offered on occasion.

EDU 625 - Early Childhood Curriculum

Focuses on educational experiences for children; parent involvement; health, psychological, and social services; planning and adaptation of facilities; utilization of materials and equipment; and development of internal program evaluation.

Credits: 3
Offered: Offered on occasion.
EDU 626 - Public School Law
The course is devoted to the study of law and the principles of law as they apply to organization and administration of education at the local, state and national levels. Special attention to the laws, rules, regulations and court decisions that influence district employees, policy, administrative operations and the community will be emphasized. The use of negotiation strategies to reach agreement will be studied.
Credits: 3
Offered: Offered on occasion.

EDU 628 - Reading Specialist Practicum
EDU 628 is a field-based practicum taken as a co-requisite with the EDU 579 Social Foundations of Literacy course. It provides Candidates in the Birth to Grade 12 Literacy Program with a minimum of 25 hours of practicum in intervention and coaching within formal educational settings wherein Candidates apply and practice what they learn in the co-requisite course about identifying and assisting all types of diverse students.
Credits: 1
Prerequisite: EDU 552. Corequisite: EDU 579. Offered: Every year.

EDU 629 - Issues, Trends, and Research in Early Childhood Education
Explores basic issues in early childhood education, current trends, and past and current research.
Credits: 3
Offered: Offered on occasion.

EDU 630 - Educational Administration Special Topics
Advanced course devoted to the analysis of one topic, which may be selected from the following: Creating Safe and Productive Schools, The Politics of Education, Studies in Administrative Leadership, School-Community Relations, Collective Negotiations, School Personnel Administration, Administering Innovation Programs, or Management Objectives.
Credits: 3
Offered: Every year.

EDU 635 - Curriculum Development in Social Studies Education
Investigates basic principles in curriculum development in elementary social studies. Examines current social studies curricula and materials. Students develop social studies curriculum projects of special interest.
Credits: 3
Offered: Offered on occasion.

EDU 636 - Issues, Trends, and Research in Elementary School Social Studies
Examines the structure and organization of social studies programs. Focuses on past and current issues, trends, and research in social studies education; and evaluation of current social studies programs.
Credits: 3
Offered: Every year.

EDU 640 - Issues, Trends, and Research in Elementary (Childhood) Mathematics
Examines issues and trends in elementary school mathematics programs. Reviews components of modern programs in elementary school mathematics, based on an examination of experimental programs, trends, and current materials. Focuses on content, instructional materials, procedures, and evaluation of current programs.
Credits: 3
Offered: Offered on occasion.

EDU 642 - Activity-Oriented Elementary Mathematics
Prepares teachers to teach elementary mathematics through laboratory and learner-oriented activities. Class members prepare laboratory materials, kits, and activity-type lessons for their own classrooms.
Credits: 3
Offered: Offered on occasion.

EDU 643 - Math Assessment in Support of All Learners
Investigation and interpretation of assessment strategies and evaluation methods in mathematics education. Includes the study of current state assessments in mathematics as well as the design and use of criteria to evaluate performance in mathematics and their application to understanding and diagnosing learning difficulties in mathematics. Examines the role of assessment in making instructional decisions. Current research on mathematics assessment is also examined.
Credits: 3
Offered: Offered on occasion.

EDU 651 - Issues and Research in Literacy
The course provides Candidates with an opportunity to analyze issues in the field of literacy and the research connected to them. The course is also the pre-requisite to the Literacy Program capstone project course and requires Candidates to select their capstone topic and write a proposal for that project.
Credits: 3
Prerequisite: EDU 570 and EDU 583 and EDU 652. Offered: Every year.
EDU 655 - Clinical Applications of Literacy Instruction
In the third clinical course, candidates apply multiple literacy and instructional techniques to enhance student's decoding, comprehension, and writing. The course addresses candidates in both elementary and secondary literacy programs.
Credits: 3
Prerequisite: EDU 583 and EDU 613. Offered: Offered on occasion.

EDU 659 - Master's Thesis/Project in Literacy
The course is the capstone for the graduate literacy program and is designed to help Candidates refine their skills in the analysis and evaluation of research and the process of conducting educational research. Candidates should have completed at least 27 credit hours of their program, including EDU 651 or EDU 660, before registering for the course.
Credits: 3
Prerequisite: EDU 570 or EDU 651 or EDU 660. Offered: Every semester.

EDU 660 - Conducting Educational Research
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 COEâ€™s Masterâ€™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 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 Masterâ€™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.
Credits: 3
Prerequisite: EDU 570. Offered: Every semester.

EDU 662 - Policy Development, Politics and Ethical Practices
The course is specifically developed for candidates interested in the School District Leadership Certificate. Candidates must have completed all sections of the School Building Leadership requirements. Emphasis on school district policy development, its legal references, local, state, judicial and federal influences and regional implications on personnel, students and community and the board of education will be explored. Political entities that influence administrative and board of education decisions will be explored. The ethical dilemmas between what is legal and what is ethical will be researched and rational positions developed.
Credits: 3
Offered: Every year.

EDU 664 - Governance, Media and Crisis Management
The course is specifically developed for candidates interested in the School District Leadership Certificate. Candidates must have completed all sections of the School Building Leadership requirements. Emphasis on central office administration, coordination of other municipal entities, local, state and federal regulatory agencies will be studied. Board of education/central administration coordination and communication, evaluation and planning will be studied with emphasis on positive district communication, coordination and public/taxpayer relations. The study of and the implementation of district crisis plans and adherence will also be studied.
Credits: 3
Offered: Every year.

EDU 670 - Independent Study: Curriculum and Instruction
Provides advanced graduate students the opportunity to work individually on problems of special concern not otherwise available through regular course offerings under the direction of a qualified faculty member. Emphasis on Curriculum and Instruction.
Credits: 1-12
Offered: Every semester.

EDU 671 - ESOL Practicum & Supervision(20 Day)
This course provides a supervised student teaching experience for graduate students who are already certified in an approved area of education and who are earning their initial certification in ESOL pre-K-12. To be recommended for this certification, students must be placed in an approved ESOL classroom at appropriate grade levels to ensure they have experience across the pre-K-12 levels. All effort will be made to place those already holding an early childhood or childhood certificate in a middle school or secondary school (grades 5-12) and those students already holding a middle school or adolescent certificate in an elementary school setting (grades pre-K-6). The field placement shall be for five days per week until placement requirements have been fulfilled.
Classroom theory is applied to field practice. Students will
be observed by a field supervisor a minimum of two times in this placement.

Credits: 3
Prerequisite: EDU 569. Offered: Every semester.

EDU 672 - Independent Study: Language, Learning, and Leadership

Provides advanced graduate students the opportunity to work individually on problems of special concern not otherwise available through regular course offerings under the direction of a qualified faculty member. Emphasis on Language, Learning, and Leadership.

Credits: 1-12
Offered: Every semester.

EDU 673 - ESOL Practicum & Supervision, Grades PreK-6 (40 Day)

This course provides a supervised student teaching experience for graduate students earning initial certification in ESOL pre-K-12. To be recommended for this certification, students must be placed in an approved ESOL classroom at appropriate grade levels to ensure they have experience across the pre-K-12 levels. This course will involve a field placement in the early childhood/childhood setting (preK-6). The field placement shall be for five days per week until placement requirements have been fulfilled. Classroom theory is applied to field practice. Students will be observed by a field supervisor a minimum of three times in this placement.

Credits: 1.5
Prerequisite: EDU 569. Offered: Every semester.

EDU 674 - Bilingual Education (BE) Practicum & Supervision- 20 Day

This course provides classroom instruction and field experience for educators of English language learners. It provides a supervised student teaching experience for graduate students who are already certified in an approved area of education (20 day placement) and for those graduate students who are earning their initial certification in TESOL pre-K-12 (40 day placement). Students are placed in an approved ESL/BE classroom at a grade level appropriate to ensuring they have experience across the pre-K-12 levels. All effort will be made to place those students already holding an early childhood or childhood certificate in a middle school or secondary school (grades 5-12) and students already holding a middle school or adolescent certificate in an elementary school setting (grades K-6). The field placement shall be for five days per week until your placement requirements have been fulfilled. This means for those students with prior certification, a 20 day placement is required. For those with no prior teaching certification, a 40 day placement is required. Classroom theory is applied to field practice. Students will be observed by a field supervisor a minimum of two times for a 20 day placement and three times for a 40 day placement.

Credits: 3
Offered: Every semester.

EDU 675 - Teaching Indigenous Languages, preK-12, Practicum & Supervision- 20 Day

This course provides classroom instruction and field experience for candidates pursuing the CAS- Teaching Indigenous Language preK-12. It provides a supervised student teaching experience for graduate students who are already certified in an approved area of education (20 day placement). Students are placed in an approved Indigenous Language learning setting at a grade level appropriate to ensuring they have experience across the pre-K-12 levels. The field placement shall be for five days per week until your placement requirements have been fulfilled. This means for those students with prior certification, a 20 day placement is required. Classroom theory is applied to field practice. Students will be observed by a field supervisor a minimum of two times for a 20 day placement.

Credits: 3
Offered: Every year.

EDU 680 - Master's Comprehensive Examination

The comprehensive examination is one of the capstone options for candidates in the Curriculum and Instruction, Literacy Education: Birth-Grade 6, and Literacy Education: Grades 5-12 programs. It is a three-part, intensive written examination in the areas of education research, foundational studies (psychology, sociology, exceptionality, and diversity), and content area pedagogy. Examinations are tentatively administered on the first Saturday of December, March, and August, but examination dates are subject to change. The course is graded S/U and may be repeated once if a grade of U is earned. Prerequisite: Enrollment in final semester of graduate study or approval of the Dean of the College of Education.

Credits: 0
Offered: Every semester.

EDU 690 - Master's Thesis/Project

Congratulations! You have reached the end of the research sequence courses as defined by SUNY Fredonia’s College of Education (COE). Prerequisites for enrollment in this class include 30 credit hours in your program of study and a grade of B or better in EDU 660. TESOL students have unique requirements for this final capstone course as defined by the COE’s Master’s Project Handbook. Therefore, EDU 690 is offered primarily as a
structured independent study where students, with guidance, complete their approved Masterâ€™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 your 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 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 (curriculum project/action research/masterâ€™s thesis) will determine the remaining requirements, but students will be obligated to meet all expectations outlined in the COE Masterâ€™s Project Handbook. You will be required to disseminate your findings/project to an approved conference (e.g., SUNY Fredoniaâ€™s Research Expo is a great place to start).

Credits: 3-6
Prerequisite: EDU 660. Offered: Every semester.

EDU 691 - Master's Thesis/Project
Research involving the preparation of a project, essay, or thesis.
Credits: 3-6
Offered: Every semester.

EDU 695 - Capstone Continuation
Graduate students are required to remain continuously enrolled until completion of thesis/capstone work in order to allow continuing usage of university resources and to accurately account for faculty involvement.
Credits: 1
Offered: Every semester.

EDUL - Educational Leadership

EDUL 614 - Introduction to Educational Leadership
The Course provides an introduction to educational leadership: various theories and models of educational and school leadership and management; the structure of education at the local, state, and national levels; and the New York State Codes and Standards governing schools and school building leaders. This course also covers the foundational skills for leadership, the role and evaluation of the school principal; organizational structure of schools; collaborative and reflective leadership; and all wrapped in the ethical blanket of mission, vision and core values.
Credits: 3

EDUL 615 - Operation & Management Systems
This course focuses on the operation and management administrative systems that promote the mission and vision of the school and support each student's learning needs. These systems include resource management of fiscal, physical and staff resources, time management, data management, support services, and budgeting. Candidates also consider how school building leaders can employ technology and software to improve the quality and efficiency of these systems and be responsible, ethical, and accountable stewards of them.
Credits: 3
Offered: Every year.

EDUL 616 - School Law
The course examines the law and the principles of law as they apply to organization and administration of education at the local, state and national levels. Special attention will be paid to the laws, rules, regulations and court decisions that influence district employees, policy, administrative operations, and students; these include the Individuals with Disabilities Act, student freedoms, search and seizure, teacher freedoms, and school liability.
Credits: 3
Offered: Summer, JTerm.

EDUL 617 - Personnel Leadership
This course examines human resources management and the development of the professional capacity and practice of school personnel. Topics addressed include the professional capacity of school personnel, Professional Learning Communities (PLC), supervision and evaluation, Annual Professional Performance Review (APPR) and observation instruments, plus recruitment, hiring, and retention.
Credits: 3
Offered: Every year.

EDUL 618 - Instructional Leadership
This course examines coherent systems of curriculum, instruction, and assessment that are responsive to student needs, embody high expectations for student learning, align with academic standards within and across grade levels, and promote academic success and social emotional well-being for each student. Topics also include the capability to employ technically appropriate systems of assessment and data collection, management, analysis for use to monitor student progress and improve instruction.
Offered: B.
EDUL 619 - Problem Solving & School Improvement

This course explores the leadership competencies of problem solving and decision making as means for effective educational leaders to act as agents of continuous school improvement to promote each student's academic success and well-being and to achieve the vision, fulfill the mission, to promote the core values of the school, and to facilitate school improvement. This course also examines the application of these competencies to effective communication, engagement, partnership, advocacy, and improvement.

Credits: 3
Offered: Every year.

EDUL 620 - Culturally Responsive Leadership

This course explores how effective educational leaders engage families and the community in meaningful, reciprocal, and mutually beneficial ways to promote each student's academic success and well-being. The course assists candidates to learn to act with equity, cultural competence and responsiveness in their interactions, decision making, and practice to promote student learning and school improvement.

Credits: 3
Offered: Every year.

EDUL 630 - School District Leadership

This course focuses exclusively on educational leadership at the district level and deals with issues that are unique to that level and type of leadership.

Credits: 3
Prerequisite: EDUL 614 and EDUL 615 and EDUL 617.
Offered: Every year.

EDUL 640 - Internship I: Competencies

This first field-based course provides candidates with the opportunity to participate directly in activities related to administrative leadership at the school building level. The online component of this course offers opportunities for both synchronous and asynchronous class discussion of topics raised by their experiences in the field. The intent of the course is to form a Professional Learning Community (PLC) among candidates wherein they work with their mentors, the course instructor, and their course colleagues to enhance their professional development as school building leaders.

Credits: 3
Offered: Every Fall semester.

EDUL 641 - Internship II: Leadership Experience

This second field-based course is the capstone for this degree and builds on the candidates' experiences in the first internship course and broadens the candidates' participation in administrative leadership at the school building level. The online component of this course offers opportunities for both synchronous and asynchronous class discussion of topics raised by their experiences in the field, and continues the Professional Learning Community (PLC) begun in the EDUL 640 course.

Credits: 3
Offered: Every Spring Semester.

ENED - English Education

ENED 101 - Introduction to English Adolescence Education

English Adolescence Education majors are introduced to teaching in this foundational course, which combines 25 hours of classroom observation with reading, writing, and discussion about the principles and practices of English Adolescence Education. The course provides an introduction to current pedagogical theory and practices.

Credits: 1
Offered: Every year.

ENED 201 - Engaged Teaching in English Adolescence Education

English Adolescence Education majors extend their study of theories and techniques of engaged pedagogy through reading, writing, and discussion. Progressive pedagogies, new literacies, differentiated learning, and anchor standards are among the topics considered.

Credits: 1
Prerequisite: ENED 101. Offered: Every year.

ENED 250 - Literacy and Technology

Designed primarily for English Adolescence Education majors, this course explores the theoretical and practical implications of technology for the nature of literacy. The course presents approaches to helping secondary students improve their literacy through the use of technology.

Credits: 3
Offered: Every year.

ENED 301 - Reflective Teaching in English Adolescence Education

Students participate in 25 hours of classroom observation in the secondary schools and then draw on the observations, readings, and program course work in exploring advanced issues in pedagogical theory and practices.

Credits: 1
Prerequisite: ENED 201. Offered: Every year.
ENED 352 - Teaching Writing in the Primary Grades
Examines the writing process as it applies to primary-grade students and offers developmentally-appropriate approaches for teaching drafting, revising, and editing.
Credits: 3
Offered: Every year.

ENED 353 - Reading and Writing Children's Literature
A study of children's picture storybooks and their use across the elementary school curriculum, combined with the craft of writing stories for children and the art of teaching story writing to them.
Credits: 3
Offered: Every other year.

ENED 354 - Literature for Intermediate Grades
The course presents a study of a range of texts written for, by and about children in the 8-12 year old range. Students will learn about the cognitive, social and psychological development typical of this time in children's lives and will consider these changes in relation to children's home, school and community experiences. Students will discuss and prepare to teach these texts in an inclusive manner to a wide range of students through the use of a number of "best practices" for literature instruction.
Credits: 3
Offered: Every year.

ENED 355 - Adolescent Literature
Study of and written responses to a broad variety of texts written for, by, and about adolescents. Examination of the adolescent experience as it is depicted in this literature, with an emphasis on multicultural education, cultural diversity, and the educational system. Students will discuss and prepare to teach adolescent literature to children from diverse cultural and linguistic backgrounds.
Credits: 3
Offered: Every year.

ENED 356 - Teaching Writing in the Secondary School
Study of and practice in strategies for teaching the process of writing: pre-writing, drafting, revision, editing, and publication. Includes methods of assessing and writing.
Credits: 3
Offered: Every year.

ENED 357 - Literacy/Language/Learning Theory
Study of philosophical, sociological, and psychological theories of language, linguistics, and learning theory used to explore the nature of the reading process, how people learn to read, how people make meaning from print and other media, and how teachers might help students become more capable readers.
Credits: 3
Offered: Every year.

ENED 358 - Teaching Writing in the Intermediate Grades
Analysis of the writing process as it applies to elementary students. Approaches to teaching writing as a means of learning throughout the elementary-school curriculum.
Credits: 3
Offered: Every year.

ENED 359 - Teaching Poetry in Elementary and Middle School
Practical approaches for helping elementary and middle school students experience and enjoy many forms of poetry. Includes reading, writing and collecting poems.
Credits: 3
Offered: Offered on occasion.

ENED 360 - Multicultural English Education in Theory and Practice
This course will allow students to gain several constructive meanings of diversity issues that are associated with five major multicultural theories circulating mostly within the U.S. field of education. Additionally, through engaging in the processes of being analytical, critical, and self-reflexive, students will be challenged to grapple with the complexity and controversy of teaching diversity issues. Moreover, students will examine how gender, class, race, ethnicity and sexual orientation issues inform their instructional goals, curriculum planning/implementation, and practices in the teaching of literature, language, and composition in K-12 English Language Arts classrooms.
Credits: 3
Offered: Every other year.

ENED 399 - Special Topics in English Education
Variable-content course; topic announced in the online Course Offerings each semester that the course is offered.
Credits: 1-3
Offered: Offered on occasion.

ENED 413 - Teaching Shakespeare
As preservice teachers, you know that when you have your own classrooms, you will probably be teaching at least one Shakespeare play as part of the curriculum. The following question then arises: "How do I get my students interested in Shakespeare?" This class will focus on Shakespeare
plays commonly found in the high school curriculum. As we work closely with the texts, we will explore a range of pedagogical strategies for engaging students in the plays. Drama in the classroom is one effective approach, so we will be learning various strategies that get students up on their feet. Because of the pedagogical focus, we will be concentrating on a few plays and then working with them in depth.

Credits: 3
Offered: Every other year.

**ENED 450 - Seminar for Teachers of English**

Workshop designed to immerse students in the processes of preparing high-school students to read literature. Emphasis on pre-reading activities, construction of discussion questions and classroom activities, development of units for teaching literature, and participation in activities. Students will complete their e-Portfolio in ENED 450. Permission of instructor.

Credits: 3
Corequisite: ENED 451 or ENGL 401. Offered: Every year.

**ENED 451 - Methods for English Education**

Principles, materials and methods for teaching English. Note: Must be taken before student teaching.

Credits: 3
Corequisite: ENED 450 or ENGL 401. Offered: Every year.

**ENED 452 - Inquiries in Student Teaching**

The course serves as a complement to student teaching experiences in English Adolescence Education and examines professional issues that arise in classrooms with emphasis on learner-initiated and shaped professional development.

Credits: 3
Corequisite: ENED 454 or ENED 455. Offered: Every year.

**ENED 453 - Student Teaching in the Secondary School - English Grades 7-12**

Student Teaching in the Secondary School - English Grades 7-12: A field assignment to teach in secondary education. Assignments provided by subject area in grades 7 through 12; arrangements made by Office of Field Experiences.

Credits: 12
Prerequisite: ENED 450 and ENED 451. Corequisite: ENED 452 or ENED 455. Offered: Every year.

**ENED 454 - Student Teaching in the Secondary School - English High School**

Student Teaching in the Secondary School - English High School: A field assignment to teach in secondary education. Assignments provided by subject area in high school; arrangements made by Office of Field Experiences.

Credits: 6
Prerequisite: ENED 450 and ENED 451. Corequisite: ENED 452 or ENED 455. Offered: Every year.

**ENED 455 - Student Teaching in the Secondary School - English Middle School**

Student Teaching in the Secondary School - English Middle School: A field assignment to teach in secondary education. Assignments provided by subject area in middle school; arrangements made by Office of Field Experiences.

Credits: 6
Prerequisite: ENED 450 and ENED 451. Corequisite: ENED 452 or ENED 454. Offered: Every year.

**ENED 502 - Directed Study**

This is a 1.5 credit independent experience for the graduate students to work one-on-one with a faculty member on a topic related to the student's research focusing particularly on pedagogical issues. It is equivalent to the already existing ENGL 502, Directed Study, adding the option of the ENED prefix to indicate its pedagogical specificity, for students in the program leading to professional teaching certification.

Credits: 1.5
Prerequisite: ENGL 500. Offered: Every semester.

**ENED 530 - Topics in Teaching Language**

Study of various topics in language awareness in the classroom, including but not limited to the sociolinguistics and discourse analysis of classroom talk as well as ways to effectively teach grammar, style and vocabulary development. Review of recent research in the language of teaching and its applications for the classroom are also included.

Credits: 3
Offered: Every year.

**ENED 535 - Topics in Teaching Diversity**

Study of diversity in schools and classrooms. Topics may include identities and experiences that students and families bring to schools, explorations of teacher candidates™ personal biases, and pedagogical approaches that work toward equity. Content will support students as they articulate individual positions and pedagogical plans designed to promote equity and awareness of diversity.
Credits: 3
Offered: Every year.

**ENED 554 - Teaching Writing in the Secondary School**
Study of and practice in approaches to teaching writing, with emphasis on whole language instruction. Survey of recent research in written composition and its applications in the secondary classroom.
Credits: 3
Offered: Every other year.

**ENED 555 - Topics in Teaching Writing**
Study of various topics in teaching writing, such as composition theory, pedagogical approaches to writing, assignment design, NYS secondary writing standards, and writing assessment. Content may also focus on the writing of various genres common to secondary ELA classrooms. Review of recent research in written composition and its applications for teaching is also included.
Credits: 3
Offered: Every year.

**ENED 560 - Seminar in English Education - Theory & Practice**
Workshop designed to immerse students in the processes of teaching in the secondary school, from learning outcomes in lessons to a philosophy of teaching
Credits: 3
Corequisite: ENED 561. Offered: Every year.

**ENED 601 - Structured Field Experience Completion**
Required for all MA+Certification candidates. Gives recognition and validation for the thoughtful completion of all parts of the required Structured Field Experience
Credits: 0
Offered: Every semester.

**ENED 665 - Studies in English Education**
Study of components of English with emphasis chosen from linguistics, criticism, composition, media, and/or learning theories. Focus is on the implications for teaching English at the secondary level.
Credits: 3

Credits: 3
Offered: Every other year.

**ENED 697 - Student Teaching in the Secondary School - English High School**
A field assignment to teach in secondary education. Assignments provided by subject area in high school; arrangements made by Office of Field Experiences
Credits: 6
Prerequisite: ENED 560 and ENED 561. Offered: Every year.

**ENED 698 - Student Teaching in the Secondary School - English Middle School**
A field assignment to teach in secondary education. Assignments provided by subject area in high school; arrangements made by Office of Field Experiences
Credits: 6
Prerequisite: ENED 560 and ENED 561. Offered: Every year.

**ENED 690 - Degree Project Research**
This required supervised research course for graduate students in English provides an opportunity for working oneonone with a faculty mentor that will culminate in a final degree project subsequent to this class (thesis, action research thesis, professional development essay, comprehensive exam). Students will finish their project research, gain faculty feedback for proposals and drafts, finalize faculty committees and review professional opportunities in the field. Students conducting classroom research as part of their degree projects will also obtain necessary permissions from the Institutional Review Board and school authorities and carry out their research in preparation for writing their final reports. Students must have a minimum overall GPA of B in order to enroll in Degree Project Research. [NOTE: identical description for ENED 690, with prerequisites ENGL 500 and ENED 502 ]
Credits: 3
Prerequisite: ENGL 500 and ENGL 502. Offered: Every Fall semester.

**ENED 696 - Degree Project Completion**
The culminating project for all graduate students in English, taken together with the capstone course (ENGL 695), demonstrating successful completion of advanced research in the field of English studies. Students choose one of several different degree projects. A final grade in 696 of B or above indicates successful completion of the degree project, including all required written and oral portions and, in the case of thesis/action research thesis, submission to the AP for Graduate Studies and to Reed Library for electronic archiving.
Credits: 3
Prerequisite: ENED 690 or ENGL 690. Offered: Every semester.

**ENGL - English**

**ENGL 100 - Craft of Writing**

A student-centered writing-workshop course in which students understand and practice various stages of the writing process; compose essays using narration, description, persuasion, exposition, and explanation; and use writing and discussion as a means of situating themselves in a world of ideas. There is an emphasis, as well, on reading critically.

Credits: 3
Offered: Every semester.

**ENGL 106 - Introduction to Literary Studies**

ENGL 106 will provide students with a full semester overview of the major areas within and current approaches to literary studies. Students will gain insight into literary history, the process of and critical debates concerning canon formation, the fundamental skills and terms for effective analysis of poetry and prose, and the multiple functions and genres of literature and writing.

Credits: 3
Offered: Every semester.

**ENGL 111 - Integrated Skills for Academic Purposes**

ENGL 111 is a course for students who need to further develop their English language skills. This multi-skills course focuses on reading, writing, and communication needs essential in academic settings.

Credits: 3
Offered: Every year.

**ENGL 114 - ESL: Spoken and Written Grammar in Context**

A review of English grammar through intensive written and oral practice to promote accurate and appropriate language use for students who have already studied grammar extensively and need to refine the ability to produce acceptable academic English.

Credits: 3
Offered: Every year.

**ENGL 117 - ESL: Academic Reading and Writing**

ENGL 117 will provide students the opportunity to further develop their academic reading and writing skills. It will focus on reading and writing strategies for academic work that will enhance fluency and accuracy, vocabulary expansion and use, and developing metacognitive awareness of the text conventions of common academic genres. Students will improve their ability to understand and respond to texts.

Credits: 3
Offered: Every other year.

**ENGL 124 - American Fictions**

Students will explore, through literature, primary historical texts, and/or other genres and media, central U.S. myths and cultural narratives. Individual sections will examine particular themes chosen by the instructor.

Credits: 3
Offered: Every year.

**ENGL 127 - Becoming Americans**

Students will delve into historical and recent American literature, across multiple genres and in relation to multiple institutions and media, that relates to the experience of “becoming Americans.”

Credits: 3
Offered: Every year.

**ENGL 131 - Word and Image**

This writing-intensive course explores how words and images work together to make meaning in an artistic form. Students will study important features of at least one specific artistic form (such as poetry, drama, graphic memoir, or fiction) and then will compose their own creative work in a genre.

Credits: 3
Offered: Every other year.

**ENGL 132 - Word and Sound**

This writing-intensive course examines how creative writers often manipulate sound patterns to capture our attention; through critical and creative assignments, it explores the rhetorical and emotional impact of the sounds of words, as well as other sounds found in and out of language. Students will study the play and purpose of sound in artistic texts and create original works utilizing sound for expressive and/or persuasive purposes. Examples may include song lyrics, spoken word, poems for page and/or performance, advertisements, musicals, oratory, and experimental traditions.

Credits: 3
Offered: Every other year.

**ENGL 144 - Reading Humanity**

Students will explore constructions of humanity and enduring questions about the human experience through inquiry into thematic readings of literature, film, and/or other genres and media.
COURSES

Credits: 3
Offered: Every year.

**ENGL 160 - Visiting Writers Program**

The Visiting Writers Program is required for two semesters for all Writing minors in the creative writing track. Guest writers give readings and present lectures concerning the craft and process of writing, which students are required to attend. Each event offers opportunities for students to interact with the visiting writers and to discuss their craft and creative process. Writing minors are required to register for the course during the semesters when they are enrolled in their intermediate and advanced writing courses (ENGL 361, 362, 460, or 461).

Credits: .5
Offered: Every semester.

**ENGL 167 - Border Crossings**

Study of a range of world literature, across multiple genres, that relates to the experience of the process of “Border Crossings.”

Credits: 3
Offered: Every year.

**ENGL 200 - Introduction to American Studies**

An introduction to the interdisciplinary study of American cultures, their historical development and contemporary status. Focusing on literary and cultural representations of specific aspects of the American experience, the course will examine the constructed nature of American self-perceptions and of U.S. history. The course contextualizes U.S. cultures within the Americas and the global arena. Particular course emphasis is selected by the instructor.

Credits: 3
Offered: Every year.

**ENGL 204 - Survey of English Literature**

The study of major texts from origins to the present in British literature. Will include divergent approaches to texts, the historical development of the literatures, and the relationships between literature and other disciplines.

Credits: 3
Offered: Offered on occasion.

**ENGL 205 - Epic and Romance**

Readings in world literature from ancient to contemporary. Readings include epics from the oral and written traditions and romances from several traditions.

Credits: 3
Offered: Every semester.

**ENGL 206 - Survey of American Literature**

The study of major texts from origins to the present in American literature. Will include divergent approaches to texts, the historical development of the literatures, and the relationships between literature and other disciplines.

Credits: 3
Offered: Offered on occasion.

**ENGL 207 - Drama and Film**

Readings in world literature from ancient to contemporary. Analysis of drama and film as theatrical and cinematic works through various thematic and critical approaches. Includes screening of films.

Credits: 3
Offered: Every semester.

**ENGL 208 - American Popular and Mass Cultures**

An introduction to the methodologies of studying American cultures, with a special focus on popular and mass cultures. Particular course emphasis will be determined by the individual instructor, but topics will stress the multiplicity of American cultures. While literary works will make up the majority of the class texts, the course will utilize an interdisciplinary approach integrating materials from fields such as history, anthropology, women’s studies, ethnic studies, geography, sociology, music, and art.

Credits: 3
Offered: Every other year.

**ENGL 209 - Novels and Tales**

Readings in world literature from ancient to contemporary. The course teaches analysis of varying narrative styles and approaches and the relationship of narrative to culture.

Credits: 3
Offered: Every semester.

**ENGL 211 - World Poetry**

Readings in world literature from ancient to contemporary. Students will develop skills in reading poems both as literary works and as cultural artifacts.

Credits: 3
Offered: Every semester.

**ENGL 213 - Texts and Contexts**

Texts and Contexts is a writing-intensive course designed to introduce students to the process of research-based writing intended for a range of audiences and rhetorical situations. Students will undertake a series of writing projects that engage writing process elements, from completing pre-writing strategies; to locating, assessing,
integrating, and properly citing research sources; to drafting, revising, and proofreading final copy. Through reading like a writer, students will learn to evaluate and construct logical arguments and to explore questions related to the contexts of writing, such as audience, genre, and historical or political moment. The course will culminate in a significant research-based writing project.

Credits: 3
Offered: Every semester.

ENGL 214 - American Fiction

Readings from among various fiction genres, intended to reflect the growth of and influences in American fiction from its beginnings to the present; specific focus is chosen by the instructor.

Credits: 3
Offered: Offered on occasion.

ENGL 215 - Detective Fiction

A survey of mystery writers from Edgar Allan Poe to P.D. James, exploring their techniques with the genre and the methods of their detectives.

Credits: 3
Offered: Offered on occasion.

ENGL 216 - Science Fiction

Historical and generic survey of science fiction through representative works and major authors; examination of its relationships with other types of literature.

Credits: 3
Offered: Offered on occasion.

ENGL 217 - Fantasy Fiction

Historical, comparative, and generic survey of fantasy fiction through representative works and major authors; examination of its relationships with other kinds of literature.

Credits: 3
Offered: Offered on occasion.

ENGL 221 - Great Books

In this course, students read a selection of foundational texts from within the Western tradition and its Others. They will learn how to identify, analyze, and evaluate the various claims and concepts elaborated from within it and about it. More specifically, they will gain insights into how the western tradition was formed, how this formation hinged on the inclusion and exclusion of certain (changing) â€œothers,â€• and how its legacy continues to inform the geocultural and geopolitical present. At the same time students will learn how to differentiate between the various linguistic and cultural singularities that make up the umbrella term â€œWestern Civilization,â€• thus becoming aware of problems of transmission and translation as well as of the logic of generalization as such. The interdisciplinary focus of the course will moreover allow students to synthesize and integrate these questions within a more widely conceived framework than can be provided within their own respective majors.

Credits: 3
Offered: Every year.

ENGL 227 - Stage/Screen

Through drama or film, students will explore significant questions and issues related to being human.

Credits: 4
Offered: Every year.

ENGL 240 - Introduction to African American Literature and Culture

An examination of major works by African American novelists, poets, dramatists, filmmakers, musicians, and essayists in terms of the intellectual and political concerns of their periods and locations. Cross-listed with ETHN 240.

Credits: 3
Offered: Every other year.

ENGL 241 - Introduction to Latino/a Literature

Study of works by and about Latinos, including poetry, novels, film, drama, music, and essays. Focus on culture of people of Hispanic descent living in the United States, including Chicanos, Puerto Ricans, Dominican Americans, and Cuban Americans, with some consideration of the ongoing relations between U.S. Latinos and Latin America. Cross-listed as ETHN 241.

Credits: 3
Offered: Offered on occasion.

ENGL 242 - American Indian Literature

Study of a variety of works, including traditional tales, novels, poems and memoirs, produced by American Indians from historical beginnings to the present. Cross-listed with ETHN 242.

Credits: 3
Offered: Offered on occasion.

ENGL 260 - Introduction to Creative Writing

First in the sequence of creative writing courses, the prerequisite for all higher level creative writing. Conducted in an informal workshop format, the course provides practical experience in the writing and evaluation of poetry
and short fiction. Basic forms, prosodies, techniques, genres, and the problems they pose are considered through study of historical and contemporary examples, and through writing assignments.

Credits: 3
Offered: Every semester.

**ENGL 261 - Literary Publishing**

The course takes an in-depth look at magazine and fiction or poetry manuscript editing in preparation for publication. The course pays special attention to the selection of work, layout, and formation of the on-campus literary magazine The Trident as well as a chapbook manuscript from each student. Students will consider the elements of layout, arrangement, and editing for manuscript work and turn in two major projects over the semester.

Credits: 3
Prerequisite: ENGL 260. Offered: Every year.

**ENGL 271 - Rhetoric for Writers**

This course introduces students to the field of composition-rhetoric, its origins and present day applications. Students will investigate historical and contemporary definitions, theories of, and figures in composition-rhetoric as well as critically analyze and produce texts with a deep awareness of rhetorical strategies underlying them.

Credits: 3
Offered: Every other year.

**ENGL 274 - Social Justice & The Written Word**

A study of the ways in which writers and others use the written word as a form of social critique and to effect social change.

Credits: 3
Offered: Every year.

**ENGL 280 - Introduction to Film**

Study of ways to approach and understand film as a medium of art and communication. Emphasis on building a working vocabulary of basic film terms through screening, discussion, and analysis of feature and shorter films.

Credits: 3
Offered: Every other year.

**ENGL 291 - The Bible as Literature**

Examination of sections of Old and New Testaments as works of literature, history and religious thought. Emphasis on major themes, motifs, and critical techniques.

Credits: 3
Offered: Offered on occasion.

**ENGL 296 - American Identities**

An exploration of the historical construction of American gender, ethnicity/race, and class; their present status; and their literary and cultural representations. Focusing on intersections between these categories of identity, the course will utilize an interdisciplinary approach, integrating materials from fields such as literary studies, history, gender studies, ethnic studies, geography, sociology, music, and art.

Credits: 3
Offered: Every year.

**ENGL 299 - Special Topics**

Variable-content course; topic announced in the online Course Offerings each semester.

Credits: 1-4
Offered: Offered on occasion.

**ENGL 300 - European Literary Landmarks**

Offered on occasion. In-depth critical examination of selected "landmarks" from the literature of continental Europe. Focus on issues of interpretation, intertextuality, literary movements and periods, canon formation, and pedagogy.

Credits: 3
Offered: Offered on occasion.

**ENGL 301 - American Literary Landmarks**

In-depth critical examination of selected "landmarks" from the literary tradition of the United States. Focus on issues of interpretation, intertextuality, literary movements and periods, canon formation, and pedagogy.

Credits: 3
Offered: Every year.

**ENGL 302 - British Literary Landmarks**

In-depth critical examination of selected "landmarks" from British literary tradition. Focus on issues of interpretation, intertextuality, literary movements and periods, canon formation, and pedagogy.

Credits: 3
Offered: Every year.

**ENGL 303 - Global Literary Landmarks**

In-depth critical and comparative examination of selected "landmarks" from global literary traditions. Focus on issues of interpretation, intertextuality, literary movements and periods, canon formation, and pedagogy.

Credits: 3
Offered: Every other year.
ENGL 304 - Latina Literature and Cultural Studies
An examination of contemporary Latina literary productions in the context of representations of Latinas in mainstream U.S. society. The focus of the course is on women of Hispanic descent living and writing in the United States, including work by and about Chicanas, Puerto Ricans, Dominican Americans, and Cuban Americans. Previous course work in Latina/Latino literature not required, but some previous course work related to African American or other ethnic literature, women’s literature/feminism, and/or film studies is strongly recommended. Cross-listed as WOST 304 and INDS 304.
Credits: 3
Offered: Offered on occasion.

ENGL 306 - Middle Eastern Literatures
This survey course will offer a study of Middle Eastern literatures from antiquity to the present. The central goal of the course is to introduce the students to the trends and genres in Middle Eastern literatures and to offer them an overview of the historical, literary, and cultural setting of some of the canonical literary texts. Particular emphasis will be given to a broad understanding of the interaction between religion, history, and literature in the Middle East. All readings will be in English translation.
Credits: 3
Offered: Offered on occasion.

ENGL 310 - Medieval Literature
Study of selected texts representative of the literature flourishing in Western Europe between 600 and 1500.
Credits: 3
Offered: Every other year.

ENGL 312 - Renaissance Literature
Study of Renaissance texts, with a focus on English Renaissance literature.
Credits: 3
Offered: Every other year.

ENGL 313 - Scribbling Women
This course includes coverage of a range of fiction, poetry, and non-fiction prose authored by 19th-century women writers, as well as the historical contexts within which those works were produced. In addition to the primary focus on reading and analyzing literature, the course will also expose students to histories and approaches of literary criticism and the methods of recovering and assessing neglected traditions and perspectives from literary history.
Credits: 3

ENGL 314 - Women Writers
An in-depth study of literature by women. The course explores questions regarding gender, language, perception, and experience through various genres. Cross-listed as WOST 314.
Credits: 3
Offered: Every other year.

ENGL 315 - The Gothic Novel
This course will explore the Gothic novel in its various geographic and temporal contexts, from classic texts to more non-traditional ones. Beginning with its eighteenth-century origins, we will examine the different changes that the genre has undergone and the different themes that the genre has addressed.
Credits: 3
Offered: Every other year.

ENGL 316 - The Early 17th Century
Study of Jacobean drama, metaphysical and neo-classical poetry, and emerging prose styles.
Credits: 3
Offered: Every other year.

ENGL 318 - Studies in Poetry
Advanced-level course in analysis of poetry: introduction to various critical approaches; background study of poetic techniques; independent work on one poet.
Credits: 3
Offered: Every other year.

ENGL 319 - Modern Drama
A study of modern dramatic literature from the late 19th century through the first half of the 20th century. Particular attention will be paid to the influence of realism on modern drama. The course will explore meaning beyond the page by considering the textual ramifications of staging dramatic texts.
Credits: 3
Offered: Every other year.

ENGL 320 - The Restoration and 18th Century
Study of major literary forms with emphasis on Neoclassicism and emergent verse and prose styles; topics include significant social and political changes such as the expansion of empire and the growth of new readerships.
Credits: 3
Offered: Every other year.
ENGL 321 - Contemporary Drama
A study of contemporary dramatic literature from the mid-20th century to the present focusing on understanding the dramatic form and its relation to society. Critical analysis of plays includes historical and cultural contexts as well as theatrical implications of staging the text.
Credits: 3
Offered: Every other year.

ENGL 322 - The Romantic Age
Romantic movement in England, 1790 to 1835, as exemplified in writings of Blake, Wordsworth, Coleridge, Lamb, Byron, the Shelleys, Keats, Wollstonecraft, DeQuincey, Hazlitt, and others.
Credits: 3
Offered: Every other year.

ENGL 324 - Myth and Symbol in Literature
Study of myth theory, mythology, and literary symbolism in world literature.
Credits: 3
Offered: Offered on occasion.

ENGL 326 - Victorian Literature
Introduction to later 19th century English poetry and prose; emphasis on relationship between social-intellectual history and literature. Topics include problems of rapid industrialization, impact of science and technology, pressures for increased democratization, impact of laissez-faire capitalism, and relationship of the literature to 19th century music, painting, and architecture.
Credits: 3
Offered: Every other year.

ENGL 327 - Modern European Literature
Study of the literature of modernism in terms of influence, development, and its interaction with the other arts within the context of continental Europe. Might include figures such as Marcel Proust, Franz Kafka, Rainer Maria Rilke, and Thomas Mann; movements such as Surrealism and Expressionism; and specific historical-geographical contexts such as the Habsburg Empire and interbellum Paris.
Credits: 3
Offered: Offered on occasion.

ENGL 328 - Modern British Literature
Study of major British fiction, poetry, and drama, 1900 to the present. Topics include the Irish national movement, romantic/realistic attitudes toward war, the roots of modernism, the dissolution of Empire. Authors range from Yeats, Synge, Joyce, and Lawrence to Amis and Fowles. Approach is varied but tends to emphasize social-historical backgrounds.
Credits: 3
Offered: Every other year.

ENGL 329 - Graphic Literature
Exploration of the evolution, subject matters, forms, and conventions of graphic texts with emphasis on their literary form.
Credits: 3
Offered: Every other year.

ENGL 330 - The Contemporary Novel
Study of the novel in Britain and America, 1948 to the present. Emphasis on variety of forms, styles, and techniques in the genre and on contrasts between British and American novels of the period reflective of long-established, quite separate traditions.
Credits: 3
Offered: Every other year.

ENGL 331 - American Literary Roots
Study of American literary and cultural roots in the 17th and 18th centuries; special attention to the emergence of myths and realities concerning the American hero and the American dream, including specific issues such as the rise of slavery, the role of women, the treatment of the Indian, the power of the Puritans, and the rhetoric of the Revolution.
Credits: 3
Offered: Every other year.

ENGL 332 - American Romanticism in Literature
Study of Romanticism in terms of influence, development, and characteristics within the context of American culture, including textual examples ranging from indigenous native sources to those of Europe and the East.
Credits: 3
Offered: Every other year.

ENGL 333 - Environmental Literature
Survey of American nature writing, chiefly over the past half century. Focuses on the art of seeing natural places. Includes field trips, direct study of nature.
Credits: 3
Offered: Offered on occasion.
ENGL 334 - Realism/Naturalism in American Literature
Study of Realism and Naturalism in terms of influence, development, and characteristics within the context of American culture, including influences from Europe and from the emerging voices of American women and African American slaves.
Credits: 3
Offered: Every other year.

ENGL 335 - Modern American Poetry
Study of American poetry of the first half of the 20th century. Focuses on tradition and innovation, distinctive voices, the cultural and historical context.
Credits: 3
Offered: Every other year.

ENGL 336 - Modernism in American Literature
Study of modernism in terms of influence, development, and characteristics within the context of American culture; might include such figures as Faulkner and Hemingway, and such movements as the Harlem Renaissance.
Credits: 3
Offered: Every other year.

ENGL 338 - Contemporary American Literature
Study of contemporary works, genres and movements with attention to literary form, historical contexts and other interdisciplinary concerns.
Credits: 3
Offered: Every other year.

ENGL 339 - Contemporary American Poetry
Study of American poetry being written now and during the past 20 years in relationship to the American and lyric traditions. Focuses on the place of poets in our society, the cultural and historical context of American poetics, and the development of a uniquely American voice in contemporary poetry.
Credits: 3
Offered: Every other year.

ENGL 340 - Black Women Writers
Study of the literature written by and often about black women, including poetry, short and long fictions, novels, drama, biography, and autobiography from the 18th century to the present.
Credits: 3
Offered: Every other year.

ENGL 341 - Harlem Renaissance
Study of the literature flourishing within the African American community between approximately 1919 and 1930. Focuses on the political, social, and literary activities of the era.
Credits: 3
Offered: Every other year.

ENGL 342 - African American Autobiography
Study of major texts that contribute to the field of African American autobiography. Focuses on the literary and cultural trends exhibited in these texts, as well as on the individual significance of each text.
Credits: 3
Offered: Every other year.

ENGL 343 - Queer Studies in Literature
This course offers students an introduction to literary and theoretical approaches to issues of sexuality and gender identity, as they pertain to gay, lesbian, bisexual, and transgender peoples. We investigate queerness both in terms of a range of identity issues, and as a set of approaches to reading texts. We will look at such representations through literature and film, from various historical, cultural and theoretical perspectives.
Credits: 3
Offered: Offered on occasion.

ENGL 344 - Contemporary Multiethnic American Literature
Study of a variety of genres of contemporary multiethnic American literature, featuring African American, Asian American, Latina/o, Native American and other ethnic American writers. The course explores whether and how these writers exhibit shared concerns; how racial and ethnic identities and differences are represented in their work; and how race and ethnicity intersect with gender, class, sexuality, and nationality.
Credits: 3
Offered: Every other year.

ENGL 345 - Critical Reading
Focus on helping students develop an awareness of their own acts of interpretation in reading and an understanding of the strengths of different approaches to interpretation and criticism.
Credits: 3
Offered: Every semester.
ENGL 346 - History of Literary Criticism
Survey of representative texts in literary criticism from Plato to the mid-19th century.
Credits: 3
Offered: Offered on occasion.

ENGL 348 - Modern Literary Criticism
Study of major documents, theoretical concerns, and dominant trends in literary criticism from the mid-19th century to the present.
Credits: 3
Offered: Offered on occasion.

ENGL 349 - Theories of Gender
A multidisciplinary approach grounded in the humanities and arts will be employed to account for the social, economic, political, historical and cultural ways that gender is constructed and represented in contemporary societies.
Credits: 3
Prerequisite: ENGL 345 or WOST 201 or WGST 201.
Offered: Every year.

ENGL 351 - Language and Society
Overview of the ways language use both reflects and shapes social identities. Areas for consideration include gender, race, age, class, status, power, and nationality.
Credits: 3
Offered: Offered on occasion.

ENGL 352 - History of the English Language
Overview of the origins and changes of the English language, from Old English to present-day American English. Areas for consideration include the changing speech sounds, word and sentence structures of English; etymology and new word formation; and the interrelationships between English and the political and social history of its speakers.
Credits: 3
Offered: Every other year.

ENGL 355 - Adolescent Literature
Study of and written responses to a broad variety of texts written for, by, and about adolescents. Examination of the adolescent experience as it is depicted in the literature, with an emphasis on multicultural education, cultural diversity, and the educational system. Students will discuss and prepare to teach adolescent literature to children from diverse cultural and linguistic backgrounds.
Credits: 3

ENGL 361 - Intermediate Fiction Writing
Continued study of forms, techniques, genres, and theories of fiction writing. Emphasis on further development of students' skills in writing and self-criticism through intensive workshop experience. Readings in contemporary fiction.
Credits: 3
Prerequisite: ENGL 260. Offered: Every year.

ENGL 362 - Intermediate Poetry Writing
Continued study of forms, techniques, genres, and theories of poetry. Emphasis on further development of students' skills in writing and self-criticism through intensive workshop experience. Readings in contemporary poetry.
Credits: 3
Prerequisite: ENGL 260. Offered: Every year.

ENGL 363 - Intermediate Creative Nonfiction
Study of forms, techniques, genres, and theories of creative nonfiction writing and the differences with other rhetorical styles of nonfiction. Emphasis on further development of students' skills in writing and self-criticism through intensive workshop experience. Readings in contemporary creative nonfiction. Permission of instructor.
Credits: 3
Prerequisite: ENGL 260. Offered: Every other year.

ENGL 365 - Form and Theory of Writing
Students will be required to explore issues of form and theory relevant to both poetry and prose and to write in both genres. Sample topics for poetry might be the implicit politics involved in writing in form in the 21st century, the complex issues surrounding the use of the lyric "I" in poetry, and the question of what different genres and modes of poetry can do (theorize, express, authenticate, narrate, etc.); sample topics for prose might include the distinctions that are made between genre and literary fiction, the question of what responsibilities, if any, a fiction writer has when he/she writes, and the sometimes complicated implications that point of view can have for narrative.
Credits: 3
Prerequisite: ENGL 260. Offered: Every other year.

ENGL 366 - Opinion in Journalism
The course focuses on the issues surrounding "fact" vs. "opinion" in journalism, including discussion of concepts such as objectivity, truth, and the importance of background, context and balance. Students will gain experience with techniques appropriate to presentation of opinion and critical commentary such as columns,
editorials, cartoons and critical reviews of the arts as well as learning how to thoughtfully critique such work.

Credits: 3
Offered: Offered on occasion.

**ENGL 367 - Advanced Composition**

Building on the work done in ENGL 100, this is a non-fiction writing workshop course in which students compose papers in argumentation, exposition, and narration. As part of the workshop, they will analyze, respond to, and edit the work of others. There will also be an emphasis on developing informational literacy, which includes gathering, evaluating, and synthesizing multiple sources in order to support or refute a claim. Students will also read professional texts that focus on advanced composing techniques, conventions, and styles.

Credits: 3
Prerequisite: ENGL 100. Offered: Every year.

**ENGL 369 - Argumentative Writing**

In this course, we will isolate and study strategies for identifying issues, determining positions, assessing claims and reasons, locating and evaluating supporting evidence, and writing essays that represent clear and convincing arguments in themselves.

Credits: 3
Prerequisite: ENGL 100. Offered: Every year.

**ENGL 372 - Grammar and Style for Writers**

This course helps writers move beyond notions of “correctness” in matters of grammar and style to appreciate the nuances involved in crafting well-written persuasive prose for a variety of audiences, purposes, and contexts. It empowers students to approach grammar, syntax, and punctuation as rhetorical tools and to make thoughtful decisions among equally acceptable alternatives to suit the goals and needs of different audiences, assignments, and contexts. Because professional writers often work for an organization or institution, the course also introduces students to the notion of a style guide, preparing them to work with whatever house style is adopted by a specific profession or publication.

Credits: 3
Prerequisite: ENGL 100. Offered: Every other year.

**ENGL 373 - English Grammar for Everyone**

Overview of basic grammatical concepts and structures, including punctuation and basic usage. Students will learn to recognize and correct grammatical errors in their writing and in everyday examples. They will also be able to explain why something is grammatically correct or incorrect, enabling them to impart their knowledge of grammar to others in their future professional workplace or classroom. While the course is designed with everyone in mind, the needs of future teachers are taken into special consideration. Additional topics will vary with instructor but might include differing approaches to grammar and style depending upon audience, purpose, and genre; the power of dynamics implicit in choosing one grammar over another; and the art of grammar - how writers use and abuse grammar artfully for expressive purposes.

Credits: 3
Offered: Offered on occasion.

**ENGL 374 - Writing and Social Change**

This writing-intensive course will use a variety of methods, materials, and rhetorical approaches to explore and respond to contemporary social change issues such as sustainability, democracy, social justice, and community engagement. In addition to literary works and nonfiction texts, students will analyze film, Internet, popular press and social media sources to evaluate the effectiveness of different writing/communication genres and to help them engage in several real world writing projects.

Credits: 3
Prerequisite: ENGL 100. Offered: Every other year.

**ENGL 375 - Writing for the Professions**

Focus on the development of students' ability to communicate in the business and professional world through the letter, memorandum, and in-house report. Emphasis on the importance of written communication as a tool for problem-solving in administrative and management settings.

Credits: 3
Offered: Offered on occasion.

**ENGL 377 - Academic Writing**

A writing workshop course in which students practice research-based writing for multiple academic audiences, investigate discourse conventions for a variety of academic disciplines and fields of study, and use critical reading, writing, and discussion to inform their writing.

Credits: 3
Prerequisite: ENGL 100. Offered: Every other year.

**ENGL 378 - Advanced Writing I: The Essay**

Workshop-oriented course in which students write, examine, and discuss the essay as a distinct mode. Through the course, students can expect to extend the range of their writing, their understanding of rhetorical traditions, and their freedom and flexibility as writers of essays.

Credits: 3
Prerequisite: ENGL 100. Offered: Offered on occasion.
ENGL 379 - Writing in a Digital World

This course has two main goals, both of which will help prepare students to be informed and skilled citizens of an increasingly digital world. First, the course will prepare students to reflect on and think critically about the wide-ranging effects of digital communication. Second, students will compose for digital spaces using a range of modes and media.

Credits: 3
Prerequisite: ENGL 100. Offered: Offered on occasion.

ENGL 380 - Film: Silence to Sound

An historical survey of feature narrative and dramatic films from the beginnings through the late 1930s, through screenings, lectures, discussions, and analysis of selected works. Filmmakers studied include Porter, Griffith, Von Stroheim, Eisenstein, Pudovkin, Lubitsch, Hitchcock, Lang, and Renoir.

Credits: 4
Offered: Offered on occasion.

ENGL 381 - Narrative Film After 1940

An historical survey of feature narrative and dramatic films from 1940 through the present, through screenings, lectures, discussions, and analysis of selected works. Filmmakers studied include Welles, Huston, Capra, Hitchcock, Kurosawa, Godard, Truffaut, Bunuel, Fellini, Antonioni, and Altman.

Credits: 4
Offered: Offered on occasion.

ENGL 386 - Women in Global Cinema

A study of films by and about women in global cinema. The course focuses on women filmmakers primarily, and their uses of documentary, experimental, and/or narrative forms.

Credits: 4
Offered: Offered on occasion.

ENGL 387 - American Film Directors

An in-depth study of the films of one or two significant American film directors as a body of work informed by a specific artistic vision. We examine this work within various critical frameworks, such as auteur theory, psychoanalytic criticism, culture studies, and American history. This course satisfies the â€œauthorsâ€• requirement in the English major and is an elective for the film minor.

Credits: 4
Offered: Offered on occasion.

ENGL 389 - Greek and Roman Literature

Introduction to major literary genres of classical Greece and Rome; emphasis on characteristic forms and themes. Readings in Modern English translations.

Credits: 3
Offered: Offered on occasion.

ENGL 390 - Jewish Literature

A study of major Jewish writers from the Bible to the present. Emphasis will be on the literature and on the varieties of Jewish culture that it represents.

Credits: 3
Offered: Offered on occasion.

ENGL 391 - Romanticism in World Literature

An exploration of basic themes commonly associated with the concept of Romanticism as identified in literature from Eastern and Western cultures.

Credits: 3
Offered: Offered on occasion.

ENGL 392 - Asian Literature

A study of selected works from Chinese, Japanese, Indian, and Middle Eastern cultures, emphasizing those that make up their canon and which are recognized as having had a significant influence on Western culture.

Credits: 3
Offered: Offered on occasion.

ENGL 393 - Literatures of Colonization and Globalization

Study of texts from a variety of genres, time periods, and world cultures that explore the dynamics of colonization and globalization.

Credits: 3
Offered: Offered on occasion.

ENGL 394 - Japanese Literature

Study of selected works from Japanese culture, emphasizing those that make up their canon and which are recognized as having had a significant international influence, especially on the U.S.; the course also examines cultural assumptions in the works, and looks closely at the problem of language in translation and cultural contexts.

Credits: 3
Offered: Offered on occasion.

ENGL 395 - Non-Western Literature

Study of texts from a variety of world cultures that challenge, revise, or pose alternatives to traditional
conceptions of the world literature canon and dominant modes of Western philosophy, history, literature, and art.

Credits: 3
Offered: Offered on occasion.

**ENGL 396 - Russian Literature**

Intensive reading of important works of Russian fiction to understand each writer's vision of the potentialities, complexities, and essential conditions of human nature, within the intellectual and cultural context perceived or created by the writer. Significant attention to political and cultural history of Russia.

Credits: 3
Offered: Offered on occasion.

**ENGL 397 - Discourses of the Enlightenment**

Study of the literary and philosophical transformations during the age of Enlightenment(s) (Aufklärung, Iluminismo, Lumieres, etc.). Focuses on the genre of satire and concepts such as liberty, discovery, rationality, natural law, revolution, difference, belonging and the idea of Europe.

Credits: 3
Offered: Offered on occasion.

**ENGL 399 - Special Topics**

Variable-content course; topic announced in the online Course Offerings each semester that the course is offered.

Credits: 1-4
Offered: Offered on occasion.

**ENGL 400 - Senior Seminar**

In the capstone course, students will reflect back upon their English major and will polish their skills in critical and close reading, research-based and other forms of writing, as well as oral explorations of literature.

Credits: 3
Prerequisite: ENGL 324 or ENGL 343 or ENGL 345 or ENGL 346 or ENGL 348 or ENGL 349 or ENGL 380 or ENGL 381 or ENGL 440 or ENGL 446. Corequisite: ENED 450 or ENGL 401. Offered: Every semester.

**ENGL 401 - Portfolio Completion**

Required for all English and English Adolescence Education majors. Gives recognition for thoughtful completion of all elements of the reflective portfolio except the exit paper. Should be taken concurrently with either ENGL 400 or ENGL 450.

Credits: 0
Corequisite: ENGL 400. Offered: Every semester.

**ENGL 404 - Literary London**

Variable topics course. Taught in London as a study abroad experience, the course examines its content using interdisciplinary approaches rooted in the resources of the city of London.

Credits: 3
Offered: Every year.

**ENGL 405 - Page and Stage**

This course will study drama as it is meant to be explored--on the page and on the stage. We begin our analysis of the drama with discussion on campus and then travel to see productions of the plays. In our post-production discussions and writing, we will consider the choices made in production and the impact of that on our reading of the plays. A frequent destination for the course will be New York City, but we may also travel to Stratford, Ontario, or other sites, for productions as well.

Credits: 1.5-6
Offered: Every semester.

**ENGL 407 - Tragedy**

An examination of representative tragedies and selected theories of tragedy from ancient Greece through Renaissance England and Neo-Classical France to the modern era. Primary focus on the plays and fiction with attention to various conceptions of the tragic vision.

Credits: 3
Offered: Offered on occasion.

**ENGL 408 - Arthurian Literature**

Study of the many works about King Arthur and his knights of the Round Table, extending from the eighth century to the present.

Credits: 3
Offered: Every other year.

**ENGL 410 - Chaucer**

Study of The Canterbury Tales and Troilus and Criseyde. Introduction to Middle English language and period and to significant Chaucerian scholarship.

Credits: 3
Offered: Every other year.

**ENGL 412 - Early Shakespeare**

Study of Shakespeare's works to 1600; emphasis on his growth as a dramatist.

Credits: 3
Offered: Every year.
ENGL 414 - Later Shakespeare
Study of Shakespeare's works from 1600 to end of his career.
Credits: 3
Offered: Every year.

ENGL 416 - Elizabethan Drama
The development of the English drama in the late 16th and early 17th centuries. The growth of drama from the medieval mystery, miracle, and morality plays through the works of Shakespeare's contemporaries. The plays in their cultural, historical, and artistic climates.
Credits: 3
Offered: Offered on occasion.

ENGL 418 - Restoration/18th Century Drama
Study of the drama and theatre of the period, focusing on a variety of traditional and emergent genres such as comedy, tragedy, heroic drama, and pantomime.
Credits: 3
Offered: Offered on occasion.

ENGL 420 - Milton
Milton's thought and art as expressed in "Paradise Lost", "Paradise Regained", "Samson Agonistes", and selections from the minor poems and the prose.
Credits: 3
Offered: Offered on occasion.

ENGL 422 - English Novel I
Study of representative novels of the 18th and early 19th centuries with attention to the development of new readerships and the novel as a genre, emphasizing forms such as the gothic, the epistolary, and the didactic.
Credits: 3
Offered: Offered on occasion.

ENGL 424 - English Novel II
Study of such 19th and 20th century novelists as Dickens, Eliot, Hardy, Conrad, Lawrence, and Woolf. Special attention to form of the novel used to portray each writer's vision.
Credits: 3
Offered: Offered on occasion.

ENGL 425 - Irish Literature
A study of Irish literature, within its cultural and historical context, drawn from both the Irish and English-language traditions. Selections might include medieval poetry and epic, myth and folklore, 18th century bardic poetry, Anglo-Irish literature, and modern and contemporary works.
Credits: 3
Offered: Every other year.

ENGL 427 - Major Writers
Study of the works of up to three major writers. A variable content course. May be taken more than once with departmental approval.
Credits: 3
Offered: Every year.

ENGL 430 - Bloomsbury Modernism
An in-depth exploration of the Bloomsbury Group, members of which individually and collectively were responsible for shifting attitudes about the nature and function of art, its relation to philosophy, science, economics, politics and culture in early twentieth-century England and beyond. The course seeks to expand studentsâ€™ understanding of the modernist period, Bloomsbury's place within it, and ongoing legacies for contemporary thinking.
Credits: 3
Offered: Offered on occasion.

ENGL 446 - Contemporary Literary Theory
A study of the most recent American and international literary critical thinking, emphasizing both theory and practice. Students are strongly encouraged to take ENGL 345 as a prerequisite.
Credits: 3
Offered: Offered on occasion.

ENGL 455 - Writing Tutors
An eight-week training program preparing students to tutor writing in the university Learning Center for a minimum of four hours per week. Permission of instructor required.
Credits: 3
Offered: Every year.

ENGL 456 - ESL Tutoring
Focus on tutoring students whose first language is not English.
Credits: 1
Offered: Every year.

ENGL 460 - Advanced Poetry Writing
Intensive critical discussion of student work. Readings in contemporary poetry. The orientation of the course is professional, and the students are expected to submit their
work to periodicals for publication. Oral presentation of student work. Writing minors must enroll in ENGL 160 concurrently with ENGL 460.

Credits: 3
Prerequisite: ENGL 362. Offered: Every year.

**ENGL 461 - Advanced Fiction Writing**

Intensive critical discussion of student fiction. Readings in contemporary fiction. The orientation of the course is professional, and students are expected to submit their work to periodicals for publication. Writing minors must enroll in ENGL 160 concurrently with ENGL 461.

Credits: 3
Prerequisite: ENGL 361. Offered: Offered on occasion.

**ENGL 465 - English Internships**

English internships. Interns work 40 hours for 1 credit hour. Enrollment requires a completed Learning Contract and permission of the department.

Credits: 1-12
Offered: Every semester.

**ENGL 490 - Independent Study**

Study of a particular author, topic, or work. Periodic meetings with instructor and writing a substantial paper. Department approval.

Credits: 1-6
Offered: Every semester.

**ENGL 499 - Special Topics**

A variable-content course. Topics announced in online Course Offerings.

Credits: 3
Offered: Offered on occasion.

**ENGL 500 - Introduction to Graduate Studies in English**

ENGL 500 introduces new graduate students to contemporary issues, designs and methods in the field of English studies. Emphasis will be on scholarly methods and aims of research in literature, rhetoric, and pedagogy, showing points of intersection and connection across various aspects of the discipline. By the end of the course, students will develop tentative plans for pursuing their own research interests, providing them with a strong foundation for their individual program of advanced study.

Credits: 3
Offered: Every year.

**ENGL 502 - Directed Study**

Short-term independent study of particular texts, methodologies, pedagogies or theories, conducted by graduate students under the direction of a graduate faculty member in English. Students must take one directed study as part of their degree requirements; a second may be taken as part of elective credit, with a different faculty member.

Credits: 1.5
Prerequisite: ENGL 500. Offered: Every semester.

**ENGL 510 - Major Writers**

Study in-depth of one writer or up to three writers related on the basis of a unifying principle.

Credits: 3
Offered: Every year.

**ENGL 512 - Historical Perspectives in Literature**

Study of the development of important movements or concepts in literature.

Credits: 3
Offered: Every year.

**ENGL 514 - Comparative Approaches to Literature**

Study of literary works from different time periods, nations, or cultures.

Credits: 3
Offered: Every year.

**ENGL 516 - Criticism and Theory I**

Part one of the historical study of critical and theoretical approaches to literature and the teaching of literature, with concentration on authors pre 1900.

Credits: 3
Offered: Every other year.

**ENGL 518 - Criticism and Theory II**

Part two of the historical study of critical and theoretical approaches to literature and the teaching of literature, with concentration on authors post 1900.

Credits: 3
Offered: Every other year.

**ENGL 520 - Graduate Seminar in Literature and Culture**

A variable-content course, interdisciplinary in nature, featuring a contemporary topic central to the discipline.

Credits: 3
Offered: Every other year.
ENGL 521 - Ethics of Writing
This course will expose students to contemporary issues of ethics as they are encountered in the writing process. Such topics may include, but are not limited to, copyright and plagiarism issues; the question of how to write about others; maintaining integrity in marketing rhetoric; the ethical implications of new media for writers; and the status of truth within contemporary creative non-fiction.
Credits: 3
Offered: Offered on occasion.

ENGL 522 - Writing for Digital Media
Writing for Digital Media will help prepare students to become informed and skilled citizens of an increasingly digital world. Students registered in this course will compose for digital spaces; relate these writing experiences to relevant theoretical frameworks; and reflect critically on the effects of digital communication.
Credits: 3
Offered: Offered on occasion.

ENGL 523 - Grant Writing
This course offers an overview of the grant writing process. In it, we will explore how to write a persuasive grant proposal and how to identify grant-making organizations best aligned with your project or need. We will also discuss the grant cycle so you can better appreciate not only how grants are reviewed, ranked, and awarded but also what is expected of you after a grant is secured.
Credits: 3
Offered: Offered on occasion.

ENGL 524 - Art of Grammar
Art of Grammar will help students learn the principles underlying internalized rules of English and the range of choices available to speakers and writers. The course will engage with debates around whether language is primarily cognitive or social in nature as well as language in use and on some fundamental principles of all languages—namely, variation and change.
Credits: 3
Offered: Offered on occasion.

ENGL 525 - Foundations of Editing
This skills-based course intended for multiple audiences provides a practical introduction to editorial practices. Students develop competence in basic procedures of copyediting; develop creativity through solving problems effectively; and come to expand their sense of the field of English and their possible roles within it.
Credits: 3
Offered: Every other year.

ENGL 580 - Studies in Literature
Study in literature or language in conjunction with a cross-listed undergraduate 400 level course. Graduate students are required to do graduate-level work beyond the course requirements for undergraduate students.
Credits: 3
Offered: Every semester.

ENGL 590 - Special Topics
A variable-content course on topics announced in the online Course Offerings each semester.
Credits: 1-6
Offered: Offered on occasion.

ENGL 591 - E-portfolio
This is a portfolio completion credit for the Certificate of Advanced Study in Professional Writing.
Credits: 1
Offered: Every semester.

ENGL 605 - Independent Study
Independent study of a defined topic under the supervision of an instructor. No more than 6 credit hours of the course may be applied to degree requirements.
Credits: 1-4
Offered: Every semester.

ENGL 690 - Degree Project Research
This required supervised research course for graduate students in English provides an opportunity for working one-on-one with a faculty mentor that will culminate in a final degree project subsequent to this class (thesis, action research thesis, professional development essay, comprehensive exam). Students will finish their project research, gain faculty feedback for proposals and drafts, finalize faculty committees and review professional opportunities in the field. Students conducting classroom research as part of their degree projects will also obtain necessary permissions from the Institutional Review Board and school authorities and carry out their research in preparation for writing their final reports. Students must
have a minimum overall GPA of B in order to enroll in Degree Project Research. [NOTE: identical description for ENED 690, with prerequisites ENGL 500 and ENED 502
Credits: 3
Prerequisite: ENGL 500 and ENGL 502. Offered: Every Fall semester.

**ENGL 694 - English Graduate Internship**

English internships at the graduate level. Interns work 40 hours for 1 credit hour. Enrollment requires a completed Learning Contract and permission of the department.
Credits: 1-3
Offered: Every semester.

**ENGL 695 - Capstone in English Studies**

Capstone course for the graduate program focusing on the current state of English studies. The course facilitates the transition from graduate student to scholar-teacher and helps candidates prepare to take their place in the profession.
Credits: 3
Prerequisite: ENGL 500 and (ENGL 502 or ENED 502) and (ENGL 690 or ENED 690). Offered: Every Spring Semester.

**ENGL 696 - Degree Project Completion**

The culminating project for all graduate students in English, taken together with the capstone course (ENGL 695), demonstrating successful completion of advanced research in the field of English studies. Students choose one of several different degree projects. A final grade of 696 of B or above indicates successful completion of the degree project, including all required written and oral portions and, in the case of thesis/action research thesis, submission to the AP for Graduate Studies and to Reed Library for electronic archiving.
Credits: 3
Prerequisite: ENGL 690 or ENED 690. Offered: Every semester.

**ESCI - Environmental Sciences**

**ESCI 100 - Environmental Sciences First-Year Seminar**

The course is designed for Freshman Environmental Sciences majors to assist them in their transition into a college environment, to introduce them more specifically to the Environmental Sciences program, to help them acquire the skills necessary to be successful in a science major, and as a first introduction into some of the most pressing contemporary environmental issues. Students will be introduced to the Environmental Sciences faculty, as well as other Environmental Sciences majors, with discussions focused upon campus resources, study skills and current environmental issues.
Credits: 1
Offered: Every year.

**ESCI 105 - Global Environmental Issues**

The course's objective is to increase student awareness of the environmental issues that affect different parts of the world and the planet as a whole. The course will explore the historical roots of the problems and how different societies deal with environmental degradation. Topics will include overpopulation, food production, water scarcity, pollution and global climate change, among others. The format of the course invites participation, discussion and critical thinking.
Credits: 3
Offered: Every year.

**ESCI 290 -** Independent research, independent study, or internship under the direction of a participating faculty advisor.
Credits: 1-3
Offered: Offered on occasion.

**ESCI 310 - Methods in Environmental Analysis**

Methods common to environmental sciences emphasizing laboratory and field measurement techniques. In the laboratory, wet chemical and electrochemical techniques; methods of trace pollutant analysis; bioassays; BOD measurements, etc., will be studied. Field studies will include classical techniques such as dissolved oxygen and Secchi disk measurements, as well as more recent assessment methods such as terrain conductivity and macroinvertebrate studies. Combination lecture/laboratory.
Credits: 3
Prerequisite: GEO 165 and GEO 169 and BIOL 133 and BIOL 134 and STAT 250 and CHEM 225* and CHEM 215*. Corequisite: CHEM 215 or CHEM 225. Cross-Listed as: * Indicates that the course can be taken in the same semester. Offered: Every year.

**ESCI 410 - Environmental Assessment**

Introduction to concepts involved in risk assessment and how they are applied to formulating a human or ecological risk assessment. Modern methods and models describing environmental risk assessment strategies will be emphasized. Topics will include fate and transport processes of pollutants in the environment, data evaluation, air and water quality, human health risk assessment, ecological risk assessment, and hazardous waste remediation. Case studies will be drawn from the contemporary literature and students will formulate a risk assessment as part of a team.
ESCI 331 - Environmental Sciences Seminar

This course is designed for senior-level Environmental Sciences majors. In this first semester seminar course every student will present several short seminars as preparation for a full-length seminar on a current topic of environmental sciences research to be given in the second semester senior seminar course. Emphasis is given on detailed knowledge of the subject matter, techniques for searching the professional literature, and procedures for the preparation and presentation of a professional presentation.

Credits: 3
Offered: Every year.

ESCI 440 - Environmental Sciences Seminar

This course is designed for senior-level Environmental Sciences majors. In this first semester seminar course every student will present several short seminars as preparation for a full-length seminar on a current topic of environmental sciences research to be given in the second semester senior seminar course. Emphasis is given on detailed knowledge of the subject matter, techniques for searching the professional literature, and procedures for the preparation and presentation of a professional presentation.

Credits: 1
Offered: Every year.

ESCI 441 - Environmental Sciences Senior Seminar

Each student will present a seminar on a current topic of environmental sciences research during the spring semester of their senior year. Emphasis on detailed knowledge of the subject matter, techniques for searching the professional literature, and procedures for the preparation and presentation of a professional seminar.

Credits: 1
Offered: Every year.

ESCI 490 - Environmental Sciences Practicum

Independent research, independent study, or internship under the direction of a participating faculty advisor.

Credits: 1-3
Offered: Every semester.

ETHN - Ethnic Studies

ETHN 101 - Colloquium

Explores the basic concepts and views of Ethnic Studies, introducing students to the concept of interdisciplinarity and some of the key issues addressed within each of the ETHN minors.

Credits: 1
Offered: Offered on occasion.

ETHN 200 - CMA Service Learning

This one-credit service learning course allows students who are on the executive board of one of the Center for Multicultural Affairs student groups to further their knowledge about the relationship between the student group and the academic pursuits of ETHN minors and WGST majors and minors.

Credits: 1
Offered: Every other year.

ETHN 202 - Foundations of Social Justice

This course introduces students to foundational concepts in the study and practice of social justice in American society, historically and at present, and in comparative global perspective. The course can include social justice topics as related to: racism; classism; religious oppression; sexism; heterosexism; transgender oppression; ableism; ageism; and environmentalism. The course will also engage students in the process of putting thought into practice by introducing various research methodologies such as quantitative, qualitative, and cultural studies approaches. Students will explore the course concepts, coupled with research methodologies, to identify and analyze social problems and to use information to formulate and engage in problem-solving strategies for social change.

Credits: 3
Offered: Every semester.

ETHN 205 - Native American Studies

Explains the origins and evolution of Native American Studies as a program, placing it within the historical, political, social and cultural context in which it developed. Students will learn why a multidisciplinary approach can be beneficial to the understanding of Native American experiences in North America. This course explores the different sets of knowledge produced by and about Native Americans and the complicated relationship between Native Americans and the United States government. By interrogating representations of American Indian identity, this course will engage students in discussions about the complexity of race, self-representation, and cultural politics.

Credits: 3
Offered: Every other year.

ETHN 206 - African American Studies

Study of the intellectual and social origins of the discipline known as African American Studies. Key concepts, themes, and theories of the discipline will be discussed in the class.

Credits: 3
Offered: Offered on occasion.

ETHN 225 - Introduction to Latinx History and Culture

An interdisciplinary approach to historicizing the Latinx 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.
ETHN 240 - Introduction to African American Literature and Culture
An examination of major works by African American novelists, poets, dramatists, filmmakers, musicians, and essayists in terms of the intellectual and political concerns of their periods and locations. Cross-listed with ENGL 240.

Credits: 3
Offered: Every year.

ETHN 241 - Introduction to Latino/a Literature
Study of works by and about Latinos, including poetry, novels, film, drama, music, and essays. Focus on culture of people of Hispanic descent living in the United States, including Chicanos, Puerto Ricans, Dominican Americans, and Cuban Americans, with some consideration of the ongoing relations between U.S. Latinos and Latin America. (Cross-listed as ENGL 241.)

Credits: 3
Offered: Every other year.

ETHN 242 - American Indian Literature
Study of a variety of works, including traditional tales, novels, poems and memoirs, produced by American Indians from historical beginnings to the present. (Cross-listed with ENGL 242.)

Credits: 3
Offered: Every other year.

ETHN 282 - Pre-Columbian and Colonial Latin America
An introductory survey of the history of early Latin America, from antiquity to the European conquest to the wars for independence in the early 19th century. Special attention is given to indigenous and African influences in the shaping of society and culture. (Cross-listed with HIST 282.)

Credits: 3
Offered: Every other year.

ETHN 283 - Latin America: Revolution & Reform
An introductory survey of the history of modern Latin America, from the wars for independence in the early 19th century to nation-state building, reform movements, violent revolutions, and democratization in the 20th century. Special attention is given to Native American influences in the shaping of modern society. The contested role of the United States in Latin American domestic policy also is considered. (Cross-listed with HIST 283.)

Credits: 3
Offered: Every other year.

ETHN 304 - Latina Literature and Cultural Studies
An examination of contemporary Latina literary productions in the context of representations of Latinas in mainstream U.S. society. The focus of the course is on women of Hispanic descent living and writing in the United States, including work by and about Chicanas, Puerto Ricans, Dominican Americans, and Cuban Americans. Previous course work in Latina/Latino literature not required, but some previous course work related to African American or other ethnic literature, women’s literature/feminism, and/or film studies is strongly recommended.

Credits: 3
Offered: Every year.

ETHN 333 - African American History to 1877
Survey of the historical forces, within the African American community and elsewhere, which have shaped the African American experience. The course explores the cultural, social, and political development of African Americans from their African origins through Reconstruction.

Credits: 3
Prerequisite: HIST 105 or HIST 133 or HIST 106 or ETHN 205 or HIST 150 or HIST 151 or HIST 152 or HIST 160 or HIST 161 or HIST 170 or HIST 171 or HIST 222 or HIST 223 or HIST 233 or HIST 243. Offered: Every other year.

ETHN 334 - African American History since 1877
Survey of the historical forces, within the African American community and elsewhere, which have shaped the African American experience. The course explores the cultural, social, and political development of African Americans from Reconstruction to the present.

Credits: 3
Prerequisite: HIST 106 or HIST 133 or HIST 105 or ETHN 205 or HIST 150 or HIST 151 or HIST 152 or HIST 160 or HIST 161 or HIST 170 or HIST 171 or HIST 222 or HIST 223 or HIST 232 or HIST 233 or HIST 243. Offered: Every other year.

ETHN 356 - Native American History
A survey of the history of North America from the perspective of Native Americans, covering topics from the period before contact through the present. Possible topics may include precontact history and societies, the challenges of contact and colonization, Indian Removal, and continuing questions of sovereignty and treaty rights.

Credits: 3
Prerequisite: HIST 105 or HIST 106 or HIST 133 or ETHN 205 or HIST 150 or HIST 151 or HIST 152 or HIST 160 or HIST 161 or HIST 170 or HIST 171 or HIST 222 or HIST 223 or HIST 232 or HIST 233 or HIST 243. Offered: Every other year.

ETHN 357 - Indians and Europeans in Early America
Introduces the major topics and themes in the ethnohistory of early America from the earliest contacts between Native Americans and Europeans to the early 18th century through a comparative study of British, French, and Spanish interactions with indigenous peoples.

Credits: 3

Prerequisite: HIST 102 or HIST 105 or HIST 115 or HIST 133 or HIST 150 or HIST 151 or HIST 152 or HIST 160 or HIST 161 or HIST 170 or HIST 171 or HIST 222 or HIST 223 or HIST 232 or HIST 233 or HIST 243. Offered: Every other year.

ETHN 358 - 20th Century Native American Issues
Native American peoples in the 20th century. Emphasis on federal policy development, the growth of political pan-Native American movements, the Native American image in popular culture, and current issues raised in the writings of contemporary authors representing a diversity of Native American nations.

Credits: 3

Prerequisite: HIST 150 or HIST 151 or HIST 152 or HIST 160 or HIST 161 or HIST 170 or HIST 171 or HIST 222 or HIST 223 or HIST 232 or HIST 233 or HIST 243 or ETHN 205. Offered: Every other year.

ETHN 359 - Ethnicity and Race
Interdisciplinary approach to race and ethnicity in the United States and other contemporary multiethnic/multiracial societies. Because these courses are equivalents, students who have earned credit for HIST/INDS/WOST 220 are not able to earn credit for this course.

Credits: 3

Offered: Every year.

ETHN 389 - Special Topics
Creating an ETHN specific course different from the INDS version.

Credits: 1-4

Offered: Every other year.

ETHN 400 - Independent Study
Intensive individual study of some aspect of multicultural studies involving a paper or project.

Credits: 1-3

ETHN 402 - Independent Study: African American Topics
Open only to African American Studies minors. Includes selected interdisciplinary reading, research, discussions and reports on current issues in African American Studies. Proposed independent study project must be described in the student's approved African American Studies proposal.

Credits: 3

Offered: Every year.

ETHN 403 - Contemporary Issues in Latinx Studies
The capstone experience for the Latinx Studies minor. Selected interdisciplinary reading, research, discussions, and reports on current issues in Latinx Studies.

Credits: 3

Offered: Every year.

ETHN 404 - Native American Capstone
The capstone experience for the Native American Studies minor. Selected interdisciplinary reading, research, discussions, and reports on current issues in Native American Studies.

Credits: 3

Offered: Every year.

ETHN 405 - Issues in Multi-Ethnic Studies
The capstone experience for the Multi-Ethnic Studies minor. Selected interdisciplinary reading, research, discussions, and reports on current issues related to Multi-Ethnic Studies.

Credits: 3

Offered: Offered on occasion.

ETHN 489 - Special Topics
Special Topics in Ethnic Studies that are not covered in other courses. Topics will vary by semester and instructor.

Credits: 3

Offered: Offered on occasion.

ETHN 490 - Ethnic Studies Internship
Open only to African American Studies, American Indian Studies, Latino Studies, or Multiethnic Studies minors. An internship can serve as the student's capstone experience. Students proposing internships must have an approved Interdisciplinary Studies proposal which includes the internship. Additionally, they must have completed the application required by the campus Office of Internships.

Credits: 1-6
ETHN 491 - Social Change Capstone
Capstone seminar in which students will investigate current and contemporary issues in the field of Ethnic and Gender Studies, engage in activism on campus, and complete a research-based paper or project under the guidance of a faculty mentor. Students will also compile an e-portfolio that reflects upon their experiences as Ethnic and Gender Studies students and for use in future professional development.
Credits: 3
Offered: Every other year.

EXSC 250 - Introduction to Applied Human Physiology
This course examines significant and recent topics in exercise physiology, wellness, rehabilitation, biomechanics, motor learning, nutrition and health benefits associated with exercise. Emphasis will be placed on educational topics such as human physiology, medicine, rehabilitation, obesity, nutrition, advancements in cardiovascular health, hypokinetic diseases and fitness testing. Discussions and presentations will integrate topics from a variety of disciplines and their impact on the broad topic of applied human physiology. Required for Exercise Science majors.
Credits: 1
Offered: Every Fall semester.

EXSC 300 - Exercise Physiology
The purpose of this course is to examine human physiology and the responses that occur during both acute and chronic exercise. An understanding of how the body responds to this stress is an imperative for the athletic trainer, health professional (Occupational Therapy, Physical Therapy, Doctor of Chiropractic) or exercise physiologist. Additionally, the course will examine environmental factors, and the effects of gender and age on the adaptive response to exercise. Emphasis is placed on bioenergetics as well as cardiovascular and respiratory responses. Also discussed are the effects of ergogenic aids on human physiology performance. The objective of this course is for students to gain an understanding and working knowledge of how the body responds to exercise so that they may apply this knowledge to their chosen field. Additionally, students will be introduced to current research in the field of exercise physiology, applied physiology and experimental physiology. Laboratory activities will focus on measuring cardiorespiratory, metabolic (aerobic and anaerobic) and perceived exertion responses to sub-maximal and maximal exercise. Three hours of lecture and two hours of lab per week.
Credits: 4
Prerequisite: BIOL 245 and BIOL 246. Offered: Every semester.

EXSC 301 - Kinesiology
The purpose of the course is to acquaint the student with functional anatomy and the biomechanics of human movement and performance. The focus will be on the physiology of skeletal muscle, muscular arrangements around the major joints of the body, and the properties of muscular force production. There will also be an examination of the skeletal muscle adaptation to various forms of stimuli.
Credits: 3
Offered: Every year.

EXSC 302 - Exercise Prescription
The course is designed to introduce the student to theoretical and practical concepts of exercise assessment, exercise interpretation and exercise prescription. Course content includes the principles and practices of prescribing exercise to healthy individuals, and individuals with conditions such as cardiac disease, diabetes, physical disabilities and the aged.
Credits: 3
Offered: Every year.

EXSC 304 - Exercise Nutrition
Exercise nutrition integrates the sciences of nutrition, exercise physiology, and exercise metabolism. The first section of this course focuses on food and the macronutrients and micronutrients they provide, nutrient structure and characteristics, food digestion and nutrient absorption, and the conversion of food to energy. The second section of this course focuses on optimal nutrition for exercise, training, and health. The third and final section of the course provides information about the development and marketing of nutritional products and ergogenic (performance enhancing) aids.
Credits: 3
Prerequisite: PHED 200 and HLT 303. Offered: Every year.

EXSC 305 - Economics of Sport
Course covers the principles of macro and micro economics related to the sport industry on a regional and national level, supply and demand, growth of the sport industry, venues and events, economic impact of facilities manufacture and television on intercollegiate and professional sport.
Credits: 3
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Prerequisite: (ECON 201 or ECON 210) and (ECON 202 or ECON 205). Offered: Every year.

**EXSC 306 - Biomechanics**

The course stresses the quantitative nature of biomechanics that integrates anatomy, physics, mathematics, and physiology for the study of human movement. The course will cover the foundations of human movement, functional anatomy, and mechanical analysis of human motion.

Credits: 3

Prerequisite: STAT 200 or PSY 200 or ECON 200 or SOC 200 and PHED 301 or EXSC 301. Offered: Every year.

**EXSC 315 - Prevention and Care of Athletic Injuries**

Study of prevention and recognition of injuries commonly associated with athletic competition. Includes the study of anatomy and physiology involved in injuries. One of several courses designed to meet state mandate for interscholastic coaching.

Credits: 3

Prerequisite: HLTH 115 and BIOL 245. Offered: Every year.

**EXSC 316 - Athletic Training Internship I**

Develops the basic competencies of students interested in athletic training. Areas included in the internship will include preventive taping, injury prevention, the basics of rehabilitation, coverage of home events, and basic functioning of a training room. Athletic Trainer required.

Credits: 1-3

Offered: Every semester.

**EXSC 317 - Athletic Training Internship II**

The study of a particular topic related to physical education and recreation. Periodic meetings with an appropriate instructor will be scheduled. The topic may encompass individual research or a practical experience.

Credits: 1-4

Prerequisite: EXSC 316. Offered: Every semester.

**EXSC 350 - Kinesiology**

The purpose of the course is to acquaint the student with functional anatomy and the biomechanics of human movement and performance. The focus will be on the physiology of skeletal muscle, muscular arrangements around the major joints of the body, and the properties of muscular force production. There will also be an examination of the skeletal muscle adaptation to various forms of stimuli.

Credits: 3

Prerequisite: EXSC 300 or EXSC 410. Offered: Every semester.

**EXSC 390 - Special Topics in Exercise Science**

This special topics course emphasizes exercise science topics not covered in detail by regular courses and/or not offered on a regular basis. The course explores the field of exercise science and uses related literature to discuss current issues in exercise science. Students will pick topics, research them, critically analyze (interpret, explain) research related to a topic and present the research to the class. Guest lecturers will be used to present students with information on specialty areas in Exercise Science.

Credits: 1-4

Offered: Every year.

**EXSC 401 - Senior Seminar in Exercise Science**

This is the capstone course for exercise science and will bridge the gap between undergraduate and graduate Education and careers. Discussion items will provide a broad context for knowledge about the field of exercise science gained throughout the undergraduate years. Part of this process will involve exploring connections between both oneself and the educational/career opportunities the field of exercise science.

Credits: 3

Offered: Every year.

**EXSC 410 - Advanced Exercise Physiology I**

This course will expose students to advanced concepts in both applied and exercise physiology. The course will expose students to theoretical and clinical physiological research with regard to various forms of exercise

Credits: 4

Prerequisite: BIOL 245 and BIOL 246. Offered: Every year.

**EXSC 420 - Advanced Exercise Physiology II**

This course is designed to cover principles related to exercise circumstances which include analysis of the effect of exercise on human physiologic function. Special focus will be given to physiological responses of the nervous and endocrine systems to various forms of exercise.

Credits: 4

Prerequisite: EXSC 410. Offered: Every year.

**EXSC 425 - Biomechanics**

The course stresses the quantitative nature of biomechanics that integrates anatomy, physics, mathematics, and physiology for the study of human movement. The course will cover the foundations of human movement, functional anatomy, and mechanical analysis of human motion.
EXSC 492 - Senior Capstone - Internship

Exercise Science students will perform a capstone experience in their senior year. The experience can take the form of research, an internship course, and will provide significant learning experiences in problem solving and written and oral communication. Capstone Internship: The student will fulfill expectations for capstone internship via a 3 credit internship experience (120 hours). Acceptable experiences include job apprenticeships (not unlike the clinical internships of MT students) involving very active learning. Research projects performed off-campus (not including REUs) are also acceptable as capstone internship experiences. A site supervisor will provide evaluations to the faculty mentor; the faculty mentor will bear responsibility for the final evaluation of the learning experience. A formal paper will be expected. Oral presentation will occur during a capstone UGR/internship symposium.

Credits: 1-3

Offered: Every semester.

EXSC 493 - Senior Capstone - Course

Exercise Science students will perform a capstone experience in their senior year. The experience can take the form of research, an internship or course, and will provide significant learning experiences in problem solving and written and oral communication. We will offer capstone 'sections' of UL courses on a rotating basis. Some of these courses will be modifications of currently existing courses; others may be new courses. Examples include Muscles and Movement and Advanced Exercise Physiology. Courses will be designed to include significant inquiry based learning, problem solving, and written and oral presentation™ enrollment will be limited and carefully controlled. Students will write a formal paper and offer a formal presentation.

Credits: 3

Offered: Every semester.

FILM - Film Studies

FILM 220 - Film Form

An introductory-level lecture course designed to introduce students to the formal issues involved in the production and perception of moving images. The course provides students with an understanding of aesthetic concepts that support the making of films, digital cinema, videos or video games. It reinforces the use of aesthetic vocabulary and demonstrates how audiences interact with, and are manipulated by, film language and syntax. Therefore, the course is useful for students who wish to enhance their skills in the making of films and videos as well as for students who wish to refine their ability to deconstruct motion pictures for critical and analytical purposes.

Credits: 3

Offered: Every year.

FILM 309 - Film Analysis

A study of contemporary filmmakers' work in feature length films. Particular focus on production elements that create aesthetic values and reflect our times and concerns.

Credits: 3

Prerequisite: COMM 155. Offered: Every year.

FILM 399 - Special Topics

A variable-content course. The topic will be announced in the online Course Offerings when the course is offered.

Credits: 1-4

Offered: Every other year.

FILM 401 - Independent Study

The course allows students to design and pursue independent, directed projects in film studies. As a rule,
these studies will examine in greater depth or breadth topics that are explored in current course offerings or are not available in current offerings. Permission of the coordinator of Film Studies required.

Credits: 1-4
Offered: Every other year.

**FILM 470 - Senior Film Seminar**

The capstone experience for the Film Studies Minor, involving advanced study, usually concerned with critical or historical issues in film. Content varies according to instructor and course title. Enrollment requires completion of 12 credits of film courses or permission of the instructor.

Credits: 3
Offered: Every year.

**FRED - Fredonia Seminar**

**FRED 101 - First-Year Seminar**

Fredonia educates, challenges, and inspires students to become skilled, connected, creative, and responsible global citizens and professionals. This signature course will introduce students to these baccalaureate goals through an engaging and intellectually rigorous curriculum. Students will work with some of the finest faculty and professional staff at Fredonia in both digital and traditional formats.

Credits: 3
Offered: Every Fall semester.

**FREN - French**

**FREN 100 - Introduction to French**

Students will be introduced to the language, familiarized with its basic vocabulary and grammar, and prepared to communicate at an elementary level. They will also be introduced to the distinctive features of the cultures where the language is spoken. The course is for students with none or very little background in the language.

Credits: 2
Prerequisite: French Lang Placement Score of an 1 or better. Offered: Every semester.

**FREN 110 - Essential French**

Students develop essential communicative skills and cultural awareness necessary in order to interact with people from that culture, whether it is in their home country or in the United States. In order to take this course, students must have scored a level 2 or 3 in the approved placement test or have taken the introductory course FREN 100 at Fredonia.

Credits: 3
Prerequisite: FREN 100 or French Lang Placement Score of an 2 or better or French Lang Placement Score of an 3 or better or FREN 115. Offered: Every semester.

**FREN 115 - Elementary French I**

Designed for students with no previous preparation. Study of fundamental speech patterns. Initial emphasis on developing listening comprehension, speaking skills, including pronunciation, with progressive emphasis on reading and writing skills. Discussion of selected cultural aspects.

Credits: 3
Offered: Every semester.

**FREN 116 - Elementary French II**

Designed for students with one semester of college level French or equivalent. Further practice in pronunciation and fundamental speech patterns. Continued development of listening, speaking, reading and writing skills for communicative proficiency. Discussion of selected cultural aspects.

Credits: 3
Prerequisite: FREN 115 or NY Regents French Exam Score of an 80 or better. Offered: Every semester.

**FREN 215 - Intermediate French I**

The course increases proficiency in listening, speaking, reading and writing skills in French. Further development of vocabulary and grammar. Selected cultural materials will provide cultural awareness and cross cultural proficiency to the students.

Credits: 3
Prerequisite: FREN 116 or NY Regents French Exam Score of an 85 or better or FREN 110 or French Lang Placement Score of an 4 or better. Offered: Every year.

**FREN 216 - Intermediate French II**

The course increases proficiency in listening, speaking, reading and writing skills in French. Further development of vocabulary and grammar. Selected cultural materials will provide cultural awareness and cross cultural proficiency to the students.

Credits: 3
Prerequisite: FREN 215 or French Lang Placement Score of an 5 or better. Offered: Every year.

**FREN 308 - Advanced French Phonetics and Diction**

Credits: 3
Prerequisite: FREN 215 or FREN 216. Offered: Every year.

**FREN 310 - The Literature/Culture of Quebec**
An exploration of Quebec's cultural uniqueness through the literature that has played a central role in defining it. The historical and political events that have influenced the development of Quebec literature and culture will also be examined. Review of separatist movement included.
Credits: 3
Prerequisite: FREN 216. Offered: Offered on occasion.

**FREN 315 - French Masterpieces**
An introduction to the three literary genres: fiction, theatre, and poetry, with an emphasis on poetry and fiction.
Selections are from a wide variety of authors and time periods, from the Renaissance to the 20th century. Primary focus is stylistic but considerable time will also be devoted to literary movements and to French history and culture.
Different types of assessment will include oral presentations by the individual student and groups, papers, quizzes, discussions, and exams which will all be in French.
Credits: 3
Prerequisite: FREN 216. Offered: Every other year.

**FREN 316 - French Plays and Prose**
An introduction to the three literary genres: fiction, theatre, and poetry, with an emphasis on drama and fiction.
Selections are from a wide variety of authors and time periods, from the Renaissance to the 20th century. Primary focus is stylistic but considerable time will also be devoted to literary movements and to French history and culture.
Different types of assessment will include oral presentations by the individual student and groups, papers, quizzes, discussions, and exams which will all be in French.
Credits: 3
Prerequisite: FREN 216. Offered: Every other year.

**FREN 317 - French Conversation**
Exercises and activities designed to promote conversations about readings, films, and/or issues in France and the French-speaking world. Ample opportunities to practice understanding and speaking French in pair and small group settings.
Credits: 3
Prerequisite: FREN 216 or French Lang Placement Score of an 6 or better. Offered: Every year.

**FREN 318 - French Composition**
Syntactical patterns of French, vocabulary building, translation, and free composition. Useful techniques of composition, problems of translation and questions of style discussed.
Credits: 3
Prerequisite: FREN 216. Offered: Every year.

**FREN 319 - Survey of French Literature I**
History of principal movements and writers, from the beginning through the 17th century, studied in light of historical and social backgrounds. Discussion and lectures in French. Student reports.
Credits: 3
Prerequisite: FREN 315 or FREN 316. Offered: Every year.

**FREN 320 - Survey of French Literature II**
History of principal movements and writers, from the 17th century to the present, studied in light of historical and social backgrounds. Discussion and lectures in French. Student reports.
Credits: 3
Prerequisite: FREN 315 or FREN 316. Offered: Every year.

**FREN 323 - France Today**
France today is a country struggling with the tensions of social and economic modernization. The subject matter, therefore, will be actual and current in an effort to understand the broad sweep of social, economic, political, and cultural changes in post-war France.
Credits: 3
Prerequisite: FREN 315 or FREN 316. Offered: Offered on occasion.

**FREN 341 - Le Grand Siecle**
Detailed study of 17th century French classicism, its formation, flowering. Student reports, discussions.
Credits: 3
Prerequisite: FREN 315 or FREN 316. Offered: Offered on occasion.

**FREN 351 - The Enlightenment**
Major works of 18th century French literature; emphasis on Montesquieu, Voltaire, Diderot, Rousseau, Marivaux, and Beaumarchais. Class work in French.
Credits: 3
Prerequisite: FREN 315 or FREN 316. Offered: Offered on occasion.
FREN 361 - Contemporary French Literature
Credits: 3
Prerequisite: FREN 315 or FREN 316. Offered: Offered on occasion.

FREN 380 - French Drama in Practice
Seven-week course in which students will read, study, and stage an important dramatic work of French literature. The course will end with two public performances of the work(s) studied in class.
Credits: 3
Prerequisite: FREN 317 and (FREN 315 or FREN 316). Offered: Offered on occasion.

FREN 381 - Topics for French Conversation
Students engage in discussions and presentations on a variety of topics covering social, scientific, artistic, philosophical, psychological, religious, and political issues.
Credits: 2
Prerequisite: FREN 308 and FREN 317. Offered: Every other year.

FREN 400 - Special Topics in French
Special areas in French language, literature, or culture and civilization not covered by regular courses.
Credits: 1-3
Prerequisite: FREN 315 or FREN 316. Offered: Offered on occasion.

FREN 410 - Directed Study
Individual directed study of a particular area or topic in French language or literature. Periodic meetings with instructor, writing of a substantial paper.
Credits: 1-3
Offered: Offered on occasion.

FREN 415 - Individual Oral Proficiency Development In French
Student will develop a list of weekly activities, such as watching movies, listening to music, reading of articles and books, etc. that will further enhance the student’s oral proficiency in French. Student will meet once a week with instructor to discuss the activities. The course will end with retaking of Oral Proficiency Interview (OPI) exam. Student is responsible for the cost of the exam.
Credits: 1
Offered: Every year.

FREN 417 - Romanticism and Realism
Detailed study of literary movements and major writers of 19th century.
Credits: 3
Prerequisite: FREN 315 or FREN 316. Offered: Offered on occasion.

FREN 419 - Studies in French Literature and Culture
Focus on a major theme, movement, author, or period in the literature and/or culture of France. The course can be repeated as its content changes.
Credits: 3
Prerequisite: FREN 318 and FREN 315 or FREN 316. Offered: Offered on occasion.

FREN 420 - Studies in Francophone Literature and Culture
Focus on a major theme, movement, author or period of one or more French-speaking regions around the world. The course can be repeated as its content changes.
Credits: 3
Prerequisite: FREN 318 and FREN 315 or FREN 316. Offered: Offered on occasion.

FREN 422 - Advanced French Conversation
Intensive practice in spoken French and listening comprehension at an advanced level.
Credits: 3
Prerequisite: FREN 317 and FREN 308. Offered: Offered on occasion.

FREN 423 - Senior Seminar
In-depth study of a literary or cultural topic selected by the instructor. Major written paper and oral presentation required. All work to be done in French.
Credits: 3
Prerequisite: (FREN 318 and FREN 319) or FREN 320. Offered: Every year.

FREN 424 - Stylistics
To give feeling for French style, shades of meaning, and mastery of stylistic difficulties not taken up in more elementary courses. Study of classic French prose; translations and free composition.
Credits: 3
Prerequisite: FREN 318. Offered: Every year.
FREN 485 - Undergraduate Learning Assistantship for French
Students serve as undergraduate learning assistants to any of the intermediate and phonetic courses in French, to be decided in consultation with the instructor. Assistants help the instructor both in the classroom as well as outside the classroom monitoring class activities online and offering tutoring. Assistants are also responsible for developing and teaching lesson(s) on grammar and/or cultural topics as agreed upon with the instructor. Assistants learn and develop best practices in language teaching. Students in education certification programs preferred.

Credits: 3
Prerequisite: FREN 315 or FREN 316 and FREN 317 and FREN 318. Offered: Every semester.

FREN 500 - Special Topics in French
Special areas in French not covered by regular courses. Permission of department.

Credits: 1-3
Offered: Offered on occasion.

FREN 510 - Directed Study in French
Individual supervised study of particular area or topic in any of the department’s French language or literature offerings. Periodic meetings with instructor and writing of a substantial paper. Permission of department.

Credits: 1-3
Offered: Offered on occasion.

GEO - Geosciences
GEO 101 - Geology of National Parks
The geology of many of America’s most visited parks, including the geologic features, the processes which formed them, the chronology of events that led to the rocks, structures, and landscapes of the natural treasures, and the environmental problems that now threaten the parks. Lectures, videos, small-group discussions, use of the Internet, in-class quizzes and exams. Small-group preparation and presentation on a geologically significant national monument or park. Not open to students who have passed GEO 165 Planet Earth. Students may take GEO 169 General Geology Lab as a co-requisite to expand their knowledge of minerals, rocks, fossils, and topographic and geologic map reading and interpretation.

Credits: 3
Offered: Every semester.

GEO 102 - Freshman Seminar
This course will introduce students to the Geosciences program at SUNY Fredonia. Throughout the semester, students will meet other Geosciences majors and the department faculty, including an introduction to faculty areas of specialization and research. Students will learn about local geology through lecture and field trips, as well as what they will be exposed to over the next four years with regard to coursework, research possibilities, job prospects, and graduate school. The seminar will provide students with networking opportunities as they make their way through demanding program requirements.

Credits: 1
Offered: Every Fall semester.

GEO 121 - Landform Geography
An introduction to the field of geography, with particular emphasis on the driving physical forces and processes that shape the earth’s surface. The impact on human activities and patterns will be examined. A spatial approach will be used to study the nature and character of physical space including measurements, relations, locations, and the distribution of phenomena. The course will meet twice a week in a traditional classroom setting and once a week in a laboratory setting, which will include occasional field trips to explore the local area in an effort to observe how landforms, vegetation and microclimate vary over short distances.

Credits: 3
Offered: Every year.

GEO 139 - Mass Extinctions
The course provides an introduction to the history of life on Earth with emphasis on the five mass extinctions throughout geologic times and the sixth mass extinction occurring today.

Credits: 1
Offered: Offered on occasion.

GEO 140 - Catastrophic Weather
Examines the development of severe and unusual weather phenomena including floods, tornadoes, thunderstorms, hurricanes and other tropical storms, blizzards, and electrical storms. The frequency and geographic occurrence of these events is considered in terms of current climatic models.

Credits: 1
Offered: Every semester.

GEO 141 - Age of Dinosaurs
The course centers on life in the Mesozoic era of geological time, when dinosaurs rule the earth. In addition to discussing the different types of dinosaurs and their ecological roles, the role of climatic and catastrophic extinction in shaping this unique time in geologic history is explored. Topics also include the evolution of dinosaurs.
and their relationship to modern birds, the controversy over "warm-blooded" versus "cold-blooded" metabolism, and the ultimate extinction of the dinosaurs leading to the age of mammals.

Credits: 1
Offered: Every semester.

GEO 142 - Drifting Continents
A review of modern ideas of crustal movement, the origin of volcanoes and earthquakes, the continents and their history of breakup, drifting and collisions to create mountain belts, and the ocean basins and their formation by seafloor spreading. The course covers the evolution in thought of the theories of continental drift and plate tectonics.

Credits: 1
Offered: Every semester.

GEO 143 - Evolution of Life
The course is an introduction to basic principles relating to present understanding of biological evolution. Evolution is a major scientific paradigm that underlies both theoretical and practical research in the life sciences, and it has strong interdisciplinary support from biology and other branches of science. The course explores the development of evolutionary ideas from early concepts up to the modern synthesis. Topics include: origin of life, geologic record and geologic time, inheritance and Darwinian selection, patterns of evolution, macroevolution, and modern opposition to evolutionary science. Lecture format.

Credits: 1
Offered: Every semester.

GEO 145 - Geology of New York State
Much of earth history can be explored by the study of New York State geology. The course explores - among other things - the evolution of life in vast marine basins, the uplift of lofty mountains during the Appalachian Orogeny, followed by the more recent advance of Pleistocene ice sheets that covered the state until about 10,000 years ago. Students should come away with a better understanding and appreciation for the rich geological history of their home state.

Credits: 1
Offered: Every semester.

GEO 146 - Great Ice Age
One of the series of five-week introductory courses exploring topics in the geological sciences. The Great Ice Age topic explores the interesting history and effects of glacial periods on Earth, with parallels to current interest in, and observations on, global climate change.

Credits: 1
Offered: Every semester.

GEO 147 - Trembling Earth
A mini-course that examines earthquakes as an example of natural hazards. Topics include history of earthquake science, quake causes, prediction, risk assessment, engineering response, and response of culture such as artistic renderings of quakes.

Credits: 1
Offered: Every year.

GEO 149 - Volcanoes
The course deals with the science of volcanology. Topics include the types of magmas (molten rock) and rocks that produce the different kinds of volcanoes, physical and chemical controls on eruptions, and hazards and benefits of volcanoes. Scientific study and the effect of volcanism on human beings are discussed in the context of major historical eruptions.

Credits: 1
Offered: Every semester.

GEO 150 - Moons and Planets
Historical and scientific treatment of the solar system. Emphasis on the development of astronomical thought from ancient times to the flowering of modern concepts of planetary origins and evolution. Problem sets deal with analysis of classical and modern concepts, including mathematical solutions. High school math through Math III suggested, but not required.

Credits: 3
Offered: Every other year.

GEO 152 - Evolution of Western Science
Examines the progression of scientific thought in the Western world from Paleolithic cultures, through Mesopotamia, Greek, and European civilizations. Emphasis on classic works of philosophers, mystics, and scientists and their contribution toward molding the nature and practice of modern-day science. Lecture format with formal group discussions, videos, and periodic question sets. One major research paper required.

Credits: 3
Offered: Every year.

GEO 160 - Blue Planet
Planet Earth formed as a ball of fire, but now is 70% water. Where did all this water come from? How does it shape our world? This course dives into these questions. We consider the chemical and physical properties of sea water, and how these waters circulate. The oceans represent the
heart of our Blue Planet and their effects - waves, tides, shoreline processes, marine biology, and economic impact - play a critical role in our future.

Credits: 3
Offered: Every year.

**GEO 165 - Planet Earth**

Explore the large and small scale processes that shape and reshape our dynamic planet Earth. This course introduces students to the many features and phenomena that help us understand Earthâ€™s geologic history and its future. From the integral role that minerals and rocks play to the wide range of internal and external processes operating on Earth, students gain a heightened awareness of natural resources, climate change and geologic hazards as society makes its way through the 21st century. Lectures and group discussion. High school background in earth sciences not required. Majors and minors in the Department of Geology and Environmental Sciences, including Childhood Education Science/Geoscience Concentration majors, should take GEO 169 Planet Earth Lab as a corequisite.

Credits: 3
Offered: Every semester.

**GEO 169 - Planet Earth Lab**

Laboratory introduction to topographic and geologic maps, and earth materials (minerals, rocks and fossils). Exercises include use of these tools to recognize and interpret geological processes, history and structure.

Credits: 1
Prerequisite: GEO 165*. Cross-Listed as: * Indicates that the course can be taken in the same semester. Offered: Every semester.

**GEO 175 - Thirsty Planet**

The course investigates ancient and modern water supplies, studies surface and underground watersheds, evaluates risks to water quantity, quality and distribution systems, reviews water law and regulation, and reflects on the role of water resources in war and terror, food and transport, scenery and beauty.

Credits: 3
Offered: Every year.

**GEO 180 - Weather and Climate**

Introduction to the transitory and long-term physical, chemical, and dynamic states of the atmosphere, measurement of weather factors, weather forecasting, regional climates, climatic change, weather and climate modification, and practical aspects and applications of weather and climate.

Credits: 4
Offered: Every year.

**GEO 210 - Earth History**

Since its formation 4.5 billion years ago, our dynamic planet has undergone enormous changes. It has survived a multitude of volcanic eruptions, ice ages and mass extinctions. Learn about the physical history of the earth and the evolution of life on our dynamic planet from its early formation through the present.

Credits: 3
Prerequisite: GEO 165. Offered: Every semester.

**GEO 211 - Earth History Lab**

This is a laboratory to accompany Geology 210. The laboratory provides practical experience in studying sedimentary rocks to interpret depositional processes and ancient environments, constructing stratigraphic sections, examining fossils and their use in age determinations, correlating rock units, interpreting geologic history from maps, and examining the regional geology of North America. These skills, introduced in the Geo 211 lab, are required in numerous upper-level courses including Field Geology. Three hours of laboratory per week are scheduled.

Credits: 1
Corequisite: GEO 210. Offered: Every year.

**GEO 215 - Earth Materials**

The course will cover theory, geological occurrence, and identification of the common earth materials, which includes subjects on minerals, rocks, and natural resources (e.g. fossil fuel and gemstones). Lecture and lab along with a field trip to adjacent area. Laboratory assignments contain a brief introduction to petrographic microscope and thin section identification, but mostly emphasize hand specimen identification. Students are required to write a paper on some aspect related to earth materials.

Credits: 4
Prerequisite: GEO 165* and CHEM 115. Cross-Listed as: * Indicates that the course can be taken in the same semester. Offered: Every other year.

**GEO 301 - Cartography**

Comprehensive treatment of maps and map making. Includes the history of maps and their construction from ancient times to present, including affect on history and politics. Also entails essential elements of maps, their construction by manual and computer means, and how they are used to express information. Lecture and lab. Can be taken as Geographic Information Systems (GIS) elective.

Credits: 4
COURSES

GEO 311 - Global Climate

Introduction to short and long term physical, chemical and dynamic states of the atmosphere, measurement of meteorological parameters, weather systems and forecasting. Special emphasis is placed on regional climates, climatic change and potential societal economic effects of climatic change.

Credits: 3

Offered: Every year.

GEO 329 - Regional Field Geology

Participants are exposed to issues of regional Historical Geology during a seven-day field trip (Summer Session I). Students observe the record of multiple mountain-building episodes and basin evolution through a series of roadcut, stream, and quarry exposures. Aspects of the geologic record including cross-cutting relationships, biostratigraphy and paleoenvironmental inference are used at stops to reconstruct the regional geology puzzle. Knowledge of structural geology is recommended but is not essential. The course applies principles learned in GEO 210, but it also supplements information in GEO 345, GEO 370, and GEO 400. Students attend several orientation classes during the spring semester in preparation for the field course. During the course, students keep notes and prepare a field diary containing information from field stops. The course grade is based on the notebook turned in upon completion of the course. Offered in years when GEO 461 is not offered.

Credits: 2

Prerequisite: GEO 210. Offered: Every other year.

GEO 330 - Geomorphology

Study of geomorphic processes, relating topographic features to underlying rocks and structures and to processes of erosion, deposition, and earth movements. Lectures and laboratory supplemented by short field trips and field research. A day-long field trip over the weekend may be required.

Credits: 4

Prerequisite: GEO 165 and GEO 169. Offered: Every year.

GEO 331 - Restless Earth

The course links the many time frames and events of geodynamics ranging from continental drift to earthquake hazards. The subject is presented from several viewpoints, including the history of science, spatial and temporal distribution of hazards and resources, and impacts on culture. Learning activities include small group discussions, computer manipulation of spatial data, reading from historical writings of scholars such as Lyell and Darwin, and review of cultural impacts through paintings and films. Prerequisite: Any introductory science course.

Credits: 3

GEO 335 - Geophysics

Emphasis on how problems dealing with the shape, mass, structure, composition, and tectonic history of the Earth can be resolved using such methods of geophysics as gravity, magnetics, and seismology. Lectures, laboratory, and field work lead to several written papers.

Credits: 4

Prerequisite: GEO 165 and GEO 169. Offered: Every other year.

GEO 341 - Stars and Galaxies

An introduction to stellar astronomy with emphasis on what is currently known about the life history of stars, the structure of galaxies - with emphasis on our own Milky Way Galaxy - and nebulae, and black holes and quasars, and dark matter. Includes a historical overview of the study of stellar astronomy as well as considerations of the origin and ultimate fate of the universe, and the origin of life in the universe. Must have completed the Natural Sciences category of the College Core Curriculum.

Credits: 3

Offered: Offered on occasion.

GEO 343 - Geochemistry

Scope, literature, and history of geochemistry. Principles and applications of geochemistry, including the elements; isotope geology; thermodynamics; water chemistry; crystal chemistry; organic geochemistry; geochemistry of sedimentary, igneous and metamorphic rocks.

Credits: 4

Prerequisite: CHEM 116 and GEO 165. Offered: Every other year.

GEO 345 - Paleontology

Principles of paleontology; biologic relationships of fossil organisms, particularly ancient invertebrates. Emphasizes evolutionary principles and trends. Field work supplements lecture and laboratory.

Credits: 4

Prerequisite: GEO 210. Offered: Every other year.

GEO 359 - Vanishing Earth Resources

An interdisciplinary synthesis of perspectives on the Earth's resources. A broad range of resources will be discussed in the context of population growth, the global commons, resource management, sustainable development,
and environmental policy. The course will focus on the measurement, analysis, and evaluation of resources such as minerals, vegetation, animals, soils and landforms, atmosphere and climate, and water.

Credits: 3
Prerequisite: GEO 121 or GEO 165. Offered: Every other year.

GEO 370 - Structural Geology
Theoretical aspects of stress and strain as applied to natural rock systems; description and origin of rock structures in Earth's crust. Laboratory work stresses structural interpretation of geologic maps. Field work supplements lectures and laboratory. Students are required to complete a paper on some aspect of structural geology; part of the revision processes will include peer review.

Credits: 4
Prerequisite: GEO 165 and GEO 169. Offered: Every year.

GEO 400 - Stratigraphy
Principles of stratigraphy with examples of stratigraphic successions from various sedimentary basins around the world. Course emphasizes techniques of basin analysis and mechanisms of basin formation. The writing and peer review of abstracts are stressed in the course. In addition, students are required to submit a written report describing their results of a field stratigraphic study of the Devonian section of western New York.

Credits: 4
Prerequisite: GEO 165 and GEO 169 and GEO 210. Offered: Every year.

GEO 410 - Directed Study
Independent study and research in areas beyond formal courses. Permission of department.

Credits: 1-4
Offered: Every semester.

GEO 411 - Mineralogy
An introduction to descriptive crystallography and to chemical, physical, deteminative and descriptive mineralogy. Areas covered include: crystal symmetry, classification, morphology, crystal chemistry, physical properties, geologic occurrence, significance, and characteristic properties of minerals. Lectures and laboratory supplemented with one field trip.

Credits: 4
Prerequisite: CHEM 115* and GEO 165*. Cross-Listed as: * Indicates that the course can be taken in the same semester. Offered: Every other year.

GEO 421 - Petrology
Lecture emphasis on problems and hypotheses involved with the origin of rocks. Laboratory stresses use of the petrographic microscope for identification, description, and analysis of rock materials. A well-written research paper, which may include computer, lab, and library research, is required. Course includes a weekend trip to study classic rock terrains in the Adirondack Mountains.

Credits: 4
Prerequisite: GEO 411. Offered: Every other year.

GEO 431 - Geochemistry
Scope, literature, and history of geochemistry. Principles and applications of geochemistry, including the elements; isotope geology; thermodynamics; water chemistry; crystal chemistry; organic geochemistry; geochemistry of sedimentary, igneous and metamorphic rocks. Lab work emphasizes instrumental methods of analysis.

Credits: 4
Prerequisite: GEO 411. Offered: Every other year.

GEO 445 - Geosciences Internship
Approved work-training experience with state or federal agency, museum, or industrial firm. Permission of department.

Credits: 1-15
Offered: Every semester.

GEO 450 - Hydrogeology
Hydrologic problems are analyzed by organizing information into a water budget and then quantifying the variables in the water budget equation. Common hydrologic variables include precipitation, evaporation, transpiration, stream flow, infiltration and groundwater. Groundwater is emphasized. Lectures supplemented by field work, lab measurements, and computer modeling.

Credits: 4
Prerequisite: GEO 165 and GEO 330 and GEO 169. Offered: Every year.

GEO 455 - Laboratory Supervision in Geosciences
Students serve as laboratory assistants under supervision of faculty member. Four hours of work per week expected for each hour of credit elected; may be taken more than once. Does not count toward major requirements. Permission of the chairperson.

Credits: 1
Offered: Every semester.
**GEO 459 - Seminar in Geosciences**
This course is designed for senior-level Geology majors. In this first semester seminar course every student will present several short seminars as preparation for a full-length seminar on a current research topic to be given in the second semester senior seminar course. Emphasis is given on detailed knowledge of the subject matter, techniques for searching the professional literature, and procedures for the preparation and presentation of a professional presentation.
Credits: 1
Offered: Every year.

**GEO 460 - Senior Seminar**
Course Description: Each student will present a seminar on a current research topic during the spring semester of their senior year. Emphasis on detailed knowledge of the subject matter, techniques for searching the professional literature, and procedures for the preparation and presentation of a professional seminar.
Credits: 1
Offered: Every year.

**GEO 461 - Field Geology**
Two-week geologic mapping course immediately following end of spring semester (Summer Session I). Held at Catskill, N.Y.
Credits: 3
Prerequisite: GEO 370. Offered: Every other year.

**GEO 471 - Senior Thesis**
Research leading to a comprehensive report reviewed and evaluated by faculty. Open to B.S. Geology majors in Honors Track only. Permission of department/enrollment in B.S. Geology Honors track.
Credits: 3
Offered: Every semester.

**GEO 480 - Special Topics in Geosciences**
Special area of geosciences not covered by regular courses.
Credits: 1-4
Offered: Every semester.

**GEO 481 - Special Topics in Geosciences**
Special area of geosciences not covered by regular courses.
Credits: 1-4
Offered: Every semester.

**GEO 482 - Special Topics in Geosciences**
Special area of geosciences not covered by regular courses.
Credits: 3
Offered: Every semester.

**GEO 483 - Special Topics in Geosciences**
Special area of geosciences not covered by regular courses.
Credits: 1-4
Offered: Every semester.

**GEO 484 - Special Topics in Geosciences**
Special area of geosciences not covered by regular courses.
Credits: 1-4
Offered: Every semester.

**GEO 485 - Special Topics in Geosciences**
Special area of geosciences not covered by regular courses.
Credits: 1-4
Offered: Every semester.

**GEO 486 - Special Topics in Geosciences**
Special area of geosciences not covered by regular courses.
Credits: 1-4
Offered: Every semester.

**GEO 487 - Special Topics in Geosciences**
Special area of geosciences not covered by regular courses.
Credits: 1-4
Offered: Every semester.

**GEO 488 - Special Topics in Geosciences**
Special area of geosciences not covered by regular courses.
Credits: 1-4
Offered: Every semester.

**GEO 489 - Special Topics in Geosciences**
Special area of geosciences not covered by regular courses. Permission of the department.
Credits: 1-4
Offered: Every semester.

**GEO 505 - Earth Science of Chautauqua County**
This is a field based course. While it includes some classroom training as topics are introduced, the majority of instruction will occur at various sites across Chautauqua County. General areas of instruction will include geologic stratigraphy, rocks and minerals, water processes (fluvial and lacustrine), soils and groundwater, glacial geology, meteorology, and astronomy.
Credits: 3
**GEO 580 - Special Topics in Advanced Geosciences**
Special areas of problems in advanced geosciences not covered by regular graduate courses.
Credits: 1-4
Offered: Offered on occasion.

**GEO 581 - Special Topics in Advanced Geosciences**
Special areas of problems in advanced geosciences not covered by regular graduate courses.
Credits: 3
Offered: Offered on occasion.

**GEO 582 - Special Topics in Advanced Geosciences**
Special areas of problems in advanced geosciences not covered by regular graduate courses.
Credits: 3
Offered: Offered on occasion.

**GEO 583 - Special Topics in Advanced Geosciences**
Special areas of problems in advanced geosciences not covered by regular graduate courses.
Credits: 3
Offered: Offered on occasion.

**GEO 584 - Special Topics in Advanced Geosciences**
Special areas of problems in advanced geosciences not covered by regular graduate courses.
Credits: 3
Offered: Offered on occasion.

**GEO 585 - Special Topics in Advanced Geosciences**
Special areas of problems in advanced geosciences not covered by regular graduate courses.
Credits: 3
Offered: Offered on occasion.

**GEO 586 - Special Topics in Advanced Geosciences**
Special areas of problems in advanced geosciences not covered by regular graduate courses.
Credits: 3
Offered: Offered on occasion.

**GEO 587 - Special Topics in Advanced Geosciences**
Special areas of problems in advanced geosciences not covered by regular graduate courses.
Credits: 3
Offered: Offered on occasion.

**GEO 588 - Special Topics in Advanced Geosciences**
Special areas of problems in advanced geosciences not covered by regular graduate courses.
Credits: 3
Offered: Offered on occasion.

**GEO 589 - Special Topics in Advanced Geosciences**
Special areas of problems in advanced geosciences not covered by regular graduate courses.
Credits: 3
Offered: Offered on occasion.

**GEO 590 - Independent Study**
Independent study of topics not covered in regular graduate course offerings and pertinent to student's program of study or future career.
Credits: 3
Offered: Offered on occasion.

**GEO 610 - Independent Research**
Independent research and study in current geoscientific problems based on laboratory and field research or current literature.
Credits: 3
Offered: Offered on occasion.

**GEO 615 - Independent Research**
Independent research and study in current geoscientific problems based on laboratory and field research or current literature.
Credits: 3
Offered: Offered on occasion.

**GERM - German**

**GERM 100 - Introduction to German**
Students will be introduced to the language, familiarized with its basic vocabulary and grammar, and prepared to communicate at an elementary level. They will also be introduced to the distinctive features of the cultures where the language is spoken. The course is for students with none or very little background in the language.
Credits: 2
Prerequisite: German Lang Placement Score of an 1 or better. Offered: Every semester.

**GERM 110 - Essential German**
Students develop essential communicative skills and cultural awareness necessary in order to interact with people from that culture, whether it is in their home country or in the United States. In order to take this course, students must have scored a level 2 or 3 in the approved placement test or have taken the introductory course GERM 100 at Fredonia.

Credits: 3
Prerequisite: GERM 100 or German Lang Placement Score of an 2 or better or German Lang Placement Score of an 3 or better. Offered: Every semester.

**GERM 115 - Elementary German I**
Designed for students with no previous preparation. Study of fundamental speech patterns. Initial emphasis on developing listening comprehension, speaking skills, including pronunciation, with progressive emphasis on reading and writing skills. Discussion of selected cultural aspects.

Credits: 3
Offered: Every semester.

**GERM 116 - Elementary German II**
Designed for students with one semester of college level German or equivalent. Further practice in pronunciation and fundamental speech patterns. Continued development of listening, speaking, reading and writing skills for communicative proficiency. Discussion of selected cultural aspects.

Credits: 3
Prerequisite: GERM 115 or NY Regents German Exam Score of an 80 or better. Offered: Every semester.

**GERM 215 - Intermediate German I**
Increases proficiency in listening, speaking, reading and writing skills in German. Further development of vocabulary and grammar. Selected cultural and literary readings.

Credits: 3
Prerequisite: GERM 116 or NY Regents German Exam Score of an 85 or better or German Lang Placement Score of an 4 or better. Offered: Offered on occasion.

**GERM 216 - Intermediate German II**
Development of listening, speaking, reading and writing skills to attain proficiency required for upper level courses in German. Expansion of vocabulary and advanced grammar. Selected cultural and literary readings.

Credits: 3
Prerequisite: GERM 215 or German Lang Placement Score of an 5 or better. Offered: Offered on occasion.

**GERM 317 - German Conversation**
Conversational exercises: reports, discussions. Readings from newspapers and cultural texts stressing contemporary colloquial German. Emphasis on idioms.

Credits: 3
Prerequisite: GERM 215. Offered: Offered on occasion.

**GERM 318 - German Composition**
Practice in writing colloquial and formal German. Emphasis on idioms; style and structure in dialogue, descriptive and critical writing.

Credits: 3
Prerequisite: GERM 215. Offered: Offered on occasion.

**GERM 323 - Germany Since 1918**
Cultural aspects of the Weimar Republic, the Third Reich, and contemporary Germany. Guest lecturers, readings, and films. in English.

Credits: 3
Prerequisite: GERM 215. Offered: Offered on occasion.

**GERM 400 - Special Topics in German**
Special areas in German language, literature, or culture and civilization not covered by regular courses.

Credits: 1-3
Offered: Offered on occasion.

**GERM 410 - Directed Study**
Individual directed study of a particular area or topic in German language or literature. Periodic meetings with instructor, writing of a substantial paper.

Credits: 1-3
Offered: Offered on occasion.

**GERM 413 - German Song Literature**
A study of selected German vocal literature in its literary and musical context to acquaint singers and pianists with authors and their background from the viewpoint of intellectual history and literary movements.

Credits: 3
Prerequisite: MUS 137 and MUS 138 and MUS 139 and MUS 264. Offered: Every other year.
**GIS - Geographic Info Systems**

**GIS 201 - Geographic Information Systems I**
The essential theory, components, and applications of Geographic Information Systems, including data structures, database management, spatial analysis, and automated mapping technology. The lab work will introduce students to commercially available Geographic Information Systems software.

Credits: 3
Offered: Every year.

**GIS 301 - Geographic Information Systems II**
The expanded theory, components and applications of Geographic Information Systems. The course builds on topics presented in GIS 201 Geographic Information Systems I, and introduces students to additional commercially available Geographic Information Systems software.

Credits: 3
Prerequisite: GIS 201. Offered: Every year.

**GIS 350 - Remote Sensing/Image Processing**
Study of the conditions and/or state of remotely sensed objects and scenes. Application to many real world problems including harvest prediction, containment migration, forest mapping, resource delivery, and extraterrestrial exploration. Image processing, pattern recognition, and Geographic Information Systems (GIS).

Credits: 3
Prerequisite: GIS 201. Offered: Every other year.

**GIS 360 - Mapping the Social World**
Representation and analysis of the spatial structure of the social world using Geographic Information Systems (GIS). Exploration of how such technology is used to exploit and commercialize the social world in ways that serve the interests of those who control the technology and how it could provide opportunities to redraw boundaries and identify new social spaces.

Credits: 3
Offered: Every other year.

**GIS 401 - Special Topics in Geographic Information Systems**
In-depth examination of GIS topics introduced in GIS 201 or GIS 301. May be taken more than once as topics vary.

Credits: 3
Prerequisite: GIS 301. Offered: Offered on occasion.

**GIS 450 - Directed Study**
Participation in GIS-related faculty research.

Credits: 1-3
Prerequisite: GIS 201. Offered: Every semester.

**GIS 460 - Teaching Assistant**
Students have the opportunity to assist the instructor in the laboratory components of GIS 201 and GIS 301.

Credits: 1-3
Prerequisite: GIS 201. Offered: Every semester.

**GIS 480 - Independent Study**
Individualized study under the close supervision of a faculty member. Students should have specific topics or projects in mind before approaching an instructor.

Credits: 3
Prerequisite: GIS 201. Offered: Every semester.

**GIS 490 - Internship**
Provides opportunities for testing concepts and applications presented in the classroom. Interns have found opportunities in both the public and private sector.

Credits: 1-6
Prerequisite: GIS 201. Offered: Every semester.

**GRAD - Graduate Studies**

**GRAD 695 - Capstone Continuation**
Graduate students are required to remain continuously enrolled until completion of thesis/capstone work in order to allow continuing usage of university resources and to accurately account for faculty involvement.

Credits: 1
Offered: Offered on occasion.

**HIST - History**

**HIST 100 - Decoding History**
Introduction to the discipline of history, with special emphasis on developing the skills necessary to read, evaluate, and write different types of history. The course will focus on teaching students to identify authorsâ€™ arguments, explain how authors build their arguments, and evaluate those arguments. Topics vary by instructor.

Credits: 3
Offered: Every semester.
HIST 107 - Themes from American History
Exploration in-depth of single themes from the history of America. Specific themes vary from semester to semester.
Credits: 1-3
Offered: Offered on occasion.

HIST 118 - Themes from Western Civilization
Exploration in depth of single themes from the history of the Western world and its antecedent civilizations. Specific themes, which vary from semester to semester.
Credits: 1-3
Offered: Offered on occasion.

HIST 150 - Global Pasts
Global Pasts is a critical examination of a narrative of Global History. Subjects and pedagogical methods of instruction will vary from semester to semester, but professors will help students develop an understanding of other world civilizations by analyzing sources and events from different perspectives in one or multiple non-Western societies. Refer to the History Department website for specific topics/focus.
Credits: 3
Offered: Every semester.

HIST 151 - Global Patterns
Global Patterns features history courses which focus on non-Western regions of the world. Subject matter will vary semester to semester, but this course will help students develop an understanding of other world civilizations using creative and innovative methods and assist them to develop creative thinking and innovation by studying patterns in the history of other world civilizations. Refer to the History Department website for specific topics/focus.
Credits: 3
Offered: Every semester.

HIST 152 - Global Perspectives
Global Perspectives focuses on the history of non-Western regions of the world. Subjects and pedagogical methods of instruction will vary from semester to semester, but professors will help students develop an understanding of other world civilizations by using a global and multicultural perspective, focusing on long-term processes and individual patterns via case studies drawn from Africa, the Americas, and Eurasia. Refer to the History Department website for specific topics/focus.
Credits: 3
Offered: Every semester.

HIST 160 - Western Pasts
Western Pasts features history courses which focus on Europe. The focus of the course will vary semester to semester, but this course will help students develop an understanding of Western Civilization by analyzing sources and events from different perspectives. Refer to the History Department website for specific topics/focus.
Credits: 3
Offered: Every semester.

HIST 161 - Western Patterns
Western Patterns features history courses which focus on Europe. Subjects will vary semester to semester, but professors will help students develop an understanding of western civilization using creative and innovative methods and assist them in developing creative thinking and innovation by studying patterns in the history of Western civilization. Refer to the History Department website for specific topics/focus.
Credits: 3
Offered: Every semester.

HIST 170 - American Pasts
American Pasts is a critical examination of a narrative of American History. The focus of the course will vary semester to semester, but this course will help students develop an understanding of American History by analyzing sources and events from different perspectives. Refer to the History Department website for specific topics/focus.
Credits: 3
Offered: Every semester.

HIST 171 - American Patterns
American Patterns is a creative examination of a narrative of American History. The focus of the course and the pedagogies used will vary semester to semester, but this course will help students develop an understanding of American History by exploring the creative production of history using primary and secondary sources written from multiple perspectives. Refer to the History Department website for specific topics/focus.
Credits: 3
Offered: Every semester.

HIST 201 - Doing History
Format varies depending on instructor, but all sections include intensive instruction in methods of historical reading, research, analysis, and writing. About 20 to 30 pages of required written work each semester. History and Social Studies majors should take the course in the sophomore year. Sophomore standing required.
Credits: 3
Offered: Every semester.

**HIST 202 - Applied History**

Introduces students to applied historical research. Focus varies with semesters, e.g., creation of historical documentaries; local history archives and research.

Credits: 3
Offered: Offered on occasion.

**HIST 203 - History Through Films**

Examination of life, values, and beliefs of various cultures, countries, and epochs as exhibited in films. Film images compared with historical writing.

Credits: 1-3
Offered: Offered on occasion.

**HIST 206 - Introduction to African American Studies**

Study of the intellectual and social origins of the discipline known as African American Studies. Key concepts, themes, and theories of the discipline will be discussed in the class.

Credits: 3
Offered: Offered on occasion.

**HIST 212 - History of the Holocaust**

The Nazi murder of six million Jews and perhaps 10 million other people during World War II, for the sole purpose of eliminating undesirable people, may be the seminal event of the 20th century. The introductory multimedia course surveys the Nazi programs of mass murder, explores their historical roots, and examines their consequences for our world today.

Credits: 3
Offered: Every year.

**HIST 215 - Holidays and American Culture**

The course will examine the invention, celebration, and meanings of American holidays from the colonial era to the present. Issues to be considered include the ways in which holidays have shaped cultural values and American identity and vice versa; the ways in which holidays have both reflected and shaped views of gender, race, class, and ethnicity; and the relationships between holidays and religious belief, nationalism, consumer culture and political ideology. The course will take a multicultural and interdisciplinary approach.

Credits: 3
Offered: Offered on occasion.

**HIST 222 - Survey of Early U.S. History**

Survey of U.S. history from colonial times to 1877. Emphases vary with instructor, but will engage students with complex questions about the United States’s depiction of itself as a nation in which all men are created equal. The course will challenge students to think about what was -- and what wasn’t -- included in the U.S. history narrative they learned in high school.

Credits: 3
Offered: Every year.

**HIST 223 - Survey of Modern U.S. History**

This course offers a broad overview of modern U.S. history. Emphases vary with instructor, but will engage students with complex questions about the United States’s role as a global leader in an increasingly interconnected world. The course will challenge students to think about what was -- and what wasn’t -- included in the U.S. history narrative they learned in high school.

Credits: 3
Offered: Every year.

**HIST 225 - Introduction to Latinx History and Culture**

An interdisciplinary approach to historicizing the Latinx experience in U.S. history. The course examines the political and cultural dynamics of Puerto Ricans, Mexicans, Cubans, and Dominicans within an historical context sensitive to changes and continuities in American history.

Credits: 3
Offered: Every other year.

**HIST 232 - Survey of Pre-Modern European History**

This course offers a broad narrative of European history from its origins through the sixteenth century. The course explores the development of various cultural and political traditions in the ancient Near East and Mediterranean, their intermingling during the Roman Era, and their transmission and transformation during the Medieval Era.

Credits: 3
Offered: Every year.

**HIST 233 - Survey of Modern European History**

The course offers a broad overview of Modern European History, focusing on the economic, social, political and cultural transformations from the fifteenth century to the present. Emphases vary with instructor, but the course will engage students with complex questions and ideas that shaped Europe’s past and its connection to the rest of the world.

Credits: 3
COURSES

Offered: Every year.

HIST 243 - Pre-Modern Global History
This course examines the human pre-history and history 3500 BCE to the sixteenth century from a broad global perspective. Students will explore major themes such as the development of agriculture, the formation of cities and classical empires, the spread of universal and ethnic religions, and global integration and exchange.
Credits: 3

Offered: Every semester.

HIST 250 - Introduction to Russia, Eastern Europe & Eurasia, 1789-Present
Following the collapse of the Soviet Union the world looked forward expectantly to a new age of European and world integration; but while some countries from within the former Soviet sphere of influence have prospered and moved toward greater integration, others have slipped into poverty, isolation and authoritarianism. Russia hangs dangerously between authoritarian and democratic tendencies. HIST 250/INDS 250 explores the history of this complex region, and identifies the traditions and influences that its constituent countries and ethnic groups hold in common and those that divide them.
Credits: 3

Offered: Every year.

HIST 261 - Islamic Civilization
The political, religious and social development of the Islamic Empire from pre-Islamic to Napoleonic era.
Credits: 3

Offered: Every other year.

HIST 264 - East Asian Civilizations
Introduction to the history and cultures of East Asia from the Neolithic Revolution to the 19th century. The course focuses primarily on the domestic economic and political developments of China and Japan, but, where appropriate, it also includes aspects of the history of Central Asia, Korea and Southeast Asia. Similarity and diversity of these civilizations, cultural interrelation and regional interaction, and contact with the West, are among the topics to be covered.
Credits: 3

Offered: Every year.

HIST 265 - Pre-modern East Asia
The development of East Asian civilization from the Neolithic Revolution to the end of the 16th century, with emphasis on the classical philosophers, the growth of states and national economies, cultural exchange, and scientific and technological achievements.
Credits: 3

Offered: Offered on occasion.

HIST 266 - Modern East Asia
The history of East Asia from 1700 to the present. Covers domestic economic and political developments, interaction between the cultures and nations of the region, interaction with the West, and the revolutions of the 19th and 20th centuries.
Credits: 3

Offered: Offered on occasion.

HIST 268 - History of South Asia
Survey of the subcontinent from the Indus civilization to the present (3000 R.C.E. - 2000 C.E.).
Credits: 3

Offered: Offered on occasion.

HIST 272 - Africa to 1800
The course provides students with a survey examination of African history from ancient Egypt to the abolition of the Atlantic slave trade. Students will be introduced to the diversity of the African experience, undermining popular notions of Africa as a "country" or homogeneous region. Themes explored include the effect of the environment on African societies; the establishment of long distance trade networks which linked Africa to global trade; the spread of world religions such as Christianity and Islam; the rise and fall of African empires and states; the impact of the Transatlantic slave trade; and cooperation and conflict with early European settlers, missionaries and explorers.
Credits: 3

Offered: Every year.

HIST 273 - Africa From the 1800s
The course provides students with a survey examination of African history from ancient Egypt to the abolition of the Atlantic slave trade. Students will be introduced to the diversity of the African experience, undermining popular notions of Africa as a "country" or homogeneous region. Themes explored include the effect of the environment on African societies; the establishment of long distance trade networks which linked Africa to global trade; the spread of world religions such as Christianity and Islam; the rise and fall of African empires and states; the impact of the Transatlantic slave trade; and cooperation and conflict with early European settlers, missionaries and explorers.
Credits: 3

Offered: Every year.
HIST 282 - Pre-Columbian and Colonial Latin America
An introductory survey of the history of early Latin America, from antiquity to the European conquest to the wars for independence in the early 19th century. Special attention is given to indigenous and African influences in the shaping of society and culture.
Credits: 3
Offered: Every other year.

HIST 283 - Latin America: Revolution and Reform
An introductory survey of the history of modern Latin America, from the wars for independence in the early 19th century to nation-state building, reform movements, violent revolutions, and democratization in the 20th century. Special attention is given to Native American influences in the shaping of modern society. The contested role of the United States in Latin American domestic policy also is considered.
Credits: 3
Offered: Every other year.

HIST 288 - The Atlantic World, 1500-1820
Introduces the concept of the Atlantic World as a focus for study. Integrating and comparing the histories of Europe, the Americas, and Africa, the course will consider key interpretive themes, including European exploration and expansion; imperialism and colonialism; the emergence of an Atlantic economy; intercultural interaction and exchange; and the establishment of the African slave trade and the plantation economy.
Credits: 3
Offered: Every other year.

HIST 299 - Experimental Course in History
Varies in content from semester to semester. Student should consult the online Course Offerings and department notices for specific subject covered each semester.
Credits: 1-3
Offered: Offered on occasion.

HIST 301 - The Greek World
The evolution of Greek society from the Minoan and Mycenaean cultures through the empire of Alexander the Great and his successors. Includes the world of Homer, Dark Ages, the Archaic Period, the age of Pericles, the rise of Macedonia, and the Hellenistic age.
Credits: 3
Prerequisite: HIST 101 or HIST 115 or HIST 134 or HIST 150 or HIST 151 or HIST 152 or HIST 160 or HIST 161 or HIST 170 or HIST 171 or HIST 222 or HIST 223 or HIST 232 or HIST 233 or HIST 243. Offered: Offered on occasion.

HIST 302 - Republican/Imperial Rome
Traces the development of Rome from a city-state through the Roman Empire and its fourth-century transformation. Includes the Primordia, the formation of the early republic and the Confederation of Italy, the Punic Wars and the conquest of the Mediterranean world, the conflicts of the late republic, Augustus and the empire, the origins of Christianity, the Third Century Crisis, and the Late Antique transformation.
Credits: 3
Prerequisite: HIST 101 or HIST 115 or HIST 134 or HIST 150 or HIST 151 or HIST 152 or HIST 160 or HIST 161 or HIST 170 or HIST 171 or HIST 222 or HIST 223 or HIST 232 or HIST 233 or HIST 243. Offered: Offered on occasion.

HIST 303 - Medieval History I
Treats the transformation of the Roman world from the Late Antique Empire through the formation of the monotheistic theocracies of the Carolingian Empire, the Byzantine Empire, and the Islamic Caliphate. Includes Late Antiquity, the Germanic invasions and kingdoms, the Byzantine Empire, the emergence of Islam and the Caliphate, Charlemagne, and the Viking Era.
Credits: 3
Prerequisite: HIST 101 or HIST 115 or HIST 134 or HIST 150 or HIST 151 or HIST 152 or HIST 160 or HIST 161 or HIST 170 or HIST 171 or HIST 222 or HIST 223 or HIST 232 or HIST 233 or HIST 243. Offered: Offered on occasion.

HIST 304 - Medieval History II
History from 900-1300. Includes lordship, monastic reform movements, great disputes on religion and society, the Crusades, the European kingdoms, political and cultural innovations, and the Medieval legacy.
Credits: 3
Prerequisite: HIST 101 or HIST 115 or HIST 134 or HIST 150 or HIST 151 or HIST 152 or HIST 160 or HIST 161 or HIST 170 or HIST 171 or HIST 222 or HIST 223 or HIST 232 or HIST 233 or HIST 243. Offered: Offered on occasion.

HIST 305 - Europe in the Era of the Renaissance
General study of European development from 1300-1600. Emphasizes the Renaissance of the 14th century within a Late Medieval context. Topics include the Italian commune, social and cultural development within the Italian city-states, printing and print culture, the Republican tradition, the Northern Renaissance, and German federalism.
COURSES

Credits: 3
Prerequisite: HIST 101 or HIST 115 or HIST 134 or HIST 150 or HIST 151 or HIST 152 or HIST 160 or HIST 161 or HIST 170 or HIST 171 or HIST 222 or HIST 223 or HIST 232 or HIST 233 or HIST 243. Offered: Offered on occasion.

HIST 306 - The Age of Reformation
Origins of Protestant and Catholic reformations will contribute to an understanding of the persistence of conflict. Intellectual issues of the age presented in light of social, cultural, economic and political conditions.
Credits: 3
Prerequisite: HIST 101 or HIST 115 or HIST 134 or HIST 150 or HIST 151 or HIST 152 or HIST 160 or HIST 161 or HIST 170 or HIST 171 or HIST 222 or HIST 223 or HIST 232 or HIST 233 or HIST 243. Offered: Offered on occasion.

HIST 309 - The Modernization of Europe
The major social, political, economic and cultural trends that have laid the foundations for the contemporary world: nationalism; scientific, technological and industrial revolutions; modern ideologies, especially Marxism; modern militarism; imperialism; revolutions of 1789, 1830, 1848, 1905; modernization of society, life styles and values.
Credits: 3
Prerequisite: HIST 102 or HIST 116 or HIST 134 or HIST 150 or HIST 151 or HIST 152 or HIST 160 or HIST 161 or HIST 170 or HIST 171 or HIST 222 or HIST 223 or HIST 232 or HIST 233 or HIST 243. Offered: Every other year.

HIST 310 - World Environmental History
An introduction to the relationship between the natural environment and human development in the 20th century. Much of the history of humanity's interaction with the environment is one of catastrophes, but the course also investigates important and instructive examples of reform, reconstruction, and co-existence.
Credits: 3
Prerequisite: HIST 102 or HIST 116 or HIST 135 or HIST 150 or HIST 151 or HIST 152 or HIST 160 or HIST 161 or HIST 170 or HIST 171 or HIST 222 or HIST 223 or HIST 232 or HIST 233 or HIST 243 or HIST 232. Offered: Every year.

HIST 311 - Europe in the Modern World
The major transition of European society from World War I, when Europe ruled the world, to its present status, newly liberated from the super powers of the Cold War, perhaps to be united as a new super power. Special attention to international tensions, fascism, and the Nazi and Soviet experiences.
Credits: 3
Prerequisite: HIST 102 or HIST 116 or HIST 134 or HIST 150 or HIST 151 or HIST 152 or HIST 160 or HIST 161 or HIST 170 or HIST 171 or HIST 222 or HIST 223 or HIST 232 or HIST 233 or HIST 243. Offered: Every other year.

HIST 313 - Medieval Russia, 860-1700
An investigation of the Russian people, state and culture, with emphasis on the major social, institutional and ideological changes from the inception of the first Russian state - Kiev Russia - in the ninth century C.E., through the rise of Moscow, to the founding of the Russian Empire in the 18th century.
Credits: 3
Prerequisite: HIST 150 or HIST 151 or HIST 152 or HIST 160 or HIST 161 or HIST 170 or HIST 171 or HIST 222 or HIST 223 or HIST 232 or HIST 233 or HIST 243. Offered: Every other year.

HIST 314 - Russian Empire, 1450-1917
Russia through the lens of Empire, from the ascendency of Muscovy in 1450 to the Russian Revolution in 1917. The course will range in its focus from the Imperial centers of Moscow and St. Petersburg to the lives of colonial subjects across Eurasia.
Credits: 3
Prerequisite: HIST 150 or HIST 151 or HIST 152 or HIST 160 or HIST 161 or HIST 170 or HIST 171 or HIST 222 or HIST 223 or HIST 232 or HIST 233 or HIST 243 or HIST 102 or HIST 116 or HIST 134. Offered: Every other year.

HIST 316 - 20th Century Russia
A political, intellectual and social examination of Russia in the 20th century. Topics include the causes of the decline of the Czarist regime, World Wars I and II, the Stalin dictatorship, and the rise and fall of the Soviet Union as a military superpower.
Credits: 3
Prerequisite: HIST 102 or HIST 116 or HIST 134 or HIST 150 or HIST 151 or HIST 152 or HIST 160 or HIST 161 or HIST 170 or HIST 171 or HIST 222 or HIST 223 or HIST 232 or HIST 233 or HIST 243 or HIST 102 or HIST 116 or HIST 134. Offered: Every other year.

HIST 321 - The Dutch Republic, 1500-1800
Survey of the history of the Dutch Republic from the Burgundian and Habsburg periods to the Napoleonic Era, 1500-1800.
Credits: 3
Prerequisite: HIST 102 or HIST 116 or HIST 134 or HIST 150 or HIST 151 or HIST 152 or HIST 160 or HIST 161 or HIST 170 or HIST 171 or HIST 222 or HIST 223 or HIST 232 or HIST 233 or HIST 243. Offered: Every other year.
HIST 323 - Victorian Britain
The transformation of Great Britain from an agrarian country governed by landed patricians to a nation directed by a commercial middle-class. The rise of democracy, an industrial economy, an urban society, public opinion, and a populist monarchy.
Credits: 3
Prerequisite: HIST 102 or HIST 116 or HIST 134 or HIST 150 or HIST 151 or HIST 152 or HIST 160 or HIST 161 or HIST 170 or HIST 171 or HIST 222 or HIST 223 or HIST 232 or HIST 243. Offered: Every other year.

HIST 324 - History of the Ukraine
History of Ukrainian society, culture, politics and economics from Kiev Rus (ca. 870) to the Orange Revolution (2004). Emphasis on the rise of modern nationalism since the mid-19th century.
Credits: 3
Prerequisite: HIST 102 or HIST 116 or HIST 133 or HIST 150 or HIST 151 or HIST 152 or HIST 160 or HIST 161 or HIST 170 or HIST 171 or HIST 222 or HIST 223 or HIST 232 or HIST 243. Offered: Every other year.

HIST 325 - Colonial America
North American history from European settlement through the mid-18th century. Topics will include exploration and early contact; settlement; and social, political, economic, and cultural development. Focus will be on the lives and perceptions of ordinary men and women.
Credits: 3
Prerequisite: HIST 105 or HIST 133 or HIST 150 or HIST 151 or HIST 152 or HIST 160 or HIST 161 or HIST 170 or HIST 171 or HIST 222 or HIST 223 or HIST 232 or HIST 243. Offered: Every other year.

HIST 326 - 20th Century Britain
The course is intended to explore the history of Britain during the 20th century. A range of political, social and economic developments will be examined, e.g. emergence of the welfare state, movements for political reform, imperial changes and the impact of two world wars.
Credits: 3
Prerequisite: HIST 102 or HIST 116 or HIST 134 or HIST 150 or HIST 151 or HIST 152 or HIST 160 or HIST 161 or HIST 170 or HIST 171 or HIST 222 or HIST 223 or HIST 232 or HIST 243. Offered: Every other year.

HIST 327 - Antebellum United States, 1820-1861
Territorial expansion and resistance, the rise of the factory system and labor unions, political and cultural democratization, social reform, immigration and nativism, religious revivalism, slavery, and the causes of the Civil War.
Credits: 3
Prerequisite: HIST 105 or HIST 133 or HIST 150 or HIST 151 or HIST 152 or HIST 160 or HIST 161 or HIST 170 or HIST 171 or HIST 222 or HIST 223 or HIST 232 or HIST 243. Offered: Every other year.

HIST 328 - Civil War Era
The roots of the Civil War in antebellum northern and southern societies, war-time military, political, and social developments in the North and South, the Reconstruction experiment, the retreat from Reconstruction and the legacy of the war in the immediate post-war era and today.
Credits: 3
Prerequisite: HIST 105 or HIST 133 or HIST 150 or HIST 151 or HIST 152 or HIST 160 or HIST 161 or HIST 170 or HIST 171 or HIST 222 or HIST 223 or HIST 232 or HIST 243. Offered: Every other year.

HIST 330 - Industrial America, 1890-1920
The transformation of the U.S. from a rural/agrarian to an urban/industrial society. Topics include the process of industrialization and social upheavals that resulted; the development of the New South and New West; the emergence of the U.S. as a world power; the challenge of ethnic/cultural diversification; and the social and political reform movements of the era.
Credits: 3
Prerequisite: HIST 106 or HIST 133 or HIST 150 or HIST 151 or HIST 152 or HIST 160 or HIST 161 or HIST 170 or HIST 171 or HIST 222 or HIST 223 or HIST 232 or HIST 243. Offered: Every other year.

HIST 331 - The Inter-War Years, 1919-1945
The domestic scene in America from end of World War I to end of World War II, including discussion of business dominated 1920s, economic crisis and the New Deal of the 1930s, second World War, and other major trends, events, and figures.
Credits: 3
Prerequisite: HIST 106 or HIST 133 or HIST 150 or HIST 151 or HIST 152 or HIST 160 or HIST 161 or HIST 170 or HIST 171 or HIST 222 or HIST 223 or HIST 232 or HIST 243. Offered: Every other year.

HIST 332 - United States History: 1945-Present
The major cultural, economic, and political developments since World War II, including the Cold War, 1960s counterculture, Civil Rights movement, the Reagan era.
Credits: 3
Prerequisite: HIST 106 or HIST 133 or HIST 150 or HIST 151 or HIST 152 or HIST 160 or HIST 161 or HIST 170 or HIST 171 or HIST 222 or HIST 223 or HIST 232 or HIST 233 or HIST 243. Offered: Every year.

HIST 333 - African American History to 1877
Survey of the historical forces, within the African American community and elsewhere, which have shaped the African American experience. The course explores the cultural, social, and political development of African Americans from their African origins through Reconstruction.

Credits: 3

Prerequisite: HIST 105 or HIST 133 or HIST 150 or HIST 151 or HIST 152 or HIST 160 or HIST 161 or HIST 170 or HIST 171 or HIST 222 or HIST 223 or HIST 232 or HIST 233 or HIST 243. Offered: Every other year.

HIST 334 - African American History Since 1877
Survey of the historical forces, within the African American community and elsewhere, which have shaped the African American experience. The course explores the cultural, social, and political development of African Americans from Reconstruction to the present.

Credits: 3

Prerequisite: HIST 106 or HIST 133 or HIST 150 or HIST 151 or HIST 152 or HIST 160 or HIST 161 or HIST 170 or HIST 171 or HIST 222 or HIST 223 or HIST 232 or HIST 233 or HIST 243. Offered: Every other year.

HIST 335 - American Women
A survey of women's history from colonial times to present with emphasis on the changing status and definition of women's roles, race and ethnicity, and women's writings.

Credits: 3

Prerequisite: HIST 133 or HIST 150 or HIST 151 or HIST 152 or HIST 160 or HIST 161 or HIST 170 or HIST 171 or HIST 222 or HIST 223 or HIST 232 or HIST 233 or HIST 243. Offered: Every other year.

HIST 336 - African American Black Women's History
Explores the history of women of African descent in the Americas, with a particular focus on the United States. Covers black women's experiences from their African origins, through the Middle Passage, in enslavement, and in freedom. Issues addressed include labor, the black family, cultural expression, and racial identity (in comparative perspective).

Credits: 3

Prerequisite: HIST 333 or HIST 334 or ENGL 240 or ENGL 340 or HIST 150 or HIST 151 or HIST 152 or HIST 160 or HIST 161 or HIST 170 or HIST 171 or HIST 222 or HIST 223 or HIST 232 or HIST 233 or HIST 243 or HIST 243. Offered: Every other year.

HIST 337 - History of New York
The course examines the history of New York though a chronological survey of key events and issues that defined the city, state and nation. Beginning with the Dutch settlement in Manhattan, this course investigates significant social, economic, cultural, religious or political changes that shaped the history of the "Empire State." Particular emphasis will be made on New York's connection with the nation and the world.

Credits: 3

Prerequisite: HIST 105 or HIST 106 or HIST 133 or HIST 150 or HIST 151 or HIST 152 or HIST 160 or HIST 161 or HIST 170 or HIST 171 or HIST 222 or HIST 223 or HIST 232 or HIST 233 or HIST 243. Offered: Every other year.

HIST 338 - 19th Century American Culture
Examines how social, political, and economic changes have affected American culture and Americans' lives. Topics include consumption patterns; recreational activities; architectural styles; high and popular culture; family life; and social and cultural rituals.

Credits: 3

Prerequisite: HIST 106 or HIST 133 or AMST 202 or AMST 210 or HIST 150 or HIST 151 or HIST 152 or HIST 160 or HIST 161 or HIST 170 or HIST 171 or HIST 222 or HIST 223 or HIST 232 or HIST 233 or HIST 243. Offered: Every other year.

HIST 339 - 20th Century American Culture
Examines how social, political, and economic changes have affected American culture and Americans' lives. Topics include consumption patterns; recreational activities; architectural styles; high and popular culture; family life; and social and cultural rituals.

Credits: 3

Prerequisite: HIST 106 or HIST 133 or AMST 202 or AMST 210 or HIST 150 or HIST 151 or HIST 152 or HIST 160 or HIST 161 or HIST 170 or HIST 171 or HIST 222 or HIST 223 or HIST 232 or HIST 233 or HIST 243. Offered: Every other year.

HIST 341 - American Revolution and Republic
The roots of the American Revolution, the political, military, economic and social developments associated with the War for Independence and the first decade of the Early Republic, and the legacy of the American Revolution.

Credits: 3

Prerequisite: HIST 105 or HIST 133 or HIST 150 or HIST 151 or HIST 152 or HIST 160 or HIST 161 or HIST 170 or HIST 171 or HIST 222 or HIST 223 or HIST 232 or HIST 233 or HIST 243 or HIST 243. Offered: Every other year.
HIST 171 or HIST 222 or HIST 232 or HIST 233 or HIST 243. Offered: Every other year.

**HIST 342 - The American Century**

The major issues in American foreign policy in the 20th century. The focus is on America's economic ascendancy and the effect of this prominence on 20th century world order.

Credits: 3

Prerequisite: HIST 106 or HIST 133 or HIST 150 or HIST 151 or HIST 152 or HIST 160 or HIST 161 or HIST 170 or HIST 171 or HIST 222 or HIST 223 or HIST 232 or HIST 233 or HIST 243. Offered: Every other year.

**HIST 343 - Civil Rights Movement**

Seeks to expose the romanticized myths currently accepted as history among the general populace and to replace those myths with a better understanding of the goals, participants, issues and divisions that were a part of the African American struggle for freedom in the United States.

Credits: 3

Prerequisite: HIST 105 or HIST 106 or INDS 106 or HIST 150 or HIST 151 or HIST 152 or HIST 160 or HIST 161 or HIST 170 or HIST 171 or HIST 222 or HIST 223 or HIST 232 or HIST 233 or HIST 243. Offered: Every other year.

**HIST 345 - Asian American History**

The course explores the experiences of Asian Americans from the mid-19th century to the present. Topics will include Asian diasporas in the United States; immigration and settlement issues; work and labor systems; racial ideologies and anti-Asian movements; gender, family and community formation; Asian Americans in American popular culture; Asian American cultural expressions and social organization; and American nationalism and debates over American citizenship.

Credits: 3

Prerequisite: HIST 106 or HIST 133 or HIST 150 or HIST 151 or HIST 152 or HIST 160 or HIST 161 or HIST 170 or HIST 171 or HIST 222 or HIST 223 or HIST 232 or HIST 233 or HIST 243. Offered: Every other year.

**HIST 346 - History of American Cities**

The course examines the history of American cities since the colonial period to the present day. It will investigate the history of U.S. cities from multiple perspectives, including industrialization, migration, globalization, suburbanization, race, gender, class, and the environment.

Credits: 3

Prerequisite: HIST 106 or HIST 106 or HIST 133 or HIST 150 or HIST 151 or HIST 152 or HIST 160 or HIST 161 or HIST 170 or HIST 171 or HIST 222 or HIST 223 or HIST 232 or HIST 233 or HIST 243. Offered: Every other year.

HIST 170 or HIST 171 or HIST 222 or HIST 223 or HIST 232 or HIST 233 or HIST 243. Offered: Every other year.

**HIST 347 - U.S. Immigration**

Immigration to the U.S., with an emphasis on comparing the experiences of European, African, Latin American, and Asian immigrants. Topics will include immigrants' lives, work, and communities; assimilation and cultural persistence; and the development of U.S. immigration policy.

Credits: 3

Prerequisite: HIST 105 or HIST 106 or HIST 133 or HIST 150 or HIST 151 or HIST 152 or HIST 160 or HIST 161 or HIST 170 or HIST 171 or HIST 222 or HIST 223 or HIST 232 or HIST 233 or HIST 243. Offered: Every other year.

**HIST 348 - The American Metropolis Since World War II**

The course examines the relationship between cities and suburbs. It analyzes metropolitan areas across regions and time, challenging traditional notions of postwar America. Utilizing historical monographs, novels, films, and more, topics range from Levittown to Columbine, beat culture to hip hop, development to redevelopment.

Credits: 3

Prerequisite: HIST 106 or HIST 133 or HIST 150 or HIST 151 or HIST 152 or HIST 160 or HIST 161 or HIST 170 or HIST 171 or HIST 222 or HIST 223 or HIST 232 or HIST 233 or HIST 243. Offered: Every other year.

**HIST 350 - The Vietnam War: An International Conflict**

The international context of the Vietnam War is examined in terms of American politics, international strategy and global economics.

Credits: 3

Prerequisite: HIST 106 or HIST 133 or HIST 150 or HIST 151 or HIST 152 or HIST 160 or HIST 161 or HIST 170 or HIST 171 or HIST 222 or HIST 223 or HIST 232 or HIST 233 or HIST 243. Offered: Every other year.

**HIST 351 - Defining America**

Examines how private citizens, writers, politicians, business, the media and popular culture have defined America since 1776, how the definitions have changed over time, and the impact of race, ethnicity, gender, and class on the definitions.

Credits: 3

Prerequisite: HIST 106 or HIST 133 or HIST 150 or HIST 151 or HIST 152 or HIST 160 or HIST 161 or HIST 170 or HIST 171 or HIST 222 or HIST 223 or HIST 232 or HIST 233 or HIST 243. Offered: Every other year.
**HIST 352 - Environmental History of North America**

The course explores the interrelationship and interdependencies of human development and the environment. Topics include Native American and colonial land use practices, capitalism and nature, industrialization, urban environments, ethics, nature as leisure, and environmental politics.

Credits: 3

Prerequisite: HIST 105 or HIST 106 or HIST 133 or HIST 150 or HIST 151 or HIST 152 or HIST 160 or HIST 161 or HIST 170 or HIST 171 or HIST 222 or HIST 223 or HIST 232 or HIST 233 or HIST 243. Offered: Every other year.

**HIST 353 - U.S. Consumer Culture**

Examines the historical development of a consumer culture and its effects. Topics include the roots of consumer culture; the role of the industrial revolution; the development of marketing; and how consumption altered American life and culture in the 20th century.

Credits: 3

Prerequisite: HIST 106 or HIST 133 or HIST 150 or HIST 151 or HIST 152 or HIST 160 or HIST 161 or HIST 170 or HIST 222 or HIST 223 or HIST 232 or HIST 233 or HIST 243. Offered: Every other year.

**HIST 356 - Native American History**

A survey of the history of North America from the perspective of Native Americans, covering topics from the period before contact through the present. Possible topics may include precontact history and societies, the challenges of contact and colonization, Indian Removal, and continuing questions of sovereignty and treaty rights.

Credits: 3

Prerequisite: HIST 105 or HIST 106 or HIST 133 or HIST 150 or HIST 151 or HIST 152 or HIST 160 or HIST 161 or HIST 170 or HIST 171 or HIST 222 or HIST 223 or HIST 232 or HIST 233 or HIST 243. Offered: Every other year.

**HIST 357 - Indians and Europeans in Early America**

Introduces the major topics and themes in the ethnohistory of early America from the earliest contacts between Native Americans and Europeans to the early 18th century through a comparative study of British, French, and Spanish interactions with indigenous peoples.

Credits: 3

Prerequisite: HIST 102 or HIST 105 or HIST 115 or HIST 133 or HIST 150 or HIST 151 or HIST 152 or HIST 160 or HIST 161 or HIST 170 or HIST 171 or HIST 222 or HIST 223 or HIST 232 or HIST 233 or HIST 243. Offered: Offered on occasion.

**HIST 358 - 20th Century Native American Issues**

Native American peoples in the 20th century. Emphasis on federal policy development, the growth of political pan-Native American movements, the Native American image in popular culture, and current issues raised in the writings of contemporary authors representing a diversity of Native American nations.

Credits: 3

Prerequisite: HIST 106 or HIST 133 or HIST 150 or HIST 151 or HIST 152 or HIST 160 or HIST 161 or HIST 170 or HIST 171 or HIST 222 or HIST 223 or HIST 232 or HIST 233 or HIST 243 or ETHN 205. Offered: Every other year.

**HIST 359 - Ethnicity and Race**

Interdisciplinary approach to race and ethnicity in the United States and other contemporary multiethnic/multiracial societies. Because these courses are equivalents, students who have earned credit for HIST/INDS/ WOST 220 are not able to earn credit for this course.

Credits: 3

Prerequisite: HIST 150 or HIST 151 or HIST 152 or HIST 160 or HIST 161 or HIST 170 or HIST 171 or HIST 222 or HIST 223 or HIST 232 or HIST 233 or HIST 243. Offered: Every year.

**HIST 361 - Modern Middle East**

History of the Modern Middle East (18th-20th century) with emphasis on the social, political and economic repercussions of the Western presence in the region.

Credits: 3

Prerequisite: HIST 102 or HIST 150 or HIST 151 or HIST 152 or HIST 160 or HIST 161 or HIST 170 or HIST 171 or HIST 222 or HIST 223 or HIST 232 or HIST 233 or HIST 243. Offered: Every other year.

**HIST 362 - History of American Education**

The course examines the history of American schools since the colonial period to the present day. It will examine the history of American education from multiple perspectives, including how education has been conceived, what it was designed for, and how people experienced American schools.

Credits: 3

Prerequisite: HIST 102 or HIST 150 or HIST 151 or HIST 152 or HIST 160 or HIST 161 or HIST 170 or HIST 171 or HIST 222 or HIST 223 or HIST 232 or HIST 233 or HIST 243. Offered: Every other year.

**HIST 363 - Chinese Culture Through Films**

Examines Chinese culture using a selection of literary texts and films. Thematic concerns include: aesthetic form and
socio-political contents, gender relations, re-writing and re-presenting history, national and transnational identity through words and images. Ten or 11 screenings each semester.

Credits: 4

Prerequisite: HIST 102 or HIST 264 or HIST 265 or HIST 150 or HIST 151 or HIST 152 or HIST 160 or HIST 161 or HIST 170 or HIST 171 or HIST 222 or HIST 223 or HIST 232 or HIST 233 or HIST 243. Offered: Offered on occasion.

HIST 364 - Historical Landscape and National Identity in Modern East Asia

The course attempts to ground the history of modern East Asia in physical space and to invest the places we see with historical meaning. To this end, the course will be set in the historical sites in China, Japan, and South Korea. Through exploring the ritual, political, and historical significance of these sites, the course will investigate the forces that have transformed physical spaces into symbols of national/local identity. This course is also suitable for the Museum Studies minor.

Credits: 3

Prerequisite: HIST 102 or HIST 264 or HIST 265 or HIST 150 or HIST 151 or HIST 152 or HIST 160 or HIST 161 or HIST 170 or HIST 171 or HIST 222 or HIST 223 or HIST 232 or HIST 233 or HIST 243. Offered: Every other year.

HIST 366 - Late Imperial China

From the late Ming dynasty to the fall of the Manchu Qing dynasty in 1912. Covers the rise of the Manchus, political and cultural developments in the Qing empire, and the Western impact in the 19th century.

Credits: 3

Prerequisite: HIST 264 or HIST 102 or HIST 150 or HIST 151 or HIST 152 or HIST 160 or HIST 161 or HIST 170 or HIST 171 or HIST 222 or HIST 223 or HIST 232 or HIST 233 or HIST 243. Offered: Every other year.

HIST 367 - 20th Century China

From the fall of the Manchus (1912) to the present. Covers political and cultural developments, including nationalist and Communist revolutions, the Anti-Japanese War, and the People’s Republic through the post-Mao reforms.

Credits: 3

Prerequisite: HIST 264 or HIST 102 or HIST 150 or HIST 151 or HIST 152 or HIST 160 or HIST 161 or HIST 170 or HIST 171 or HIST 222 or HIST 223 or HIST 232 or HIST 233 or HIST 243. Offered: Every other year.

HIST 368 - Modern Japan

Japanese history from the founding of the Tokugawa shogunate to the present. Covers political and cultural developments during the shogunate, the Meiji Restoration, domestic political and cultural developments, and Japan’s interactions with the West and other East Asian nations in the 19th and 20th centuries.

Credits: 3

Prerequisite: HIST 264 or HIST 102 or HIST 150 or HIST 151 or HIST 152 or HIST 160 or HIST 161 or HIST 170 or HIST 171 or HIST 222 or HIST 223 or HIST 232 or HIST 233 or HIST 243. Offered: Offered on occasion.

HIST 370 - History of South Africa

This course provides a critical, objective, and balanced examination of South African history from the seventeenth century to the present, based upon a combination of lectures, seminar readings, and discussions, and drawing upon primary documents, literary works, and films about South Africa. South Africa’s complex history of social competition, conflict and cooperation provides students the opportunity to explore in greater depth the history of one of the world’s most notorious states. Themes and topics studied include: white settlement and race relations, the impact of industrialization, apartheid, and South Africa from a global perspective.

Credits: 3

Prerequisite: HIST 102 or HIST 116 or HIST 150 or HIST 151 or HIST 152 or HIST 160 or HIST 161 or HIST 170 or HIST 171 or HIST 222 or HIST 223 or HIST 232 or HIST 233 or HIST 243. Offered: Every other year.

HIST 371 - Russia After Stalin

A thematic approach to recent Russian history. The course identifies Russia’s most critical immediate problems and places them in their historical context. Major themes include: political structures and practices; the economy; the military; domestic security; international relations; minorities; culture and society.

Credits: 3

Prerequisite: HIST 102 or HIST 116 or HIST 134 or HIST 150 or HIST 151 or HIST 152 or HIST 160 or HIST 161 or HIST 170 or HIST 171 or HIST 222 or HIST 223 or HIST 232 or HIST 233 or HIST 243. Offered: Every other year.

HIST 372 - Africa in the 19th Century

The course deals with five case studies of political and economic transformation in the 19th century. The case studies are drawn from three different parts of sub-Saharan Africa: Sokoto (Nigeria) and Ashanti (Ghana) in the West; the Zulu (Republic of South Africa) and Sotho (Lesotho) in the South; and Buganda (Uganda) in the East.

Credits: 3

Prerequisite: HIST 102 or HIST 272 or HIST 150 or HIST 151 or HIST 152 or HIST 160 or HIST 161 or HIST 170 or
HIST 171 or HIST 222 or HIST 223 or HIST 232 or HIST 233 or HIST 243. Offered: Every other year.

HIST 373 - African Urban History

This course aims to provide students with a comprehensive approach to urban African history. To avoid fashioning an understanding of this history that often equates urbanization with westernization, this course begins with an examination of the multiple precolonial urban centers which existed in Africa prior to the arrival of the Europeans. It continues with the onset of colonialism and industrialisation which affected both the pace and nature of urbanisation in Africa. Migrations to the cities transformed the lives of millions of Africans. This course will focus on the lives of these urban dwellers: their relations to the spaces in which they live and the influence of those spaces on them; the development of urban cultures; the gendered character of urbanization; the creation of new social, political, economic and criminal networks; conflict and cooperation amongst urbanites; and the nature of colonial and post colonial oppression and control in the cities.

Credits: 3

Prerequisite: HIST 101 or HIST 102 or HIST 115 or HIST 116 or HIST 150 or HIST 151 or HIST 152 or HIST 160 or HIST 161 or HIST 170 or HIST 171 or HIST 222 or HIST 223 or HIST 232 or HIST 233 or HIST 243. Offered: Every other year.

HIST 375 - History of Authority

Interdisciplinary analysis of the methods of domination and control employed in major Western cultures since the 17th century. Focus on 19th and 20th century United States. Prison, schooling, the market system, hegemony, the welfare state, narrative and the media.

Credits: 3

Prerequisite: HIST 150 or HIST 151 or HIST 152 or HIST 160 or HIST 161 or HIST 170 or HIST 171 or HIST 222 or HIST 223 or HIST 232 or HIST 233 or HIST 243. Offered: Offered on occasion.

HIST 376 - Film and American Culture

Examines the links between film and American culture and society from the silent era to the present, with some emphasis on the Great Depression, the post-World War II years, and the 1980s. Thematic concerns include race and ethnicity, sexuality and gender, class, identity, postmodernism, voyeurism, and the new age. Ten or 11 screenings each semester.

Credits: 3

Prerequisite: HIST 106 or HIST 133 or HIST 150 or HIST 151 or HIST 152 or HIST 160 or HIST 161 or HIST 170 or HIST 171 or HIST 222 or HIST 223 or HIST 232 or HIST 233 or HIST 243. Offered: Offered on occasion.

HIST 386 - Global Studies

Study of cross-cultural encounters based on case studies from Africa, Asia, and the Americas (e.g. Spanish and Aztecs in Mexico; Dutch and Mughals in India; British and Zulus in South Africa).

Credits: 3

Prerequisite: HIST 101 or HIST 102 or HIST 150 or HIST 151 or HIST 152 or HIST 160 or HIST 161 or HIST 170 or HIST 171 or HIST 222 or HIST 223 or HIST 232 or HIST 233 or HIST 243. Offered: Every other year.

HIST 390 - Interpreting the Global Past

Introduction to recent world history scholarship, exploring interpretations and understandings of certain topics and time periods from the age of transregional nomadic empires to the present (e.g. dependency and world systems analysis, the "rise of the West" and the "decline of the East," "New or High" Imperialism).

Credits: 3

Prerequisite: HIST 102 or HIST 116 or HIST 150 or HIST 151 or HIST 152 or HIST 160 or HIST 161 or HIST 170 or HIST 171 or HIST 222 or HIST 223 or HIST 232 or HIST 233 or HIST 243. Offered: Offered on occasion.

HIST 391 - History of Christianity I

History of Christianity I introduces the student to the broad narrative of the religion's development within a historical context. The course explores the formation of Christian doctrines, faith practices, and institutions until 1517 within broader cultural, social, and economic parameters, while addressing the impact of specific events and personalities on the formation of Christian spiritualities and identities. The course aims at a balance between the study of doctrine and practice. Of particular importance is an exploration of the impact of non-Christian religious and philosophical traditions on the formation of Christian doctrines and practices. Students will also gain an understanding of the academic study of religion as a field of inquiry in its own right, with reference to theories of religion and terminology from the field of religious studies.

Credits: 3

Prerequisite: HIST 101 or HIST 115 or HIST 134 or HIST 303 or HIST 304 or HIST 305 or INDS 120 or HIST 150 or HIST 151 or HIST 152 or HIST 160 or HIST 161 or HIST 170 or HIST 171 or HIST 222 or HIST 223 or HIST 232 or HIST 233 or HIST 243. Offered: Every other year.

HIST 394 - Globalization

Analysis of 20th Century and recent history of globalization and its effects in Africa, Asia and Latin America. The course will focus on the history of cultural and economic globalization, and its effects on society. In
particular, the course will examine changes in the status, condition or rights of women, human rights, the role of international organizations and non-governmental organizations, and the relationship between the World Bank and International Monetary Fund (IMF) and economic development in non-Western regions. The course will also examine the recent rise of China as an economic, political and cultural force in the world.

Credits: 3

Prerequisite: HIST 101 or HIST 102 or HIST 135 or HIST 150 or HIST 151 or HIST 152 or HIST 160 or HIST 161 or HIST 170 or HIST 171 or HIST 222 or HIST 223 or HIST 232 or HIST 233 or HIST 243. Offered: Every other year.

HIST 396 - Themes in American History

The study of a person, event, cultural issue, or other theme during a specific period in American History. Students will delve in depth into the historical context of the topic, gaining a greater understanding of the way that people, ideas, and events can change history or reflect and respond to changes that have already occurred. Through primary and secondary sources, students will consider the issue from different perspectives, developing a greater understanding for the role of the historian as interpreter.

Credits: 3

Prerequisite: HIST 105 or HIST 106 or HIST 133 or HIST 150 or HIST 151 or HIST 152 or HIST 160 or HIST 161 or HIST 170 or HIST 171 or HIST 222 or HIST 223 or HIST 232 or HIST 233 or HIST 243. Offered: Every year.

HIST 397 - Themes in European History

The study of a person, event, cultural issue, or other theme during a specific period in European History. Students will delve in depth into the historical context of the topic, gaining a greater understanding of the way that people, ideas, and events can change history or reflect and respond to changes that have already occurred. Through primary and secondary sources, students will consider the issue from different perspectives, developing a greater understanding for the role of the historian as interpreter.

Credits: 3

Prerequisite: HIST 115 or HIST 116 or HIST 134 or HIST 150 or HIST 151 or HIST 152 or HIST 160 or HIST 161 or HIST 170 or HIST 171 or HIST 222 or HIST 223 or HIST 232 or HIST 233 or HIST 243. Offered: Every year.

HIST 398 - Themes in World History

The study of a group, event, cultural issue, or other theme during a specific period in world history. Students will delve in depth into the historical context of the topic, gaining a greater understanding of the way that people, ideas, and events can change history or reflect and respond to changes that have already occurred. Through primary and secondary sources, students will consider the issue from different perspectives, developing a greater understanding for the role of the historian as interpreter.

Credits: 3

Prerequisite: HIST 101 or HIST 102 or HIST 135 or HIST 150 or HIST 151 or HIST 152 or HIST 160 or HIST 161 or HIST 170 or HIST 171 or HIST 222 or HIST 223 or HIST 232 or HIST 233 or HIST 243. Offered: Every year.

HIST 399 - Experimental Course in History

Varies in content from semester to semester. Students should consult college the online Course Offerings and department notices for specific subject covered each semester.

Credits: 1-3

Prerequisite: HIST 150 or HIST 151 or HIST 152 or HIST 160 or HIST 161 or HIST 170 or HIST 171 or HIST 222 or HIST 223 or HIST 232 or HIST 233 or HIST 243. Offered: Every semester.

HIST 400 - Directed Study

In-depth exploration of an historical topic under the direction of a department member. Student must have instructor's approval before registering for course. Students should have specific topics in mind before approaching an instructor.

Credits: 1-3

Offered: Every semester.

HIST 440 - History Study Abroad

Faculty members lead students to another country where they visit a variety of historical and cultural sites. Professors will use physical sites â€” museums, houses of worship, seats of power, peopleâ€™s plazas, residential streets and neighborhoods, among many others â€” as their classrooms and lecture halls. Places become the textbook and the primary sources for students to â€œreadâ€ and interpret. History Study Abroad provides an opportunity for students to connect historical content with lived experience. Check with the History Department for information about the specific location being offered.

Credits: 3-6

Offered: Every year.

HIST 490 - Public History Internship

Students interested in a career in public history may receive credit for an internship with an historical society, museum, archive, or other public history venue. Enrollment is to be arranged with an appropriate faculty sponsor.

Credits: 1-6

Offered: Every semester.
<table>
<thead>
<tr>
<th>Code</th>
<th>Course Title</th>
<th>Description</th>
<th>Credits</th>
<th>Prerequisites</th>
<th>Offered</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST 495</td>
<td>Capstone Seminar</td>
<td>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.</td>
<td>3</td>
<td>HIST 201</td>
<td>Every semester.</td>
</tr>
<tr>
<td>HIST 499</td>
<td>Honors Research Seminar</td>
<td>Focus is on historiography and research methodology through preparation of a research paper based on primary sources. By invitation only.</td>
<td>3</td>
<td>HIST 201</td>
<td>Every year.</td>
</tr>
<tr>
<td>HIST 500</td>
<td>Special Topics</td>
<td>Directed Study of a defined topic, to be arranged with and supervised by the instructor.</td>
<td>0-3</td>
<td>HIST 201</td>
<td>Offered on occasion.</td>
</tr>
<tr>
<td>HIST 623</td>
<td>Readings in World History</td>
<td>Themes and issues in recent scholarship on world history. Content varies from semester to semester according to instructor.</td>
<td>3</td>
<td></td>
<td>Offered on occasion.</td>
</tr>
<tr>
<td>HIST 633</td>
<td>Graduate Research Seminar: World History</td>
<td>Research topics and methodologies in world history. Content varies from semester to semester according to instructor.</td>
<td>3</td>
<td></td>
<td>Offered on occasion.</td>
</tr>
<tr>
<td>HIST 643</td>
<td>Readings in American History</td>
<td>A graduate-level introduction to the historical literature for a particular chronological period or subject. Content varies from semester to semester according to instructor, yet all offerings have a pedagogical component. Possible topics include the colonial era; the family; the Civil War and Reconstruction; the African American experience.</td>
<td>3</td>
<td></td>
<td>Offered on occasion.</td>
</tr>
<tr>
<td>HIST 653</td>
<td>Research Seminar in American History</td>
<td>A graduate-level research seminar in American history. Content varies according to instructor. Students will become familiar with the basic literature in the area of study and will conduct original research in that area.</td>
<td>3</td>
<td></td>
<td>Offered on occasion.</td>
</tr>
<tr>
<td>HIST 670</td>
<td>Curriculum Development Project Research</td>
<td>Design and development of a curriculum unit relating to a particular topic in world history or American history. Project must be approved by the department graduate committee; work is done in consultation with a faculty advisor.</td>
<td>2-3</td>
<td></td>
<td>Offered on occasion.</td>
</tr>
<tr>
<td>HIST 671</td>
<td>Curriculum Development Project Completion</td>
<td>Completion of curriculum project, including final production, editing, and formatting of project to departmental and Graduate Studies guidelines. Final project must be approved by department graduate committee; work is done in consultation with faculty advisor. The final work must be defended before a faculty committee.</td>
<td>1</td>
<td>HIST 670</td>
<td>Offered on occasion.</td>
</tr>
<tr>
<td>HIST 1SA</td>
<td>100 Level Study Abroad Elective</td>
<td>A course taken during a study abroad experience that does not have a direct equivalency to a Fredonia course.</td>
<td>0-15</td>
<td></td>
<td>Offered</td>
</tr>
<tr>
<td>HIST 2SA</td>
<td>200 Level Study Abroad Elective</td>
<td>A course taken during a study abroad experience that does not have a direct equivalency to a Fredonia course.</td>
<td>0-15</td>
<td></td>
<td>Offered</td>
</tr>
<tr>
<td>HIST 3SA</td>
<td>300 Level Study Abroad Elective</td>
<td>A course taken during a study abroad experience that does not have a direct equivalency to a Fredonia course.</td>
<td>0-15</td>
<td></td>
<td>Offered</td>
</tr>
<tr>
<td>HIST 4SA</td>
<td>400 Level Study Abroad Elective</td>
<td>A course taken during a study abroad experience that does not have a direct equivalency to a Fredonia course.</td>
<td>0-15</td>
<td></td>
<td>Offered</td>
</tr>
</tbody>
</table>
HLTH - Health Education

HLTH 115 - First Aid Skills and Knowledge
Prepares students, through knowledge and skills, to meet the needs of most emergency situations when first aid care is required and medical attention is not readily available. Personal safety and accident-prevention information incorporated to acquaint individuals with causes of many accidents, so that action may be taken to eliminate or minimize such causes. The course meets the coaching first aid requirements of the New York State Coaching Mandate.

Credits: 3
Offered: Every semester.

HLTH 215 - Personal and Community Health
To develop positive attitudes toward health and optimum living and to influence formation of good habits affecting one's physical, mental, and social well being. Emphasis will be on proper health behavior as it relates to the disease process. Brief consideration is given to the role of health agencies in assessing community health needs and coordinating activities to meet these needs.

Credits: 3
Offered: Every year.

HLTH 217 - Fitness & Wellness for Life: A Multidisciplinary Perspective
This course examines the multiple dimensions of fitness, health, and wellness as they relate to individuals and society. Students will develop an understanding of current trends and practices as they relate to topics such as stress management, cardiovascular fitness, nutrition, and disease prevention. Emphasis will be given to four components of wellness: physical, emotional, social, and psychological. Students will apply this knowledge to become educated health care consumers, advocates, and responsible decision makers. Students will develop personal and community action plans for enhancing health and well-being.

Credits: 3
Offered: Every semester.

HLTH 220 - Health Sciences Applied to Coaching
The course will fulfill the NYSED Health Sciences Applied to Coaching requirement for certification as a coach in New York State. The components for certification include a basic knowledge of health sciences, including anatomy, physiology, kinesiology, human growth and development and maturation, risk minimization, sport-specific fitness and conditioning, and coaching psychology.

Credits: 3
Prerequisite: HLTH 115. Offered: Every year.

HLTH 221 - Philosophy, Principles and Organization of Athletics in Education
The course will fulfill the NYSED Philosophy, Principles and Organization of Athletics in Education requirement for certification as a coach in New York State. The components for certification include a basic knowledge of coaching philosophy, and principles and organization of associations and leagues. Child maltreatment and abuse are also covered in the course.

Credits: 3
Offered: Every year.

HLTH 300 - Education in Drugs/Alcohol/Tobacco
Knowledge and methods to deal with the problems of use of drugs, alcohol, and tobacco in elementary and secondary schools. Meets requirement for Education Law, Section 804, 804a, and 805. Limited to Education majors only.

Credits: 1
Offered: Every semester.

HLTH 302 - Stress Management
Identifies the mechanisms that generate the human stress response and their physical and psychological effects on the body and mind. The course also introduces the student to developing personal strategies for effective stress management.

Credits: 1
Offered: Every semester.

HLTH 303 - Fitness and Wellness
This course will explore the development of knowledge and skills necessary to become personally responsible for fitness and wellness. Investigations will include fitness assessment, exercise prescription, preventative health care, eating disorders, weight management, nutrition, smoking cessation and stress management.

Credits: 3
Prerequisite: HLTH 115. Offered: Every semester.

HLTH 321 - Theory & Techniques of Coaching
A course designed to introduce the prospective coach to the basic skills, strategies and coaching techniques required in organizing a particular sport. While the course is one of several courses designed to meet state mandates for interscholastic coaching, the student is expected to have completed all other courses in the mandate before enrolling in HLTH 321 or attain the permission of the instructor.

Credits: 2
Offered: Every semester.
HLTH 343 - Drugs and Behavior
The course provides students with a basic understanding of the effects of legal and illegal drugs on physiological and psychological functioning, and how drugs influence personal and social behavior.
Credits: 3
Offered: Every year.

HLTH 386 - Wellness and Health Promotion
The course emphasizes wellness as a positive approach to health promotion. The course explores ways of establishing effective health strategies that affect the physical, emotional and social self, use the mind constructively, channel stress energies positively, express emotions effectively, and enable the individual to interact with others.
Credits: 3
Offered: Every semester.

HLTH 400 - Internship
Work under supervision in a community setting. Students are expected to complete 67 clock hours of direct service to individuals, groups, or organizations for each credit hour awarded. The internship will emphasize theory, knowledge and skills needed when working with and within groups and organizations. A Learning Contract encompassing job requirements, learning objectives and methods will be utilized to evaluate the intern.
Credits: 1-6
Offered: Every semester.

HLTH 499 - Independent Study
The study of a particular topic related to health and wellness. Periodic meetings with an appropriate instructor will be scheduled. The topic may encompass individual research or a practical experience.
Credits: 1-3
Offered: Every semester.

HLTH 500 - Wellness and Health Promotion for the Elderly
The course explores wellness and health promotion the human lifespan. Emphasis will be placed on prevention, behavior modification and services available to the individual as they age.
Credits: 3
Offered: Offered on occasion.

HLTH 502 - Stress Management
The course deals with the physiological, psychological aspects of stress as it affects individual performance and people within the workplace and educational environments. Stress causes, effects, and management strategies will be introduced in this course.
Credits: 3
Offered: Every year.

HONR - Honors

HONR 300 - Honors Colloquium
A discussion course for students in the Honors Program. Subjects of discussion range from current events to campus activities to metaphysical speculations.
Credits: 1
Offered: Every semester.

HONR 301 - Honors-Arts
Content will vary from year to year depending on the instructor.
Credits: 3
Offered: Every semester.

HONR 302 - Honors-The Human Experience
Content will vary from year to year depending on the instructor.
Credits: 3
Offered: Every semester.

HONR 303 - Honors - Social Science
Content will vary from year to year depending on the instructor.
Credits: 3
Offered: Every semester.

HONR 304 - Honors - Science and Society
Content will vary from year to year depending on the instructor.
Credits: 3
Offered: Every semester.

HONR 305 - Honors - The Human Past
Content will vary from year to year depending on the instructor.
Credits: 3
Offered: Every semester.

HONR 306 - Honors - Interdisciplinary Thinking
Content will vary from year to year depending on the instructor.
HONR 400 - Honors Thesis
Directed research leading to the preparation of a thesis.
Credits: 3
Offered: Offered on occasion.

HONR 401 - Honors Thesis
Directed research leading to the preparation of a thesis.
Credits: 3
Offered: Offered on occasion.

HONR 490 - Honors Internship
Upper-level experiential learning opportunity through on-campus or off-campus placements. Nature of work will vary from placement to placement. This course is generally reserved for Honors Program members and students are responsible for finding and negotiating their own placement. Course requires students to consult with the Honors Program Director and the Career Development Office to complete a Learning Contract in accordance with college guidelines before the start of the internship.
Credits: 1-24
Offered: Every semester.

INDS - Interdisciplinary Studies

INDS 100 - International Student Seminar
A seminar for international students that provides speaking and writing opportunities building on previous English language training. Enrollment requires permission of instructor and/or the International Education Office.
Credits: 1
Offered: Every semester.

INDS 101 - Colloquium
Explores the basic concepts and views of International Studies as well as offering an introduction to each area of specialization.
Credits: 1
Offered: Offered on occasion.

INDS 105 - Introduction to American Indian Studies
Introduces students to the multi-disciplinary nature of American Indian Studies. The course is divided into three parts with each part emphasizing a different set of knowledges and approaches to the study of American Indians. The first part of the course will examine the historical relationships between American Indians and the U.S. government. Emphasis will be placed on changes in federal policies, and the importance of law in shaping American Indian geographies. Part two of the course examines the politics of "Indian Country," the environment, changing Indian demographics and economic development. Part three will focus upon cultural politics and will examine American Indian ethnic identity, representations of Indians in movies and literature, and Indian self-expression through literature and other expressive forms.
Credits: 3
Offered: Offered on occasion.

INDS 110 - SUNYMEU: Freshman
The course meets weekly for 50 minutes, culminating in participation in a four-day intercollegiate, international simulation of the European Union. The simulation takes place at a university campus in New York State in odd years (spring semester) and at a European university in even years (winter break/January). Students are assigned alter egos (roles) and work on country teams.
Credits: 2
Offered: Every year.

INDS 111 - Religion and Culture in the Time of the Crusades
The course focuses specifically on interactions between Christianity and Islam during the time of the Crusades. From four disciplinary perspectives, the class examines both the interdependence and the roots of conflict between the two cultures, the nature of fanaticism, and the development of Church and State as related institutions, as they all originate from the medieval quest for true knowledge of God.
Credits: 3
Offered: Offered on occasion.

INDS 120 - World Religions
An introduction to the beliefs, history, scriptures, practices, experiences, institutions, and values of five prominent world religions: Hinduism, Buddhism, Judaism, Christianity, and Islam. Also introduces the methods and classic theories of the discipline of Religious Studies.
Credits: 3
Offered: Every year.

INDS 199 - Service Learning
Students will work on public service projects that are coordinated through the instructor. Successful completion of an approved service-learning contract will be expected for students enrolled in this course. A maximum of 4 credit hours of service learning may be applied to the 120 credit hour requirement for Bachelorâ€™s Degree.
COURSES

INDS 202 - Introduction to Museum Studies

The course will provide a broad introduction to the field of museum work. Topics may include the history, philosophy, and ethics of museums; the different types of museums; social, economic, and political trends influencing museums; introduction to museum software such as Past Perfect; museum administration; collections management and conservation; and the various aspects of museum work - collecting, registration and record keeping, curatorial, object conservation, exhibition, interpretation, education, research, and public relations.

Credits: 3
Offered: Every semester.

INDS 210 - SUNYMEU: Sophomore

The course meets weekly for 50 minutes, culminating in participation in a four-day intercollegiate, international simulation of the European Union. The simulation takes place at a university campus in New York State in odd years (spring semester) and at a European university in even years (winter break/January). Students are assigned alter egos (roles) and work on country teams.

Credits: 2
Offered: Every year.

INDS 240 - African American Literature and Culture

An examination of major works by African American novelists, poets, dramatists, filmmakers, musicians, and essayists in terms of the intellectual and political concerns of their periods and locations. Cross-listed with ENGL 240

Credits: 3
Offered: Every year.

INDS 241 - Introduction to Latino Literature and Culture

Examines literature by Latinos in the U.S. including poems, short stories, novels, plays, and essays, but will also consider music, mass media representations, performance art, film and at least one documentary in order to give students a better picture of the cultures of U.S. Latinos (Chicanos, Puerto Ricans, Cuban Americans, Dominican Americans, etc). Designed for students with no previous knowledge of U.S. Latino cultures or Spanish. Not a complete historical survey, but will introduce students to key issues for understanding U.S. Latino literature with texts from conquest to contemporary.

Credits: 3
Offered: Every year.

INDS 285 - Mock Trial I

Preparation of case materials for participation in the trial competition sponsored by the American Mock Trial Association. Competition includes both civil and criminal litigation.

Credits: 0
Offered: Every year.

INDS 287 - Mock Trial II

Preparation of case materials for participation in the trial competition sponsored by the American Mock Trial Association. Competition includes both civil and criminal litigation.

Credits: 3
Prerequisite: INDS 285 or POLI 285. Offered: Every year.

INDS 299 - Service Learning

Students will work on public service projects that are coordinated through the instructor. Successful completion of an approved service-learning contract will be expected for students enrolled in this course. A maximum of 4 credit hours of service learning may be applied to the 120 credit hour requirement for Bachelorâ€™s Degree.

Credits: 1
Offered: Every semester.

INDS 302 - Special Topics: Museum Studies

The course will examine a specialized area of museum studies, such as public history, museum education, the art museum, historical sites administration, or the anthropological museum. Format and topic will vary, depending on instructor. May be taken more than once for credit.

Credits: 3
Prerequisite: INDS 202. Offered: Every year.

INDS 250 - Introduction to Russia, Eastern Europe & Eurasia, 1789-Present

Following the collapse of the Soviet Union the world looked forward expectantly to a new age of European and world integration; but while some countries from within the former Soviet sphere of influence have prospered and moved toward greater integration, others have slipped into poverty, isolation and authoritarianism. Russia hangs dangerously between authoritarian and democratic tendencies. HIST 250/INDS 250 explores the history of this complex region, and identifies the traditions and influences that its constituent countries and ethnic groups hold in common and those that divide them.

Credits: 3
Offered: Every year.
INDS 310 - SUNYEMU: Junior

The course meets weekly for 50 minutes, culminating in participation in a four-day intercollegiate, international simulation of the European Union. The simulation takes place at a university campus in New York State in odd years (spring semester) and at a European university in even years (winter break/January). Students are assigned alter egos (roles) and work on country teams.

Credits: 2
Offered: Every year.

INDS 315 - Italian American Experience

This course examines the experience of Italians in the United States from an interdisciplinary perspective. It explores the push and pull factors during the peak years of Italian emigration, the culture, society, economy, and government they left behind, and the new world they entered.

Credits: 3
Offered: Offered on occasion.

INDS 389 - Special Topics

Topics of special or current interest offered periodically and taught from an interdisciplinary perspective.

Credits: 1-3
Offered: Offered on occasion.

INDS 399 - Service Learning

Students will work on public service projects that are coordinated through the instructor. Successful completion of an approved service-learning contract will be expected for students enrolled in this course. A maximum of 4 credit hours of service learning may be applied to the 120 credit hour requirement for Bachelorâ€™s Degree.

Credits: 1
Offered: Every semester.

INDS 400 - Independent Study

Intensive individual study of some aspect of multicultural studies involving a paper or project.

Credits: .5-8
Offered: Offered on occasion.

INDS 410 - SUNYEMU: Senior

The course meets weekly for 50 minutes, culminating in participation in a four-day intercollegiate, international simulation of the European Union. The simulation takes place at a university campus in New York State in odd years (spring semester) and at a European university in even years (winter break/January). Students are assigned alter egos (roles) and work on country teams.

Credits: 2
Offered: Every year.

INDS 480 - Independent Study

Open only to Interdisciplinary Studies majors. Proposed independent studies must be described in the student's approved Interdisciplinary Studies proposal.

Credits: 1-6
Offered: Every semester.

INDS 489 - Special Topics

Topics of special or current interest offered periodically and taught from an interdisciplinary perspective.

Credits: 0-3
Offered: Every year.

INDS 490 - Internship

Open only to Interdisciplinary Studies majors. Students proposing internships must have an approved Interdisciplinary Studies proposal which includes the internship. Additionally, they must have a faculty sponsor and a detailed plan for the internship describing: (1) the duties approved by the interning agency; (2) the student's method of reporting or reflecting on the internship experience; (3) the method of internship evaluation; and (4) the amount of credit to be earned.

Credits: 1-15
Offered: Every semester.

INDS 491 - African American Studies Internship

Open only to African American Studies minors. Students proposing internships must have an approved Interdisciplinary Studies proposal which includes the internship. Additionally, they must have completed the application required by the campus Office of Internships.

Credits: 0-6
Offered: Offered on occasion.

INDS 492 - American Indian Studies Internship

Open only to American Indian Studies minors. Students proposing internships must have an approved Interdisciplinary Studies proposal which includes the internship. Additionally, they must have completed the application required by the campus Office of Internships.

Credits: 0-6
Offered: Offered on occasion.

INDS 493 - Latino Studies Internship

Open only to Latino Studies minors. Students proposing internships must have an approved Interdisciplinary Studies proposal which includes the internship.
Additionally, they must have completed the application required by the campus Office of Internships.

Credits: 0-6

Offered: Offered on occasion.

**INDS 494 - Museum Studies Capstone**

Internship with a museum (history, art, anthropological, natural history/science), archive, historical site, etc. Enrollment is to be arranged with an appropriate supervisor and faculty sponsor, by permission only. Internship should include the opportunity to create a small exhibit or work on another special project, determined in consultation with the site supervisor and faculty sponsor. Student should also enroll in INDS 495.

Credits: 3

Prerequisite: INDS 302. Corequisite: INDS 495. Offered: Every semester.

**INDS 495 - Museum Studies Portfolio Completion**

Students will work with the coordinator to complete and turn in all elements of the Museum Studies portfolio required for the minor. Should be taken concurrently with INDS 494.

Credits: 0

Prerequisite: INDS 302. Corequisite: INDS 495. Offered: Every semester.

**INDS 499 - Service Learning**

Students will work on public service projects that are coordinated through the instructor. Successful completion of an approved service-learning contract will be expected for students enrolled in this course. A maximum of 4 credit hours of service learning may be applied to the 120 credit hour requirement for Bachelorâ€™s Degree.

Credits: 1

Offered: Every semester.

**INDS 555 - Introduction of Databases for Data Science**

This course is designed to introduce graduate students to the foundations of database systems, focusing on relational algebra and data model, query optimization and query processing. Students would also be introduced to practical database design and implementation including SQL and NoSQL programming. Other topics to be covered include Data and Database Security, Object-Relational Databases, Database Tuning, Transaction processing, Concurrency control, Database recovery techniques, Electronic commerce, Distributed Databases.

Credits: 3

Offered: Offered on occasion.

**INDS 573 - Big Data and Distributed Database Systems Management**

This course is designed to introduce graduate students to the large data warehousing, "Cloud" computing, Hadoop and similar distributed/parallel systems. Students would also be introduced to the current data mining tools. The students will learn about the general architecture of data mining systems, techniques and algorithms of practical utility, types of patterns that can be found in practically important systems. Data mining primitives and query languages, an integration of a data mining system with databases and data warehouses will be investigated; essential insights in data mining systems of the future will be given. Students are also expected to be able to clearly communicate the data mining results.

Credits: 3

Offered: Offered on occasion.

**INDS 589 - Special Topics**

Topics of special or current interest offered periodically and taught from an interdisciplinary perspective.

Credits: 1-4

Offered: Every year.

**INDS 590 - Independent Study**

Independent study of interdisciplinary topics not covered in regular graduate course offerings and pertinent to the student's program of study.

Credits: 1-3

Offered: Every semester.

**INDS 662 - Data Visualization and Presentation Techniques**

The course introduces the students to the field of data visualization. Students will study basic visualization design and evaluation principles, and learn how to acquire, parse, and analyze large datasets. They will also learn techniques for visualizing multivariate, temporal, text-based, geospatial, hierarchical, and network/graph-based data in 2-, 3-, or more dimensions. In addition, they will utilize various software tools to implement these techniques.

Credits: 3

Offered: Offered on occasion.

**INDS 690 - Research**

Capstone research experience required for the Interdisciplinary Studies degree. Research leading to, and preparation of, a final project explored in depth or a traditional master's thesis that integrates interdisciplinary course work with professional and personal goals. All work guided by a faculty mentor and coordinated by the Dean of Graduate Studies or the student's advisor. Copies
of completed project/thesis must be submitted to the Graduate Office.

Credits: 1-5
Offered: Every semester.

**INDS 691 - Research**

Continued attention to research project or thesis for IND 690, as needed. Requires written justification approved by the faculty mentor and submitted for the review of the Dean of Graduate Studies prior to registration.

Credits: 1
Offered: Offered on occasion.

**INDS 695 - Thesis/Capstone Research Continuation**

Graduate students are required to remain continuously enrolled until completion of thesis/capstone work in order to allow continuing usage of university resources and to accurately account for faculty involvement.

Credits: 1
Offered: Every semester.

**INED - International Education**

**INED 299 - International - Special Topics**

A variable content faculty-led international course. Subject is based on student and faculty interest and is arranged through the Office of International Education.

Credits: 0-15
Offered: Offered on occasion.

**INED 312 - Health Care in Latin America**

Students will learn about health care issues in Latin America. The course will include information on diseases, access to health care, treatments and historical aspects of healthcare in different countries. The students will also prepare for interacting with patients at medical brigades, interacting with children at the orphanage, and for being a visitor in Central America. This 2-credit course is required for students who wish to participate in the 2 credit study abroad course in Honduras in January.

Credits: 2
Offered: Every Fall semester.

**INED 313 - Health Care in Honduras**

Students will travel to Nuevo Paraiso in Honduras to conduct medical brigades and perform community service work. We will stay at the Sociedad de Los Ninos, learning about the services provided in education and health care. We will conduct medical brigades to different communities in the region and interact with the children living at Sociedad.

Credits: 2
Offered: Summer, JTerm.

**INED 390 - Art History Abroad**

An introduction to the history of art that examines a specific geographical area and chronological span during a study abroad experience. The course provides the student a thorough grounding in the major art works and artists involved, adding the concrete dimension of direct observation and personal experience of the places and motifs that informed various movements. The two to three week study/travel abroad includes readings, discussion, a daily journal, and a written interpretation of themes and ideas in art.

Credits: 3
Offered:

**INED 399 - International - Special Topics**

A variable content faculty-led international course. Subject is based on student and faculty interest and is arranged through the Office of International Education.

Credits: .5-15
Offered: Offered on occasion.

**INED 400 - Study Abroad**

Opportunities for study abroad as arranged through the Office of International Education.

Credits: 1-23
Offered: Every semester.

**INED 401 - Study Abroad - Aichi University of Education, Japan**

Conveniently located along the Tokyo-Osaka corridor, Aichi University is close to Kyoto and Nara, two of Japan's most popular tourist and resort areas. The four week language and culture program is for students interested in learning Japanese and offers a unique opportunity for intensive daily language instruction and cultural excursions to places such as the Toyota Motor Co., Nagoya City and Nagoya Castle. Students live in residence halls with other international students. Meals are self catered.

Credits: 1-21
Offered: Every year.

**INED 402 - Study Abroad - American University in Bulgaria**

The American University in Bulgaria (AUBG) is a highly selective private university that attracts students and faculty from all around the world. Located in the city of Blagoevgrad, AUBG is one hour from the capital of Sofia. AUBG offers an American style liberal arts education taught in English. Students interested in American Studies,
Business Administration, History, International Studies, Journalism and Political Science will find the curriculum stimulating. Fredonia students share double rooms with Bulgarians.

Credits: 1-21
Offered: Every semester.

INED 403 - Study Abroad - IAU in Aix en Provence, France

Founded in 1957, the Institute for American Universities (IAU) is one of the oldest and largest education abroad programs in Europe. IAU's program offers a cross cultural environment that stimulates intellectual vigor, reflection and personal growth. Students take courses in European studies, all levels of French, and literature courses conducted in French and humanities and social science courses conducted in English. Housing is with host families.

Credits: 1-21
Offered: Every semester.

INED 404 - Study Abroad - Northumbria University, England

Newcastle Upon Tyne, a city known for its vibrant cultural life, is home to Northumbria University and nearly 30,000 students studying in 500 undergraduate and graduate programs. The very modern campus has wireless Internet throughout, single residence halls, and athletic facilities. Instruction is delivered via lectures, workshops, and tutorials. The British Colloquium course, a requirement for full time visiting students, covers the history and culture of Britain and includes regular cultural excursions.

Credits: 1-21
Offered: Every semester.

INED 405 - Study Abroad - University Autonoma Benito Juarez, Mexico

Founded in 1974 as the Language Center of the Benito Juarez University of Oaxaca, it serves over 1,500 students and offers courses in Spanish, French, Italian, Portuguese and Zapotec. The language courses are offered at six levels, from beginning to advanced, in small group settings. It has been designed to develop basic language skills and to help use language in real-life scenarios with a Mexican context. Housing is with host families to further immersion in the life and culture of Oaxaca.

Credits: 1-21
Offered: Every semester.

INED 408 - Study Abroad - Music Conservatory of Seville, Spain

The Conservatorio Superior de Musica Manuel Castillo de Sevilla, a conservatory of international stature, prepares students for the music profession. There are five distinct specialties: instrumental instruction, composition, musicology, choir conducting, and pedagogy. Although some instruction is offered in English, students will need to understand Spanish at an intermediate level to fully participate. Intensive language instruction is available at the University of Seville prior to classes beginning in the fall. Housing is with host families.

Credits: 3-21
Offered: Every semester.

INED 409 - Study Abroad - Izmir University of Economics

Founded in 2001, Izmir University of Economics offers courses in business, computer science, art and design, economics, international relations, psychology, journalism and many others that can be taken to fulfill SUNY Fredonia degree requirements. Courses are taught in English. IUE is located in the coastal city of Izmir, 200 miles from Istanbul.

Credits: 1-21
Offered: Every semester.

INED 410 - Study Abroad: SiPN: Portugal

Upper level coursework in humanities, social and natural sciences, business, and Portuguese language. Internships available.

Credits: 3-15
Offered: Every semester.

INED 415 - Study Abroad: University of Puerto Rico, Puerto Rico

The University of Puerto Rico, also referred to as UPR-RP, is a public research university in San Juan, Puerto Rico. UPR-RP serves more than 18,000 students, 20% graduate, and grants an average of over 3,000 degrees a year. It is recognized by the Carnegie Foundation for the Advancement of Teaching as an Intensive Doctoral/Research University. Its academic offerings range from the baccalaureate to the doctoral degree, through 70 undergraduate programs and 19 graduate degrees with 71 specializations in the basic disciplines and professional fields. UPR-RP is the largest campus in terms of student population of the University of Puerto Rico System, and is the first public university in the history of Puerto Rico.

Credits: 1-21
Offered: Every semester.
INED 416 - Study Abroad: Earth Education International

Earth Education International (EEI) in Costa Rica provides interdisciplinary courses and programs related to sustainability, environmental studies and social responsibility. EEI's offerings emphasize applied learning, substantial field study experiences and in-class lectures, discussions, workshops, debates, and student presentations. Time spent outside the classroom may include field trips, educational exercises, field research, and/or other appropriate assignments. The sites serve as case studies that taken together provide a real-world context for understanding the complex regional, national and global issues associated with working toward a sustainable future.

Credits: 1-21
Offered: Every semester.

INED 437 - Study Abroad - University of the Sunshine Coast Australia

Founded in 1998, The University of the Sunshine Coast offers courses in the arts, education, humanities, business and sciences that can be taken to fulfill SUNY Fredonia degree requirements. It is located one hour north of Brisbane on the Mooloolaba coast.

Credits: 1-21
Offered: Every semester.

INED 438 - Study Abroad - UPAEP Mexico

Founded in 1973, the Universidad Popular Autonoma del Estado de Puebla offers courses in arts, education, humanities, language and sciences that can be taken to fulfill SUNY Fredonia degree requirements. While most courses are taught in Spanish, UPAEP also offers a selection of courses in English. UPAEP is located in the city of Puebla.

Credits: 1-21
Offered: Every semester.

INED 439 - Study Abroad - St. Petersburg University Russia

Founded in 1755, St. Petersburg University offers courses in the arts, education, humanities, business and sciences that can be taken to fulfill SUNY Fredonia degree requirements. Courses are offered in English and Russian. The University is located in the city of St. Petersburg, about 450 miles from Moscow.

Credits: 1-21
Offered: Every semester.

INED 440 - Study Abroad: Southwestern Univ. of Finance and Economics

SWUFE, founded in 1952, is listed as one of China's key universities for international student exchange. It features strong scholarly excellence and course work in economics, finance, accounting, management and mathematics. While all courses are taught in English, students who want to learn to speak Chinese will receive free lessons taught by the College of International Education. SWUFE is located in the Chengdu, the capital of the Sichuan Province.

Credits: 1-21
Offered: Every semester.

INED 441 - Study Abroad: University of Plymouth, England

Plymouth is a university built on a rich heritage dating back to 1862 and while it has grown in terms of size, reputation and impact, it remains true to its values of social inclusion with a strong sense of place and civic responsibility. In 2008 Plymouth was named as a top 50 research university. Courses are offered in all major areas of studies and specialized courses in areas such as marine sciences and entrepreneurial studies.

Credits: 1-21
Offered: Every semester.

INED 442 - Study Abroad: Weimar Conservatory, Germany

At the LISZT SCHOOL of Music- Weimar Conservatory students can study all orchestral instruments, piano, guitar, accordion, voice, theatre, organ, early music, composition, conducting, school music and music pedagogy. In addition, jazz and music theory, musicology and arts management are offered. The most important goal of The LISZT SCHOOL is to prepare its students for their future careers as comprehensively as possible. This means that the classical orchestral instrumentalists are not only offered private lessons and a committed orchestral school but also gain an insight into special branches such as

Credits: 1-21
Offered: Every semester.

INED 443 - Study Abroad: FLAME, India

The Foundation for Liberal and Management Education (FLAME) is located in the city of Pune, about 1 hour from Mumbai. FLAME focuses on broadening students' perspectives by offering students courses in a range of disciplines - from pure sciences to humanities and social sciences to performance studies. Students are free to choose between courses offered by all four FLAME schools (FSB, FSC, FSLE and FSPA). This freedom results in intellectual interactions between our PG and UG students. A post-graduate student of business, an
undergraduate student of physics, a post graduate student of journalism, and an Gl

Credits: 1-21
Offered: Every semester.

**INED 444 - Study Abroad: Umbra Institute, Italy**

The Umbra Institute, founded in 1999 in Perugia, Italy, is the only year-round independent American program based in Perugia, offering semester, year-long and summer programs with a variety of academic programs and special courses. The faculty and staff strive to incorporate a genuine Italian experience into all elements of both the academic curriculum and student life. Whether they choose to pursue a curriculum taught by Umbra faculty or Direct Enrollment at one of the local Italian universities, Umbra students have Italian classmates and engage in the Perugia community on a daily basis for cultural and linguistic discovery.

Credits: 1-21
Offered: Every semester.

**INED 445 - Study Abroad: Hankuk University of Foreign Studies, Korea**

Since its founding in 1954, Hankuk University of Foreign Studies (HUFS) has played a significant role in reconstructing Korea after the Korean War by producing numerous CEOs and outstanding diplomats, who are competitive enough to strive forward in the global stage. HUFS teaches courses in 45 foreign languages, humanities, law, social sciences, business, and computer science, helping students to grow as global leaders, equipped with both professional knowledge and language proficiency. HUFS is located in the capital city of Seoul.

Credits: 1-21
Offered: Every semester.

**INED 446 - Study Abroad: Aichi Prefectural University, Japan**

Aichi Prefectural University was founded in 1947 at the end of the Second World War, when the residents of Aichi Prefecture wanted to recover from a period of confusion. In 1998, the campus was relocated from Nagoya city, where the School of Information Science and Technology, the School of Literature, and the School of Foreign Studies, were founded. APU’s educational philosophy aims to advance globalization, social welfare, and a society of lifelong learning.

Credits: 1-21
Offered: Every semester.

**INED 447 - Study Abroad: Yamasa Institute, Japan**

The Yamasa Institute, noted for its excellence in Japanese language instruction and cultural immersion programs is the place where students from around the world begin to encounter the “real Japan.” Living with, studying with, and communicating with Japanese people is the key to understanding Japan and its people. The Yamasa Institute has been working since 1919 to improve the quality of education and real understanding across cultures.

Credits: 1-21
Offered: Every semester.

**INED 448 - Study Abroad: Shih Hsin University: Taiwan**

Upper level coursework in the humanities, communications, business. Introductory Chinese language.

Credits: 1-23
Offered: Every semester.

**INED 449 - Study Abroad: Niigata University Japan**

Niigata University offers students the chance to study Japanese language coursework, as well as social sciences and humanities in English while spending a semester or year in Japan. Niigata University is a large, public institution located in Niigata City.

Credits: 1-23
Offered: Every semester.

**INED 450 - International Internship**

Opportunities for international internships as arranged through the Office of International Education.

Credits: 1-15
Offered: Every semester.

**INED 451 - Study Abroad - Washington, D.C.**

Prior selection required.

Credits: 1-15
Offered: Every semester.

**INED 499 - International - Special Topics**

This is a variable content faculty-led international course. Subject is based on student and faculty interest and is arranged through the Office of International Education.

Credits: .5-15
Offered: Offered on occasion.

**INED 599 - Study Abroad Special Topics**

Study abroad experience with emphasis that changes according to content and experiences.

Credits: 1-15
Offered: Offered on occasion.
INED 1SA - 100 Level Study Abroad Elective
A course taken during a study abroad experience that does not have a direct equivalency to a Fredonia course.
Credits: 1-15
Offered:

INED 2SA - 200 Level Study Abroad Elective
A course taken during a study abroad experience that does not have a direct equivalency to a Fredonia course.
Credits: 0-15
Offered:

INED 3SA - 300 Level Study Abroad Elective
A course taken during a study abroad experience that does not have a direct equivalency to a Fredonia course.
Credits: 1-15
Offered:

INED 4SA - 400 Level Study Abroad Elective
A course taken during a study abroad experience that does not have a direct equivalency to a Fredonia course.
Credits: 0-15
Offered:

INTL - International Studies

INTL 101 - Introduction to International Studies
Required for all International Studies majors and minors. An introduction to the interdisciplinary study of the global society, its historical development and contemporary status. The course is based on a selection of readings that explore the world's evolution from the perspective of politics, history, economics, sociology, anthropology and the arts.
Credits: 1
Offered: Offered on occasion.

INTL 303 - Globalization in Latin America
Examines the complexities and nuances of modern Latin American societies having as a background the dynamics of the global economy. The course analyzes politics, culture, and socioeconomic conditions in Latin America, both from a contemporary policy perspective and with an examination of the region's insertion into the international political economy in the 19th century.
Credits: 3
Offered: Offered on occasion.

INTL 305 - Transitions in Central Europe
Examines the history, geography, culture, and politics of countries in Central Europe, more specifically, Bulgaria, Hungary, Poland, Romania, Ukraine, Czech Republic, and Slovakia. Particular emphasis is placed on contemporary political and economic developments evolving from the transition from communism to democracy and capitalism. It is designed for students with no knowledge of Slavic languages.
Credits: 3
Offered: Offered on occasion.

INTL 400 - Special Topics
Course content varies based on student and faculty interest.
Credits: 1-15
Offered: Offered on occasion.

INTL 401 - Intl Studies Senior Project
Required for all International Studies majors. A scholarly project utilizing methods and concepts drawn from the Social Sciences and the Humanities and applied to current issues in International Studies. Upon registration, student must submit a project proposal to the Coordinator of International Studies. Working under supervision, student will complete and submit a comprehensive study of the selected topic. International Studies majors only.
Credits: 1
Offered: Every year.

INTL 500 - Overseas Graduate Study - Special Topics
The course provides students with an international experience studying the culture, language, history and politics of foreign countries. Course subject varies based on student and faculty interest. Students are expected to conduct an in-depth exploration of selected topics.
Credits: 3-6
Offered: Offered on occasion.
ITAL - Italian

ITAL 100 - Introduction to Italian
Students will be introduced to the language, familiarized with its basic vocabulary and grammar, and prepared to communicate at an elementary level. They will also be introduced to the distinctive features of the cultures where the language is spoken. The course is for students with none or very little background in the language.
Credits: 2
Offered: Every semester.

ITAL 110 - Essential Italian
Students develop essential communicative skills and cultural awareness necessary in order to interact with people from that culture, whether it is in their home country or in the United States. In order to take this course, students must have scored a level 2 or 3 in the approved placement test or have taken the introductory course ITAL 100 at Fredonia.
Credits: 3
Prerequisite: ITAL 100 or Italian Lang Placement Score of an 2 or better or Italian Lang Placement Score of an 3 or better or ITAL 115. Offered: Every semester.

ITAL 115 - Elementary Italian I
Designed for students with no previous preparation. Study of fundamental speech patterns. Initial emphasis on developing listening comprehension, speaking skills, including pronunciation, with progressive emphasis on reading and writing skills. Discussion of selected cultural aspects.
Credits: 3
Offered: Every semester.

ITAL 116 - Elementary Italian II
Designed for students with one semester of college level Italian or equivalent. Further practice in pronunciation and fundamental speech patterns. Continued development of listening, speaking, reading and writing skills for communicative proficiency. Discussion of selected cultural aspects.
Credits: 3
Prerequisite: ITAL 115. Offered: Every semester.

ITAL 210 - Italian Through Literature and Popular Culture
Students will strengthen their language skills and develop an understanding of Italian culture. Emphasis will be on communication in Italian.
Credits: 3
Prerequisite: ITAL 116 or ITAL 110. Offered: Every year.

LANG - Foreign Languages

LANG 100 - Special Topics on Lang & Lit
Special topics in Modern Languages and Literature not covered in detail by regular courses.
Credits: 1-6
Offered: Offered on occasion.

LANG 180 - World in Cinema: Special Topics
With a thematic approach, the course will introduce students to the films of a specific country(ies) and/or culture(s). The films will be analyzed as art objects and serve as a text through which students will learn about the history, beliefs, and socio-political issues affecting the culture(s). Films will be watched in the original version with subtitles in order to expose students to the language in which they were shot. The course can be repeated as its content changes.
Credits: 3
Offered: Every year.

LANG 188 - Spanish Civilization/Culture
A comprehensive introduction to aspects of Spanish civilization and culture: geography, history, social customs, political movements, literature and art. In English.
Credits: 3
Offered: Every other year.

LANG 200 - Special Topics on Lang & Lit
Special topics in Modern Languages and Literature not covered in detail by regular courses.
Credits: 1-6
Offered: Offered on occasion.

LANG 300 - Special Topics on Lang & Lit
Special topics in Modern Languages and Literature not covered in detail by regular courses.
Credits: 1-6
Offered: Offered on occasion.

LANG 315 - Transitions in Bulgaria
The goal of the course is to learn about Bulgarian history, culture, politics, economics, geography, and language with an emphasis on contemporary Bulgaria and the transition from Communism to democracy and capitalism. It is designed for students with no knowledge of Slavic languages. Comparison and contrasts with other Eastern/Central European countries will be made.
LANG 322 - French Civilization/Culture
Introduction to the political development of France and issues of community, family, gender and class in determining French national identity. Topics include Gothic cathedrals, Joan of Arc, the chateaux of the Loire, the Sun King and Versailles, Le Louvre, the age of reason, Napoleon and the establishment of the Republic.
Credits: 3
Offered: Offered on occasion.

LANG 323 - Germany Since 1918
Cultural aspects of the Weimar Republic, the Third Reich, and contemporary Germany. Guest lecturers, readings, and films in English.
Credits: 3
Offered: Every year.

LANG 327 - Magic Realism in Latin American Literature
A study of conflicting definitions by scholars of what is and is not Magic Realism. Readings will include works by authors considered by many critics (rejected by others) to be practitioners of Magic Realism. The opinions of these writers will also be incorporated into the study, through recorded and published interviews.
Credits: 3
Offered: Offered on occasion.

LANG 340 - Introduction to Liberal Arts in Puerto Rico
This course will provide introduction to the study of what it means to be Puerto Rican and to the understanding of Puerto Rican society. This Fall one-credit course will prepare students for their study abroad interdisciplinary experience in Puerto Rico during J-Term.
Credits: 1
Offered: Every Fall semester.

LANG 342 - Liberal Arts in Puerto Rico Meets OSCAR
This course is the culmination of the interdisciplinary cultural immersion in Puerto Rico, where student will produce a research paper and poster presentation at OSCAR, putting together what they learned from the lectures, related field trips, living experiences, research, and discussions.
Credits: 1
Prerequisite: LANG 340. Offered: Every Spring Semester.

LANG 371 - Canadian Writers
An introduction to some of Canada's most significant writers, both anglophone and francophone. Although this is primarily a literature course, considerable attention will be devoted to Canadian history and politics, and to the notion of the Canadian identity.
Credits: 3
Offered: Offered on occasion.

LANG 378 - Canada Today
A look at the history, politics, culture, and geography of Canada and an analysis of contemporary issues affecting Canada and its neighbors.
Credits: 3
Offered: Every year.

LANG 380 - World in Cinema: Special Topics
The course will introduce students to the films of a specific country and/or culture. The films will serve as a text through which students will learn about the country's history, culture, and the socio-political issues affecting that society and how they are depicted through film. Films will be seen in the original with subtitles in order to expose students to the language in which they were filmed. The course can be repeated as its content changes.
Credits: 3
Offered: Every year.

LANG 385 - German Film
The course will address contemporary civilization in Germany in that it will examine its artistic expression in drama and film. The works of major directors such as Fritz Lang, Leni Riefenstahl, Werner Herzog, and Wim Wenders will be examined. Short examples of Fassbinder, Schlondorff and von Trotta will be shown to contrast their work and style.
Credits: 3
Offered: Offered on occasion.

LANG 388 - Spanish Civilization/Culture
A comprehensive introduction to aspects of Spanish civilization and culture: geography, history, social customs, political movements, literature and art. In English.
Credits: 3
Offered: Offered on occasion.

LANG 400 - Special Topics in Languages and Literatures
Special topics in Modern Languages and Literature not covered in detail by regular courses.
COURSES

COURSES

Credits: .5-6
Offered: Offered on occasion.

LANG 405 - French Women Writers
An evaluation of the contributions of French women writers to the social, economic and political institutions which form the basis of Western philosophic tradition.
Credits: 3
Offered: Every year.

LANG 410 - Directed Study
Individual supervised study of a particular area or topic in any of the department's language or literature offerings. Periodic meetings with instructor; writing of a substantial paper.
Credits: 1-3
Offered: Offered on occasion.

LANG 415 - Bulgaria Study Tour
A two-three week study/travel tour of Bulgaria. First week in Sofia includes lectures and visits to various government business and social organizations. Following would be travel to key cities and historical sites around Bulgaria. Possible side trip to Istanbul.
Credits: 3
Prerequisite: LANG 315 or INTL 305. Offered: Offered on occasion.

LANG 419 - France and the French
Develops students’ understanding of France and the French. Students explore an important theme, movement, author, or period in the literature and/or culture of France. The course can be repeated as its content changes. Course taught in English.
Credits: 3
Offered: Offered on occasion.

LANG 420 - The French-speaking World
Introduces students to the Francophone world. Students explore an important theme, movement, author, or period in the literature and/or culture of one or more Francophone regions such as French Caribbean, West and North Africa, Canada, etc. The course can be repeated as its content changes. The course is taught in English.
Credits: 3
Offered: Offered on occasion.

LANG 500 - Special Topics in Foreign Language
Special topics in Modern Languages and Literature not covered in detail by regular courses.
Credits: 1-3
Offered: Offered on occasion.

LANG 510 - Directed Study
Individual supervised study of a particular area or topic in any of the department's language or literature offerings. Periodic meetings with instructor; writing of a substantial paper.
Credits: 1-3
Offered: Offered on occasion.

LART - Liberal Arts

LART 150 - Liberal Arts Freshman Seminar
As part of The Liberal Arts Freshman Year Experience, entering freshmen who are still exploring for a major are required to choose from an interesting variety of topical, 1 credit seminars. Taught by faculty and professional staff members, each seminar enrolls no more than 20 students and is graded on a Satisfactory/Unsatisfactory basis. In addition to the seminar, all Liberal Arts freshmen must attend one group meeting as part of the course requirement.
Credits: 1
Offered: Every year.

LART 151 - Liberal Arts Freshmen Explore for Major
Second-semester Liberal Arts freshmen who have not yet chosen a major are required to attend 15 of 17 class meetings offered during the first-half of the spring semester. This part of The Liberal Arts Freshman Year Experience provides students with a survey of the variety of major offerings. Presentations are made by faculty, chairpersons, students and deans from departments and divisions across campus. In addition to answering any questions students may have, the discussions explain the requirements for each discipline as well as the career paths students have taken with these majors, whether or not graduate school is indicated, what remuneration can be expected and more. Grading is done on a Satisfactory/Unsatisfactory basis determined by attendance.
Credits: 1
Offered: Every year.

LEAD - Leadership Studies

LEAD 101 - Intro to Leadership Seminar
An introductory course in the study of leadership that will introduce the student to the tasks, strategies and skills of effective leadership. This course covers introductory theories of leadership, personal assessment, and offers opportunities to develop individual self-discovery and
LEAD 201 - Advanced Leadership Development
A course in the study of leadership that introduces the student to tasks, strategies, and skills of effective leadership. Course activities will move the student from theory to the practical processes of leadership through the use of experiential learning, oral expression, and effective teamwork on several projects.

Credits: 1
Offered: Every Spring Semester.

LEAD 302 - Exploring Leadership and Ethics
Through this course students will gain a broad understanding of historical and current theories of leadership and management and the shift from the dominant paradigm to the emergent paradigm. Students will also explore how normative ethics affects their leadership philosophy and decision making. As a way to recognize their leadership strengths, students will participate in several instruments that will assist them in defining their leadership strength and style.

Credits: 3
Offered: Every semester.

LEAD 490 - Internship in Leadership
Open only to Leadership Studies minors. Students proposing internships must have an approved Leadership Studies proposal which includes the internship. Additionally, they must have a faculty sponsor and a detailed plan for the internship describing: (1) the duties approved by the interning agency; (2) the student’s method of reporting or reflecting on the internship experience; (3) the method of internship evaluation; and (4) the amount of credit earned.

Credits: 1-6
Prerequisite: LEAD 201 or SPST 201. Offered: Every semester.

MAED - Mathematics Education

MAED 105 - Introduction to Contemporary Mathematics Education
Introduction to middle and secondary mathematics education, its principles and practices. Organization of schools, planning, teaching styles, classroom management, and instructional materials in mathematics education are among the topics considered. Direct experiences with middle and secondary school students are an integral part of the course.

Credits: 3
Corequisite: MAED 106. Offered: Every semester.

MAED 106 - Contemporary Mathematics Education - Field Experience
Provides participants an opportunity to observe classroom operations, observe and describe the role of the teacher, conduct focused observations and interviews, work with individual and small groups of candidates on a teaching project.

Credits: 0
Corequisite: MAED 105. Offered: Every semester.

MAED 207 - Mathematics Tutoring in the Community
The course is designed for students working as Math and Science Partnership mathematics tutors in the local community. Students eligible for the work-study program or working as volunteers, tutor in area schools or after-school programs. The course examines issues such as getting children interested in mathematics, how to explain various topics, working with groups vs. individuals, and cultural differences. Problems encountered in the tutoring experience will be discussed. Students must apply through the Mathematical Sciences department.

Credits: 1
Offered: Every semester.

MAED 208 - Special Topics
Selected readings, discussions, and problem solutions on a topic in mathematics education at an introductory level. Permission of department required.

Credits: 1-3
Offered: Offered on occasion.

MAED 240 - Statistics for School Teachers
This course will include data collection, random sampling, numerical and graphical summaries, statistical variability, the logic behind tests of significance and confidence intervals, simulation, regression and chance. Activities for learning statistics and resources available for teaching and learning statistics at a middle school level will be used.

Credits: 3
Offered: Every semester.

MAED 276 - Literacy and Technology for Science and Mathematics
The course provides an overview of the processes involved in literacy acquisition and instructional technologies
available to enhance teaching in science and mathematics. The relationship of reading and writing, and aspects of writing development and writing process appropriate to each stage of reading development will be presented. Topics: conceptual and methodological issues related to instruction and acquisition of reading, the role and use of technology in literacy instruction, assessment of candidate's reading and writing, diversity in reading acquisition, use of computers, graphing calculators and other multimedia applications.

Credits: 3
Offered: Every Spring Semester.

MAED 301 - Mathematics for School Teachers I

Meaning, development, and communication of number ideas and logical structure of base 10 number systems (as well as other bases); the concepts and procedures related to the basic algorithms of arithmetic; problem solving and mathematical modeling within the whole number system and positive rational number system. Course open only to students seeking certification to teach at the early childhood, childhood, or middle childhood level. Sophomore standing required.

Credits: 3
Offered: Every semester.

MAED 302 - Mathematics for School Teachers II

Meaning, development and communication in the real number system; problem solving and mathematical modeling within this system; including proportional reasoning; algebra, statistics, probability, properties of geometric shapes and measurement in 2 and 3-dimensions. Course open only to students who are seeking certification to teach at the early childhood, childhood or middle childhood level.

Credits: 3
Prerequisite: MAED 301. Offered: Every semester.

MAED 303 - Advanced Mathematics for School Teachers

Further development of geometry concepts; including triangle congruence and similarity; coordinate geometry and transformations; advanced problem solving using algebraic models, geometric models and other modeling techniques; emphasis on the framework provided by the National Council of Teachers of Mathematics for elementary/middle school mathematics; investigation of concepts teachers must know in order to build and refine mathematical ideas and connections in K-8.

Credits: 3
Prerequisite: MATH 202 or MAED 302. Offered: Every year.

MAED 305 - Diversity in the Teaching of Science and Mathematics

The course provides a theoretical framework for exploring and developing a culturally responsive approach to the teaching of mathematics and science. In exploring different instructional formats, the course allows candidates to develop approaches that prepare them for an ever-increasing population of students that reflect diverse backgrounds and abilities. The field experience is a corequisite that allows the candidates the opportunity to apply their knowledge of the issues presented in the course work to a diverse population.

Credits: 3
Corequisite: MAED 313. Offered: Every Fall semester.

MAED 310 - Reading and Writing Mathematics

The course will use the vehicle of problem solving to help students develop their abilities in reading and writing mathematics. It will also focus on how reading and writing exercises can be used to enhance the teaching and learning of mathematics, and how reading and writing mathematics can be used to enhance the teaching of literacy. The course will include discussions of reading mathematics, writing mathematics, oral presentation of mathematics, and problem solving techniques. "Communication" is one of the standards from Principles and Standards for School Mathematics of the National Council of Teachers of Mathematics. Students will read and discuss material from the NCTM and other sources related to the standard.

Credits: 3
Offered: Every year.

MAED 313 - Diversity in the Teaching of Science and Mathematics Field Experience

The course is the field component to MAED 305. Candidates will use different instructional formats to develop effective approaches for teaching mathematics and science to students with different backgrounds and abilities in diverse educational learning environments.

Credits: 0
Corequisite: MAED 305. Offered: Every Fall semester.

MAED 325 - Technology Integration in Mathematics Education

Introduction to software packages appropriate for use by mathematics educators. Topics selected from, but not limited to: applets, geometry software, calculators, web page design, programming, scientific word processors, spreadsheet applications, computer algebra systems, electronic whiteboards and other specialized software.

Credits: 3
Prerequisite: MAED 302. Offered: Every year.
MAED 400 - Independent Study
Independent study of a selected list of readings approved by a faculty advisor. Permission of department required.
Credits: 1-3
Offered: Offered on occasion.

MAED 410 - Seminar: Mathematics for High School Teachers
The course is intended for future teachers of high school mathematics to help them develop a deeper knowledge of some key topics in the high school curriculum. Topics will be chosen from the following: Complex numbers, functions including logarithmic, exponential and trigonometric functions, curve-fitting, transformations, equations, inequalities and algebraic expressions. Students must have senior standing in the Mathematics Adolescence Education major.
Credits: 3
Offered: Every year.

MAED 416 - Math Student Teaching Seminar
The course complements the student teaching practicum in either Adolescence Mathematics Education or Middle Childhood Mathematics Education. Candidates receive detailed instruction in the completion of the applied teaching and learning projects associated with their student teaching placements.
Credits: 3
Offered: Every semester.

MAED 417 - Middle School (Grades 5-9) Methods in Mathematics
Principles, materials, and methods for teaching middle school (grades 5-9) mathematics. The course serves as the primary methods course for students pursuing initial certification in Middle Childhood Education - Mathematics Specialist. Departmental approval required.
Credits: 3
Offered: Every year.

MAED 419 - Secondary School (Grades 7-12) Methods in Mathematics
Principles, materials, and methods for teaching secondary school (grades 7-12) mathematics. The course serves as the primary methods course for students pursuing initial certification in Adolescence Education - Mathematics. Note: must be successfully completed before student teaching. Departmental approval required.
Credits: 3
Offered: Every year.

MAED 428 - Student Teaching for Mathematics/Middle Childhood Education: Grades 5-6 Placement
A field assignment to teach middle school mathematics. Assignments provided in grades 5 through 6 during this placement. Arrangements made by the Office of Field Experiences.
Credits: 6
Corequisite: MAED 416 or MAED 429. Offered: Every semester.

MAED 429 - Student Teaching for Mathematics/Middle Childhood Education: Grades 7-9 Placement
A field assignment to teach middle school mathematics. Assignments provided in grades 7 through 9 during this placement. Arrangements made by the Office of Field Experiences.
Credits: 6
Corequisite: MAED 416 or MAED 429. Offered: Every semester.

MAED 430 - Student Teaching for Mathematics/Adolescence Education: Grades 7-9 Placement
A field assignment to teach mathematics at the adolescence level. Assignments provided in grades 7 through 9 during this placement. Arrangements made by the Office of Field Experiences.
Credits: 6
Corequisite: MAED 416 or MAED 431. Offered: Every semester.

MAED 431 - Student Teaching for Mathematics/Adolescence Education: Grades 10-12 Placement
A field assignment to teach mathematics at the secondary level. Assignments provided in grades 10 through 12 during this placement. Arrangements made by the Office of Field Experiences.
Credits: 6
Corequisite: MAED 416 or MAED 431. Offered: Every semester.

MAED 500 - Independent Study
Independent study of a set of related topics agreed to by the student and the instructor.
Credits: 1-6
Offered: Offered on occasion.
MAED 509 - Technology in Mathematics Education
A survey of software or technology used in teaching mathematics and of current issues in the use of technology in the teaching and learning of mathematics.
Credits: 3
Offered: Offered on occasion.

MAED 512 - Design and Evaluation of Mathematics Curricula
Study of the design and evaluation of various models of mathematics curricula including the latest National Council Teachers of Mathematics (NCTM) materials.
Credits: 3
Offered: Offered on occasion.

MAED 514 - Instructional Methods in Mathematics
A critical study of the literature on current methods of teaching mathematics.
Credits: 3
Offered: Offered on occasion.

MAED 518 - History of Mathematics Education
Overview of the development of mathematics education as a discipline, the major influence from other fields and society, trends in recent decades, and the impact on school mathematics.
Credits: 3
Offered: Offered on occasion.

MAED 520 - Advanced Calculus
Graduate level mathematics education course emphasizing connections between mathematics and other STEM disciplines. Mathematical topics include: 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. Successful undergraduate completion of Linear Algebra and Calculus III recommended.
Credits: 3
Offered: Offered on occasion.

MAED 522 - Differential Equations
Introductory course with emphasis on applications of calculus. Topics include: first order equations, higher order linear equations, undetermined coefficients, variation of parameters, linear systems, bifurcation analysis, series solutions, Laplace transforms, numeric and qualitative techniques, mathematical modeling and applications, and computational technology. Additional topics selected from linear and nonlinear systems as time permits. Prerequisites: MATH 122, 123, 223, 231 or permission from the instructor.
Credits: 3
Offered: Offered on occasion.

MAED 523 - Real Analysis
Topology of the real line, measure and integration on the real line, function spaces and their topologies.
Credits: 3
Offered: Offered on occasion.

MAED 524 - Complex Analysis
Geometric interpretation of the complex plane, analytic functions and power series representations, introduction to Riemann Surfaces, the Cauchy Integral Theorem and Integral Formula, calculation of integrals by residues, application to potential theory.
Credits: 3
Offered: Offered on occasion.

MAED 531 - Rings and Fields
An introduction to rings and fields: rings; integral domains; fields; characteristic of a ring; subrings; ideals; factor rings; ring homomorphisms; polynomial rings; introduction to Galois theory as time permits.
Credits: 3
Offered: Offered on occasion.

MAED 532 - Abstract Algebra with Applications
Study of selected applications of abstract algebra. Topics selected from: identification numbers, symmetry, applications to combinatorics, coding theory, cryptography.
Credits: 3
Offered: Offered on occasion.

MAED 533 - Theory of Equations
This course focuses on a problem with a rich mathematical history, that of solving polynomial equations. Topics selected from: review of rings and fields; construction of the real numbers from the rationals; algebraic and complex numbers; fundamental theorem of algebra; finite fields and integral domains; polynomial rings, including the division algorithm and Euclidean algorithm for polynomials; counting and locating real roots; cubic and quartic equations; introduction to Galois theory.
Credits: 3
Offered: Offered on occasion.
MAED 535 - Number Theory
Topics selected from: congruence relations; arithmetic functions; primitive roots; quadratic reciprocity; sums of squares; continued fractions; Farey sequences; factoring and primality testing; analytic and additive number theory. The course relates directly to the following N.Y.S. Learning Standards for Mathematics, Science, and Technology: mathematical reasoning, numbers and numeration, and patterns/functions.
Credits: 3
Offered: Offered on occasion.

MAED 537 - Combinatorics
The addition, multiplication and pigeonhole principles. Permutations and combinations, partitions and distributions; the binomial and multinomial theorems. Generating functions; recurrence relations; principle of inclusion-exclusion; combinatorial algorithms or designs as time permits. The course relates directly to the following N.Y.S. Learning Standards for Mathematics, Science, and Technology: mathematical reasoning, modeling/multiple representation, and pattern/functions.
Credits: 3
Offered: Offered on occasion.

MAED 540 - Graph Theory
Graph models; graph structure and representation; trees; connectivity; graph traversals; graph colorings; other topics as time permits. The course relates directly to the N.Y.S. Learning Standards for Mathematics, Science, and Technology: mathematical reasoning, modeling/multiple representation, and pattern/functions.
Credits: 3
Offered: Offered on occasion.

MAED 541 - Euclidean Geometry
Neutral geometry; Euclidean geometry; comparison of various models of Euclidean geometry, such as that of Hilbert and the SMSG; comparison of Euclidean geometry to various finite geometries and non-Euclidean geometries; geometry of circles and triangles; other topics such as analytic and transformational geometry as time permits.
Credits: 3
Offered: Offered on occasion.

MAED 542 - Non-Euclidean Geometry
Neutral geometry; hyperbolic geometry; elliptic geometry; various models of hyperbolic and elliptic geometry; comparison of results to those of Euclidean geometry.
Credits: 3
Prerequisite: MATH 341. Offered: Offered on occasion.

MAED 543 - Algebraic Geometry
A study of varieties and morphisms between them; foundational material from commutative ring theory; the Zariski topology; dimension and degree of varieties; select problems in enumerative geometry.
Credits: 3
Prerequisite: MATH 331. Offered: Offered on occasion.

MAED 545 - Geometric Topology
Detailed study of topological spaces and their invariants. The emphasis will be on the geometric aspects of topology. Topics may include Sperner's lemma and Brouwer Fixed Point Theorem, classification of compact surfaces, application to systems of differential equations.
Credits: 3
Offered: Offered on occasion.

MAED 550 - Statistics for Mathematics Educators
Given the emphasis on statistics in the mathematics 5 - 12 grades curriculum, and the increased need for teachers competent to teach AP Statistics, mathematics educators need to understand statistical concepts and methods to a greater depth than what is acquired in an undergraduate level statistics course or sequence. In this course, students will learn to understand and explain why certain statistical techniques are used in certain situations and why they work, why certain methods don't work well sometimes, and also common conceptual errors that users and consumers of statistics often make. Students in the course will investigate some current resources that exist to help their students understand statistics, as well as teaching methods and activities that increase student understanding. Prerequisite: a university-level statistics course.
Credits: 3
Offered: Offered on occasion.

MAED 560 - Conics
This course concerns the conic sections: the parabola, ellipse, and hyperbola. It covers their basic definitions and equations, from both a synthetic and analytic perspective, including their equations in polar coordinates. It then moves on to consider the conic sections in light of Bezoutâ€™s theorem, which concerns the number of points of intersection of two algebraic curves.
COURSES

MAED 575 - Linear Optimization
Formulation and solution of linear programming problems using graphical and algebraic methods and computer software, sensitivity analysis, and the dual problem; additional topics chosen from network analysis, game theory, and integer programming.
Credits: 3
Prerequisite: MATH 231. Offered: Offered on occasion.

MAED 581 - History of Mathematics
A study of selected topics in the history of mathematics and their applications to teaching. Permission of instructor required.
Credits: 3
Offered: Offered on occasion.

MAED 591 - Math Academy: K-12 Materials
The week-long academy is dedicated to the development of instructional and curricular materials in K-12 mathematics. Special topics include proof and communication, the use of current technology and manipulatives, and preparation strategies for N.Y.S. Math Assessments.
Credits: 3
Offered: Every year.

MAED 599 - Special Topics
Selected readings, discussions, reports and problem solutions on a topic of interest in mathematics, mathematics education or statistics.
Credits: 1-3
Offered: Offered on occasion.

MAED 602 - Mathematics Education Seminar
Selected reading, discussions, and reports on current issues in mathematics education.
Credits: 3
Offered: Every year.

MAED 690 - Graduate Project
Students will be required to research a topic pertaining to mathematics education and apply it to their own classroom experiences if possible. The project will require a written proposal, a final report and an oral defense.
Credits: 3
Prerequisite: MAED 602. Offered: Every year.

MATH - Mathematics

MATH 100 - Mathematics First-Year Seminar
The course seeks to help students utilize campus resources effectively, learn useful academic skills, especially those relevant to mathematics, develop a support network, become more self-aware, promote personal health and wellness, and better connect with the campus. The course will introduce students to the culture of the Mathematical Sciences department and the mathematics community in general. Students in the course should be concurrently enrolled in a precalculus or calculus course.
Credits: 1
Offered: Every year.

MATH 105 - Precalculus
The course is designed to prepare students to take Survey of Calculus I (MATH 120) or University Calculus I (MATH 122). It emphasizes multi-step problem solving. Topics include algebraic, exponential, logarithmic, and trigonometric functions and their graphs, transformations and combinations of functions, a review of algebra, geometry, and trigonometry, solving inequalities and systems of equations, and computational technology. (The course is not open to students who have completed MATH 106 with a grade of C- or better, or those who have completed a calculus course.) Background assumed: N.Y.S. Integrated Algebra and Trigonometry, or equivalent.
Credits: 4
Offered: Every year.

MATH 106 - University Precalculus
The course is designed to prepare students to take University Calculus (MATH 122) and emphasizes multi-step problem solving. Topics include a review of algebra, solving inequalities, algebraic and transcendental functions, trigonometry, analytic geometry, applications and computational technology. (Not open to students who have completed a calculus course with a grade of C- or better.) Background assumed: N.Y.S. Algebra II and Trigonometry (or Math B), or equivalent.
Credits: 3
Offered: Every semester.

MATH 108 - Prize-Winning Mathematics
The course surveys some mathematical tools that have proved useful to the social sciences, especially in business, economics, and political science. Work on one topic in particular, game theory, has led to several Nobel prizes, and may have helped the New England Patriots win three Super Bowls. Other topics will be selected from linear models, matrices, linear programming, and nonlinear and
probabilistic models. Background assumed: N.Y.S. Algebra II and Trigonometry (or Math B), or equivalent.

Credits: 3
Offered: Every year.

**MATH 110 - Mathematics in Action**

Emphasizes the real-world significance of mathematics and the applications of several areas of mathematics. Some topics: design of street networks, planning and scheduling, weighted voting systems, fair division and apportionment, measuring populations and the universe, and statistics. Background assumed: N.Y.S. Algebra II and Trigonometry (or Math B), or equivalent.

Credits: 3
Offered: Every semester.

**MATH 112 - Preparation for Calculus**

Designed for students who plan to take first-semester calculus in the following semester, and want to hone their precalculus skills. The course utilizes an online system called ALEKS (Assessment and LEarning in Knowledge Spaces), an artificially-intelligent assessment and learning system. ALEKS uses adaptive questioning to determine exactly what each student knows, and then tailors a study plan to each individual student. Students work at their own pace to attain mastery of the prerequisite knowledge necessary for success in calculus. Not open to students with credit for calculus.

Credits: 1
Offered: Summer, JTerm.

**MATH 115 - Survey of Matrix Algebra**

The course surveys topics from linear algebra, including matrix algebra, systems of linear equations, linear inequalities and linear programming, determinants, linear transformations, and eigenvalues and eigenspaces. Other topics may be selected from: regression, Markov chains, and game theory. Background assumed: N.Y.S. Algebra II.

Credits: 3
Offered: Every year.

**MATH 117 - Why Mathematics?**

Introduces the liberal arts student to the nature of mathematics and what mathematicians do. An emphasis on presenting ideas and mathematical concepts rather than on attaining computational skills. Ideas from algebra, geometry, number theory, set theory and topology are presented with emphasis on their history and relevance to other disciplines. Background assumed: N.Y.S. Algebra II and Trigonometry (or Math B), or equivalent.

Credits: 3

**MATH 120 - Survey of Calculus I**

An introduction to differential and integral calculus for functions of a single variable with applications to the management, social, and life sciences. Not open to students majoring in mathematics, physics, or chemistry. Background assumed: Preparation equivalent to MATH 105 or MATH 106. Credit may not be earned for both MATH 120 and MATH 122.

Credits: 3
Offered: Every semester.

**MATH 121 - Survey of Calculus II**

A continuation of MATH 120. Review of the definite integral and the fundamental theorem of calculus. Techniques of integration, including integration by parts and partial fractions. Applications of the definite integral, including area, volume, work with probability density functions, and simple differential equations. Introduction to multivariate calculus and to curves described parametrically. Note: Students majoring in mathematics, physics, or chemistry should take MATH 123 University Calculus II instead of MATH 121.

Credits: 3
Prerequisite: MATH 120. Offered: Every semester.

**MATH 122 - University Calculus I**

Functions, inverse functions, limits, continuity, derivatives, indeterminate forms, antiderivatives; applications to rectilinear motion, graphing, maxima-minima, related rates; computational technology. Background assumed: Preparation equivalent to MATH 105 or MATH 106. Credit will not be given for both MATH 120 and MATH 122.

Credits: 4
Offered: Every semester.

**MATH 123 - University Calculus II**

Definite integrals, the fundamental theorem of calculus, techniques of integration, applications of the definite integral in the physical sciences and geometry, improper integrals, differential equations, sequences and series. Credit will not be given for both MATH 121 and MATH 123.

Credits: 4
Prerequisite: MATH 122. Offered: Every semester.

**MATH 124 - Survey of Calculus III**

A continuation of MATH 121. Differentiation and integration of transcendental functions, with applications to the computation of tangent lines, Taylor polynomials, area, and volume. Additional techniques of integration
(trigonometric integrals and trigonometric substitution). Vector calculus, sequences and series, and multivariable calculus of transcendental functions.

Credits: 3
Prerequisite: MATH 121. Offered: Every Fall semester.

MATH 125 - Software for Mathematics
Introduction to software packages used by mathematicians. Topics selected from: computer algebra systems, spreadsheet software, and software for publishing mathematics (both in print and on the Web). Some attention is given to writing programs and macros within these systems.

Credits: 3
Prerequisite: MATH 122. Offered: Every year.

MATH 190 - Honors Problem Solving
Designed to engage promising mathematics students in solving problems related to calculus and its applications. Students are partitioned into small groups and given interesting and nontrivial problems to work on together. Students present solutions in class and are required to record their work in notebooks.

Credits: 2
Corequisite: MATH 123. Offered: Every year.

MATH 201 - Concepts of Foundational Mathematics: A Problem Solving Approach
The course explores the foundational concepts of modern mathematics. A problem solving approach is incorporated to discover fundamental structure and meaning associated with central content themes of Number Systems, Functions/Patters, Statistics/Probability, Geometry, and Measurement. Prerequisite: Sophomore standing

Credits: 3
Offered: Every semester.

MATH 202 - Concepts of Foundational Mathematics II
Meaning, development, problem solving and communication in the real number system, statistics, probability, geometry and algebra. Course open only to students seeking certification to teach at the childhood or middle childhood level.

Credits: 3
Prerequisite: MATH 201. Offered: Every semester.

MATH 210 - Mathematical Structures and Proof
Careful study of the concepts and techniques often used in mathematics courses at the advanced undergraduate level. Topics include logic, set theory, proof techniques, elementary number theory, mathematical induction, functions, and relations. Additional topics from abstract algebra, combinatorics, or countable vs. uncountable sets as time permits.

Credits: 4
Prerequisite: MATH 121 or MATH 123. Offered: Every semester.

MATH 223 - University Calculus III
Parametric equations, polar, cylindrical, and spherical coordinates, algebra of vectors, equations of lines, planes, quadratic surfaces, vector functions and space curves, calculus of functions of several variables including multiple integration; applications to the physical sciences and geometry; computational technology.

Credits: 4
Prerequisite: MATH 123. Offered: Every semester.

MATH 224 - Differential Equations
Introductory course with emphasis on methods of solution of differential equations and applications. Topics include: first order differential equations, higher order linear differential equations, method of undetermined coefficients, method of variation of parameters, systems of first order linear differential equations, qualitative and numerical analyses of solutions, and power series solutions and Laplace transforms as time permits.

Credits: 3
Prerequisite: MATH 123. Offered: Every year.

MATH 231 - Linear Algebra
Careful study of matrices, systems of linear equations, determinants, linear transformations, with emphasis on similarities and isometries of the plane, vector spaces, eigenvalues and eigenvectors; other topics as time permits. Completion of, or concurrent enrollment in MATH 210 is recommended.

Credits: 4
Prerequisite: MATH 121 or MATH 123. Offered: Every semester.

MATH 290 - Sophomore Honors Mathematics
Mathematics majors who excel in calculus and/or discrete mathematics may be invited to join the Honors Program in Mathematics. MATH 290 is the first course in the Honors Program. It looks at advanced topics from calculus, discrete mathematics, and linear algebra, with emphasis on reading and writing mathematical proofs.

Credits: 2
Prerequisite: MATH 210. Corequisite: MATH 231. Offered: Every year.
MATH 307 - Math and Music
Explores how mathematical ideas have been used to understand and create music, and how musical ideas have influenced math and science. Topics selected from the history of tuning and alternative tuning, the Music of the Spheres doctrine, historical theories of consonance, contributions to music theory by mathematicians, mathematical analysis of sound, philosophical and cognitive connections between math and music, and math in music composition and instrument design. An ability to read music is recommended. This course is not intended for Mathematics majors.
Credits: 3
Offered: Offered on occasion.

MATH 309 - Mathematical Sciences Internship
Participation in an approved professional experience applying mathematics or statistics in a real world setting. Students must submit a Learning Contract describing the work experience, its relationship to the mathematical sciences, and how it will be monitored and evaluated. Permission of the department required.
Credits: 1-6
Offered: Offered on occasion.

MATH 315 - Theory of Equations
Credits: 3
Prerequisite: MATH 210. Offered: Offered on occasion.

MATH 322 - Partial Differential Equations
Introductory course in partial differential equations with emphasis on boundary value problems encountered in mathematical physics. Fourier series; separation of variables; D’Alembert’s solution; the heat, wave and potential equations. Additional topics such as Sturm-Liouville problems or Laplace transforms as time permits.
Credits: 3
Prerequisite: MATH 224. Offered: Offered on occasion.

MATH 323 - Introductory Real Analysis
Careful presentation of the ideas of calculus that are developed intuitively in the usual freshman-sophomore calculus courses. Techniques of proof in analysis; countable sets and cardinality; the real line as a complete ordered field; some topology of the real line; sequences and their limits; continuous functions and their properties; other topics as time permits.
Credits: 3
Prerequisite: MATH 210. Offered: Every Fall semester.

MATH 325 - Numerical Analysis
Credits: 3
Prerequisite: MATH 123. Offered: Offered on occasion.

MATH 329 - Mathematical Modeling
An introduction to the development of mathematical models to solve various applied and industrial problems. Topics will include optimization, Lagrange multipliers, sensitivity analysis in optimization models, analysis and simulation of discrete and continuous dynamic models.
Credits: 3
Prerequisite: MATH 223 and MATH 231. Offered: Every year.

MATH 331 - Abstract Algebra I
Study of algebraic structures, such as groups and rings. The fundamental theorem of finite abelian groups, basic homomorphism theorems for groups, permutation groups and polynomial rings are presented.
Credits: 3
Prerequisite: MATH 210 and MATH 231. Offered: Every year.

MATH 332 - Abstract Algebra II
Continuation of the study of algebraic structures such as groups, rings, integral domains and fields, with applications such as: geometric symmetry and crystallography, switching networks, and error-correcting codes.
Credits: 3
Prerequisite: MATH 331. Offered: Every other year.

MATH 335 - Number Theory
Study of integers and their properties; divisibility; primes; congruencies; multiplicative functions; quadratic residues; quadratic reciprocity; Diophantine equations.
Credits: 3
Prerequisite: MATH 210. Offered: Every other year.

MATH 337 - Combinatorics
The addition, multiplication and pigeon-hole principles. Permutations and combinations, partitions and
distributions; the binomial and multinomial theorems. Generating functions; recurrence relations; principle of inclusion-exclusion; combinatorial algorithms or designs as time permits.

Credits: 3
Prerequisite: MATH 210 and MATH 231. Offered: Every other year.

MATH 341 - Geometry
Study of absolute, Euclidean, and hyperbolic geometry from synthetic and analytic viewpoints. Topics include axioms for geometries, transformations, triangles and other basic shapes, and constructions. Some consideration given to finite, spherical, and spatial geometry. Use of geometry software.

Credits: 3
Prerequisite: MATH 210. Offered: Every year.

MATH 359 - Probability Models in Operations Research
Topics chosen from stochastic processes; birth-death processes; queuing theory; inventory theory; reliability; decision analysis; simulation.

Credits: 3
Prerequisite: STAT 350 and MATH 231. Offered: Offered on occasion.

MATH 365 - Financial Mathematics
Study of basic financial mathematical concepts used in modeling and hedging. Topics include: financial derivatives, call and put options, futures, binomial trees, replicating portfolios and arbitrage, stocks and options pricing, Black-Scholes model, hedging. Additional topics such as swaps, currency markets, and international political risk analysis as time permits.

Credits: 3
Prerequisite: MATH 231 and STAT 350. Offered: Offered on occasion.

MATH 369 - Interest Theory
A rigorous treatment of the mathematical theory associated with financial transactions, including simple and compound interest, annuities, bonds, yield rates, amortization schedules, and sinking funds. Additional topics such as capital asset pricing models and portfolio risk analysis as time permits.

Credits: 3
Prerequisite: MATH 123. Offered: Every other year.

MATH 375 - Deterministic Models in Operations Research
Topics chosen from linear programming and applications; network analysis; game theory; dynamic, integer and nonlinear programming.

Credits: 3
Prerequisite: MATH 231. Offered: Offered on occasion.

MATH 381 - History of Mathematics
Chronological study of the development of mathematics. Emphasis on the solution of selected mathematical problems associated with historical periods.

Credits: 3
Prerequisite: MATH 210. Offered: Every year.

MATH 390 - Honors Special Topics
The course, the second in the Honors Program in Mathematics, will focus on a topic reflecting the interest of the instructor. Examples include combinatorial topology, nonlinear dynamic systems, graph theory, complex analysis, and the theory of partitions. This course is by invitation only.

Credits: 2
Prerequisite: MATH 290. Offered: Every year.

MATH 400 - Independent Study
Independent study of a selected list of readings approved by a faculty advisor. Permission of department required.

Credits: 1-3
Offered: Every semester.

MATH 405 - Senior Seminar
Studies from selected areas of mathematics. Written reports and formal presentations will be required. Senior standing or permission of instructor required.

Credits: 1
Offered: Every semester.

MATH 406 - Applied Math Senior Seminar
Students are partitioned into small groups and given problems from the Mathematical Contest in Modeling, or similar material, to work on together. Written reports and formal presentations will be required. Departmental approval required.

Credits: 1
Offered: Every year.

MATH 408 - Special Topics Seminar
Selected readings, discussions, and reports on topics in mathematics. Permission of department required.
Credits: 1-3
Offered: Offered on occasion.

MATH 420 - Advanced Calculus
Vector calculus; Jacobian matrices and their determinants; differentiation and integration of differential forms and applications to physics; generalizations of the fundamental theorem of calculus, including Green’s theorem, the divergence theorem, Gauss’s theorem, and Stokes’ theorem; potential theory.
Credits: 3
Prerequisite: MATH 231 and MATH 223. Offered: Every other year.

MATH 423 - Topics in Analysis
Topics vary, depending on the instructor, but may include measure and integration, basic functional analysis, complex analysis, residue theory, and special functions.
Credits: 3
Prerequisite: MATH 323. Offered: Offered on occasion.

MATH 440 - Graph Theory
Introduction to graph theory. Topics chosen from: connectivity, trees, eulerian and hamiltonian graphs, matchings, factorizations, and colorings. Applications chosen from: the shortest path problem, communication networks, the traveling salesman problem, the optimal assignment problem, and scheduling algorithms.
Credits: 3
Prerequisite: MATH 210 and MATH 231. Offered: Offered on occasion.

MATH 490 - Honors Thesis
The capstone course in the Honors Program in Mathematics. Each student will conduct research under the mentorship of a faculty member, culminating in a written thesis and an oral presentation. This course is by invitation only.
Credits: 3
Prerequisite: MATH 390. Offered: Every year.

MEDT - Medical Technology
MEDT 490 - Clinical Internship
A full-year program of study conducted at an NAACLS-approved hospital medical technology program, typically one of the three programs with which SUNY Fredonia is affiliated. Students attend lectures and perform lab tests under the instruction and supervision of certified lab scientists and physicians. Upon successful completion of the internship, students receive certification as a medical technologist, are eligible to take the board exam offered by the American Society of Clinical Pathologists. Passing the exam extends Board certification and N.Y.S. licensure, enabling the graduates to work as medical technologists in a variety of laboratory settings. Permission of department is required.
Credits: 15
Offered: Every semester.

MUED - Music Education
MUED 128 - Instruments for Vocal/General Concentration
Group applied instruction on brass, woodwind, string, and percussion instruments to develop a playing competence sufficient to teach beginning students through NYSSMA Level II on at least one instrument in each area. The. Candidates who already possess playing competence may test out of the requirement.
Credits: 1
Offered: Every semester.

MUED 150 - Introduction to Public School Music
The preliminary course for the Foundations of Music Education sequence combines an introduction to and exploration of the purposes and premises of music education. Class sessions seek to broaden students' perspectives of the profession and of the potential for a rewarding career in music education.
Credits: 0
Offered: Every year.

MUED 161 - Beginning Trumpet
Group applied instruction on the trumpet designed to develop a playing competence sufficient to teach beginning
students through NYSSMA Level II. Required course for Music Education majors with an instrumental concentration. Students who already possess playing competence may examine out of the requirement and substitute another brass or woodwind instrument in its place.

Credits: 1
Offered: Every semester.

**MUED 162 - Beginning Trombone**
Group applied instruction on the trombone designed to develop a playing competence sufficient to teach beginning students through NYSSMA Level II. Required course for Music Education majors with an instrumental concentration. Students who already possess playing competence may examine out of the requirement and substitute another brass or woodwind instrument in its place.

Credits: 1
Offered: Every semester.

**MUED 163 - Beginning French Horn**
Group applied instruction on the French horn designed to develop a playing competence sufficient to teach beginning students through NYSSMA Level II. Required course for Music Education majors with an instrumental concentration. Students who already possess playing competence may examine out of the requirement and substitute another brass or woodwind instrument in its place.

Credits: 1
Offered: Every semester.

**MUED 164 - Beginning Tuba/Euphonium**
Group applied instruction on the tuba/euphonium designed to develop a playing competence sufficient to teach beginning students through NYSSMA Level II. Required course for Music Education majors with an instrumental concentration. Students who already possess playing competence may examine out of the requirement and substitute another brass or woodwind instrument in its place.

Credits: 1
Offered: Every semester.

**MUED 171 - Beginning Clarinet**
Group applied instruction on the clarinet designed to develop a playing competence sufficient to teach beginning students through NYSSMA Level II. Required course for Music Education majors with an instrumental concentration. Students who already possess playing competence may examine out of the requirement and substitute another brass or woodwind instrument in its place.

Credits: 1
Offered: Every semester.

**MUED 172 - Beginning Flute**
Group applied instruction on the flute designed to develop a playing competence sufficient to teach beginning students through NYSSMA Level II. Required course for Music Education majors with an instrumental concentration. Students who already possess playing competence may examine out of the requirement and substitute another brass or woodwind instrument in its place.

Credits: 1
Offered: Every semester.

**MUED 173 - Beginning Oboe**
Group applied instruction on the oboe designed to develop a playing competence sufficient to teach beginning students through NYSSMA Level II. Required course for Music Education majors with an instrumental concentration. Students who already possess playing competence may examine out of the requirement and substitute another brass or woodwind instrument in its place.

Credits: 1
Offered: Every semester.

**MUED 174 - Beginning Bassoon**
Group applied instruction on the bassoon designed to develop a playing competence sufficient to teach beginning students through NYSSMA Level II. Required course for Music Education majors with an instrumental concentration. Students who already possess playing competence may examine out of the requirement and substitute another brass or woodwind instrument in its place.

Credits: 1
Offered: Every semester.

**MUED 175 - Beginning Saxophone**
Group applied instruction on the saxophone designed to develop a playing competence sufficient to teach beginning students through NYSSMA Level II. Required course for Music Education majors with an instrumental concentration. Students who already possess playing competence may examine out of the requirement and substitute another brass or woodwind instrument in its place.

Credits: 1
Offered: Every semester.
MUED 185 - Beginning Violin/Viola
Group applied instruction on the violin/viola designed to develop a playing competence sufficient to teach beginning students through NYSSMA Level II. Required course for Music Education majors with an instrumental concentration. Students who already possess playing competence may examine out of the requirement and substitute another string instrument in its place.
Credits: 1
Offered: Every semester.

MUED 186 - Beginning Cello
Group applied cello designed to develop a playing competence sufficient to teach beginning students through NYSSMA Level II. Required course for Music Education majors with an instrumental concentration. Students who already possess playing competence may examine out of the requirement and substitute another string instrument in its place.
Credits: 1
Offered: Every semester.

MUED 187 - Beginning String Bass
Group applied string bass designed to develop a playing competence sufficient to teach beginning students through NYSSMA Level II. Required course for Music Education majors with an instrumental concentration. Students who already possess playing competence may examine out of the requirement and substitute another string instrument in its place.
Credits: 1
Offered: Every semester.

MUED 203 - Intermediate Voice Class
Applied group instruction in voice for non-voice general choral Music Education majors. Further development of student's performing ability, repertoire, and principle and technique behind healthy singing. Emphasis on an introduction to vocal anatomy and physiology, application of vocal technique to choral warm-ups and instruction.
Credits: 1.5
Prerequisite: MUS 113. Offered: Every year.

MUED 204 - Advanced Voice Class
Applied group instruction in voice for non-voice general choral Music Education majors. Emphasis on methods of developing and building singing voices. Student further develops performing ability and enlarges his/her repertoire. Introduction to International Phonetic Alphabet and its application to correct diction.
Credits: 1.5
Prerequisite: MUED 203. Offered: Every year.

MUED 210 - Guitar Class
Designed to enable students to accompany themselves and to lead others in the singing of simple folk and popular songs. Includes use of I, IV, V7 chords in the keys of G, C, D, E; simple strumming and finger picking; and single line melodies.
Credits: 1
Offered: Every semester.

MUED 211 - Guitar Class
Continuation of MUED 210. Includes I, IV, V7 chords in the keys of A, F, B; secondary dominants; more advanced accompaniment patterns.
Credits: 1
Prerequisite: MUED 210. Offered: Every semester.

MUED 215 - Music, Play & Self
A course primarily for students with little or no previous musical knowledge or skill. Examines the relationships among music, play and self, especially with regard to children. Emphasizes activity, creativity and personal expression.
Credits: 3
Offered: Every semester.
factors in the home, school, and community on students’ readiness to learn. Study and implement effective practices for planning and designing co-teaching and collaboration with peers. Includes language acquisition development and literacy development by native English speakers and students who are English language learners. Introduction to instructional planning and multiple research-validated instructional strategies for teaching students within the full range of abilities in music.

Credits: 2
Corequisite: MUED 252 or MUED 255. Offered: Every semester.

MUED 251 - Psychology and Sociology in Music Education
Study basic principles of educational psychology and sociology, including learning processes, motivation, communication, and classroom management. Introduction to research-validated instructional strategies for teaching students within the full range of abilities. Study the special education process and state and federal special education laws and regulations. Study of the rights and responsibilities of teachers, staff, students, parents, community members, school administrators, and others with regard to education, and the importance of productive relationships and interactions among the school, home, and community for enhancing student learning.

Credits: 3
Offered: Every semester.

MUED 252 - Child Abuse/Neglect Reporting
The course covers the basics of identifying and reporting suspected child abuse and maltreatment, at the local, state, and federal levels.

Credits: 0
Corequisite: MUED 250. Offered: Every semester.

MUED 253 - Alcohol, Tobacco, and Drug Abuse Identification
The course covers the basics of identifying and dealing with students who have problems with alcohol, tobacco, and other drug abuse problems, with an emphasis on knowledge and prevention at the local, state, and federal levels, and skill in applying that understanding to create a safe and nurturing learning environment that is free of alcohol, tobacco, and other drugs and that fosters the health and learning of all students, and the development of a sense of community and respect for one another.

Credits: 0
Corequisite: MUED 251 or MUED 256. Offered: Every semester.

MUED 255 - Foundations I Practicum - Elementary
Students act as music teachers or teacher aides for approximately 40 contact hours. The requirement may be completed during the January recess, in May/June or by several other alternatives approved by the chair for Music Education/Music Therapy.

Credits: 0
Corequisite: MUED 250. Offered: Every semester.

MUED 256 - Foundations II Practicum - Middle School
Students act as music teachers or teacher aides in middle school level settings for approximately 40 contact hours. This requirement may be completed during the January recess, in May/June or by several other alternatives approved by the area chair for Music Education/Music Therapy.

Credits: 0
Corequisite: MUED 251. Offered: Every semester.

MUED 260 - Brass Pedagogy
Covers instructional materials and pedagogical methods common to beginning instruction in public schools on brass instruments. Student must be enrolled simultaneously in one or more brass instrument playing classes, or should already have completed the competency requirements for trumpet and trombone.

Credits: 1
Offered: Every year.

MUED 261 - Advanced Trumpet
Group applied instruction and pedagogical approaches on the trumpet designed to develop a playing competence sufficient to teach beginning students through NYSSMA Level IV. Required course for Music Education majors with an instrumental concentration. Students who already possess playing competence may examine out of the requirement and substitute another brass instrument in its place. Prerequisite: Demonstrated playing proficiency on a contrasting brass instrument through NYSSMA Level II.

Credits: 1
Offered: Every year.

MUED 262 - Advanced Trombone
Group applied instruction and pedagogical approaches on the trombone designed to develop a playing competence sufficient to teach beginning students through NYSSMA Level IV. Required course for Music Education majors with an instrumental concentration. Students who already possess playing competence may examine out of the requirement and substitute another brass instrument in its place. Prerequisite: Demonstrated playing proficiency on a contrasting brass instrument through NYSSMA Level II.
Credits: 1  
Offered: Every year.  
**MUED 263 - Advanced French Horn**  
Group applied instruction and pedagogical approaches on the French horn designed to develop a playing competence sufficient to teach beginning students through NYSSMA Level IV. Required course for Music Education majors with an instrumental concentration. Students who already possess playing competence may examine out of the requirement and substitute another brass instrument in its place. Prerequisite: Demonstrated playing proficiency on a contrasting brass instrument through NYSSMA Level II.

Credits: 1  
Offered: Every year.

**MUED 264 - Advanced Tuba/Euphonium**  
Group applied instruction and pedagogical approaches on the tuba/euphonium designed to develop a playing competence sufficient to teach beginning students through NYSSMA Level IV. Required course for Music Education majors with an instrumental concentration. Students who already possess playing competence may examine out of the requirement and substitute another brass instrument in its place. Prerequisite: Demonstrated playing proficiency on a contrasting brass instrument through NYSSMA Level II.

Credits: 2  
Offered: Every year.

**MUED 271 - Advanced Clarinet**  
Group applied instruction and pedagogical approaches on the clarinet designed to develop a playing competence sufficient to teach beginning students through NYSSMA Level IV. Required course for Music Education majors with an instrumental concentration. Students who already possess playing competence may examine out of the requirement and substitute another woodwind instrument in its place. Prerequisite: Demonstrated playing proficiency on a contrasting woodwind instrument through NYSSMA Level II.

Credits: 2  
Offered: Every year.

**MUED 272 - Advanced Flute**  
Group applied instruction and pedagogical approaches on the flute designed to develop a playing competence sufficient to teach beginning students through NYSSMA Level IV. Required course for Music Education majors with an instrumental concentration. Students who already possess playing competence may examine out of the requirement and substitute another woodwind instrument in its place. Prerequisite: Demonstrated playing proficiency on a contrasting woodwind instrument through NYSSMA Level II.

Credits: 2  
Offered: Every year.

**MUED 273 - Advanced Oboe**  
Group applied instruction and pedagogical approaches on the oboe designed to develop a playing competence sufficient to teach beginning students through NYSSMA Level IV. Required course for Music Education majors with an instrumental concentration. Students who already possess playing competence may examine out of the requirement and substitute another woodwind instrument in its place. Prerequisite: Demonstrated playing proficiency on a contrasting woodwind instrument through NYSSMA Level II.

Credits: 2  
Offered: Every year.

**MUED 274 - Advanced Bassoon**  
Group applied instruction and pedagogical approaches on the bassoon designed to develop a playing competence sufficient to teach beginning students through NYSSMA Level IV. Required course for Music Education majors with an instrumental concentration. Students who already possess playing competence may examine out of the requirement and substitute another woodwind instrument in its place. Prerequisite: Demonstrated playing proficiency on a contrasting woodwind instrument through NYSSMA Level II.

Credits: 2  
Offered: Every year.

**MUED 275 - Advanced Saxophone**  
Group applied instruction and pedagogical approaches on the saxophone designed to develop a playing competence sufficient to teach beginning students through NYSSMA Level IV. Required course for Music Education majors with an instrumental concentration. Students who already possess playing competence may examine out of the requirement and substitute another woodwind instrument in its place. Prerequisite: Demonstrated playing proficiency on a contrasting woodwind instrument through NYSSMA Level II.

Credits: 2  
Offered: Every year.

**MUED 285 - Advanced Violin/Viola**  
Group applied instruction and pedagogical approaches on the violin or viola designed to develop a playing competence sufficient to teach beginning students through NYSSMA Level IV. Required course for Music Education majors with an instrumental concentration. Students who
already possess playing competence may examine out of the requirement and substitute another advanced string instrument in its place. Prerequisite: Demonstrated playing proficiency on cello/string bass through NYSSMA Level II.

Credits: 2
Offered: Every year.

**MUED 286 - Advanced Cello/String Bass**

Group applied instruction and pedagogical approaches on the cello or string bass designed to develop a playing competence sufficient to teach beginning students through NYSSMA Level IV. Required course for Music Education majors with an instrumental concentration. Students who already possess playing competence may examine out of the requirement and substitute another advanced string instrument in its place. Prerequisite: Demonstrated playing proficiency on violin/viola through NYSSMA Level II.

Credits: 2
Offered: Every year.

**MUED 291 - Technology in Music I**

An overview of technology in one's musical life. Basic technological concepts are explored with the goal of developing self sufficiency, and the means to update knowledge and skills in music, with a focus towards utilization of technology in future teaching and study.

Credits: 2
Offered: Every semester.

**MUED 292 - Technology in Music II**


Credits: 2
Prerequisite: MUS 124 and MUED 291. Offered: Every year.

**MUED 300 - Foundations in Music Education III**

Study history, philosophy, and role of education, including philosophy of music, education, and music education. This course also will examine philosophies of assessment, using formal and informal methods of assessing student learning, and help students develop skill in using information gathered through assessment and analysis to plan or modify instruction. Develop skills to provide instruction that will promote the participation and progress of students with disabilities. Study and practice skills for developing the listening, speaking, reading, and writing skills of all students. Investigate means to update knowledge and skills in music and in pedagogy. Professional Standing required.

Credits: 3
Corequisite: MUED 303 or MUED 355. Offered: Every semester.

**MUED 301 - General Music in Elementary School**

Study curriculum development, instructional planning, and research-validated instructional strategies for teaching general music in grades K through 6. Design and practice offering differentiated instruction that enhances the music learning of all students. Initiate and practice applying knowledge of human and musical developmental processes and variations to create a safe and nurturing learning environment that fosters the health and learning of all students, and the development of a sense of community and respect for one another. Practice applying knowledge of learning processes, motivation, communication, and classroom management to stimulate and sustain student interest, cooperation, and achievement to each student's highest level of learning in preparation for productive work, citizenship in a democracy, and continuing growth. Develop skills to provide instruction that will promote the participation and progress of students with disabilities. Study and implement effective practices for planning and designing co-teaching and collaboration with peers; Increase skill assessing student learning, analyzing one's own teaching practice, using information gathered through assessment and analysis to plan or modify instruction, and using various resources to enhance teaching. Investigate means to update knowledge and skills in music and in pedagogy. Intern teaching with students in elementary school classrooms. Professional Standing required.

Credits: 2
Corequisite: MUED 356. Offered: Every semester.

**MUED 302 - General Music in Secondary School**

Study curriculum development, instructional planning, and research-validated instructional strategies for teaching students in general music activities and programs in middle school through high school. Design and practice offering differentiated instruction that enhances the music learning of all students. Initiate and practice applying knowledge of human and musical developmental processes and variations to create a safe and nurturing learning environment that fosters the health and learning of all students, and the development of a sense of community and respect for one another. Practice applying knowledge of learning processes, motivation, communication, and classroom management to stimulate and sustain student interest, cooperation, and achievement to each student's highest level of learning in preparation for productive work, citizenship in a democracy, and continuing growth. Develop skills to provide instruction that will promote the participation and progress of students with disabilities. Develop skill in using technology and teaching students to use technology to acquire information,
communicate, and enhance learning. Increase skill assessing student learning, analyzing one's own teaching practice, using information gathered through assessment and analysis to plan or modify instruction, and using various resources to enhance teaching. Investigate means to update knowledge and skills in music and in pedagogy. Intern teaching with students in middle school or high school. Professional Standing required.

Credits: 2
Corequisite: MUED 356. Offered: Every semester.

MUED 303 - Literacy Instruction Workshop
The course provides an overview of the processes involved in literacy acquisition and the instructional approaches that acknowledge current thinking. Consideration is given to the relationship between English and music literacy.

Credits: 0
Corequisite: MUED 300. Offered: Every semester.

MUED 304 - Instrumental Music in Elementary School
Study curriculum development, instructional planning, and research-validated instructional strategies for teaching instrumental music in elementary school. Design and practice offering differentiated instruction that enhances the music learning of all students. Practice applying knowledge of human and musical developmental processes and variations to create a safe and nurturing learning environment that fosters the health and learning of all students, and the development of a sense of community and respect for one another. Develop skills to provide instruction that will promote the participation and progress of students with disabilities. Study and apply effective practices for applying positive behavioral supports and interventions to address student and classroom management needs. Study and practice skills for developing the listening, speaking, reading, and writing skills of all students. Increase skill assessing student learning, analyzing one's own teaching practice, using information gathered through assessment and analysis to plan or modify instruction, and using various resources to enhance teaching. Develop and practice skill in fostering effective relationships and interactions to support student growth and learning, including skill in resolving conflicts. Investigate means to update knowledge and skills in music and in pedagogy. Intern teaching with high school students. Professional standing required.

Credits: 2
Corequisite: MUED 394. Offered: Every semester.

MUED 310 - Guitar Class
Designed to enable students to accompany themselves and to lead others in the singing of simple folk and popular songs. Includes use of transposition and capo, more advanced melodic patterns, and melody and accompaniment combinations.

Credits: 1
Prerequisite: MUED 211. Offered: Every semester.

MUED 311 - Guitar Class
Continuation of MUED 310; includes pedagogy of guitar for individuals in public schools, music therapy, and private instruction.

Credits: 1
Prerequisite: MUED 310. Offered: Every semester.

MUED 331 - Marching Band Techniques
Technical and organizational considerations for the public school marching band program. Topics include parade, field and show marching, rehearsal techniques, drill and show design, festivals and competitions, auxiliary and support units. Individual and class projects include field-based instruction.

Credits: 2
Offered: Offered on occasion.
MUED 340 - Introduction to Early Childhood Music Pedagogy

Candidates will be introduced to various approaches for teaching music to children from birth through age five. They will learn about various music learning opportunities available locally, regionally, nationally, and worldwide, which are developmentally appropriate for young children. Learning will include critical reviews of research and best-practice literature, observations of music interactions among children and adults at a childcare center or preschool, and opportunities to assist during early childhood music classes.

Credits: 1
Offered: Every semester.

MUED 355 - Foundations III Practicum - Secondary

Students act as music teachers or teacher aides in secondary school music settings for approximately 40 contact hours. The requirement may be completed during the January recess, in May/June or by several other alternatives approved by the chair for Music Education/Music Therapy.

Credits: 3
Prerequisite: MUED 256. Corequisite: MUED 300 or MUED 303. Offered: Every semester.

MUED 356 - Methods Practicum

Students act as music teachers or teacher aides in music learning settings for approximately 40 contact hours. The requirement may be completed during the January recess, in May/June or by several other alternatives approved by the chair for Music Education/Music Therapy.

Credits: 0
Offered: Every semester.

MUED 391 - Elementary School Choral Rehearsal Techniques

Study curriculum development, instructional planning, and research—validated instructional strategies for teaching choral music in elementary school. Design and practice offering differentiated instruction that enhances the music learning of all students. Practice applying knowledge of human and musical developmental processes and variations to create a safe and nurturing learning environment that fosters the health and learning of all students, and the development of a sense of community and respect for one another. Practice applying knowledge of learning processes, motivation, communication, and classroom management to stimulate and sustain student interest, cooperation, and achievement to each student’s highest level of learning in preparation for productive work, citizenship in a democracy, and continuing growth. Develop skills to provide instruction that will promote the participation and progress of students with disabilities. Study and apply effective practices for planning and designing co-teaching and collaboration with peers; individualizing instruction; and applying positive behavioral supports and interventions to address student and classroom management needs. Study and practice skills for developing the listening, speaking, reading, and writing skills of all students. Increase skill in using technology and teaching students to use technology to acquire information, communicate, and enhance learning. Increase skill assessing student learning, analyzing one’s own teaching practice, using information gathered through assessment and analysis to plan or modify instruction, and using various resources to enhance teaching. Investigate means to update knowledge and skills in music and in pedagogy. Intern teaching occurs in an elementary school choral classroom. Professional Standing required.

Credits: 3
MUED 393 - Elementary School Instrumental Rehearsal Techniques

Design and practice offering differentiated instruction that enhances the music learning of all students in elementary and middle school instrumental music rehearsals. Initiate and practice applying knowledge of human and musical developmental processes and variations to create a safe and nurturing learning environment that fosters the health and learning of all students, and the development of a sense of community and respect for one another. Practice applying knowledge of learning processes, motivation, communication, and classroom management to stimulate and sustain student interest, cooperation, and achievement to each student’s highest level of learning in preparation for productive work, citizenship in a democracy, and continuing growth. Increase skill assessing student learning, analyzing one’s own teaching practice, using information gathered through assessment and analysis to plan or modify instruction, and using various resources to enhance teaching. Develop and practice skill in fostering effective relationships and interactions to support student growth and learning, including skill in resolving conflicts. Investigate means to update knowledge and skills in music and in pedagogy. Professional Standing required.

Credits: 2
Corequisite: MUED 304. Offered: Every semester.

MUED 394 - Secondary School Instrumental Rehearsal Techniques

Design and practice offering differentiated instruction that enhances the music learning of all students in secondary instrumental music rehearsals. Practice applying knowledge of learning processes, motivation, communication, and classroom management to stimulate and sustain student interest, cooperation, and achievement to each student’s highest level of learning in preparation for productive work, citizenship in a democracy, and continuing growth. Develop skills to provide instruction that will promote the participation and progress of students with disabilities. Increase skill assessing student learning, analyzing one’s own teaching practice, using information gathered through assessment and analysis to plan or modify instruction, and using various resources to enhance teaching. Develop and practice skill in fostering effective relationships and interactions to support student growth and learning, including skill in resolving conflicts. Investigate means to update knowledge and skills in music and in pedagogy. Professional Standing required.

Credits: 2
Corequisite: MUED 305. Offered: Every semester.

MUED 400 - Professional Semester

Student teaching in selected public schools in western New York State under the supervision of university music education faculty and cooperating teachers. With music education faculty advisement, students typically seek placements that provide experience and credentials in the musical specialties, and at the public school levels, in which they expect to seek professional positions. The combination of field experiences and student teaching shall include both settings, pre-kindergarten through grade 6 and grades 7 through 12.

Credits: 12
Prerequisite: EDU 303 or SAVE Workshop of an 1 or better. Offered: Every semester.

MUED 440 - Applications of Early Childhood Music Pedagogy

Candidates will further their learning about approaches for teaching children from birth through age five through practical application. Learning will include critical reviews of research and best-practice literature, planning and providing music interactions among children and adults at a childcare center or preschool, and assessing the music development of the children being taught. The candidates will also reflect on their own teaching and the learning of the children in the classroom.

Credits: 1
Offered: Every semester.

MUED 450 - Directed Study in Music Education

Projects related to music education but not otherwise a part of regular course offerings. Requires a formal Learning Contract approved by a faculty sponsor and the chair for Music Education/Music Therapy.

Credits: 1-3
Offered: Every semester.

MUED 451 - Directed Study in Music Education

Projects related to music education but not otherwise a part of regular course offerings. Requires a formal Learning Contract approved by a faculty sponsor and the chair for Music Education/Music Therapy.

Credits: 1-3
Offered: Every semester.

MUED 470 - Special Topics in Music Education

Studies of area supplementing, not replacing, regular course offerings.

Credits: 1-3
Offered: Offered on occasion.
 MUED 471 - Special Topics in Music Education
Studies of areas supplementing, not replacing, regular course offerings.
Credits: 1-3
Offered: Offered on occasion.

 MUED 472 - Special Topics in Music Education
Studies of areas supplementing, not replacing, regular course offerings.
Credits: 1-3
Offered: Offered on occasion.

 MUED 473 - Special Topics in Music Education
Studies of areas supplementing, not replacing, regular course offerings.
Credits: 1-3
Offered: Offered on occasion.

 MUED 474 - Special Topics in Music Education
Studies of areas supplementing, not replacing, regular course offerings.
Credits: 1-3
Offered: Offered on occasion.

 MUED 475 - Special Topics in Music Education
Studies of areas supplementing, not replacing, regular course offerings.
Credits: 1-3
Offered: Offered on occasion.

 MUED 476 - Special Topics in Music Education
Studies of areas supplementing, not replacing, regular course offerings.
Credits: 1-3
Offered: Offered on occasion.

 MUED 477 - Special Topics in Music Education
Studies of areas supplementing, not replacing, regular course offerings.
Credits: 1-3
Offered: Offered on occasion.

 MUED 478 - Special Topics in Music Education
Studies of areas supplementing, not replacing, regular course offerings.
Credits: 1-3
Offered: Offered on occasion.

 MUED 479 - Special Topics in Music Education
Studies of area supplementing, not replacing, regular course offerings.
Credits: 1-3
Offered: Offered on occasion.

 MUED 485 - Advanced Instrument Pedagogy
For instrument majors to learn advanced techniques for teaching their instrument. Course involves teaching beginning instrument classes with guidance and instruction from faculty.
Credits: 2
Prerequisite: MUS 325 and MUED 304 and MUED 393.
Offered: Every semester.

 MUED 510 - Principles of Music Education with Media
Study in principles and use of media in instructional situations in music education. Theoretical framework for use of media developed. Student responsible for series of media productions appropriate to music education.
Emphasis not on operation of audio-visual equipment, but on effectiveness and efficiency of media-based instruction, thus suitable for non-music majors with some familiarity with music in school situations, but whose interest in media may be more far-reaching.
Credits: 3
Offered: Offered on occasion.

 MUED 513 - Systematic Design of Curricula for Music Education
Systematic design of curricula for all areas of music education. Each participant develops actual curriculum, plans for using and evaluating it, and means for evaluating and reporting students' progress.
Credits: 3
Offered: Offered on occasion.

 MUED 514 - Psychology of Music
Study of empirical aesthetics. Explores characteristics of aesthetic response, structural characteristics of music as they relate to aesthetic responses, and theories that describe how this response is achieved and developed. Empirical research studies examined within theoretical contexts.
Credits: 3
Offered: Every year.

 MUED 522 - Psychological Research in Music
Resources, techniques, applications, and processes in research in music education and therapy. Special emphasis will be on psychological and experimental research.
Credits: 3
Offered: Every year.

**MUED 555 - Special Topics Workshop**
Usually summer or other short-term workshops dealing with specific music literature, techniques, problems, or teaching methodologies. Maximum of 6 credit hours in increments of no more than 3 credit hours may apply, with permission, to requirements in the Elective Course Work by Advisement category.

Credits: 1-3
Offered: Every year.

**MUED 560 - Teaching Hand Drumming in Schools**
African and Caribbean drumming in the middle school. Special emphasis on World Music Drumming Curriculum and the National and State Standards in Music.

Credits: 1
Offered: Every year.

**MUED 565 - Special Topics Seminar**
Presentation and investigation of a specific but not regularly scheduled topic of current need or interest. Course may be repeated to a maximum of 6 credit hours (in different topics) and may apply with permission to requirements in the categories of Music Education and related Course Work or Elective Course Work by Advisement.

Credits: 1-3
Offered: Every year.

**MUED 590 - Special Studies**
Studies not otherwise available as regular course offerings relevant to students' programs or career plans, pursued in independent, directed, tutorial manner. Student must submit proposal for approval, available in School of Music Office. Student must also secure agreement of faculty member to sponsor the study. Maximum of 6 hours of any combination of MUS and MUED may be earned this way in increments of no more than 3 credit hours.

Credits: 1-3
Offered: Every semester.

**MUED 591 - Special Studies**
Studies not otherwise available as regular course offerings relevant to students' programs or career plans, pursued in independent, directed, tutorial manner. Student must submit proposal for approval, available in School of Music Office. Student must also secure agreement of faculty member to sponsor the study. Maximum of 6 credit hours of any combination of MUS and MUED may be earned this way in increments of no more than 3 credit hours.

Credits: 1-6
Offered: Every semester.

**MUED 609 - Administration and Supervision of School Music**
Study of current practices. Topics include supervision, inservice education, curricular and instructional developments, public relations, finance, facilities, and resources. Individual projects connected to teaching situations.

Credits: 3
Offered: Offered on occasion.

**MUED 610 - Music Assessment**
Presents and examines the functions of assessment in the music classroom; how to create, administer, and interpret the results of teacher-developed assessments; and how to interpret the results of externally developed, published music measures.

Credits: 3
Offered: Offered on occasion.

**MUED 618 - Seminar in Music Education**
Presentation and examination of current topics of relevance to music educators. Outside faculty, students, and others in music and related fields called upon as needed. Individual projects.

Credits: 3
Offered: Every year.

**MUED 619 - Foundations of Music Education I**
Study of philosophical and historical foundations of music education, emphasizing current issues and developments. Particular application to curriculum and instruction in school music.

Credits: 3
Offered: Every year.

**MUED 620 - Foundations of Music Education II**
Study of psychological and sociological foundations of music education, emphasizing current issues and developments. Particular application to curriculum and instruction in school music.

Credits: 3
Offered: Every year.
MUED 621 - Music Education Foundation III

Study of curriculum and assessment in music education, emphasizing a synthesis of previous course work. Written project required. Should be the final Music Education course after all requirements are met in the Music Education category, all but 3 credit hours completed in the Musicianship category, and all but 3 credit hours completed in the elective category.

Credits: 3
Prerequisite: MUED 619 and MUED 620. Offered: Every year.

MUED 651 - Philosophical Perspectives of Music Education

Examination of important philosophies, relevance to music education and educator; aesthetics; contemporary educational philosophies including Existentialism, Reconstructionism, Experimentalism, Realism, Idealism, and philosophies of mind as they relate to the artistic experience and arts education. Emphasis on developing, articulating, and defending a philosophical point of view.

Credits: 3
Offered: Offered on occasion.

MUED 652 - Psychological Perspectives for Music Education

Examination of important psychological developments and theories and their importance for music education and the music educator: psychology of aesthetics, humanistic psychology, current learning theory, and child and adolescent development as related to problems of instruction in music. Emphasis on developing, articulating, and defending methods of instruction and choice of musical content in terms of psychological principles.

Credits: 3
Offered: Offered on occasion.

MUED 695 - Thesis/Final Project

Study/research culminating in a Thesis, a Composition/Arrangement, or a Performance Recital as required in the Final Project Program. Candidate must register for the course in each semester or term during which the services of the Project Leader are actively engaged toward the completion of the Final Project. Maximum of 3 credit hours.

Credits: 1-3
Offered: Offered on occasion.

MUSB - Music Industry

MUSB 100 - Pathway to Success

The course is intended to help students succeed at Fredonia and become lifelong learners. It introduces the students to the academic and social aspects of college life and provides an introduction to the nature of college education and a general orientation to the functions and resources of the college as a whole. In addition, it will help building a support network with faculty, staff and peers and improve the study skills inside and outside the classroom.

Credits: 3
Offered: Every year.

MUSB 101 - Music Industry Career Foundations

A survey of the various opportunities in the Music Industry, including venue operation, artist management, performing, recording, publishing, broadcast media, journalism, film etc., paired with the development of writing skills. Students will gather information and evaluate the interrelationships between multiple potential career paths while developing skills in written and oral communications including preparation of letters of inquiry, press releases, press kits and presentation materials.

Credits: 3
Offered: Every semester.

MUSB 201 - The Business of Music

A comprehensive exploration of the various facets of the music business including careers in music, music publishing (copyrights, licensing, music books, exploitation of catalogue), the record business (recording, artist management, licensing, record distribution), tour management, self-employment business basics and ethics in the music business.

Credits: 3
Offered: Every semester.

MUSB 230 - History of the Music Industry

The American music industry has generated hits and new style combinations throughout every decade. The course will survey this evolution from roots through modern times.

Credits: 3
Prerequisite: MUSB 101. Offered: Every other year.

MUSB 301 - Music Copyrights

An exploration of copyright purpose, history, use and challenges. Students will learn about copyright ownership and registration, and how copyright is used to manage royalties, publication, project development, and
dissemination of the intellectual property through the various media, including the Internet.

Credits: 3
Prerequisite: MUS 380 or MUSB 201. Offered: Every year.

**MUSB 304 - Business of the Beatles**

An in-depth look at the business of The Beatles. The course will examine recording contracts, publishing, touring and biographies of those most closely associated with the band.

Credits: 3
Prerequisite: MUSB 101. Offered: Every other year.

**MUSB 320 - Music Contracts**

The music business engages musicians with detailed contracts that establish terms of management, marketing, producing, licensing, recording, distribution, and the like. The student will learn about standard language and the principles of contract negotiations.

Credits: 3
Prerequisite: MUS 285 or MUSB 301. Offered: Every year.

**MUSB 350 - Special Topics in Music Business**

Special topics in Music Business not covered in detail by regular courses and not offered on a regular basis.

Credits: 1-3
Offered: Offered on occasion.

**MUSB 351 - Digital Marketing for Music Industry**

The course aims at mastering studentsâ€™ abilities in providing knowledge about digital marketing. Topics include digital marketing business models and concepts; social media best practices; building a music marketing web site; online security and payment systems; Guerilla marketing; online press, promotion, and advertising options. Increasing Search Engine Presence; using data analytics and measuring the results, as well as ethical and social issues in online marketing.

Credits: 3
Offered: Every year.

**MUSB 420 - Student Record Label**

Examines the inner workings of a record label. The primary functions of all department of a record label will be discussed, including artist repertoire, marketing, business and legal affairs, public relations, promotion, sales and distribution, merchandising, and artist relations. Students will gain hands-on experience operating an independent record label and facilitating the creation of a music product.

Credits: 3
Prerequisite: (MUSB 201 and MUSB 320) or (MUS 380 and MUS 385). Offered: Every year.

**MUSB 425 - Music Marketing and Promotion**

Effective marketing is a necessary component of any successful release of recorded music. This course explores the various elements of a marketing plan: how it is researched, prepared, and implemented. The use and effectiveness of marketing via radio, print, the Internet, and touring will be examined. An inquiry into the changing music industry will focus on the emergence of developing markets and the future of music.

Credits: 3
Prerequisite: (MUSB 201 and MUSB 320) or (MUS 380 and MUS 385). Offered: Every year.

**MUSB 430 - Independent Study**

This is a course for highly motivated students to undertake special studies in music business under faculty guidance.

Credits: 1-3
Offered: Offered on occasion.

**MUSB 435 - Contemporary Issues in Music and the Marketplace**

Contemporary consumer behavior and the changing marketplace as well as traditional marketing methods and the legal issues that apply must be understood for a successful career in the music industry. Students will examine the current market in the context of emerging legal issues and marketplace ethics.

Credits: 3
Prerequisite: MUSB 301 and MUSB 320. Offered: Every year.

**MUSB 465 - Music Industry Internship**

The course provides credit for professional experience in the music business for music business majors. Enrollment is to be arranged with an appropriate instructor.

Credits: 1-15
Offered: Every year.

**MUSB 470 - Concert Touring and Sound**

This course will teach the essential elements of assembling a tour team, understanding live sound and acoustics and tips on recording.

Credits: 3
Prerequisite: MUSB 101. Offered: Every other year.
MUSB 480 - Independent Study
This is a course for highly motivated students to undertake special studies in music business under faculty guidance.
Credits: 1-7
Offered: Every semester.

MUS - Music

MUS 018 - Clarinet Ensemble
The study and performance of ensemble repertoire for the clarinet family.
Credits: 0.5
Offered: Every semester.

MUS 022 - College Choir
All music students participate in the university music ensembles, the required number of participations varying among the several music curricula. Participation in any ensemble is open to students in other departments of the university by audition and consent of the conductor and/or Director of the School of Music.
Credits: 1
Offered: Every semester.

MUS 021 - University Chorus
All music students participate in the university music ensembles, the required number of participations varying among the several music curricula. Participation in any ensemble is open to students in other departments of the university by audition and consent of the conductor and/or Director of the School of Music.
Credits: 1
Offered: Every semester.

MUS 023 - Chamber Choir
All music students participate in the university music ensembles, the required number of participations varying among the several music curricula. Participation in any ensemble is open to students in other departments of the university by audition and consent of the conductor and/or Director of the School of Music.
Credits: 1
Offered: Every semester.

MUS 024 - Women's Chorus
All music students participate in the university music ensembles, the required number of participations varying among the several music curricula. Participation in any ensemble is open to students in other departments of the university by audition and consent of the conductor and/or Director of the School of Music.
Credits: 1
Offered: Every semester.

MUS 025 - All-College Band
All music students participate in the university music ensembles, the required number of participations varying among the several music curricula. Participation in any ensemble is open to students in other departments of the university by audition and consent of the conductor and/or Director of the School of Music.
Credits: 1
Offered: Every semester.

MUS 026 - Concert Band
All music students participate in the university music ensembles, the required number of participations varying among the several music curricula. Participation in any ensemble is open to students in other departments of the university by audition and consent of the conductor and/or Director of the School of Music.
Credits: 1
Offered: Every semester.

MUS 027 - Wind Symphony
All music students participate in the university music ensembles, the required number of participations varying among the several music curricula. Participation in any ensemble is open to students in other departments of the university by audition and consent of the conductor and/or Director of the School of Music.
Credits: 1
Offered: Every semester.

MUS 028 - Wind Ensemble
All music students participate in the university music ensembles, the required number of participations varying among the several music curricula. Participation in any ensemble is open to students in other departments of the university by audition and consent of the conductor and/or Director of the School of Music.
Credits: 1
Offered: Every semester.

MUS 029 - Symphony Orchestra
All music students participate in the university music ensembles, the required number of participations varying among the several music curricula. Participation in any ensemble is open to students in other departments of the
university by audition and consent of the conductor and/or Director of the School of Music.

Credits: 1
Offered: Every semester.

**MUS 030 - Chamber Orchestra**

All music students participate in the university music ensembles, the required number of participations varying among the several music curricula. Participation in any ensemble is open to students in other departments of the university by audition and consent of the conductor and/or Director of the School of Music.

Credits: 1
Offered: Every semester.

**MUS 031 - String Chamber Ensemble**

All music students participate in the university music ensembles, the required number of participations varying among the several music curricula. Participation in any ensemble is open to students in other departments of the university by audition and consent of the conductor and/or Director of the School of Music.

Credits: 0.5
Offered: Every semester.

**MUS 032 - Music Theatre Ensemble**

All music students participate in the university music ensembles, the required number of participations varying among the several music curricula. Participation in any ensemble is open to students in other departments of the university by audition and consent of the conductor and/or Director of the School of Music.

Credits: 0.5
Offered: Every semester.

**MUS 033 - Opera Prod Practicum**

All music students participate in the university music ensembles, the required number of participations varying among the several music curricula. Participation in any ensemble is open to students in other departments of the university by audition and consent of the conductor and/or Director of the School of Music.

Credits: 0.5
Offered: Every semester.

**MUS 034 - Opera Workshop**

All music students participate in the university music ensembles, the required number of participations varying among the several music curricula. Participation in any ensemble is open to students in other departments of the university by audition and consent of the conductor and/or Director of the School of Music.

Credits: 0.5
Offered: Every semester.

**MUS 035 - Piano Ensemble**

All music students participate in the university music ensembles, the required number of participations varying among the several music curricula. Participation in any ensemble is open to students in other departments of the university by audition and consent of the conductor and/or Director of the School of Music.

Credits: 1
Offered: Every semester.

**MUS 036 - Woodwind Chamber Ensemble**

All music students participate in the university music ensembles, the required number of participations varying among the several music curricula. Participation in any ensemble is open to students in other departments of the university by audition and consent of the conductor and/or Director of the School of Music.

Credits: 0.5
Offered: Every semester.

**MUS 037 - Brass Chamber Ensemble**

All music students participate in the university music ensembles, the required number of participations varying among the several music curricula. Participation in any ensemble is open to students in other departments of the university by audition and consent of the conductor and/or Director of the School of Music.

Credits: 0.5
Offered: Every semester.

**MUS 038 - Saxophone Ensemble**

All music students participate in the university music ensembles, the required number of participations varying among the several music curricula. Participation in any ensemble is open to students in other departments of the university by audition and consent of the conductor and/or Director of the School of Music.

Credits: 0.5
Offered: Every semester.

**MUS 039 - Flute Ensemble**

All music students participate in the university music ensembles, the required number of participations varying among the several music curricula. Participation in any ensemble is open to students in other departments of the
university by audition and consent of the conductor and/or Director of the School of Music.

Credits: 0.5
Offered: Every semester.

**MUS 040 - Brass Choir**

All music students participate in the university music ensembles, the required number of participations varying among the several music curricula. Participation in any ensemble is open to students in other departments of the university by audition and consent of the conductor and/or Director of the School of Music.

Credits: 0.5
Offered: Every semester.

**MUS 041 - Percussion Ensemble**

All music students participate in the university music ensembles, the required number of participations varying among the several music curricula. Participation in any ensemble is open to students in other departments of the university by audition and consent of the conductor and/or Director of the School of Music.

Credits: 0.5
Offered: Every semester.

**MUS 042 - African Drumming Ensemble**

All music students participate in the university music ensembles, the required number of participations varying among the several music curricula. Participation in any ensemble is open to students in other departments of the university by audition and consent of the conductor and/or Director of the School of Music.

Credits: 0.5
Offered: Every semester.

**MUS 043 - Guitar Chamber Ensemble**

All music students participate in the university music ensembles, the required number of participations varying among the several music curricula. Participation in any ensemble is open to students in other departments of the university by audition and consent of the conductor and/or Director of the School of Music.

Credits: 0.5
Offered: Every semester.

**MUS 044 - Guitar Quartet**

All music students participate in the university music ensembles, the required number of participations varying among the several music curricula. Participation in any ensemble is open to students in other departments of the university by audition and consent of the conductor and/or Director of the School of Music.

Credits: 1
Offered: Every semester.

**MUS 045 - Guitar Ensemble**

All music students participate in the university music ensembles, the required number of participations varying among the several music curricula. Participation in any ensemble is open to students in other departments of the university by audition and consent of the conductor and/or Director of the School of Music.

Credits: 1
Offered: Every semester.

**MUS 046 - Special Ensemble**

All music students participate in the university music ensembles, the required number of participations varying among the several music curricula. Participation in any ensemble is open to students in other departments of the university by audition and consent of the conductor and/or Director of the School of Music.

Credits: 0.5
Offered: Every semester.

**MUS 047 - Special Ensemble**

All music students participate in the university music ensembles, the required number of participations varying among the several music curricula. Participation in any ensemble is open to students in other departments of the university by audition and consent of the conductor and/or Director of the School of Music.

Credits: 0.5
Offered: Every semester.

**MUS 048 - Special Ensemble**

All music students participate in the university music ensembles, the required number of participations varying among the several music curricula. Participation in any ensemble is open to students in other departments of the university by audition and consent of the conductor and/or Director of the School of Music.

Credits: 0.5
Offered: Every semester.

**MUS 100 - Recital-Seminar**

Required of all freshman music majors enrolled in private applied music instruction or composition. Students perform or critique performance or composition of colleagues during one recital-seminar each week. Recital schedule
MUS 101 - Beginning Music Theory I
For students with little or no background in music. Course deals with beginning and rudimentary aspects of music including clefs, scales, chords, key signatures, melody, harmony, ear training, and aural perception.
Credits: 3
Offered: Every semester.

MUS 102 - Beginning Music Theory II
For students with little or no background in music. Course deals with beginning and rudimentary aspects of music including clefs, scales, chords, key signatures, melody, harmony, ear training, and aural perception.
Credits: 3
Offered: Every year.

MUS 103 - Beginning Piano Class for Non-Majors
A one semester beginning piano class for non-majors.
Credits: 1
Offered: Offered on occasion.

MUS 104 - Applied Music Class for Non-Music Majors
Group instruction in voice, keyboard, and orchestral instruments for students not majoring in music. Previous experience in performance medium required. Enables student to enhance performance ability in performance area. May involve rental of instrument. Course may be repeated for credit.
Credits: 1
Offered: Offered on occasion.

MUS 105 - Applied Music Major
Weekly half-hour private applied instruction for music majors in Bachelor of Arts and Bachelor of Science degree programs. Students should see MUS 125-126 for further information about the requirements of specific studios.
Credits: 2
Offered: Every semester.

MUS 106 - Applied Music Major
Weekly half-hour private applied instruction for music majors in Bachelor of Arts and Bachelor of Science degree programs. Students should see MUS 125-126 for further information about the requirements of specific studios.
Credits: 2

MUS 107 - Double Reed Class I
(Required for all freshman oboe and bassoon majors.) The beginning fundamentals of reed making are covered including formation of blank and rudimentary scraping skills.
Credits: .5
Offered: Every year.

MUS 108 - Double Reed Class II
(Required for all freshman oboe and bassoon majors.) A continuation of Class I. The course covers shaping, gouging and refinement of scraping skills.
Credits: .5
Prerequisite: MUS 107. Offered: Every year.

MUS 109 - Harp Class, Elementary
Introductory course for beginners on the harp. Hand position, finger exercises, and tone production.
Credits: 1
Offered: Every semester.

MUS 110 - Harp Class, Intermediate
Continuing development of tone and technique: elementary harp repertoire.
Credits: 1
Prerequisite: MUS 109. Offered: Every year.

MUS 111 - The Rudiments of Music
A course for students who do not successfully complete the rudiments proficiency exam required for entrance into MUS 123. Covers the fundamentals of scales, key signatures, intervals, triads, and rhythm.
Credits: 1
Prerequisite: Mus Theory Rudiments Exam of an 85 or better. Offered: Every semester.

MUS 113 - Voice Class
One-semester course in basic vocal skills. Primary objective is to develop vocal technique for demonstration as instrumental or vocal conductor, and for choral participation.
Credits: 1
Offered: Every semester.

MUS 115 - Music Appreciation
Introduction to music in Western civilization: materials of music (melody, harmony, rhythm, tempo, dynamics, musical structure and design, and musical style); various
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performance media. Major composers of each musical epoch discussed, musical examples listened to in class. Covers 19th century Romanticism; 18th century classicism; medieval, renaissance, and baroque music; the 20th century, and the American scene.

Credits: 3  
Offered: Every semester.

MUS 117 - Piano Class, Elementary

For students with little or no piano background. Development of beginning technique through major and minor scales and arpeggios, chord study, harmonization, transposition, sight reading, pedal usage, and improvisation.

Credits: 1  
Prerequisite: MUS 101 or MUS 123. Offered: Every semester.

MUS 118 - Piano Class, Elementary

For students with previous piano background or MUS 117. Development of technique through major and minor scales and arpeggios, chord study, harmonization, transposition, sight reading, pedal usage, improvisation, and repertoire. Barrier exam at end of course.

Credits: 2  
Prerequisite: MUS 117. Offered: Every semester.

MUS 119 - Free Improvisation

The course is an exploration of the art of music improvisation for self-expression. It is taught in a supportive, safe environment of non-judgment, in order to give students the freedom needed to create music spontaneously. The voice is considered the primary instrument. Drums, and other World Music instruments will be provided. Other instruments primary, secondary, or otherwise, may be used in the class.

Credits: 1  
Offered: Every semester.

MUS 120 - Concert Attendance

Attendance at a minimum of eight approved concerts (including faculty solo and ensemble recitals, Western New York Chamber Orchestra, visiting artists, and major student ensembles) each semester.

Credits: 0  
Offered: Every semester.

MUS 121 - Aural Skills I

Course deals with various aspects of ear training including melodic, harmonic, and formal perception as well as sightsinging skills.

Credits: 2  
Offered: Every semester.

MUS 122 - Aural Skills II

A continuation of MUS 121 dealing with various aspects of ear training including melodic, harmonic, and formal perceptions as well as sightsinging skills.

Credits: 2  
Prerequisite: MUS 121. Offered: Every semester.

MUS 123 - Music Theory I

Course deals with elements of counterpoint, harmony, rhythm, and phrase analysis. Prerequisite: Satisfactory completion of Rudiments Exam.

Credits: 3  
Prerequisite: Mus Theory Rudiments Exam of an 85 or better. Offered: Every semester.

MUS 124 - Music Theory II

A continuation of MUS 122 dealing with more advanced aspects of harmony, melody, form, and style analysis.

Credits: 3  
Prerequisite: MUS 123. Offered: Every semester.

MUS 125 - Applied Music Major

Weekly hour private applied instruction for music majors in Bachelor of Music in Performance and Bachelor of Music in Music Education degree programs.

Credits: 2  
Offered: Every semester.

MUS 126 - Applied Music Major

Weekly hour private applied instruction for music majors in Bachelor of Music in Performance and Bachelor of Music in Music Education degree programs.

Credits: 2  
Offered: Every semester.

MUS 127 - Composition Lessons

Weekly hour private applied instruction for music majors in the Bachelor of Music Composition program.

Credits: 2  
Offered: Every semester.

MUS 128 - Composition Lessons

Weekly hour private applied instruction for music majors in the Bachelor of Music Composition program.

Credits: 2
Prerequisite: MUS 127. Offered: Every semester.

**MUS 129 - Beginning Composition**

Introduction to composition, covering the various concepts inherent in composition, with an emphasis on creativity and performance. Students will be expected to begin to understand their own creative process and demonstrate their knowledge through composition projects.

Credits: 2

Prerequisite: MUS 121* or MUS 123*. Cross-Listed as: * Indicates that the course can be taken in the same semester. Offered: Every semester.

**MUS 130 - Beginning Composition**

Introduction to composition, covering the various concepts inherent in composition, with an emphasis on creativity and performance. Students will be expected to begin to understand their own creative process and demonstrate their knowledge through composition projects.

Credits: 2

Prerequisite: MUS 129 and MUS 121* and MUS 123*. Cross-Listed as: * Indicates that the course can be taken in the same semester. Offered: Every semester.

**MUS 131 - Applied Musicianship I**

Study of solfege and conducting as basic tools of musicianship.

Credits: 1

Offered: Every semester.

**MUS 132 - Applied Musicianship II**

Study of solfege and conducting as basic tools of musicianship.

Credits: 1

Offered: Every semester.

**MUS 137 - Diction for Singers-English**

One 7-week course in 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 English diction. The course is designed for voice students in all music curricula, and may be taken by students from other majors as well.

Credits: .5

Offered: Every year.

**MUS 138 - Diction for Singers-Italian**

One 7-week course in 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 diction. The course is designed for voice students in all music curricula, and may be taken by students from other majors as well.

Credits: .5

Offered: Every year.

**MUS 198 - Composition Forum**

Required of all first-year music majors enrolled in MUS 127-128. One recital/seminar per week, in which students perform and/or critique performances and compositions of colleagues. Recital schedule rotates from studio, to area, to school. Regular faculty and guest presentations and master classes are included.

Credits: 0

Corequisite: MUS 129. Offered: Every semester.

**MUS 199 - Composition Forum**

Required of all first-year music majors enrolled in MUS 127-128. One recital/seminar per week, in which students perform and/or critique performances and compositions of colleagues. Recital schedule rotates from studio, to area, to school. Regular faculty and guest presentations and master classes are included.

Credits: 0

Prerequisite: MUS 198. Offered: Every semester.

**MUS 200 - Recital Seminar**

Required of all sophomore music majors enrolled in private applied music instruction or composition. Students perform or critique the performance or composition of colleagues during one recital-seminar each week. Recital schedule rotated: one week, studio; the next week, area.
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Credits: 0
Offered: Every semester.

MUS 201 - Collaborative Piano Skills and Repertoire I
Introduction to skills of the collaborative pianist, including how to approach orchestral reductions, requirements of different instruments and voice types, rehearsal techniques, how to prepare works with text, and internet/library resources for this repertoire. Each student will accompany three undergraduate music majors (ideally two singers and one instrumentalist) who will each attend our class at least once per semester for a performance and coaching. Students will rehearse regularly with these partners and attend their lessons weekly or as needed.

Credits: 2
Offered: Every year.

MUS 202 - Collaborative Piano Skills and Repertoire II
Introduction to the repertoire of the collaborative pianist. Course will include a brief introductory survey of song and sonata repertoire. Additionally, each student will continue to accompany three undergraduate music majors (ideally two singers and one instrumentalist) who will each attend our class at least once per semester for a performance and coaching. These class performances will build on the foundation created in Collaborative Piano Skills and Repertoire I. Students will rehearse regularly with these partners and attend their lessons weekly or as needed.

Credits: 2
Prerequisite: MUS 201. Offered: Every year.

MUS 205 - Applied Music Major
Weekly half-hour private applied instruction for music majors in Bachelor of Arts, Bachelor of Science and Bachelor of Music in Music Composition degree programs. Students should see MUS 225-226 for further information about the requirements of specific studios.

Credits: 2
Prerequisite: MUS 106. Offered: Every semester.

MUS 206 - Applied Music Major
Weekly half-hour private applied instruction for music majors in Bachelor of Arts, Bachelor of Science and Bachelor of Music in Music Composition degree programs. Students should see MUS 225-226 for further information about the requirements of specific studios.

Credits: 2
Prerequisite: MUS 205. Offered: Every semester.

MUS 209 - Harp Class, Advanced
Advanced training in technique: scales, arpeggios, harmonies, pedal studies, chords, octaves, glissandi, and finger exercises in velocity.

Credits: 1
Prerequisite: MUS 110. Offered: Offered on occasion.

MUS 213 - Opera Seminar I
The study of stage movement and acting as it relates to opera performance. Projects will include study and performance of monologues, arias, and ensembles.

Credits: 1
Offered: Every semester.

MUS 217 - Piano Class, Intermediate
Intermediate course in functional piano playing of major, minor, modal scales, arpeggios, harmonization using primary and secondary chords, seventh chords, and secondary dominants; transposition, improvisation, sight reading, and repertoire.

Credits: 1
Prerequisite: MUS 118. Offered: Every semester.

MUS 218 - Piano Class, Intermediate
Continuation of development of functional piano skills through technique studies, harmonization, part-reading, transposition, improvisation and accompanying. Piano Standards barrier exam at end of course.

Credits: 1
Prerequisite: MUS 217. Offered: Every semester.

MUS 221 - Aural Skills III
A continuation of MUS 123 dealing with more advanced aspects of ear training including melodic, harmonic, and formal perception as well as sightsinging skills.

Credits: 2
Prerequisite: MUS 122. Offered: Every semester.

MUS 222 - Aural Skills IV
A continuation of MUS 221 dealing with the more advanced aspects of ear training including melodic, harmonic, and formal perception as well as sightsinging skills.

Credits: 2
Prerequisite: MUS 221. Offered: Every semester.

MUS 223 - Music Theory III
A continuation of MUS 124 dealing with more advanced aspects of harmony, form, and style analysis.
MUS 224 - Music Theory IV
A continuation of MUS 223 dealing with advanced harmony, form, and style analysis.
Credits: 3
Prerequisite: MUS 223. Offered: Every semester.

MUS 225 - Applied Music Major
Credits: 2
Prerequisite: MUS 126. Offered: Every semester.

MUS 226 - Applied Music Major
Credits: 2
Prerequisite: MUS 225. Offered: Every semester.

MUS 227 - Composition Lessons
Weekly hour private applied instruction for music majors in the Bachelor of Music in Music Composition program.
Credits: 2
Prerequisite: MUS 130. Corequisite: MUS 298. Offered: Every semester.

MUS 228 - Composition Lessons
Weekly hour private applied instruction for music majors in the Bachelor of Music in Music Composition program.
Credits: 2
Prerequisite: MUS 227. Corequisite: MUS 299. Offered: Every semester.

MUS 231 - Conducting I
Basic conducting technique with special emphasis on score reading and improved aural skills, rehearsal planning and efficient use of time, conducting leadership style, and ability to communicate effectively with an ensemble.
Credits: 2
Prerequisite: MUS 124. Offered: Every year.

MUS 232 - Conducting II
Continuation of skills developed in MUS 231. Special emphasis on interpretation within defensible parameters, aural refinements in overcoming difficulties, diction (chorus)/articulation (instrumental), balance, and blend.
Credits: 2
Prerequisite: MUS 231. Offered: Every year.

MUS 233 - Musics of the World
Non-technical introduction to ethnomusicology. Survey of musical styles from around the world emphasizing how music reflects and influences society.
Credits: 3
Offered: Every semester.

MUS 234 - Music, Society, and Crisis
This course examines the interrelationship between people social crisis and musical practice. The course applies interdisciplinary methods to explore how music responds to the most prevailing social issues taking place in the world around us â€” issues such as the needs of subdominant groups, the AIDS pandemic, democracy and social justice, and cultural liberty. This course encourages diverse perspectives related to other disciplines, such as cultural studies, women studies, history, and medical anthropology.
Credits: 3
Offered: Every year.

MUS 235 - Musical Theatre Voice
Continuation of fundamentals of vocal technique. Emphasis upon German literature and literature from the Broadway stage. Continued study of contemporary vocal literature as well as introduction to operatic and oratorio repertoire.
Credits: 3
Prerequisite: MUS 126. Offered: Every semester.

MUS 236 - Musical Theatre Voice
Continuation of fundamentals of vocal technique. Emphasis upon German literature and literature from the Broadway stage. Continued study of contemporary vocal literature as well as introduction to operatic and oratorio repertoire.
Credits: 3
Prerequisite: MUS 235. Offered: Every semester.

MUS 245 - Performance Major
Credits: 3
Prerequisite: MUS 126. Offered: Every semester.

MUS 246 - Performance Major


Credits: 3

Prerequisite: MUS 245. Offered: Every semester.

MUS 247 - African American Music

A chronological history of African American music from its African roots through American forms of work songs, cries, hollers, spirituals, blues, ragtime, jazz, rhythm and blues, rock and roll, soul, gospel, rap, and music written by 20th century Black composers.

Credits: 3

Offered: Every year.

MUS 262 - American Music

Survey of U.S. music, colonial times to present. Such American developments studied as music of first New England School, vernacular and black music of 19th century, jazz, and mixed media music of 20th century. American music which parallels and absorbs European developments and distinctly American contributions to Western music, such as music of Ives, Gershwin, and Copland included.

Credits: 3

Offered: Every other year.

MUS 263 - Music History in Western Civilization I

Survey of Western art music from the medieval era to the classical period, focusing on primary composers and their works, and major style periods. Through readings and listening assignments the course will construct a basic historical narrative of music as an evolving art form and as an integral part of society.

Credits: 3

Offered: Every year.

MUS 264 - Music History in Western Civilization II

Survey of Western art music from the classical period to today, focusing on primary composers and their works, and major style periods. Through readings and listening assignments the course will construct a basic historical narrative of music as an evolving art form and as an integral part of society.

Credits: 3

Offered: Every semester.

MUS 265 - History of Jazz

For majors and non-majors. History of jazz, early African American origins through 1970s. Survey of principal movements and personalities in jazz and sociological and cultural influences on these movements.

Credits: 3

Offered: Every year.

MUS 266 - American Music

American music which parallels and absorbs European developments and distinctly American contributions to Western music, such as music of Ives, Gershwin, and Copland included.

Credits: 3

Offered: Every other year.

MUS 267 - American Music

A chronological history of African American music from its African roots through American forms of work songs, cries, hollers, spirituals, blues, ragtime, jazz, rhythm and blues, rock and roll, soul, gospel, rap, and music written by 20th century Black composers.

Credits: 3

Offered: Every year.

MUS 268 - Music Criticism

Development of method and vocabulary for critiquing musical works and performances. Extensive in-class listening and discussion. Reading assignments survey the history of music criticism and compare reviews of various musical genres and the other arts. Writing assignments include reviews of concerts and recordings. Non-music majors should have taken a college-level music course or have significant experience in music activities.

Credits: 3

Prerequisite: ENGL 100. Offered: Every year.

MUS 269 - Music History in Western Civilization II

Survey of Western art music from the classical period to today, focusing on primary composers and their works, and major style periods. Through readings and listening assignments the course will construct a basic historical narrative of music as an evolving art form and as an integral part of society.

Credits: 3

Offered: Every year.

MUS 270 - The History of American Popular Music, 1900-1963

A non-technical survey of the 20th century American popular music genres, beginning with ragtime and ending at the time of the emergence of the new British rock. Among the subjects covered will be vaudeville, blues, country music, the Big Band era, Broadway and Hollywood, pop vocalists, rhythm and blues, early rock 'n' roll, and ethnic and regional popular music. Classes will consist of listening and discussion. Written assignments will be based on required and supplemental listening and recommended readings.

Credits: 3

Prerequisite: ENGL 100. Offered: Every year.

MUS 272 - Arts Advocacy and Leadership

This course is an overview of the issues in the arts, especially as perceived and confronted by the artist, artist manager and educator. The course will explore the relationship between artist and various constituencies that have the potential of form audiences, supporters, advocates and communities. Students will learn about the not-for-profit model, and how to engage business, government, and other sectors as partners. The class is a mixture of lecture, seminar, workshop and guest lectures.

Credits: 3

Offered: Every year.

MUS 280 - What Makes Music Great?

Much of the critical discourse about music centers on separating the "great" from the average. This is a
course about greatness in music. In it we will discuss the mythologies and commonly perceived criteria that define cultural importance or technical greatness in music. We will look for common rhetoric across many different genres and will deal with popular images of music in film and criticism, the technical parameters of “great” music, and the interpretation of music.

Credits: 3
Offered: Every other year.

**MUS 285 - Music Copyright**
An exploration of copyright purpose, history, use and challenges. Students will learn about copyright ownership and registration, and how copyright is used to manage royalties, publication, project development, and dissemination of the intellectual property through the various media, including the Internet.

Credits: 3
Prerequisite: MUS 380. Offered: Every other year.

**MUS 298 - Composition Forum**
Required of all sophomore-level music majors enrolled in MUS 227-228. One recital/seminar per week, in which students perform and/or critique performances and compositions of colleagues. Recital schedule rotates from studio, to area, to school. Regular faculty and guest presentations and master classes are included.

Credits: 0
Corequisite: MUS 227. Offered: Every semester.

**MUS 299 - Composition Forum**
Required of all sophomore-level Music majors enrolled in MUS 227-228. One recital/seminar per week, in which students perform and/or critique performances and compositions of colleagues. Recital schedule rotates from studio, to area, to school. Regular faculty and guest presentations and master classes are included.

Credits: 0
Corequisite: MUS 228. Offered: Every semester.

**MUS 300 - Recital Seminar**
Required of all junior-level music majors enrolled in private applied music instruction or composition. Students perform or critique performance or composition of colleagues during one recital-seminar each week. Recital schedule rotated: one-week studio, the next week area, and following week school recitals.

Credits: 0
Offered: Every semester.

**MUS 301 - Instrumentation**
Fundamentals of instrumentation, covering the various timbral and technical characteristics of the instruments within the string, woodwind, brass, and percussion families. Students will be expected to understand how each instrument works and demonstrate their knowledge through quizzes and transcription projects.

Credits: 2
Prerequisite: MUS 121 and MUS 123. Offered: Offered on occasion.

**MUS 302 - Orchestration**
Fundamentals of orchestration, covering the techniques of combining instrumental colors in small and large ensembles. Additional instruments that were not covered in MUS 301 will be studied, as well. Students will be expected to understand the combinative concepts and demonstrate their knowledge through transcription projects.

Credits: 2
Prerequisite: MUS 301. Offered: Offered on occasion.

**MUS 305 - Applied Music Major**
Weekly half-hour private applied instruction for music majors in Bachelor of Arts and Bachelor of Music in MusicComposition degree programs. Students should see MUS 325-326 for further information about the requirements of specific studios.

Credits: 2
Prerequisite: MUS 206. Offered: Every semester.

**MUS 306 - Applied Music Major**
Weekly half-hour private applied instruction for music majors in Bachelor of Arts and Bachelor of Music in MusicComposition degree programs. Students should see MUS 325-326 for further information about the requirements of specific studios.

Credits: 2
Prerequisite: MUS 305. Offered: Every semester.

**MUS 310 - Composition Lab: Music Notation**
The course will entail study of western musical notation rules and traditions, engraving techniques, and digital note setting using digital notation software. The course will emphasize a practical approach to both the final product and to the process.

Credits: 1
Prerequisite: MUS 121 and MUS 123. Offered: Offered on occasion.
MUS 311 - Composition Lab: Advanced Techniques
The course will concentrate on a specific compositional challenge for the composer by exploring solutions from the repertoire, experimenting in workshops, and composing a culminating project.
Credits: 1
Prerequisite: MUS 121 and MUS 123. Offered: Every other year.

MUS 312 - Composition Lab: Styles & Genres I
This course will explore the techniques inherent in major works and styles that have influenced the trends in concert music today.
Credits: 1
Prerequisite: MUS 121 and MUS 123. Offered: Every other year.

MUS 313 - Opera Seminar II
The study of stage movement and acting as it relates to opera performance. Projects will include study and performance of monologues, arias, and ensembles. This course will build on the skills learned in Opera Seminar I.
Credits: 1
Prerequisite: MUS 213. Offered: Every semester.

MUS 314 - Composition Lab: Repertoire & Analysis I
This course will analyze a range of major works of the 20th and 21st centuries.
Credits: 1
Prerequisite: MUS 121 or MUS 123. Offered: Every other year.

MUS 315 - Secondary Applied Study
Weekly one-half hour private instruction on an instrument other than a student's principal applied instrument, and for which the student has already had the appropriate secondary applied group instruction in a playing class.
Credits: 1
Offered: Every semester.

MUS 316 - Secondary Applied Study
Weekly one-half hour private instruction on an instrument other than a student's principal applied instrument, and for which the student has already had the appropriate secondary applied group instruction in a playing class.
Credits: 1
Offered: Every semester.

MUS 317 - Piano Class
More advanced class for non-keyboard major with emphasis on technique development, sight reading, ensemble playing and repertoire such as Bach, Two-Part Invention; Chopin, Prelude in B minor, and Sonatinas by Clementi, Kuhlau.
Credits: 1
Prerequisite: MUS 218. Offered: Every semester.

MUS 318 - Piano Class
More advanced class with emphasis on performance of solo piano literature, accompaniment of vocal and instrumental solos and choral accompaniments.
Credits: 1
Prerequisite: MUS 317. Offered: Every semester.

MUS 319 - Free Improvisation II
This course is a continuation of Free Improvisation I, MUS 119 for select students, who will be chosen by audition, during their participation in Free Improvisation I. While the orientation of the subject is similar to the free style of Improvisation I, this class will spend more time with structures, forms and tonality, as well as atonality, electronica, performance art, etc., allowing time to be spent creating original works, being exposed to world music, and exploring innovative improvisatory techniques. The class is designed to be less about the process of improvisation and more about its performance. Students will explore alternative performance venues, and spend time improvising in front of audiences.
Credits: 1
Prerequisite: MUS 119. Offered: Every semester.

MUS 321 - Composition Lab: Entrepreneurship I
The course will explore the entrepreneurial components of a career in music. The creation of a digital and written portfolio will complement the development of knowledge in areas of networking, marketing, public speaking, and time management.
Credits: 1
Prerequisite: MUS 121 and MUS 123. Offered: Every other year.

MUS 322 - Composition Lab: Entrepreneurship II
The course will explore the legal and financial components of building an entrepreneurial career in music.
Credits: 1
Prerequisite: MUS 121 and MUS 123. Offered: Every other year.
MUS 323 - Composition Lab: Styles and Genres II
This course will explore the techniques inherent in major works and styles that have influenced the trends in concert music today.
Credits: 1
Prerequisite: MUS 121 and MUS 123. Offered: Every other year.

MUS 324 - Comp Lab: Repertoire and Analysis II
This course will analyze a range of major works of the 20th and 21st centuries.
Credits: 1
Prerequisite: MUS 121 and MUS 123. Offered: Every other year.

MUS 325 - Applied Music Major
Credits: 2
Prerequisite: MUS 226. Offered: Every semester.

MUS 326 - Applied Music Major
Credits: 2
Prerequisite: MUS 226. Offered: Every semester.

MUS 327 - Composition Lessons
Weekly hour private applied instruction for music majors in the Bachelor of Music in Music Composition program.
Credits: 2
Prerequisite: MUS 228. Corequisite: MUS 398. Offered: Every semester.

MUS 328 - Composition Lessons
Weekly hour private applied instruction for music majors in the Bachelor of Music in Music Composition program.
Credits: 2
Prerequisite: MUS 327. Corequisite: MUS 399. Offered: Every semester.

MUS 330 - Advanced Instrumental Conducting
Develop proficiency in manual and aural skills with special emphasis on rehearsal techniques. Studies and practices aimed toward improved clarity and musicality of basic conducting technique. Practical exploration of rehearsal techniques with an emphasis on efficiency of solving problems of balance, ensemble, intonation and phrasing.
Credits: 3
Prerequisite: MUS 231 and MUS 232 and MUS 222 and MUS 224. Offered: Every semester.

MUS 333 - Musics of the World
Non-technical introduction to ethnomusicology. Survey of musical styles from around the world emphasizing how music reflects and influences society.
Credits: 3
Offered: Every year.

MUS 334 - Music of Latin America
Survey of the Concert Music of Latin America from colonial times to the present. Special emphasis will be placed on the unique culture of this region and its relationship to the compositional characteristics of its music. Students will become familiar with the geography, history, and distinctive elements which make up the major regions (Rio de la Plata, Caribbean, Andean, etc.). Although there are no prerequisites, a reading knowledge of Spanish would be desirable.
Credits: 3
Offered: Offered on occasion.

MUS 335 - Musical Theatre Voice
Continuation of the study of vocal techniques. Possible inclusion of the French repertoire. Continuation of the study of literature of the Broadway stage, opera and oratorio.
Credits: 3
Prerequisite: MUS 236. Offered: Every semester.

MUS 336 - Musical Theatre Voice
Continuation of the study of vocal techniques. Possible inclusion of the French repertoire. Continuation of the study of literature of the Broadway stage, opera and oratorio.
Credits: 3
Prerequisite: MUS 236. Offered: Every semester.

MUS 340 - Piano Pedagogy I
Introduction to piano pedagogy. Survey of learning theories and varied approaches to teaching the beginning piano student, evaluation of beginning piano methods, use of technology in the studio, improvisation, technical development in the beginner, and the business of teaching. Practice teaching and observations.
Credits: 3
MUS 341 - Piano Pedagogy II
Introduction to the intermediate repertoire available to the piano student, with specific study of assigned literature; pedagogical approaches to adult students and group piano study; teaching piano technique and musicianship to the intermediate to advanced piano student. Practice teaching and observations.
Credits: 3
Offered: Every other year.

MUS 344 - Vocal Pedagogy
Introduction to the objective study of the art of singing. Students will develop a working knowledge of the anatomy and physiology of the vocal mechanism as it relates to posture, respiration, phonation, resonance and articulation in singing. Findings from other sciences are applied to problems of vocal development, voice disorders and vocal hygiene. Students are expected to develop a knowledge base in these areas sufficient to demonstrate competence in working with voices of all ages in a voice studio setting.
Credits: 3
Offered: Every year.

MUS 345 - Performance Major
Credits: 3
Prerequisite: MUS 246. Offered: Every semester.

MUS 346 - Performance Major
Credits: 3
Prerequisite: MUS 246. Offered: Every semester.

MUS 347 - Junior Recital
Student performs Junior Performance Recital while enrolled. Enrollment is concurrent with Performance Major lessons, either MUS 345 or MUS 346.
Credits: 1
Offered: Every semester.

MUS 349 - Vocal Pedagogy Practicum
Students act as voice instructors for approximately 15 contact hours per semester teaching studio voice lessons. One two-hour weekly seminar concentrates on methods of building voices, assessing and assigning vocal literature, building recital programs, choice and use of exercises and vocalizes.
Credits: 1
Prerequisite: MUS 344. Offered: Every semester.

MUS 350 - Special Topics in Music History
A course to permit music history instructors to initiate special studies in specialized subjects.
Credits: 3
Offered: Offered on occasion.

MUS 351 - Independent Study Music History
An opportunity for a student to pursue a limited study under supervision. The study will usually result in a research-based term paper.
Credits: 1
Offered: Offered on occasion.

MUS 354 - Topics in Musical Analysis
A analytical study of musical styles, periods, genera, and forms, with rotating focuses, including: sonata forms; the symphony; music since 1945; Impressionism; the Second Viennese School; late Romanticism; and the analysis of song
Credits: 3
Prerequisite: MUS 222 and MUS 224. Offered: Every semester.

MUS 355 - Pedagogy Practicum
Music Performance majors in orchestral instruments tutoring secondary or non-major applied music classes under supervision of applied studio faculty.
Credits: 0
Offered: Every semester.

MUS 356 - Pedagogy Practicum
Music Performance majors in orchestral instruments tutoring secondary or non-major applied music classes under supervision of applied studio faculty.
Credits: 0
Offered: Every semester.

MUS 358 - Governments and the Avant Garde
Interdisciplinary course begins with a section on arts and governments of former times, and in socialist countries, to
provide an historical context for systems current in the U.S. and Canada. Then the arts-funding institutions of the U.S. and Canada will be studied. The actual interactions of U.S. and Canadian governments and artists will be compared.

Credits: 3
Offered: Offered on occasion.

**MUS 361 - Jazz Improvisation**

A performance lab and study of various theoretical foundations of improvised jazz. Mainstream style is emphasized.

Credits: 2
Prerequisite: MUS 122 and MUS 124. Offered: Every year.

**MUS 362 - Jazz Theory**

A study of ear training, jazz harmony, intervals, chord symbols, voicings, melody, harmonization, chord extensions and substitutions in various jazz styles. Specific hands on application to your instrument/voice is included in the curriculum. Prerequisites can be waived by permission of instructor.

Credits: 3
Prerequisite: MUS 123 and MUS 124. Offered: Every year.

**MUS 363 - Music Entrepreneurship I**

This course will build upon the concepts and skills from Arts Leadership and help the student explore the entrepreneurial career options in an ever-changing landscape in the arts. The class will be comprised of lectures, discussion, guests, readings, written projects and group projects. Emphasis will be on considering current, successful models as the students imagine what might be appropriate to their own skills and interests.

Credits: 3
Prerequisite: MUS 272. Offered: Every year.

**MUS 364 - Music Entrepreneurship II**

This course will build upon the concepts and skills from Arts Leadership and Entrepreneurship I. From brainstorming and identification of a niche, to planning, grant-writing, and networking students will develop a set of skills leading up to the creation of an arts venture plan. The class will be comprised of lectures, discussion, guests, readings, written projects and group projects. Students will develop their knowledge and skills, culminating in the creation of a complete arts venture plan, to be carried out during the capstone course.

Credits: 3
Prerequisite: MUS 272 and MUS 363. Offered: Every year.

**MUS 370 - Rhythm, Pitch, and Gesture**

A course designed for music majors, dance majors, and musical theatre majors that emphasizes experiential learning or rhythmic and pitch phenomena through full-body movement, improvisation, and musical visualization (making music “visual” through three-dimensional movement.) Sophomore standing required.

Credits: 3
Prerequisite: MUS 101 or MUS 122. Offered: Every year.

**MUS 371 - Woodwind Repair**

Introduction to common repair problems, preventative maintenance, adjustments necessary to maintain good playing condition, and emergency repairs on the woodwind instruments. Replacement of pads, springs, corks and felts.

Credits: 2
Offered: Every other year.

**MUS 372 - Special Topics in Music**

Study of music areas supplementing but not replacing regular courses. Topics, credit hours, and instructor determined by school.

Credits: .5-3
Offered: Offered on occasion.

**MUS 373 - Special Topics in Music**

Study of music areas supplementing but not replacing regular courses. Topics, credit hours, and instructor determined by school.

Credits: 1-3
Offered: Offered on occasion.

**MUS 374 - Special Topics in Music**

Study of music areas supplementing but not replacing regular courses. Topics, credit hours, and instructor determined by school.

Credits: 1-3
Offered: Offered on occasion.

**MUS 375 - Special Topics in Music**

Study of music areas supplementing but not replacing regular courses. Topics, credit hours, and instructor determined by school.

Credits: 1-3
Offered: Offered on occasion.
MUS 376 - Special Topics in Music
Study of music areas supplementing but not replacing regular courses. Topics, credit hours, and instructor determined by school.
Credits: 1-3
Offered: Offered on occasion.

MUS 377 - Special Topics in Music
Study of music areas supplementing but not replacing regular courses. Topics, credit hours, and instructor determined by school.
Credits: 1-3
Offered: Offered on occasion.

MUS 378 - Special Topics in Music
Study of music areas supplementing but not replacing regular courses. Topics, credit hours, and instructor determined by school.
Credits: 1-3
Offered: Offered on occasion.

MUS 379 - Special Topics in Music
Study of music areas supplementing but not replacing regular courses. Topics, credit hours, and instructor determined by school.
Credits: 1-3
Offered: Offered on occasion.

MUS 380 - The Business of Music
A comprehensive exploration of the various facets of the music business including careers in music, music publishing (copyrights, licensing, music books, exploitation of catalogue), the record business (recording, artist management, licensing, record distribution), tour management, self-employment business basics and ethics in the music business.
Credits: 3
Offered: Every other year.

MUS 385 - Music Contracts
The music business engages musicians with detailed contracts that establish terms of management, marketing, producing, licensing, recording, distribution, and the like. The student will learn about standard language and the principles of contract negotiations.
Credits: 3
Prerequisite: MUS 285. Offered: Every other year.

MUS 395 - Career/Business Management for Musicians
Business and marketing skills for the professional performing musician and private studio teacher. Career and financial planning, accounting and record-keeping, taxes and insurance, contracts and booking, promotion and marketing, etc. Junior standing in Music or permission of instructor required.
Credits: 3
Offered: Every other year.

MUS 396 - Guitar Pedagogy
The course is designed to help students develop the skills necessary to be successful guitar teachers. The focus will be on classical guitar methods and literature. Topics include early childhood education, guitar in the classroom, and running a private music studio, technical development, and etudes.
Credits: 3
Offered: Every other year.

MUS 398 - Composition Forum
Required of all junior-level Music majors enrolled in MUS 327-328. One recital/seminar per week, in which students perform and/or critique performances and compositions of colleagues. Recital schedule rotates from studio, to area, to school. Regular faculty and guest presentations and master classes are included.
Credits: 0
Corequisite: MUS 327. Offered: Every semester.

MUS 399 - Composition Forum
Required of all junior-level Music majors enrolled in MUS 327-328. One recital/seminar per week, in which students perform and/or critique performances and compositions of colleagues. Recital schedule rotates from studio, to area, to school. Regular faculty and guest presentations and master classes are included.
Credits: 0
Corequisite: MUS 328. Offered: Every semester.

MUS 400 - Recital Seminar
Required of all senior-level Music majors enrolled in private applied music instruction or composition. Students perform or critique performance or composition of colleagues during one recital-seminar each week. Recital schedule rotated: one week studio, the next week area, and following week, school recitals.
Credits: 0
Offered: Every semester.
MUS 403 - Counterpoint
A study of the art of counterpoint as practiced from its beginning in western musical history to the present, concentrating on analysis of important examples and some compositional exercises based thereon.
Credits: 3
Prerequisite: MUS 222 and MUS 224. Offered: Every other year.

MUS 404 - Choral Scoring & Arranging
Fundamental techniques of composing and arranging for a cappella and accompanied choral groups. Deals primarily with choral ensembles, their specific characteristics and limitations, including ranges, voice combinations, and suitable material. Includes consideration of use of special choral devices and treatments.
Credits: 2
Prerequisite: MUS 222 and MUS 223 and MUS 224 or MUS 354. Offered: Every year.

MUS 405 - Applied Music Major
Weekly half-hour private applied instruction for Music majors in Bachelor of Arts in Applied Music degree program. See MUS 425-426 for further information about the requirements of specific studios.
Credits: 2
Prerequisite: MUS 306. Offered: Every semester.

MUS 406 - Applied Music Major
Weekly half-hour private applied instruction for Music majors in Bachelor of Arts in Applied Music degree program. See MUS 425-426 for further information about the requirements of specific studios.
Credits: 2
Prerequisite: MUS 306. Offered: Every semester.

MUS 408 - History and Literature of the Wind Band
Survey of various influences (political, social, musical, etc.) upon the development of the Wind Band and its repertoire. Extensive listening, analysis and discussion with individual projects including bibliography and discography development.
Credits: 3
Offered: Offered on occasion.

MUS 409 - History and Literature of the Guitar
For majors and non-majors. A survey of guitar history from the years 1487 to the present. Primary attention will be devoted to guitar composers/performers and their musical works examined in historical, aesthetic and social contexts. These include: musical form and genre; compositional practices and procedures; aspects of the composer's biography and/or historical events that shaped his or her attitudes; general intellectual trends that helped to shape musical practices; and the original venues and circumstances in which the musical works were created and heard.
Credits: 3
Prerequisite: MUS 137 and MUS 138 and MUS 139 and MUS 140 and MUS 264. Offered: Every year.

MUS 410 - Survey of Song Literature
A survey of representative composers and associated poets from their origins to the present in the English, French, and German language art song traditions. Discussions will include divergent approaches to style and text setting, historical development of the genre and associated musical characteristics. Music studied through scores, recordings and student performances.
Credits: 3
Prerequisite: MUS 137 and MUS 138 and MUS 139 and MUS 140 and MUS 264. Offered: Every year.

MUS 411 - American Song Literature
A study of selected American vocal literature in its literary and musical context to acquaint singers and pianists with authors and their background from the viewpoint of intellectual history and literary movements.
Credits: 3
Prerequisite: MUS 137 and MUS 138 and MUS 139 and MUS 140 and MUS 264. Offered: Every other year.

MUS 412 - French Song Literature
A study of selected 19th and 20th century French vocal literature in its literary and musical context, to acquaint singers and pianists with composers and poets from the viewpoint of intellectual history and literary movements.
Credits: 3
Prerequisite: MUS 137 and MUS 138 and MUS 139 and MUS 140 and MUS 264. Offered: Every other year.

MUS 413 - German Song Literature
A study of selected German vocal literature in its literary and musical context to acquaint singers and pianists with authors and their background from the viewpoint of intellectual history and literary movements.
Credits: 3
Offered: Every other year.

MUS 415 - Piano Class for Keyboard Majors
Introductory course in functional piano for keyboard majors. Technical study of modal scales, harmonization using primary and secondary chords, secondary dominant
chords, and seventh chords in folk, pop and beginning jazz style, transposition, part-reading, ensemble playing, playing by ear, sight reading, improvisation, transposing instrument parts and reading clefs.

Credits: 1
Prerequisite: MUS 317 and MUS 318. Offered: Every year.

**MUS 416 - Piano Class for Keyboard Majors**

Continuation of development of functional piano skills of harmonization, part-reading, transposition, sight reading, and improvisation; playing and improvising rags, and writing or arranging a piano duet. Piano standards barrier exam at end of course.

Credits: 1
Prerequisite: MUS 415. Offered: Every year.

**MUS 417 - Piano Class for Non-Keyboard Majors**

More advanced course in functional piano with emphasis on harmonization in pop and jazz style. Continued work on transposition, sight reading, playing by ear and part-reading. Music Education majors take the piano proficiency barrier at conclusion of course.

Credits: 1
Prerequisite: MUS 317 and MUS 318. Offered: Every semester.

**MUS 418 - Vocal Accompaniment for Non-Keyboard Majors**

Emphasis on harmonization of lead sheets with jazz voicings, chord substitution, creative harmonization, tritone substitution; improvisation of 12 bar blues and boogie.

Credits: 1
Prerequisite: MUS 317 and MUS 318. Offered: Every semester.

**MUS 420 - Piano Literature I**


Credits: 3
Prerequisite: MUS 221 and MUS 222 and MUS 223. Offered: Every other year.

**MUS 421 - Piano Literature II**

Continuation of the survey of representative piano literature begun in Piano Literature I, with analysis of the works of principal composers from the romantic through Modern periods. Emphasis on structural and stylistic considerations.

Credits: 3
Prerequisite: MUS 420. Offered: Every other year.

**MUS 424 - The History of Opera**

Technical study of opera emphasizing its musical and dramatic development, relating it to social, cultural, and intellectual forces influencing it.

Credits: 3
Prerequisite: MUS 122 and MUS 123 and MUS 124. Offered: Offered on occasion.

**MUS 425 - Applied Music Major**


Credits: 2
Prerequisite: MUS 326. Offered: Every semester.

**MUS 426 - Applied Music Major**


Credits: 2
Prerequisite: MUS 326. Offered: Every semester.

**MUS 427 - Composition Lessons**

Weekly hour private applied instruction for music majors in the Bachelor of Music in Music Composition program.

Credits: 2
Prerequisite: MUS 328. Corequisite: MUS 498. Offered: Every semester.

**MUS 428 - Composition Lessons**

Weekly hour private applied instruction for music majors in the Bachelor of Music in Music Composition program.

Credits: 2
Prerequisite: MUS 427. Corequisite: MUS 499. Offered: Every semester.

**MUS 432 - VoceVISTA: Science of the Professional Voice**

This course involves an in-depth study of vocal tract acoustics (acoustic phonetics) and resonance strategies utilized by singers trained in the western classical tradition as well as non-classical (i.e. Broadway, or CCM - Contemporary Commercial Music).
Credits: 3
Offered: Every other year.

**MUS 433 - Romanticism and Music**
Investigation of aesthetic and philosophical concepts of Romanticism in art, literature, and philosophy; search for those conceptual characteristics in history of musical style.
Credits: 3
Offered: Offered on occasion.

**MUS 435 - Musical Theatre Voice**
Preparation of the B.F.A. in Musical Theatre recital which includes dance technique, acting technique and the culmination of the three previous years of vocal study.
Credits: 3
Prerequisite: MUS 336. Offered: Every semester.

**MUS 436 - Musical Theatre Voice**
Preparation of the B.F.A. in Musical Theatre recital which includes dance technique, acting technique and the culmination of the three previous years of vocal study.
Credits: 3
Prerequisite: MUS 336. Offered: Every semester.

**MUS 437 - Digital Music Seminar: Scoring for Video Games**
This course is an introduction to the many technical and creative procedures involved when scoring for video games.
Credits: 3
Offered: Every other year.

**MUS 438 - Digital Music Seminar: Scoring for Film and Video**
This course is an introduction to the many technical and creative procedures involved when scoring for film and video.
Credits: 3
Offered: Every other year.

**MUS 439 - Composition Seminar**
Continuation of free composition with detailed study of 20th century compositional techniques.
Credits: 3
Offered: Every semester.

**MUS 440 - Composition for Electronic Media: Analog**
Basic compositional and technical skills necessary for realization of electronic music. Emphasis on proper recording, editing, mixing, and synthesis techniques as they relate to the composer. Analog synthesis is stressed.
An introduction to digital synthesis (MIDI, FM, computer-assisted composition) also included. Brief historical survey of medium presented.
Credits: 3
Offered: Every year.

**MUS 441 - Composition for Electronic Media: Digital**
Electronic music composed and realized using a variety of computer-related techniques. Covers digital recording and synthesis using MIDI and other digital audio hardware/software. Emphasis on MIDI and audio sequencing. Related topics include electronic orchestration, computer assisted software and algorithms, and literature.
Credits: 3
Offered: Every year.

**MUS 442 - Digital Music Seminar: Digital Orchestration**
This course is an introduction to the many technical and creative procedures involved when orchestrating within the digital medium.
Credits: 3
Offered: Every other year.

**MUS 443 - Digital Music Seminar: Sound Design**
This course is an introduction to the many technical and creative procedures involved when creating sound design for film, video, and theatre.
Credits: 3
Offered: Every other year.

**MUS 445 - Performance Major**
Credits: 3
Prerequisite: MUS 346. Offered: Every semester.

**MUS 446 - Performance Major**
Credits: 3
Prerequisite: MUS 346. Offered: Every semester.
MUS 447 - Senior Recital
Student performs Senior Performance Recital while enrolled. Enrollment is concurrent with Performance Major lessons, either MUS 445 or MUS 446.
Credits: 1
Offered: Every semester.

MUS 450 - Directed Studies
Directed Studies in music. Designed exclusively for Childhood Education majors with a concentration in music. Includes voice proficiency, vocal instruction, observation of elementary music classrooms, and conducting.
Credits: 2
Offered: Every semester.

MUS 451 - Directed Studies
Directed Studies in music. Designed exclusively for Childhood Education majors with a concentration in music. Includes voice proficiency, vocal instruction, observation of elementary music classrooms, and conducting.
Credits: 2
Offered: Every semester.

MUS 453 - The Baroque Period in Music
Detailed study of styles, trends, and developments in music, 17th and 18th centuries through preclassic era. Music studied through scores, recordings, and performance. Review of important historical and theoretical developments.
Credits: 3
Offered: Offered on occasion.

MUS 454 - The Classical Period in Music
Credits: 3
Offered: Offered on occasion.

MUS 455 - The Romantic Period in Music
Music composers, and theorists of 19th and 20th centuries, from after Beethoven through impressionists. Emphasis on developments in the music through study of scores and performance. Parallels between musical romanticism and romanticism in other arts.
Credits: 3

MUS 456 - The Modern Period in Music
Detailed historical study of 20th century composers, musical trends, and developments. Variety of contemporary styles, experimentation, and performance practice in recent music emphasized. Recorded examples.
Credits: 3
Offered: Offered on occasion.

MUS 457 - Seminar in Popular Music
The seminar examines the ways in which contemporary popular music both reflects and influences contemporary society. A brief history of American popular music and its styles will be followed by discussions based on topics such as cover tunes, music videos, cross-over artists, and the music business. Junior standing required.
Credits: 3
Offered: Offered on occasion.

MUS 458 - Cult of Elizabeth/Patronage in Arts
For upper-level non-music majors. Course deals with understanding of the purposes of the Cult of Elizabeth in Renaissance England and to assess its effect on music and other arts of the age. With the Elizabethan patronage model as a foundation for understanding the relationships between governments and the arts, the present system of support for the arts will be assessed, debated and critiqued.
Credits: 3
Offered: Offered on occasion.

MUS 460 - Independent Study
Maximum of 6 credit hours of independent study in music or music education exclusive of applied music. Projects selected from subject areas not available in regularly scheduled course offerings. Well in advance of registration for either regular or summer session, student must complete independent study request form (in triplicate) available in the School of Music office.
Credits: 1-3
Offered: Every semester.

MUS 461 - Independent Study
Maximum of 6 credit hours of independent study in music or music education exclusive of applied music. Projects selected from subject areas not available in regularly scheduled course offerings. Well in advance of registration for either regular or summer session, student must complete independent study request form (in triplicate) available in School of Music office.
Credits: 1-3
Offered: Every semester.

**MUS 465 - Music Business Internship**

The course provides credit for professional experiences in the music business for music business majors. Enrollment is to be arranged with an appropriate instructor.

Credits: 1-15

Offered: Every semester.

**MUS 470 - Special Topics Workshop**

Usually summer or other short-term workshops/institutes dealing with specific music literature, topics, problems, or teaching approaches and techniques.

Credits: 1-6

Offered: Offered on occasion.

**MUS 471 - Special Topics Workshop**

Usually summer or other short-term workshops/institutes dealing with specific music literature, topics, problems, or teaching approaches and techniques.

Credits: 1-6

Offered: Offered on occasion.

**MUS 476 - Audio and Desktop Multimedia**

Course designed for students with a strong interest and background in composition, multimedia, audio and MIDI. A project-oriented course which focuses on audio design, analysis, and integration as it applies to multimedia authoring, motion video, and web content creation.

Credits: 3

Prerequisite: MUED 291. Offered: Every year.

**MUS 477 - History of Performance and the Analysis of Interpretation**

Explores the changing historical views of the process of musical interpretation in performance and develops a useful language to discuss the interpretive choices made by performers. We will discuss the aesthetic issues surrounding the notions of ‘the work’ and ‘the interpretation’ while comparing recorded performances from across the 20th century. Guest lecturers from among our studio faculty and ensemble directors will discuss their own specialty from the perspective of interpretation.

Credits: 3

Offered: Every other year.

**MUS 485 - Multimedia for Musicians**

A course designed for musicians and music educators focusing on the preparation and integration of various elements (text, graphics, video, music) with the goal of producing interactive or self-running computer-based presentations. Related topics include: design and content issues, music and authoring software, media preparation and creation, and final delivery.

Credits: 3

Prerequisite: MUED 291. Offered: Every year.

**MUS 491 - Senior Project in Composition**

An original composition representing the most mature work of the apprentice composer. Students will also supply a complete written analysis of the final composition. The scope and content of all final projects are subject to the approval of the area head.

Credits: 2

Offered: Every semester.

**MUS 492 - Music Capstone Project**

Building upon the skills and ideas developed through a non-performance track of the Bachelor of Arts in Music, students will implement an arts venture and/or research project as approved and guided by faculty. The project will be linked to the professional goals of the curriculum and the career interests of the student.

Credits: 3

Offered: Every year.

**MUS 498 - Composition Forum**

Required of all senior-level music majors enrolled in MUS 427-428. One recital/seminar per week, in which students perform and/or critique performances and compositions of colleagues. Recital schedule rotates from studio, to area, to school. Regular faculty and guest presentations and master classes are included.

Credits: 0

Corequisite: MUS 427. Offered: Every semester.

**MUS 499 - Composition Forum**

Required of all senior-level music majors enrolled in MUS 427-428. One recital/seminar per week, in which students perform and/or critique performances and compositions of colleagues. Recital schedule rotates from studio, to area, to school. Regular faculty and guest presentations and master classes are included.

Credits: 0

Corequisite: MUS 428. Offered: Every semester.

**MUS 500 - Graduate Music Ensemble**

Instrumental or vocal performance group for graduate students. All music students participate in the university music ensembles, the required number of participations varying among the several music curricula. Participation in any ensemble is open to students in other departments of
the university by audition and consent of the conductor and/or Director of the School of Music.

Credits: .5
Offered: Every semester.

MUS 501 - Graduate Music Ensemble
Instrumental or vocal performance group for graduate students. All music students participate in the university music ensembles, the required number of participations varying among the several music curricula. Participation in any ensemble is open to students in other departments of the university by audition and consent of the conductor and/or Director of the School of Music

Credits: 1
Offered: Every semester.

MUS 502 - Harmonic Styles Since 1850
Analytical and compositional study of stylistic developments since 1850 which extend, expand, depart from or negate "common-practice" harmony and tonality. Major composers studied. Emphasis on gaining understanding of their harmonic styles via analysis and compositional imitation by student. Individual projects required.

Credits: 3
Prerequisite: MUS 221. Offered: Offered on occasion.

MUS 503 - 20th Century Counterpoint
Study of linear aspects of music via combining melodies into various textures. Special emphasis on revival of contrapuntal techniques in 20th century by such composers as Busoni, Hindemith, Bartok, Schoenberg, Webern, and their successors; these techniques and styles used in direct composition.

Credits: 3
Offered: Offered on occasion.

MUS 506 - Basic Studies Seminar: Theory
A review of the principles and practices of music theory/composition, centering on the "common practice" period but not confined to it, and geared to the individual needs of participating students, whose prior involvement with theory may not be recent or extensive. Syllabi for particular areas of study, relevant texts, scores and recordings in library, assignments leading to final paper.

Credits: 3
Offered: Every other year.

MUS 507 - Basic Studies Seminar: History
A review of the basic framework of Western musical history, centered on a core repertory but not restricted by it, with class listening and discussion; individual projects required of students, utilizing standard research procedures and reference materials, including scores and recordings; optionally also class lecture and/or performance by students.

Credits: 3
Offered: Every other year.

MUS 508 - History and Literature of the Wind Band
Survey of various influences (political, social, musical, etc.) upon the development of the Wind Band and its repertoire. Extensive listening, analysis and discussion with individual projects including bibliography and discography development.

Credits: 3
Offered: Every other year.

MUS 516 - Collaborative Piano Performance Seminar
Performance seminar for students in the Collaborative Piano Masters Program. Students will perform with their collaborative partners (instrumentalists and singers), receive critique from both faculty and peers, and discuss performance related issues.

Credits: 1
Offered: Every semester.

MUS 520 - Piano Literature

Credits: 3
Offered: Every other year.

MUS 521 - Music Bibliography
An exploration of the resources and techniques needed for graduate studies in all areas of music. Students will learn to examine and critically evaluate music resources in both traditional and electronic forms, and will develop research strategies that can be adapted to many different areas of study. Through a variety of projects and in-class presentations, students will become better equipped to undertake graduate level music research, and to ultimately present that research with proper bibliographic style according to established scholarly conventions.

Credits: 3
Offered: Offered on occasion.
MUS 522 - Style and Techniques of Song Literature

Students will study a survey of representative songs from their origins to the present in the Italian, French, German, British, and American art song traditions. Discussions will include divergent approaches to style and text settings, historical development of the genre, poetry, and associated musical characteristics. Music is studied through scores, recordings and performances. Students will be coached in the performance practice of the literature.

Credits: 3
Offered: Offered on occasion.

MUS 523 - Sonata Duo and Chamber Ensemble Seminar

Collaborative Pianists will study representative chamber instrumental literature from the Baroque, Classical, Romantic, Impressionistic, and 20th century periods. An overview of standard literature for duos with all instruments, piano, trios, and larger ensembles (quartets, quintets, and sextets) will be presented. Collaborative Pianists will also play in chamber ensembles and perform duos in class.

Credits: 3
Offered: Every year.

MUS 524 - Techniques of Opera Coaching

Collaborative pianists will learn basic skills for working as a rehearsal pianist with a conductor and stage director, how to prepare an orchestral reduction of an opera score, and how to assist singers in the preparation of operatic roles. Collaborative pianists will prepare arias, recitatives, and ensemble pieces, and will be expected to sing vocal lines while playing the orchestral accompaniment as well as accompany guest singers in the class. Topics discussed will include elements of style, traditions of vocal ornamentation, and lyric diction.

Credits: 3
Prerequisite: MUS 615. Offered: Offered on occasion.

MUS 542 - Renaissance Period in Music

Detailed study of styles, trends, and developments in music in 15th and 16th centuries. Survey of 14th century. Ars Nova period also included. Philosophical and theoretical ideas of period studied as well as the actual music. Performance of Renaissance music stressed.

Credits: 3
Offered: Offered on occasion.

MUS 544 - Classical Period in Music


Credits: 3
Offered: Offered on occasion.

MUS 545 - Romantic Period in Music

Music, composers, and theorists of 19th and 20th centuries, from after Beethoven through impressionists. Emphasis on developments in the music through study of scores and performance. Parallels between musical romanticism and romanticism in other arts.

Credits: 3
Offered: Offered on occasion.

MUS 550 - Compositional Technology Since 1950


Credits: 3
Offered: Offered on occasion.

MUS 555 - Special Topics Workshop

Usually summer or other short-term workshops dealing with specific topics, techniques or problems in music theory, analysis, history or literature. Maximum of 6 credit hours in increments of no more than 3 credit hours may apply with permission to requirements in categories of theory, history and literature, or electives.

Credits: 1-3
Offered: Offered on occasion.

MUS 565 - Special Topics Seminar

Presentation and investigation of a specific but not regularly scheduled topic of current need or interest, including choral conducting and analysis of choral scores. Course may be repeated to a maximum of 6 credit hours (in different topics) and may apply with permission to requirements in categories of theory, history and literature, or electives.

Credits: 1-3
Offered: Offered on occasion.

MUS 566 - Advanced Choral Conducting/Analysis of History Styles

Advanced choral conducting techniques and analysis of choral scores. Students will conduct in class from choral repertoire that will be chosen from representative works of the important style periods in music history, including Gregorian Chant, the Middle Ages, Renaissance, Baroque, Classical, Romantic, and a variety of 20th century styles.
Some class time will also be devoted to presentation and discussion of appropriate choral literature of high quality in the school curriculum.

Credits: 3
Prerequisite: MUS 222 and MUS 224 and MUS 232. Offered: Offered on occasion.

MUS 575 - Music and Computer Multimedia
A course focusing on the integration of music (digital audio and MIDI) into a variety of computer-based multimedia environments including Hypercard, Director, Adobe Premiere, and others. Music development tools will include many recent production and editing applications including: Digital Performer, Deck, Alchemy, and Sound Designer.

Credits: 3
Offered: Every semester.

MUS 576 - Audio and Desktop Multimedia
Course designed for students with a strong interest and background in composition, multimedia, audio and MIDI. A project-oriented course which focuses on audio design, analysis, and integration as it applies to multimedia authoring, motion video, and web content creation.

Credits: 3
Prerequisite: MUS 291. Offered: Every year.

MUS 577 - The History of Performance and the Analysis of Interpretation
Explores the changing historical views of the process of musical interpretation in performance and a develops a useful language to discuss the interpretive choices made by performers. We will discuss the aesthetic issues surrounding the notions of the work and the interpretation while comparing recorded performances from across the 20th century. Guest lecturers from among our studio faculty and ensemble directors will discuss their own specialty from the perspective of interpretation.

Credits: 3
Offered: Every other year.

MUS 578 - Narrative and Dramatic Analysis of Music
The idea that music is dramatic or poetic is a common one. However, the language of music theory and emotional interpretation often remain remote from one another. The goal of this course is to help us develop the critical concepts and the analytical language needed to make such transitions possible. We will attempt to reclassify or rephrase music theoretical concepts in terms of their dramatic impact on listeners in real time. This will involve a good deal of musical analysis and a solid foundation is a prerequisite for the course. We will also explore linguistic and dramatic ideas of narrative time and theories about how stories are structured.

Credits: 3
Offered: Every other year.

MUS 580 - The Art of Improvisation
The course, which will explore the world of free improvisation, will enhance the expressive skills of performers, educators, and music therapists.

Credits: 1-3
Offered: Every year.

MUS 590 - Special Studies
Studies not otherwise available as regular course offerings and relevant to student's program or career plans, pursued in independent, directed, or tutorial manner. Student must submit proposal for approval, format available in the School of Music office. Student must also secure agreement of faculty member to sponsor study. Maximum of 6 credit hours of any combination of MUS and MUED may be earned this way in increments of no more than 3 credit hours.

Credits: 1-3
Offered: Offered on occasion.

MUS 591 - Special Studies
Studies not otherwise available as regular course offerings and relevant to student's program or career plans, pursued in independent, directed, or tutorial manner. Student must submit proposal for approval, format available in the School of Music office. Student must also secure agreement of faculty member to sponsor study. Maximum of 6 credit hours of any combination of MUS and MUED may be earned this way in increments of no more than 3 credit hours.

Credits: 1-3
Offered: Offered on occasion.

MUS 592 - Graduate Performance Major
Two semesters of advanced applied instruction for candidates for Master of Music in Performance degree culminating in a public performance.

Credits: 3
Corequisite: MUS 516. Offered: Every semester.

MUS 593 - Graduate Performance Major
Two semesters of advanced applied instruction for candidates for Master of Music in Performance degree culminating in a public performance.

Credits: 3
Corequisite: MUS 516. Offered: Every semester.

MUS 601 - Applied Music Minor I
Half-hour lessons in secondary applied instruments. Permission of School of Music.
CREDITS: 1
Offered: Every semester.

MUS 616 - Collaborative Piano Performance Seminar
Performance seminar for students in the Collaborative Piano Masters Program. Students will perform with their collaborative partners (instrumentalists and singers), receive critique from both faculty and peers, and discuss performance related issues.
CREDITS: 1
Prerequisite: MUS 516. Offered: Every semester.

MUS 670 - Special Topics Seminar
Presentation and investigation of a specific but not regularly scheduled topic of current need or interest. Course may be repeated to a maximum of 6 credit hours (in different topics) and may apply with permission to requirements in categories of theory, history and literature, or electives.
CREDITS: 1-3
Offered: Offered on occasion.

MUS 602 - Applied Music Minor II
Half-hour lessons in secondary applied instruments. Permission of School of Music.
CREDITS: 1
Offered: Every semester.

MUS 603 - Applied Music Minor III
Half-hour lessons in secondary applied instruments. Permission of School of Music.
CREDITS: 1
Offered: Every semester.

MUS 604 - Applied Music Minor IV
Half-hour lessons in secondary applied instruments. Permission of School of Music.
CREDITS: 1
Offered: Every semester.

MUS 605 - Applied Music Major I
Hour lessons in major applied instruments. Permission of School of Music.
CREDITS: 2
Offered: Every semester.

MUS 606 - Applied Music Major II
Hour lessons in major applied instruments. Permission of School of Music.
CREDITS: 2
Offered: Every semester.

MUS 607 - Applied Music Major III
Hour lessons in major applied instruments. Permission of School of Music.
CREDITS: 2
Offered: Every semester.

MUS 608 - Applied Music Major IV
Hour lessons in major applied instruments. Permission of School of Music.
CREDITS: 2
Offered: Every semester.

MUS 609 - Composition
Advanced free composition for graduate study, concentrating on individual creative musical inclinations of each student. Seminar and private study of 20th century creative concepts.
CREDITS: 3
Prerequisite: (MUS 438 or MUS 439) and MUS 609.
Offered: Every semester.

MUS 610 - Composition
Advanced free composition for graduate study, concentrating on individual creative musical inclinations of each student. Seminar and private study of twentieth century creative concepts.
CREDITS: 3
Prerequisite: (MUS 438 or MUS 439) and MUS 609.
Offered: Every semester.

MUS 611 - Composition
Continuation of advanced composition pursuing mature, professional creative expression.
CREDITS: 3
Prerequisite: MUS 610. Offered: Offered on occasion.

MUS 612 - Composition
Continuation of advanced composition pursuing mature, professional creative expression.
CREDITS: 3
Prerequisite: MUS 610 and MUS 611. Offered: Offered on occasion.
MUS 614 - The Pedagogy of Music Theory

Designed to provide the necessary background and practical instruction in the art of teaching music theory and aural skills acquisition. Students will engage in a critical evaluation of the philosophies, materials, curricula, and strategies essential to teaching music theory. The course provides pedagogical training geared toward music theory teaching of students at the K-12 and college levels and in the context of the classroom, rehearsal, and individual applied lesson.

Credits: 3
Offered: Offered on occasion.

MUS 615 - Graduate Diction for Singers

The purpose of the course is to review and expand the knowledge of the International Phonetic Alphabet, the recognized tool for pronunciation in the world of singing, and to address the rules that govern proper articulation and pronunciation of English, Italian, German, and French in both spoken and sung forms of these languages. In addition, students will learn to transcribe written poetic texts into the International Phonetic Alphabet.

Credits: 3
Offered: Offered on occasion.

MUS 624 - Analytic Techniques

The application of analytical methods, including Schenkerian reductive analysis, to Western tonal music since the latter 17th century. Includes the study of musical forms in Western music and entails a significant prose writing component.

Credits: 3
Offered: Offered on occasion.

MUS 631 - Art of Wind Conducting

Students will gain the score study skills necessary to conduct top quality repertoire and establish criterion and knowledge of quality repertoires. Students will gain the skills necessary to choose, teach and conduct quality repertoire at the professional level.

Credits: 1-3
Offered: Every year.

MUS 632 - Wind Conducting Symposium

Designed to enhance the skills of conductors at every level, topics include repertoire choices, rehearsal techniques, baton technique, ensemble development, and score study. Masterworks will be explored and conducted with development of musical interpretation, movement and conducting technique being the goal. Students will achieve a high level of aural, physical and emotional skill on the podium.

Credits: 3
Prerequisite: MUS 624. Offered: Every other year.

MUS 643 - Baroque Period in Music

Detailed study of styles, trends, and developments in music, 17th and 18th centuries through preclassic era. Music studied through scores, recordings, and performance. Review of important historical and theoretical developments.

Credits: 3
Offered: Every other year.

MUS 646 - Modern Period In Music

Detailed historical study of 20th century composers, musical trends, and developments. Variety of contemporary styles, experimentation, and performance practice in recent music emphasized.

Credits: 3
Offered: Every other year.

MUS 651 - Pedagogy of Music Composition

A seminar/discussion course that will prepare graduate students to teach music composition at the beginning levels. Class and private instruction observation, research and discussion with individual projects and presentations.

Credits: 3
Offered: Every other year.

MUS 652 - Schenkerian Analysis

The course covers the fundamental concepts of Schenkerian analysis beginning with the interpretation of brief phrases and themes and eventually progressing through short binary forms and larger designs such as sonata form.

Credits: 3
Prerequisite: MUS 624. Offered: Every other year.

MUS 653 - Post-Tonal Analysis

The course introduces students to a variety of post-tonal music and analytic approaches. Repertoires covered include free-atonality, twelve-tone music, integral serialism, early electronic music, aleatoric music and indeterminacy.

Credits: 3
Prerequisite: MUS 624. Offered: Every other year.

MUS 665 - Advanced Choral Conducting and Analysis

Advanced choral conducting techniques and analysis of choral scores. Students will conduct in class from choral repertoire which will be chosen from representative works of the important style periods in music history, including
Gregorian Chant, the Middle Ages, Renaissance, Baroque, Classical, Romantic, and a variety of 20th century styles. Some class time will also be devoted to presentation and discussion of appropriate choral literature of high quality in the school curriculum. Students should have completed undergraduate fundamentals of conducting classes and all undergraduate theory courses.

Credits: 3
Offered: Offered on occasion.

MUS 666 - Choral Literature for Secondary Schools
Students will read and analyze, in class, a variety of choral repertoire, deemed by the instructor to be of the highest quality. Literature will be chosen from representative works of the important style periods in music history, from the Renaissance to the 20th century. Emphasis will be given to literature that is especially appropriate for junior and senior high school choral programs.

Credits: 3
Offered: Offered on occasion.

MUS 692 - Graduate Performance Major
Two semesters of advanced applied instruction for candidates for Master of Music in Performance degree culminating in a public performance.

Credits: 3
Prerequisite: MUS 593. Offered: Every semester.

MUS 693 - Graduate Performance Major
Two semesters of advanced applied instruction for candidates for Master of Music in Performance degree culminating in a public performance.

Credits: 3
Prerequisite: MUS 593. Offered: Every semester.

MUS 694 - Recital
Concurrently with MUS 693 or in any subsequent semester, candidate for major in Performance presents public recital under supervision of major instructor and two other instructors from same area.

Credits: 3
Offered: Every semester.

MUS 695 - Thesis
Candidate for degree in Theory-Composition engages in advanced work culminating in thesis project or composition/arrangement.

Credits: 1-3
Offered: Offered on occasion.

MUS 18 - Clarinet Ensemble
The study and performance of ensemble repertoire for the clarinet family.

Credits: .5
Offered: Every semester.

MUS 21 - University Chorus
All music students participate in the university music ensembles, the required number of participations varying among the several music curricula. Participation in any ensemble is open to students in other departments of the university by audition and consent of the conductor and/or Director of the School of Music.

Credits: 1
Offered: Every semester.

MUS 22 - College Choir
All music students participate in the university music ensembles, the required number of participations varying among the several music curricula. Participation in any ensemble is open to students in other departments of the university by audition and consent of the conductor and/or Director of the School of Music.

Credits: 1
Offered: Every semester.

MUS 23 - Chamber Choir
All music students participate in the university music ensembles, the required number of participations varying among the several music curricula. Participation in any ensemble is open to students in other departments of the university by audition and consent of the conductor and/or Director of the School of Music.

Credits: 1
Offered: Every semester.

MUS 24 - Fredonia Camerata
All music students participate in the university music ensembles, the required number of participations varying among the several music curricula. Participation in any ensemble is open to students in other departments of the university by audition and consent of the conductor and/or Director of the School of Music.

Credits: 1
Offered: Every semester.

MUS 25 - All-College Band
All music students participate in the university music ensembles, the required number of participations varying among the several music curricula. Participation in any ensemble is open to students in other departments of the
university by audition and consent of the conductor and/or Director of the School of Music.

Credits: 1
Offered: Every semester.

MUS 26 - Concert Band
All music students participate in the university music ensembles, the required number of participations varying among the several music curricula. Participation in any ensemble is open to students in other departments of the university by audition and consent of the conductor and/or Director of the School of Music.

Credits: 1
Offered: Every semester.

MUS 27 - Wind Symphony
All music students participate in the university music ensembles, the required number of participations varying among the several music curricula. Participation in any ensemble is open to students in other departments of the university by audition and consent of the conductor and/or Director of the School of Music.

Credits: 1
Offered: Every semester.

MUS 28 - Wind Ensemble
All music students participate in the university music ensembles, the required number of participations varying among the several music curricula. Participation in any ensemble is open to students in other departments of the university by audition and consent of the conductor and/or Director of the School of Music.

Credits: 1
Offered: Every semester.

MUS 29 - Symphony Orchestra
All music students participate in the university music ensembles, the required number of participations varying among the several music curricula. Participation in any ensemble is open to students in other departments of the university by audition and consent of the conductor and/or Director of the School of Music.

Credits: 1
Offered: Every semester.

MUS 30 - Chamber Orchestra
All music students participate in the university music ensembles, the required number of participations varying among the several music curricula. Participation in any ensemble is open to students in other departments of the university by audition and consent of the conductor and/or Director of the School of Music.

Credits: .5
Offered: Every semester.

MUS 31 - String Chamber Ensemble
All music students participate in the university music ensembles, the required number of participations varying among the several music curricula. Participation in any ensemble is open to students in other departments of the university by audition and consent of the conductor and/or Director of the School of Music.

Credits: .5
Offered: Every semester.

MUS 32 - Music Theatre Ensemble
All music students participate in the university music ensembles, the required number of participations varying among the several music curricula. Participation in any ensemble is open to students in other departments of the university by audition and consent of the conductor and/or Director of the School of Music.

Credits: .5
Offered: Every semester.

MUS 33 - Opera Prod Practicum
All music students participate in the university music ensembles, the required number of participations varying among the several music curricula. Participation in any ensemble is open to students in other departments of the university by audition and consent of the conductor and/or Director of the School of Music.

Credits: .5
Offered: Every semester.

MUS 34 - Opera Workshop
All music students participate in the university music ensembles, the required number of participations varying among the several music curricula. Participation in any ensemble is open to students in other departments of the university by audition and consent of the conductor and/or Director of the School of Music.

Credits: .5
Offered: Every semester.

MUS 35 - Piano Ensemble
All music students participate in the university music ensembles, the required number of participations varying among the several music curricula. Participation in any ensemble is open to students in other departments of the university by audition and consent of the conductor and/or Director of the School of Music.

Credits: .5
Offered: 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.

Credits: .5
Offered: Every semester.

MUS 36 - Woodwind Chamber Ensemble

MUS 37 - Brass Chamber Ensemble

MUS 38 - Saxophone Ensemble

MUS 39 - Flute Ensemble

MUS 40 - Brass Choir

MUS 41 - Percussion Ensemble

MUS 42 - African Drumming Ensemble

MUS 43 - Guitar Chamber Ensemble

MUS 44 - Guitar Quartet

MUS 45 - Guitar Ensemble
university by audition and consent of the conductor and/or Director of the School of Music.

Credits: 1
Offered: Every semester.

**MUS 46 - Special Ensemble**

All music students participate in the university music ensembles, the required number of participations varying among the several music curricula. Participation in any ensemble is open to students in other departments of the university by audition and consent of the conductor and/or Director of the School of Music.

Credits: .5
Offered: Every semester.

**MUS 47 - Special Ensemble**

All music students participate in the university music ensembles, the required number of participations varying among the several music curricula. Participation in any ensemble is open to students in other departments of the university by audition and consent of the conductor and/or Director of the School of Music.

Credits: .5
Offered: Every semester.

**MUS 48 - Special Ensemble**

All music students participate in the university music ensembles, the required number of participations varying among the several music curricula. Participation in any ensemble is open to students in other departments of the university by audition and consent of the conductor and/or Director of the School of Music.

Credits: .5
Offered: Every semester.

**MUS 49 - Vocal Jazz Combo**

A select jazz chamber ensemble for vocalists and instrumentalists. Open to any student who can qualify by audition.

Credits: .5
Offered: Every semester.

**MUS 50 - Instrumental Jazz Combo**

An intensive study of jazz small group performance practice, improvisation, and repertoire. Open to any student who can qualify by audition.

Credits: .5
Offered: Every semester.

**MUS 51 - Fredonia New Jazz Ensemble**

The Fredonia New Jazz Ensemble provides the Fredonia student with a specially curated big band experience. Selected repertoire includes contemporary jazz ensemble music from around the world. Seating is determined by audition.

Credits: .5
Offered: Every semester.

**MUS 52 - Fredonia Jazz Orchestra**

The Fredonia Jazz Orchestra provides the Fredonia student with a diverse and comprehensive big band experience. Selected repertoire includes classic and contemporary pieces to excite and challenge the aspiring big band musician. Seating is determined by audition.

Credits: 1
Offered: Every semester.

**MUTY - Music Therapy**

**MUTY 112 - Music Therapy Clinical Observation and Seminar**


Credits: 1
Offered: Every year.

**MUTY 115 - Introduction to Music Therapy**

A basic orientation and general introduction to music therapy as a creative arts discipline. Lectures, classroom discussion, films and classroom demonstrations are used to introduce students to the target populations/disabilities.

Credits: 2
Offered: Every year.

**MUTY 116 - Orientation to Clinical Practice**

Course designed to introduce the American Music Therapy Association Professional Competencies in the area of Music Foundations: Composition and Arranging; Nonsymphonic Instrumental Skills and Improvisation Skill as well as Music Therapy Competencies: Clinical Foundations and Principles.

Credits: 2
MUTY 211 - Clinical Placement and Seminar I
Seminar designed to address knowledge of American Music Therapy Professional Competencies in Clinical Foundations: exceptionality, principles of therapy and the therapeutic relationship and Music Therapy: Foundations and Principles, novice level Client Assessment, Treatment Planning, Therapy Implementation, Therapy Evaluation, Documentation, Termination/Discharge Planning and Supervision. Structured experiences include weekly field placements in area nursing homes, documentation and supervision appropriate to students’ first clinical experience.
Credits: 1
Offered: Every year.

MUTY 212 - Clinical Placement and Seminar II
Seminar designed to address knowledge of American Music Therapy Professional Competencies in Clinical Foundations: exceptionality, principles of therapy and the therapeutic relationship and Music Therapy: Foundations and Principles, Client Assessment, Treatment Planning, Therapy Implementation, Therapy Evaluation, Documentation, Termination/Discharge Planning and Supervision. Structured experiences include the continuation of weekly field placements in the same area nursing homes as the previous semester, documentation and supervision.
Credits: 1
Offered: Every year.

MUTY 215 - Music Therapy Repertoire
Designed to address the development of American Music Therapy Association Competencies in foundational knowledge and repertoire of Music and Music Therapy experiences in singing, playing instruments, movement, listening, and creating (including composition and improvisation).
Credits: 2
Offered: Every year.

MUTY 216 - Impact of Music on Human Health and Behavior
Designed to address American Music Therapy Professional Competencies in Music Therapy: foundational knowledge of Psychological and Physiological aspects of musical behavior and experience; and Research Methods.
Credits: 2
Offered: Every year.

MUTY 240 - Music for Children with Disabilities
Introduction to the needs of students with disabilities, including categories of disabilities; identification and remediation of disabilities and how music can be used as a teaching method. Add INDS 299 Service Learning in Music for Children with Disabilities to this course to gain intern teaching experience teaching music for children with disabilities in classroom settings.
Credits: 1
Offered: Every semester.

MUTY 270 - Social Instruments
Group applied instruction on a variety of social/recreational non-traditional instruments (e.g. autoharp, dulcimer, recorder, ukulele, percussion instruments, tone bells). Designed to develop a playing competence sufficient to accompany general music classes/music therapy clinical sessions.
Credits: 2
Offered: Every semester.

MUTY 301 - Seminar in Music Therapy
Designed to support the clinical practicum experience. Fall semester seminars correspond to clinical population; spring semester seminars cover medical music therapy, clinical improvisation and senior music therapy competency audit.
Credits: 1
Prerequisite: MUTY 115 and MUTY 300. Offered: Every semester.

MUTY 302 - Practicum in Music Therapy
Designed to provide structured experience in a clinical setting under the supervision of a music therapist. Students work two hours per week, on a two-semester basis, with children, adolescents, adults, and elderly in area clinical facilities. Written monthly and semester reports are part of the clinical requirements.
Credits: 0
Offered: Every semester.

MUTY 311 - Clinical Placement and Seminar III
Seminar designed for music therapy students to address knowledge of American Music Therapy Professional Competencies in Clinical Foundations: exceptionality, principles of therapy and the Therapeutic Relationship and Music Therapy: Foundations and Principles, intermediate Client Assessment, Treatment Planning, Therapy Implementation, Therapy Evaluation, Documentation, Termination/Discharge Planning and Supervision. Structured experiences include weekly field placements in a school, day habilitation, or hospital setting, documentation and supervision developmentally.
appropriate for first semester junior music therapy students.

Credits: 1
Offered: Every year.

**MUTY 312 - Clinical Placement and Seminar IV**
Seminar designed to address knowledge of American Music Therapy Professional Competencies in Clinical Foundations: exceptionality, principles of therapy and the therapeutic relationship and Music Therapy: Foundations and Principles, Client Assessment, Treatment Planning, Therapy Implementation, Therapy Evaluation, Documentation, Termination/Discharge Planning and Supervision. Structures experiences include weekly field placements in school, day habilitation, or hospital settings, documentation and supervision developmentally appropriate for second semester junior music therapy students.

Credits: 1
Offered: Every year.

**MUTY 314 - Impact of Music on Health & Behavior**
Designed to address American Music Therapy Professional Competencies in Music Therapy: foundational knowledge of Psychological and Physiological aspects of musical behavior and experience; and Research Methods.

Credits: 2
Prerequisite: MUTY 115. Offered: Every year.

**MUTY 315 - Methods of Music Therapy**
Designed to address American Music Therapy Association Competencies of the demonstration of basic knowledge of existing music therapy methods and philosophical, psychological, physiological and sociological bases for the use of music as therapy (Music Therapy), as well as Principles of Therapy (Clinical Foundations).

Credits: 2
Offered: Every year.

**MUTY 316 - Principles of Music Therapy**
Designed to address American Music Therapy Association Professional Competencies of Professional Role/Ethics, Interdisciplinary Collaboration and Supervision and Administration. Includes the development of a job portfolio and a professional presentation.

Credits: 2
Offered: Every year.

**MUTY 411 - Clinical Placement and Seminar V**
Seminar designed to address knowledge of American Music Therapy Professional Competencies in Clinical Foundations: exceptionality, principles of therapy and the therapeutic relationship and Music Therapy: Foundations and Principles, Client Assessment, Treatment Planning, Therapy Implementation, Therapy Evaluation, Documentation, Termination/Discharge Planning and Supervision. Senior students are expected to be more independent in their clinical work than previous clinical experiences.

Credits: 1
Offered: Every year.

**MUTY 414 - Psychology of Music**
Science of psychology related to fundamentals of musical talent. The musical mind, sensory capacities, individual differences and psychology of listening. An introduction to musical acoustics.

Credits: 3
Offered: Every other year.

**MUTY 416 - Music Therapy Internship Seminar**
The course serves as an audit of the senior music therapy students' knowledge and skills listed on the American Music Therapy Association Professional Competencies and results in the final Individualized Training Plan that is required for music therapy interns and their clinical directors upon beginning the internship.

Credits: 1
Offered: Every year.

**MUTY 422 - Psychological Research in Music**
Students propose, carry out, and write an experimental study in the area of music therapy or music education. Class and individual projects are required.

Credits: 3
Offered: Every other year.

**MUTY 450 - Internship in Music Therapy**
This two-credit course fulfills 520 hours of the 1,040 hour clinical internship requirement of the American Music Therapy Association leading toward Board Certification. Students' work is supervised by by Board Certified Music Therapists. To qualify for certification, students must complete this class twice, taking 520 hours in one term and another 520 hours in a second term.

Credits: 2
Offered: Every semester.
MUTY 500 - Foundations of Professional Music Therapy

This course begins with a basic orientation and general introduction to music therapy as a creative arts discipline, including target populations/disabilities. Next, Music Foundations of Composition and Arranging; Non-symphonic Instrumental Skills and Improvisation Skill as well as Music Therapy Competencies: Clinical Foundations and Principles are addressed. Finally, 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) are addressed. This course is the prerequisite equivalency masters course that prepares students for pre-internship clinical placements, and is designed as a Hybrid course that includes 3 face-to-face weekend meetings.

Credits: 3
Offered: Every year.

MUTY 501 - Clinical Placement I: Older Adults

Clinical Placement 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 Graduate Music Therapy Equivalency students' first clinical experience.

Credits: 2
Prerequisite: MUTY 500. Offered: Every year.

MUTY 502 - Clinical Placement II: Adults or Children

Music therapy equivalency masters students who have completed Foundations of Professional Music Therapy (MUTY 500) and Clinical Placement I: Older Adults (MUTY 501) will complete one clinical placement with adults or children (MUTY 502: Clinical Placement II), and one clinical placement with adults or children (MUTY 503: Clinical Placement III) of 40 hours each under the supervision of a Board Certified Music Therapist at the site where those music therapists work. With the advisement of Fredoniaâ€™s Music Therapy Clinical Director, the student is responsible to find his or her own placement, and the requirements of the placement will be at the discretion of the on-site music therapist.

Credits: 2
Prerequisite: MUTY 500 and MUTY 501 and MUTY 502. Offered: Every year.

MUTY 504 -

This course is required of music therapy masterâ€™s equivalency music therapy students who have completed MUTY 500: Foundations of Professional Music Therapy and at least the first two Music Therapy Placements (MUTY 501 MUTY 502). The course addresses the development of a personal theory/philosophy of music therapy, study of advanced music therapy models and professional topics including ethics, development of job proposals, and interdisciplinary collaboration. This is a fully online course.

Credits: 3
Prerequisite: MUTY 500 and MUTY 501 and MUTY 502. Offered: Every year.

MUTY 505 - Foundations of Advanced Music Therapy

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Designed to focus on professional orientation issues related specifically to music therapists seeking licensure in Creative Arts Therapy. Students will examine their own professional awareness, knowledge and skill sets for successfully negotiating work life in music psychotherapy. Topics will include the study of professional responsibilities, history of music therapy, assessment, and group process. Professional involvement with the American Music Therapy Association and the Certification Board for Music Therapists through presentations, publications, or committee membership will be examined and encouraged.

Credits: 3
Offered: Every year.
MUTY 510 - Advanced Guitar Skills for Music Therapists

Designed to help music therapists to advance their skills using the guitar. The focus of the course centers on the fundamentals of guitar technique in music therapy. Course material will be implemented by the use of literature from varying styles and will cover melodic harmonization, chord voicing, strumming techniques, plectrum techniques, as well as reading various guitar notations.

Credits: 2
Offered: Every year.

MUTY 518 - Foundations of Clinical Piano Improvisation

The training will develop the concept of clinical improvisation and provide specific strategies for developing and applying clinical improvisation skills within a therapeutic relationship. Piano is the primary medium and use of the voice will also be addressed. A variety of styles will be explored. In addition, the concept of developing improvisations based on classical repertoire will be presented. The importance of thematic development specific to individual client profiles will be discussed. Experiential work of improvising with others will provide opportunities for integrating the knowledge, skills and abilities addressed in the training. Required readings as well as video and audio recordings will be utilized as learning tools.

Credits: 2
Offered: Every year.

MUTY 520 - Theory of Vocal Psychotherapy

Students will learn the theories that underlie vocal psychotherapy, and experience this model of in-depth (reconstructive) music therapy that utilizes sounds, vocal improvisation, songs and dialog within a therapeutic relationship to promote intrapsychic and interpersonal change. They will have opportunities to observe and participate in voice-centered therapeutic experiences and interventions. The course format includes lecture, review of assigned readings, demonstration, and participation in individual and group vocal psychotherapy exercises and experiences.

Credits: 2
Offered: Every year.

MUTY 530 - Introduction to Guided Imagery and Music

Introduces the major components of the Guided Imagery and Music (GIM) process. In an overview, the topics include: the history, definitions and session format of GIM, as well as music and imagery; imagery, alternate states of consciousness; processing techniques; guiding techniques; music in alternate states of consciousness; ethics and contra-indications. The course will include an experiential component.

Credits: 2
Offered: Every year.

MUTY 540 - Internship in Music Industry I

Development of clinical skills and experience in the music therapy field under the supervision of an experienced clinician.

Credits: 2
Prerequisite: MUTY 501 and MUTY 502 and MUTY 503. Offered: Every semester.

MUTY 541 - Internship in Music Therapy II

Development of advanced clinical skills and experience in the music therapy field under the supervision of an experienced clinician.

Credits: 2
Prerequisite: MUTY 540. Offered: Every semester.

MUTY 550 - Internship in Music Therapy

This fulfills 500 hours of clinical internship requirement for the Office of the Professions of master’s students pursuing their license as a Creative Arts Therapist. Development of advanced clinical skills and experience in the music therapy field under the supervision of an experienced clinician.

Credits: 4
Offered: Every semester.

MUTY 560 - Lifespan Human Development

The purpose of this seminar is to provide advanced students with an in-depth knowledge of human growth and development from the prenatal period through old age and death. The course will focus on the interaction of biopsychosocial forces on physical, socio-emotional, and cognitive development across the lifespan with an eye toward application of the material to practical situations as encountered by human service providers, such as Licensed Creative Arts Therapists and other Mental Health practitioners. In addition, special attention will be paid to the major theories of human development as they pertain to development from a lifespan perspective, as well as relevant recent research.

Credits: 3
Offered: Every year.

MUTY 570 - Psychopathology

This course covers theory and research in adult psychopathology, focusing on a comprehensive review and
critical examination of behavioral and mental disorders under the most current Diagnostic and Statistical Manual (DSM) published by the American Psychiatric Association. Etiological, diagnostic, and treatment issues are emphasized, as are issues related to classification of mental disorders. In addition, special attention will be paid to the major theories of psychopathology with an eye toward application of the material to practical situations as encountered by human service providers, such as Licensed Creative Arts Therapists and other Mental Health practitioners.

Credits: 3
Offered: Every year.

MUTY 590 - Special Studies in Music Therapy

Studies not otherwise available as regular course offerings related to the work of Creative Arts Therapists (i.e., body work training, dance/movement or art therapy workshops) pursued in independent, directed or tutorial manner. Student must submit a proposal for approval, available in the School of Music office. Students must also secure agreement of faculty member to sponsor the study.

Credits: 3
Offered: Every year.

MUTY 605 - Foundations of Advanced Music Therapy II

The goals of this seminar are to provide an introduction to the concepts of theory building and philosophical inquiry in music therapy and qualitative research, to exchange ideas in a collaborative process and develop a personal theory and philosophy of music in/as therapy. Students will become familiar with the nature and process of philosophical inquiry and qualitative research, explore the concept of "meaning" in music, therapy and music therapy, and become familiar with existing literature in music therapy philosophical, theoretical and qualitative research.

Credits: 3
Offered: Every year.

MUTY 620 - Vocal Psychotherapy Practice

Students will be trained in vocal psychotherapy, a model of in-depth (reconstructive) music therapy that utilizes sounds, vocal improvisation, songs and dialogue within a therapeutic relationship to promote intrapsychic and interpersonal change. Students will have opportunities to observe, participate in and conduct voice-centered therapeutic experiences and interventions. They will also become experienced in transitioning between musical interventions and verbal interventions. The course format includes lecture, review of assigned readings, demonstration, peer teaching and participation in individual and group vocal psychotherapy exercises and experiences.

Credits: 2
Offered: Every year.

MUTY 630 - Clinical Music and Imagery

Music and Imagery is an advanced technique of music therapy 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. This course emphasizes the use of verbally guided meditation and non-directional music.

Credits: 2
Offered: Every year.

MUTY 650 - Advanced Practicum in Music Therapy

This course accompanies Clinical Courses: Clinical Piano Improvisation, Vocal Psychotherapy and Guided Imagery Music. Clinical sites may be at the studentsâ€™ place of employment or at university created placements. Supervision is provided by Board Certified Music Therapists Licensed Creative Arts Therapists who are university affiliated supervisors. This course may be repeated. A minimum of 500 hours of Advanced Practicum is required for students entering the program as Board-Certified Music Therapists

Credits: 2
Prerequisite: MUTY 518 and MUTY 520 and MUTY 530.
Offered: Every semester.

PHED - Physical Education

PHED 100 - Champs/Lifeskills

The course is based on the National Collegiate Athletic Association (NCAA) CHAMPS/Lifeskills Program. It is designed to assist first year student athletes with a variety of lifeskills components, including commitment, personal development, career development, service commitment and athletics commitment.

Credits: 2
Offered: Offered on occasion.

PHED 101 - Aqua-Aerobics

Course introduces a sequence of water exercises that enhances the student's aerobic fitness.

Credits: 1
Offered: Every semester.
**PHED 102 - Learn to Swim**
Course emphasizes the basic skills needed to learn to swim. Course is designed for non-swimmers.
Credits: 1
Offered: Every semester.

**PHED 103 - Intermediate Swimming**
Course emphasizes the intermediate skills needed to develop individual strokes.
Credits: 1
Offered: Every semester.

**PHED 104 - Advanced Swimming**
Course emphasizes advanced stroke development and training techniques involved in advanced swimming.
Credits: 1
Offered: Every semester.

**PHED 105 - Swimming and Conditioning**
Course educates students about how to use the swimming pool to develop and maintain a sensible level of physical fitness. Water exercises and technique are taught.
Credits: 1
Offered: Every semester.

**PHED 106 - Lifeguard Training**
Course emphasizes the skills and techniques needed to gain lifeguard certification. Lifeguard certification is possible at the end of the course.
Credits: 3
Offered: Every year.

**PHED 107 - WSI-Water Safety Instructor**
Course follows the Red Cross guidelines to train Water Safety Instructors. WSI is possible at the completion of this course.
Credits: 2
Offered: Every year.

**PHED 108 - Basic Scuba**
Course emphasizes the basic skills involved in learning how to SCUBA dive. Classroom sessions and open water dives are planned as part of this class.
Credits: 2
Offered: Every semester.

**PHED 110 - Advanced Scuba Diving**
Course introduces the advanced techniques of SCUBA diving needed for open water diving.
Credits: 1
Prerequisite: PHED 108. Offered: Every semester.

**PHED 112 - Zumba®**
The Zumba® program fuses hypnotic Latin rhythms and easy-to-follow moves to create a one-of-a-kind fitness program. The routines feature interval training sessions where fast and slow rhythms and resistance training are combined to tone and sculpt the body while burning fat. Add some Latin flavor and international zest into the mix and you’ve got a Zumba® class! The course is taught by a licensed Zumba instructor and a Zumba® Instructor Member.
Credits: 2
Offered: Every semester.

**PHED 113 - Basic Bowling**
Introduces students to the fundamentals of bowling including scoring, approaches and strategies needed to attain basic competencies as a beginning bowler.
Credits: 1
Offered: Every semester.

**PHED 116 - Golf - Basic**
Course introduces the student to the skills and rules needed to develop introductory golf proficiency.
Credits: 1
Offered: Every year.

**PHED 117 - Running and Conditioning**
Course teaches the student the basics of aerobic conditioning as a means of developing physical fitness.
Credits: 1
Offered: Every semester.

**PHED 120 - Ice Skating - Basic**
Student will learn the basic skills needed to begin ice skating. Balance, footwork, turning and stopping are emphasized in the course.
Credits: 1
Offered: Every semester.

**PHED 121 - Ice Skating - Intermediate**
Course emphasizes in-depth skills introduced in basic ice skating.
Credits: 1
Offered: Every semester.

**PHED 122 - Figure Skating**

Introduces the intermediate skater to the basics of figure skating, power crossovers; movement forward and backwards, 3 turns, mohawks, single jumps and spins. Course will also provide the advanced figure skater an opportunity to continue training in double and triple jumps, combination spins and connecting footwork.

Credits: 1

Offered: Every semester.

**PHED 124 - Basic Aerobics**

Aerobic exercise involves any physical movement that requires oxygen to perform. This course is designed to teach students about benefits of aerobic fitness and to engage them in aerobic-type activities. Activities may include traditional step aerobics, jump rope, jogging, and sustained rhythmic movement such as Zumba©.

Credits: 2

Offered: Every semester.

**PHED 125 - Step Aerobics**

Course introduces the student to aerobic exercise through a step aerobics technique.

Credits: 2

Offered: Every semester.

**PHED 126 - Body Sculpting (Women)**

Course introduces the student to strength training, body toning and the basics of aerobic exercise. The development of individual programs will be directed toward the fitness needs of women.

Credits: 2

Offered: Every semester.

**PHED 127 - Yoga**

An introduction to "Hatha" yoga. Students will learn basic postures (asanas) as well as breathing techniques (pranayama) and beginning meditation practices. Students will work to increase flexibility, develop balance, deepen respiration and mind-body awareness.

Credits: 2

Offered: Every semester.

**PHED 128 - Racquetball - Basic**

The basic skills, rules and techniques of scoring are taught in the course.

Credits: 1

Offered: Offered on occasion.

**PHED 129 - Racquetball - Intermediate**

Strategies of singles and doubles play are emphasized in the course.

Credits: 1

Offered: Offered on occasion.

**PHED 131 - Self-Defense**

Course emphasizes the basic techniques needed to defend oneself. Stances and defensive strategies are emphasized.

Credits: 1

Offered: Every semester.

**PHED 132 - Skiing**

The basic techniques needed to ski are taught. The course is designed to meet the needs of beginners as well as intermediate and advanced skiers.

Credits: 1

Offered: Every semester.

**PHED 134 - Tennis - Basic**

Course emphasizes the rules, grips, stances and elementary stroke development for the beginning player.

Credits: 1

Offered: Every semester.

**PHED 135 - Tennis - Intermediate**

Course introduces in-depth tennis skills and advanced techniques and strategies for singles and doubles play.

Credits: 1

Offered: Every semester.

**PHED 138 - Volleyball**

Course introduces basic volleyball skills necessary for the student interested in intramural or recreational play.

Credits: 1

Offered: Every semester.

**PHED 139 - Weight Training**

Course introduces the student to basic techniques of weight training and body toning. Emphasis is placed on learning specific exercises and training techniques necessary for establishing an effective weight training program.

Credits: 2

Offered: Every semester.

**PHED 141 - Advanced Conditioning**

The course introduces students to the fundamentals of advanced training techniques. Techniques include weight
training, powerlifting, aerobics, agility, interval and plyometric training.

Credits: 1
Offered: Every other year.

**PHED 171 - Conditioning for Today's Active Woman**

This class is designed for the female student who would like to improve her overall core strength, flexibility, and anaerobic conditioning level. Instruction will be provided in proper active range of motion warm up techniques, proper body position for maximum performance and injury prevention, agility drills, plyometric and explosive training and anaerobic drills and conditioning.

Credits: 1
Offered: Every year.

**PHED 180 - Assistant Scuba Instructor**

The course will educate people who have basic aquatic skills and basic scuba certification to teach basic skills associated with scuba diving. The skills taught include skin diving skills, pool safety, equipment inspection, buddy systems, air emergencies, communications, and open water diving. Permission of instructor required.

Credits: 2
Prerequisite: PHED 108. Offered: Every semester.

**PHED 199 - Special Topics**

Special topics in wellness.

Credits: 1-6
Offered: Every semester.

**PHED 200 - Human Physiology I**

A comprehensive overview of the field without being overwhelming. It provides a solid foundation of basic physiology to better interpret and understand sport and exercise physiology. It reviews the major body systems and examines the body's acute response to exercise and its chronic response to training. Students will learn how the environment affects these responses. The course examines various approaches used to optimize performance and focuses on unique concerns of special populations involved in physical activity. It also examines the importance of physical activity to lifelong health.

Credits: 3
Offered: Every year.

**PHED 201 - Human Physiology Lab I**

Provides exercise science majors with lab exercises that are designed to expose them to the practical aspects of exercise physiology. Sample areas will include stress testing, heart rate and blood pressure and body fat analysis.

Credits: 1
Corequisite: PHED 200. Offered: Every year.

**PHED 202 - Human Anatomy**

The purpose of this course is to acquaint the student with major aspects of human anatomy from the cell and tissue level through the major organ systems, muscle, and skeletal groups. The emphasis will be on descriptive and structural aspects of human anatomy. The course will also stress function and inter-relationships between different body systems.

Credits: 3
Offered: Every year.

**PHED 203 - Human Physiology II**

This course is a continuation of Human Physiology I and is designed to provide students with the opportunity to study and learn concepts of human performance and exposes the student to the process of collecting scientific data and presenting those findings. This course emphasizes the digestive, endocrine, nervous and urinary systems, hydration, and ergogenic aids as they relate to human bioenergetics.

Credits: 3
Prerequisite: PHED 200 and PHED 201. Corequisite: PHED 204. Offered: Every year.

**PHED 204 - Human Physiology II Laboratory**

This course provides exercise science majors with lab exercises that are designed to expose them to the practical aspects of conducting research including formulating a hypothesis, conducting literature reviews, data collection and methodology and project presentations related to PHED 203 Human Physiology II. Laboratory meetings will include a brief instructional lecture, followed by laboratory exercises.

Credits: 1
Corequisite: PHED 203. Offered: Every year.

**PHED 214 - Emergency Medical Technician (EMT-B)**

The course offers training for pre-hospital care professionals performing emergency care. Students will gain a knowledge of first aid, cardiovascular emergency, shock, fractures, bleeding, defibrillation, and special problems in triage and extrication. The course follows the guidelines of the New York State Department of Health Emergency Services Program.

Credits: 4
Offered: Every year.
PHED 307 - Biomechanics Laboratory
The course is the laboratory component of the biomechanics course. Emphasis will placed on the application of biomechanics concepts, hands-on activities and experiments involving contemporary forms of biomechanical analysis. Sample areas will include video analysis of motion and kinematics of running, jumping throwing, linear motion and equilibrium.
Credits: 1
Corequisite: PHED 306. Offered: Every year.

PHED 311 - The Psychology of Coaching
A course for understanding the application of basic psychological principles to the coaching of the individual athlete, or teams in the competitive environment. One of several courses designed to meet state mandate for interscholastic coaching.
Credits: 2
Offered: Every year.

PHED 350 - Special Topics
Advanced special topics in physical education and/or wellness.
Credits: 1-4
Offered: Offered on occasion.

PHED 400 - Sports Studies Internship
Working under supervision in a community setting. The internship will emphasize theory, knowledge and skills needed when working with and within groups and organizations. Student will be expected to complete 67 clock hours of direct service to individuals, groups or organizations for each credit hour awarded. A Learning Contract encompassing job requirements, learning objectives and methods will be utilized in student's evaluation.
Credits: 1-6
Prerequisite: PHED 398. Offered: Every semester.

PHED 499 - Independent Study
The study of a particular topic related to physical education and recreation. Periodic meetings with an appropriate instructor will be scheduled. The topic may encompass individual research or a practical experience.
Credits: 1-4
Offered: Every semester.

PHED 530 - Legal Aspects of Sport and Physical Activity
The course is designed for Athletic and Educational Administrators. The course covers the structure of the legal system, introduces the case study method, aspects of constitutional law, labor and anti-trust law, tort law, product liability, contract law, administrative and statutory law and risk management systems applicable to the sport industry and educational settings.
Credits: 3
Offered: Every year.

PHIL - Philosophy

PHIL 106 - Critical Thinking
The course concerns the study and practice of critical thinking through analysis of issues in theoretical philosophy, applied philosophy, and the public sphere more generally. By applying critical thinking skills to controversial issues and dramatic examples, students will engage in careful thought and hone their analytic skills. The primary feature of the course is the consideration of an abundance of issues, examples, and applications from philosophy and everyday life, ranging from human nature to the courtroom and political debate, and from advertising to current moral and social issues.
Credits: 3
Offered: Every other year.

PHIL 115 - Introduction to Philosophy
Discussion of some central problems in philosophy such as the existence of God, the ultimate nature of reality, the conditions for knowledge, the question of free will versus determinism, and the foundations of morality. How should one live? Why would God allow evil? How much can we know about the world around us? Do we have free will? Can we survive death? Such questions are universal and fundamental to all humanity.
Credits: 3
Offered: Every semester.

PHIL 116 - Introduction to Logic
The development of formal systems of propositional and predicate logic for the evaluation of reasoning. Truth table techniques to distinguish valid from fallacious inferences, symbolizing English in logical notation, proofs in propositional logic, predicate logic with quantifiers.
Credits: 3
Offered: Every year.

PHIL 218 - Introduction to Ethics
This class looks at the nature of morality, across and within specific cultures from various parts of the world. Specifically, it looks at the status of moral sentences, what morality is about (right, good, and virtue), and specific moral issues.
PHIL 220 - Medical Ethics

Medical ethics is the study of morality in the context of health and pathology. It concerns metaphysical issues about the nature of physical and mental disorders, and moral issues about treatments and policies. Topics include the creation of life, euthanasia, the Hippocratic Oath, treatment of the diseased or disabled, and the distribution of limited healthcare resources. The course topics are at the heart of moral, metaphysical, and economic issues in applied ethics: for example, creation-of-life and end-of-life issues. This course explores these issues and their consequences for the theoretical and applied fields of healthcare.

Credits: 3

Offered: Every other year.

PHIL 222 - The Greek Way

Introduces students to classical Greek philosophy in the context of the historical, cultural, social, and political conditions of ancient Greece. Part of the course is devoted to a careful examination of the social context of ancient Greece and to the sources and manifestations of Greek values: mythological, religious, literary, educational, and aesthetic.

Credits: 3

Offered: Every other year.

PHIL 223 - Roman Philosophy

This course chronicles philosophy in action -- in historical and political contexts. We examine the crucial role Platonism, Aristotelianism, Stoicism, and Epicureanism played during major social upheaval as Caesar, Pompey, Cicero, Cato, Brutus, and Cassius struggle with the often conflicting demands of seeking personal salvation, honoring philosophical conviction, and fulfilling patriotic duty in the final days of the Roman Republic. Later, during the building of the Roman empire, Seneca, Musonius Rufus, and Marcus Aurelius confronted the same conflicts but in different political settings.

Credits: 3

Offered: Every other year.

PHIL 224 - Medieval Thought

Islamic, Judaic, and Latin-Christian thought of the Middle Ages, particularly the 11th to 13th centuries. The course examines the significance of the Greco-Roman tradition to medieval hopes and fears and addresses problems prevalent in all three cultures: the relationship between faith and reason; the nature of the Supreme Being; the connection between theology and art, politics, and metaphysics; and the origin and cause of the world.

Credits: 3

Offered: Every other year.

PHIL 226 - The Age of Reason and Its Legacy

The nature of reality, knowledge, and experience as portrayed by thinkers such as the Rationalists (Descartes, Leibniz, and Spinoza), the Empiricists (Locke, Berkeley, and Hume), Kant, and Reid. The legacy of these thinkers as reflected in standard notions of causality, truth, proof, and argument will be explored in relation to contemporary thinkers.

Credits: 3

Offered: Every other year.

PHIL 228 - American Philosophy

The political philosophy, epistemology, scientific method, and criteria of truth, argument, and reason which distinctively characterize the Founding Fathers, the Transcendentalists, the Pragmatists, and contemporary inheritors of the Pragmatist tradition. Includes consideration of the question: What is distinctively American about American philosophy?

Credits: 3

Offered: Every other year.

PHIL 238 - Philosophy of Religion

Careful examination of classical and contemporary issues such as the nature of religious experience, the relationship of faith and reason, arguments for and against the existence of God, the significance of the problem of evil, knowing God without arguments, religious language, life after death, miracles, religious ethics, and the differences between Eastern and Western theisms.

Credits: 3

Offered: Every year.

PHIL 258 - Life and Death

The class explores fundamental issues relating to life and death. In particular, it looks at what constitutes life and what, if anything, makes life good. It also investigates what constitutes death and whether death is bad. Using these notions, the class then analyzes particular moral issues surrounding life and death, such as the moral status of the following practices: abortion, suicide, euthanasia, capital punishment, and war.

Credits: 3

Offered: Every year.
PHIL 265 - Social/Political Philosophy
The proper form of human association, the just balance of economic, political, and social power, and the nature of the relationship between the state and the individual are explored in the works of prominent historical and contemporary theorists. The course examines the nature of social commitment as viewed by major political philosophies.

Credits: 3
Offered: Every other year.

PHIL 270 - Philosophy of the Arts
Philosophical problems in the arts. Nature of art and aesthetic appreciation; aesthetic attitude, experience, and emotion; relations between art and art institutions; interpretation and evaluation of works of art are among topics considered. Problems specific to music, film, literature, painting, and sculpture are also discussed.

Credits: 3
Offered: Offered on occasion.

PHIL 274 - Existentialism
Existentialism is a philosophical realization of living in a broken, ambiguous, dislocated world into which we are thrown and condemned yet abandoned and free. The course examines the work of authors such as Kierkegaard, Dostoevsky, Nietzsche, Kafka, Heidegger, Sartre, Camus, and de Beauvoir. Students confront the main themes of life: anxiety, authentic living, meaning, love, relationships, God, and death.

Credits: 3
Offered: Offered on occasion.

PHIL 301 - Intermediate Deductive Logic
The development of a formal system of logic with relations and multiple quantifiers, identity and definite descriptions. Other topics may include non-classical logics, modal logic (the logic of possibility and necessity), set theory, or results concerning the scope and limits of logical systems.

Credits: 3
Prerequisite: PHIL 116. Offered: Offered on occasion.

PHIL 302 - Abortion, Philosophy, and Law
Students will explore abortion from theoretical and legal perspectives. They will investigate various underlying theoretical issues and the factual and legal aspects if abortion. Students will combine these concepts and explore the moral status of abortion.

Credits: 3
Offered: Offered on occasion.

PHIL 303 - Crime and Punishment
The course investigates the criminal justice system and the limits of state coercion. May the state coerce persons only to prevent some persons from harming others? May it do so to protect persons from harming themselves or to protect society's moral fabric? The class will then examine the justification of punishment. Is punishment justified because it reforms offenders, because offenders deserve punishment, or because punishment deters other potential offenders? Finally, the class explores contemporary moral issues such as whether the state should criminalize recreational drug use, hate crimes, or blackmail.

Credits: 3
Offered: Every other year.

PHIL 310 - Business Ethics
Careful examination of moral issues arising in business contexts such as the duty to tell the truth, the profit motive, the relationship between private ownership and the public interest, the rights and duties of employees and employers, the responsibilities and liabilities of businesses to consumers, the respective roles of business and government, and business trends and social responsibility.

Credits: 3
Offered: Offered on occasion.

PHIL 312 - Current Moral Issues and Principles
An examination of moral issues of significance today such as abortion, euthanasia, sexual ethics, affirmative action, animal rights, torture, and war. In exploring answers to these issues the course includes an introduction to moral principles produced by traditional theories such as natural law, utilitarianism, Kantianism, and the social contract tradition.

Credits: 3
Offered: Every year.

PHIL 313 - Sex and Love
Addresses three specific areas of sex and love, and includes cross-cultural components. First, sexual ethics: Which kinds of sexual activity are morally permissible under what sort of circumstances? Must morally permissible sex be based on love? What is good sex? Second, the politics of sex: Are versions of proper sexuality used as mechanisms to oppress women and homosexuals? Third, the ideals of love: What are the different kinds of love? Why should persons be concerned with analyzing love?

Credits: 3
Offered: Every year.
PHIL 317 - Philosophy of Science
An examination of the basic concepts and methods of the sciences through the study of topics such as the nature of scientific explanation, the status of laws of nature, the relation between observation and theory, and methods of confirming or refuting hypotheses. Other topics might include causality, scientific realism, scientific revolutions, evolution and natural functions, and the distinction between science and pseudo-science.

Credits: 3
Prerequisite: PHIL 106 or PHIL 115 or PHIL 218 or PHIL 226 or PHIL 258 or PHIL 265 or PHIL 270. Offered: Every other year.

PHIL 330 - Libertarianism
Libertarianism holds that the only proper function of the state is to protect its citizens from acts of force, fraud, or theft. The class will explore libertarianism and evaluate the arguments for and against it. The class will examine such issues as: whether the state has authority over persons, whether distributive justice allows the state to redistribute wealth, whether rights are inviolable, whether and to what extent property rights should be respected, and whether antidiscrimination laws are justified.

Credits: 3
Offered: Offered on occasion.

PHIL 331 - Eastern Thought
A survey of classic eastern philosophies and religions, including classical Chinese schools (Confucianism, Daoism), some varieties of Hinduism (Advaita Vedanta, Visistadvaita Vedanta), and some varieties of Theravada and Mahayana Buddhism. Topics include human nature, enlightenment, the nature of ultimate reality, reincarnation, karma, moral transformation of individuals and societies, supernatural beings, knowledge, truth, and idealism.

Prerequisite: must have completed INDS 120 or at least one 3 credit Philosophy class.

Credits: 3
Offered: Every other year.

PHIL 337 - Religious Pluralism
Religions differ. What should we make of this fact of religious diversity? Theories of religious pluralism hold that in some sense or other, all religions are the same. In this course we shall explore four major religious traditions, and will then explore theories of religious pluralism, as well as critical responses to and theoretical alternatives to them.

Credits: 3
Offered: Offered on occasion.

PHIL 338 - Marxist Thought
Examines the central themes of the tradition: its view of history, economics, the nature of political struggle, the status of law and morality, and the effects of material living conditions on forms of thought. The relevance of Marxism to revolutionary political movements is explored in the works of thinkers such as Lenin, Stalin, Trotsky, Luxemburg, Gramsci, and Marcuse.

Credits: 3
Offered: Every other year.

PHIL 345 - The Meaning of Life
The course addresses the most fundamental questions of human existence in theistic, humanistic, and practical dimensions. Does life as a whole have inherent meaning? Does human life in particular have inherent meaning? If there is no God does that imply that life has no inherent meaning? Even if life has no inherent meaning, can life have meaning created by those who live it? If there is no inherent meaning of life, why do people exist? Does mortality rob human life of any significance it might have?

Credits: 3
Offered: Offered on occasion.

PHIL 346 - Human Happiness
A critical evaluation of major theories of happiness. If people are rational and actively loving, what should people teach their children about more durable forms of life satisfaction? What is success? What is happiness? Is happiness the greatest good? Are all meaningful lives happy? Are all happy lives meaningful lives? What are the sources or conditions of happiness? What is the relationship between heroic, meaningful, and happy lives?

Credits: 3
Offered: Offered on occasion.

PHIL 351 - Metaphysics
An examination of the fundamental categories of reality, such as existence, substance, property, identity, space, time, event, causation, necessity, essence, free will and mind. The philosophical questions in which these categories play a role will also be discussed; e.g., Is free will possible in a deterministic world? How can something change its properties over time and still remain the very same thing? Prerequisite: 3 credit hours in philosophy.

Credits: 3
Offered: Every other year.

PHIL 353 - Theory of Knowledge
Inquiry into the nature of human knowledge and related concepts such as truth, belief and epistemic justification.
Knowledge from experience and a priori knowledge. The course addresses theories of justification such as foundationalism, coherentism and reliabilism. It also confronts problems posed by Skepticism for the scope of human knowledge, especially knowledge about the external world. Prerequisite: 3 credit hours in philosophy.

Credits: 3
Offered: Every other year.

PHIL 362 - Philosophy of Law
The course explores the nature of law and judicial decision-making. Is law simply a union of rules, a social practice, or an attempt to apply justice to interpersonal disputes? The course also examines the content and interpretation of statutes. Should the interpretation take into account the statute's plain meaning? The intent of the legislature that voted for it? Considerations of justice? The class will then discuss the role of judges in interpreting both statutes and common law (judge-made law).

Credits: 3
Offered: Every other year.

PHIL 364 - Justice, Law, and Economics
The civil law system adjudicates contractual disputes and disputes involving claims to compensation for injury. The course begins with a discussion of the justification of the system. The class will investigate whether the system is justified by a concern for economic efficiency, justice or both. The class will look at economic rules that relate to the civil laws, such as the rules relating to breach of contract, automobile accidents, liability for defective products, and pollution control. The class will also explore whether justice allows economic factors to be considered.

Credits: 3
Offered: Offered on occasion.

PHIL 369 - Topics in Philosophy
Special topics in philosophy. Variable-content course which may be taken more than once for credit. An in-depth study beyond the standard curriculum.

Credits: 1-3
Offered: Offered on occasion.

PHIL 430 - Philosophy of Mind
Philosophical accounts of the mind and its relation to the world. Topics include the mind-body problem, the intentionality (or "aboutness") of thought, the nature of mental content, consciousness, introspection and knowledge of other minds. Consideration of theories on these topics, such as dualism, behaviorism, type-physicalism, functionalism and eliminativism. Prerequisite: 3 credit hours in philosophy.

Credits: 3
Offered: Every other year.

PHIL 432 - The Age of Analysis: Philosophy Since 1900
Major currents and themes in 20th century analytic philosophy. Attention devoted to the work of such philosophers as Russell, Moore, Wittgenstein, Quine and others. A critical examination of analytic approaches to the philosophy of language, metaphysics, epistemology and other traditional areas of philosophy. Likely topics are theories of meaning and reference, logical atomism, logical positivism, ordinary language philosophy, and recent debates concerning the nature of knowledge, meaning and necessity. Prerequisite: 3 credit hours in philosophy.

Credits: 3
Offered: Every other year.

PHIL 441 - Philosophy of Language and Semantics
Exploration into the nature of language through the examination of such topics as meaning, reference, truth, use, and convention. Contemporary theories about the semantic contribution to sentence meaning made by proper names and definite descriptions; the difference between linguistic and other forms of communication and representation; and the relations between language, thought and reality. Prerequisite: 3 credit hours in philosophy.

Credits: 3
Offered: Offered on occasion.

PHIL 446 - Selected Problems
Advanced special topics and problems not treated thoroughly in other courses. Past examples: Environmental Ethics, Philosophy of War, Philosophy of History, Rationality, Renaissance Philosophy, Autonomy, and Theories of the Good. Current topics specified in the online Course Offerings.

Credits: 3
Offered: Every other year.

PHIL 447 - Selected Problems

Credits: 3
Offered: Every other year.

PHIL 448 - Selected Problems
Advanced special topics and problems not treated thoroughly in other courses. Past examples: Environmental

Credits: 3
Offered: Every other year.

**PHIL 449 - Selected Problems**

Advanced special topics and problems not treated thoroughly in other courses. Past examples: Environmental Ethics, Philosophy of War Philosophy of History, Rationality, Renaissance Philosophy, Autonomy, and Theories of the Good. Current topics specified in the online Course Offerings.

Credits: 3
Offered: Every other year.

**PHIL 460 - Major Philosophers**


Credits: 3
Offered: Every other year.

**PHIL 461 - Major Philosophers**


Credits: 3
Offered: Every other year.

**PHIL 462 - Major Philosophers**


Credits: 3
Offered: Every other year.

**PHIL 463 - Major Philosophers**


Credits: 3
Offered: Every other year.

**PHIL 464 - Major Philosophers**


Credits: 3
Offered: Every other year.

**PHIL 465 - Major Philosophers**


Credits: 3
Offered: Every other year.

**PHIL 466 - Major Philosophers**


Credits: 3
Offered: Every other year.

**PHIL 467 - Major Philosophers**


Credits: 3
Offered: Every other year.

**PHIL 468 - Major Philosophers**


Credits: 3
Offered: Every other year.

**PHIL 469 - Major Philosophers**

Intensive study of the thought of a major philosopher of historical or contemporary significance. Past examples: Socrates, Plato, Hume, Kant, Nietzsche, Wittgenstein,
Locke, Berkeley, Russell. Current topics specified in the online Course Offerings.

Credits: 3
Offered: Every other year.

**PHIL 477 - Capstone Seminar**

The course centers on some of the following issues: (1) an in-depth study of a particular philosopher or specific topic; (2) detailed reflection on the discipline of philosophy, and the effects, if any, of being a philosophy major on the kind of person one becomes in terms of values, attitudes, and ways of viewing and acting in the world; (3) an examination of the art of philosophical research, writing, and oral presentations. Course format and focus vary depending on instructor. Prerequisite: Philosophy major with junior or senior standing, or by permission of instructor.

Credits: 3
Offered: Every year.

**PHIL 481 - Directed Study**

Student, with faculty member's guidance, will study a topic not currently offered, or will engage in studies in greater depth than current course offerings permit. Permission of instructor required.

Credits: 1-3
Offered: Every semester.

**PHIL 485 - Independent Study**

Student will pursue a course of independent study and present evidence of accomplishment at end of semester. Philosophy major and permission of instructor required.

Credits: 1-3
Offered: Every semester.

**PHYS - Physics**

**PHYS 101 - Contemporary Physics for Non-Science Majors**

(Designed for students majoring in humanities and social sciences.) Non-mathematical survey of selected areas of contemporary science. Emphasis on ideas and concepts of physics, including its role in society.

Credits: 3
Offered: Every semester.

**PHYS 104 - The Big Bang**

Non-mathematical presentation of selected topics regarding the latest theories of the formation of the universe including ideas from special and general relativity.

Credits: 3
Offered: Every year.

**PHYS 107 - Particles and Waves**

Introductory level course on topics of special interest not covered in regular courses.

Credits: 1-3
Offered: Offered on occasion.

**PHYS 111 - Introduction to Physical Sciences**

An inquiry and algebra based approach to the major topics of physics: motion, conservation laws, heat, electricity, optics, and introductory atomic physics.

Credits: 3
Offered: Offered on occasion.

**PHYS 117 - Sound, Light and Color**

A course for the non-major covering topics in acoustics (especially musical acoustics), optics, light, lasers, holograms, and theories of color. The approach is mostly conceptual with some use of simple algebra. Emphasis will be on the physics, but some discussion of perceptual issues concerning the ear, eye, and brain will be included.

Credits: 3
Offered: Every other year.

**PHYS 118 - Introduction to Astronomy**

An introduction to the study of astronomy, from the early historical development of astronomy as a science to our modern understanding of stars, galaxies, and the Universe. The mathematics will be at the level of high school algebra and geometry.

Credits: 3
Offered: Every other year.

**PHYS 121 - College Physics I**

A non-calculus lecture sequence: motion, dynamics, conservation theorems, heat. Students requiring a laboratory component should include PHYS 123. Student must have taken MATH 105 or N.Y.S. Regents Math B.

Credits: 3
Offered: Every year.

**PHYS 122 - College Physics II**

A non-calculus lecture sequence: wave motion, sound, electromagnetic fields, circuits, optics, quantum phenomena. Students requiring a laboratory component should include PHYS 124.

Credits: 3
Prerequisite: PHYS 121. Offered: Every year.
PHYS 123 - College Physics Lab I
One three-hour laboratory session per week treating topics covered in PHYS 121.
Credits: 1
Corequisite: PHYS 121. Offered: Every year.

PHYS 124 - College Physics II Lab
One three-hour laboratory session per week treating topics covered in PHYS 122.
Credits: 1
Corequisite: PHYS 122. Offered: Every year.

PHYS 152 - Observing the Sky
An introductory astronomy course aimed at exploring the historical and modern techniques by which scientists observe objects in the sky. Topics will include the historical development of science, motions in the sky, light and telescopes, and digital imaging. While some classes will be held in the planetarium, no nighttime telescope work will be required. The mathematics will be at the level of high school algebra and geometry.
Credits: 3
Offered: Every Fall semester.

PHYS 199 - Special Topics
Introductory level course on topics of special interest not covered in regular courses.
Credits: 1-3
Offered: Offered on occasion.

PHYS 200 - Engineering Graphics
Introduction to tools, language, and procedures basic to training of an engineering draftsperson. Emphasis on drafting techniques, two-dimensional and isometric representation.
Credits: 2
Offered: Offered on occasion.

PHYS 205 - Science and Civilization
A survey of the major scientific discoveries, the scientists behind these discoveries, and the effect that these discoveries have had on the progress of civilization. The course will discuss historical developments from Thales to Einstein.
Credits: 3
Offered: Every year.

PHYS 206 - Genesis of the Universe
A non-mathematical course covering historical, philosophical, theological and scientific aspects concerning the genesis of the universe.
Credits: 3
Offered: Offered on occasion.

PHYS 230 - University Physics I
Calculus-based lecture sequence for science and mathematics majors who have completed a course or courses in University Calculus or the equivalent. Kinematics, dynamics, gravitation. A recitation is included.
Credits: 4
Prerequisite: MATH 122. Corequisite: PHYS 232. Offered: Every year.

PHYS 231 - University Physics II
Calculus-based lecture sequence for science and mathematics majors who have completed a course or courses in University Calculus or the equivalent. Electricity and magnetism. A recitation is included.
Credits: 4
Prerequisite: MATH 123 and PHYS 230. Corequisite: PHYS 233. Offered: Every year.

PHYS 232 - University Physics I Lab
One three-hour laboratory session per week treating topics covered in PHYS 230.
Credits: 1
Corequisite: PHYS 230. Offered: Every year.

PHYS 233 - University Physics II Lab
One three-hour laboratory session per week treating topics covered in PHYS 231.
Credits: 1
Corequisite: PHYS 231. Offered: Every year.

PHYS 234 - Modern Physics
Special relativity, wave motion, basic concepts of quantum mechanics, atomic structure, solid state, and nuclear physics, including a weekly three hour lab.
Credits: 4
Prerequisite: PHYS 231. Offered: Every year.

PHYS 311 - Acoustics I
Elements of physics bearing directly on production and assimilation of musical tones: wave motion, resonance, complex waves, physiology of hearing, musical scales,
simple acoustical models of musical instruments, and architectural acoustics.

Credits: 3
Prerequisite: PHYS 121 or PHYS 230. Offered: Every year.

**PHYS 312 - Acoustics II**

Psychoacoustics and architectural acoustics. A study of the mechanics and neurological foundations of the perception of pitch, loudness, timbre, and direction, followed by a contrasting study of the behavior, measurement, and evaluation of sound and music in a variety of environments, utilizing both objective techniques and the psychoacoustical insights gained from the first part of the course.

Credits: 3
Prerequisite: PHYS 311. Offered: Offered on occasion.

**PHYS 318 - Basic Electronics**

Introduction to electronic circuits, devices, and systems with practical applications to recording engineering and biomedical instrumentation. Non-majors only.

Credits: 3
Prerequisite: (MATH 120 or MATH 122) and (PHYS 122 or PHYS 231). Offered: Every year.

**PHYS 321 - Engineering Statics**

A calculus treatment of statics applied to the equilibrium of rigid and elastic bodies, including fundamentals of mechanics, vector algebra, free body diagrams, equivalent force/moment systems, distributed forces, centroids and center of gravity, equilibrium of particles and rigid bodies, trusses, frames, beams, internal forces in structural members, friction, first and second moments of area and moments and products of inertia, and methods of virtual work and total potential energy.

Credits: 3
Prerequisite: PHYS 230. Offered: Every year.

**PHYS 322 - Mechanics of Solids**

Continuation of PHYS 321 including stress and strain tensors, mechanical properties of solids, multidimensional stress-strain relations, section forces in beams, stresses in beams, deflection of beams, torsion, stresses and strain relations at a point, Mohr’s circle, energy methods, elastic stability, and vibrations.

Credits: 4
Prerequisite: PHYS 321. Offered: Every year.

**PHYS 323 - Circuit Analysis**

A development of network analysis including Ohm’s and Kirchhoff’s laws, dependent and independent voltage and current sources, circuit simplification techniques including node-voltage, mesh-current methods, Thevenin and Norton equivalents, energy-storage elements, operational amplifiers, natural and step response of RL, RC and RLC circuits, sinusoidal steady-state analysis, introduction to Laplace Transforms, passive filters.

Credits: 4
Prerequisite: PHYS 231. Offered: Every year.

**PHYS 324 - Circuit Analysis II**

Continuation of PHYS 323 including sinusoidal excitation and phasors, AC steady state analysis, three-phase circuits, complex frequency and network functions, frequency response, transformers, Fourier and Laplace transforms.

Credits: 3
Prerequisite: PHYS 323. Offered: Every year.

**PHYS 325 - Electronics**


Credits: 3
Prerequisite: PHYS 231. Corequisite: PHYS 327. Offered: Every other year.

**PHYS 326 - Digital Logic**

TTL characteristics, Boolean algebra, logic functions, and minimization procedures. Logic gates and implementation. Design of combinational and sequential circuits. Flipflops, counters, shift registers, and arithmetic circuits. Analog to digital and digital to analog conversion. Solid state memories and simple processors.

Credits: 3
Corequisite: PHYS 328. Offered: Every year.

**PHYS 327 - Electronics Lab**

Laboratory to accompany and supplement PHYS 325.

Credits: 1
Corequisite: PHYS 325. Offered: Every other year.

**PHYS 328 - Digital Lab**

Laboratory to accompany and supplement PHYS 326.
COURSES

<table>
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<tr>
<th>COURSE</th>
<th>CREDITS</th>
<th>DESCRIPTION</th>
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<tbody>
<tr>
<td>PHYS 329</td>
<td>3</td>
<td>Engineering Dynamics: Mechanics applied to the motion of particles and rigid</td>
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<td>bodies, including kinematics and dynamics of particles, relative motion,</td>
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<td>work-energy and impulse-momentum methods, and kinematics and dynamics of rigid</td>
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<td>bodies, including rotation and simple vibration.</td>
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<td>PHYS 330</td>
<td>3</td>
<td>Thermodynamics: Concepts of temperature, laws of thermodynamics, entropy,</td>
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<td>thermodynamic relations and potentials, processes, properties and cycles,</td>
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<td></td>
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<td>applications to physical systems, introduction to statistical mechanics. MATH</td>
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<td>223 is recommended (may be taken concurrently).</td>
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<td>PHYS 331</td>
<td>3</td>
<td>Theoretical Mechanics: Vector-tensor approach to classical mechanics including</td>
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<td>kinematics, dynamics, oscillations, Lagrange's and Hamilton's equations,</td>
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<td>transformations, central force, and rigid body motion.</td>
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<td>PHYS 333</td>
<td>3</td>
<td>Electricity and Magnetism: Mathematical theory of electrostatics and</td>
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<td>electromagnetism employing vector calculus. Applications of Maxwell's equations.</td>
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<tr>
<td>PHYS 340</td>
<td>3</td>
<td>Optics: An introduction to geometrical, physical, and modern optics.</td>
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<td>PHYS 341</td>
<td>1</td>
<td>Optics Laboratory: Laboratory to accompany and supplement PHYS 340.</td>
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<td>PHYS 350</td>
<td>3</td>
<td>Astrophysics: A survey of modern astrophysics, applying the physical and</td>
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<td>mathematical tools learned in the prerequisites. Topics covered include the</td>
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<td>physics of stars, interstellar gas and dust, galaxies, and cosmology.</td>
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<td>PHYS 352</td>
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<td>Measuring the Sky: A laboratory course covering techniques in modern</td>
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<td>observational astrophysics. Students will be trained to operate the telescope</td>
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<td>on campus and will gain expertise in the acquisition and analysis of digital</td>
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<td>images. Nighttime work outside of formal class meeting time will be required.</td>
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<td>PHYS 400</td>
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<td>Undergraduate Seminar: Presentations by students discussing topics in physics.</td>
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<td>Counted once for the physics credit hour requirements.</td>
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<td>PHYS 401</td>
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<td>Special Relativity: Tensor calculus approach to relativistic kinematics,</td>
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<td>dynamics, optics, electrodynamics, and selected applied topics.</td>
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<td>PHYS 425</td>
<td>3</td>
<td>Mathematical Physics I: Applied methods including cartesian and non-cartesian</td>
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<td>vector and tensor analysis, complex numbers and functions, linear algebra,</td>
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<td>vectors and coordinate transforms, eigenvectors and eigenvalues, infinite</td>
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<td>series, multiple integrals, Jacobians, Greenâ€™s Theorem, Divergence Theorem,</td>
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<td>Stokeâ€™s Theorem and Fourier Series.</td>
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<td>PHYS 426</td>
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<td>Mathematical Physics II: Applied methods including Fourier and Laplace</td>
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<td>transforms, partial differential equations, boundary value problems, special</td>
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<td>functions, Green's functions, and functions of a complex variable.</td>
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</table>

Credits: 1
Corequisite: PHYS 326. Offered: Every year.

Credits: 3
Prerequisite: PHYS 230. Offered: Every year.

Credits: 3
Prerequisite: PHYS 231 and PHYS 425 or MATH 420. Offered: Every year.

Credits: 3
Prerequisite: MATH 224 and PHYS 230. Offered: Every year.

Credits: 3
Prerequisite: PHYS 234. Offered: Every year.

Credits: 3
Prerequisite: PHYS 230. Corequisite: PHYS 341. Offered: Every other year.

Credits: 1
Corequisite: PHYS 340. Offered: Every other year.

Credits: 3
Prerequisite: PHYS 345. Offered: Every Fall semester.

Credits: 3
Prerequisite: PHYS 231 and MATH 223. Offered: Every other year.

Credits: 1
Prerequisite: PHYS 152 or PHYS 231. Offered: Every Fall semester.

Credits: 1
Offered: Every year.

Credits: 3
Prerequisite: PHYS 234. Offered: Offered on occasion.

Credits: 3
Prerequisite: PHYS 234. Offered: Every year.

Credits: 3
Prerequisite: PHYS 231. Corequisite: PHYS 341. Offered: Every other year.

Credits: 1
Corequisite: PHYS 340. Offered: Every other year.
PHYS 431 - Introduction to Quantum Mechanics
Concept of wave-particle duality, Schroedinger's wave equation with applications to potential problems, to the hydrogen atom, and to atomic spectra; perturbation theory, and spin-orbit interaction.

Credits: 3
Prerequisite: PHYS 234. Corequisite: PHYS 425. Offered: Every year.

PHYS 434 - Solid State Physics
Crystal structure, conduction theory, binding and energy levels and other properties of conductors, semiconductors, dielectrics, and magnetics.

Credits: 3
Prerequisite: PHYS 431. Offered: Offered on occasion.

PHYS 440 - Seminar: Wave Motion in Physics
The course will be devoted to the study of waves and its applications in different fields of physics. The principal objective is to develop an understanding of basic wave concepts and of their relations with one another. Readings and discussions on topics such as free and forced oscillations, superposition principle, traveling and standing waves, modulations, pulses, wave packets, bandwidth, coherence time and polarization, will serve to reach the proposed goal. Applications of different physical systems as water waves, sound waves, light waves, transmission lines, quantum waves, etc. will be illustrated through interesting examples.

Credits: 1
Prerequisite: PHYS 234. Offered: Offered on occasion.

PHYS 442 - Computational Physics and Engineering
Numerical and computational techniques for solving a wide variety of problems in physics and engineering. Various methods for solving ordinary and partial differential equations describing mechanical oscillators (both periodic and chaotic), electrical and magnetic fields, and quantum mechanical wave functions will be explored. Students will be introduced to MATLAB, and some projects will be run in EXCEL. Familiarity with the physical systems involved is not a prerequisite. If time permits, Monte-Carlo methods will also be explored.

Credits: 1
Prerequisite: MATH 223 and PHYS 230. Offered: Offered on occasion.

PHYS 444 - Seminar: Quantum Information and Measurement
Readings and discussion on the measurement process in quantum mechanics. Entangled states, Einstein-Podolsky-Rosen paradox, Bell's inequality, quantum encryption and quantum computation. Experimental techniques. Philosophical issues raised by quantum theory.

Credits: 1
Prerequisite: PHYS 431. Offered: Offered on occasion.

PHYS 450 - Advanced Laboratory
Students explore advanced experimental techniques progressing through introductory stages to applications, devoting two to four weeks to each chosen topic. Student interest accommodated in topics (and respective applications) such as Nuclear Magnetic Resonance (Magnetic Resonance Imaging-MRI), X-Ray Techniques (crystallography/elemental analysis/medical imaging), Hall effect and related techniques (semiconductor characterization/Giant Magneto Resistive computer disc readers, etc.), and Magnetization measurements (data storage/electrical and mechanical power conversion/geological surveying/bird and insect navigation, etc.).

Credits: 1
Prerequisite: PHYS 234 or CHEM 316. Offered: Every other year.

PHYS 461 - Telescope Operations and Outreach
Students enrolled learn how to lead telescope-related outreach activities under faculty supervision. Specific learning objectives include operating the telescope, identification and investigation of celestial objects of interest to the general public, presenting technical information to non-specialists, and public speaking. Approval to register must be obtained from the department. Approximately three hours of work per week, per credit hour, are expected. Course may be repeated for a maximum of 4 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: 1-2
Offered: Every semester.

PHYS 462 - Planetarium Operations and Outreach
Students enrolled learn how to lead planetarium-related outreach activities under faculty supervision. Specific learning objectives include operating the planetarium, identification and investigation of celestial objects and topics of interest to the general public, presenting technical information to non-specialists, and public speaking. Approval to register must be obtained from the department. Approximately three hours of work per week, per credit hour, are expected. Course may be repeated for a maximum of 4 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.)
PHYS 468 - Independent Study
Independent work on a theoretical or experimental topic under the supervision of a faculty member.
Credits: 1-2
Offered: Every semester.

PHYS 469 - Directed Research
Theoretical or experimental research under the supervision of a faculty member.
Credits: 1-3
Offered: Offered on occasion.

PHYS 470 - Special Topics
Area not covered in regular courses. Broad range of topics consistent with teaching and research interests of department.
Credits: 1-3
Offered: Every semester.

PHYS 471 - Special Topics
Area not covered in regular courses. Broad range of topics consistent with teaching and research interests of department.
Credits: 1-3
Offered: Every semester.

PHYS 472 - Special Topics
Area not covered in regular courses. Broad range of topics consistent with teaching and research interests of department.
Credits: 1-3
Offered: Every semester.

PHYS 473 - Special Topics
Area not covered in regular courses. Broad range of topics consistent with teaching and research interests of department.
Credits: 1-3
Offered: Every semester.

PHYS 474 - Special Topics
Area not covered in regular courses. Broad range of topics consistent with teaching and research interests of department.
Credits: 1-3
Offered: Every semester.

PHYS 475 - Special Topics
Area not covered in regular courses. Broad range of topics consistent with teaching and research interests of department.
Credits: 1-3
Offered: Every semester.

PHYS 476 - Special Topics
Area not covered in regular courses. Broad range of topics consistent with teaching and research interests of department.
Credits: 1-3
Offered: Every semester.

PHYS 477 - Special Topics
Area not covered in regular courses. Broad range of topics consistent with teaching and research interests of department.
Credits: 1-3
Offered: Every semester.

PHYS 478 - Special Topics
Area not covered in regular courses. Broad range of topics consistent with teaching and research interests of department.
Credits: 1-3
Offered: Every semester.

PHYS 479 - Special Topics
Area not covered in regular courses. Broad range of topics consistent with teaching and research interests of department.
Credits: 1-3
Offered: Every semester.

PHYS 480 - Laboratory Supervision in Physics
Students enrolled serve as laboratory assistants under faculty supervision. Approval to register must be obtained from department. Three hours of work per week are expected for each hour of credit elected. Course may be repeated for a maximum of 6 credit hours applicable toward fulfillment of physics or mathematics-physics major's supporting course requirements. (A major in physics or mathematics-physics is not a prerequisite.)
Credits: 1-3
Offered: Every semester.
**PHYS 490 - Honors Thesis**

Research project culminating in a thesis. In most cases a full year of work will be required to complete both project and thesis.

Credits: 3
Offered: Every year.

**PHYS 530 - Kinetic Theory and Statistical Mechanics**

Maxwell-Boltzmann collision theory. H-theorem, transport equation, quantum statistics partition functions, equipartition theorem, applications to thermodynamic systems, ergodicity.

Credits: 3
Offered: Offered on occasion.

**PHYS 531 - Mathematical Physics I**

Mathematical methods including eigenfunctions and eigenvalues, variational principles, abstract vector spaces, integral equations, Green's functions, partial differential equations of physics.

Credits: 3
Offered: Offered on occasion.

**PHYS 532 - Mathematical Physics II**

Mathematical methods including eigenfunctions and eigenvalues, variational principles, abstract vector spaces, integral equations, Green's functions, partial differential equations of physics.

Credits: 3
Offered: Offered on occasion.

**PHYS 533 - Electromagnetic Theory I**

Potential theory and boundary value problems, electromagnetic field relations, magnetohydrodynamics, Leinard-Wiechert potentials.

Credits: 3
Prerequisite: PHYS 531. Offered: Offered on occasion.

**PHYS 534 - Electromagnetic Theory II**

Potential theory and boundary value problems, electromagnetic field relations, magnetohydrodynamics, Leinard-Wiechert potentials.

Credits: 3
Prerequisite: PHYS 531. Offered: Offered on occasion.

**PHYS 540 - Modern Optics**

Green's functions and linear theory, spatial filters, geometrical theory and aberrations, interference, diffraction and image formation, matrix and coherence theory, partial polarization, Fourier Methods.

**PHYS 541 - Advanced Dynamics**

Lagrangian and Hamiltonian methods, variational principles, relativistic mechanics, transformation theory, oscillations, fields.

Credits: 3
Prerequisite: PHYS 531. Offered: Offered on occasion.

**PHYS 543 - Quantum Mechanics I**

Solutions to wave equations, approximation methods, time dependent problems, vector spaces, matrix formulation, identical particles, scattering, radiation, second quantization.

Credits: 3
Prerequisite: PHYS 531. Offered: Offered on occasion.

**PHYS 544 - Quantum Mechanics II**

Solutions to wave equations, approximation methods, time dependent problems, vector spaces, matrix formulation, identical particles, scattering, radiation, second quantization.

Credits: 3
Prerequisite: PHYS 531. Offered: Offered on occasion.

**PHYS 546 - Reactor Physics**

Nuclear reactions and radiations, reactor theory, instrumentation, control, fuel, shielding, heat transfer, and applications of nuclear reactors.

Credits: 3
Prerequisite: PHYS 432. Offered: Offered on occasion.

**PHYS 547 - Special Topics**

Areas not covered in regular courses. Broad range of advanced topics consistent with teaching and research interests of department.

Credits: 1-3
Offered: Offered on occasion.

**PHYS 630 - Advanced Nuclear Physics**

Current experimental and theoretical topics including nuclear properties and systematics, nucleon scattering, nuclear forces and structure, reactions, decay processes, nuclear spectroscopy.

Credits: 3
Prerequisite: PHYS 531 and PHYS 432. Offered: Offered on occasion.
PHYS 631 - Atomic and Molecular Structure

Quantum mechanical treatment of atomic and molecular energy levels including transitions, fine and hyperfine structure, isotopic effects, beam methods, collision and ionization phenomena.

Credits: 3
Prerequisite: PHYS 543. Offered: Offered on occasion.

PHYS 690 - Research

Experimental or theoretical research in physics including a thesis.

Credits: 3
Offered: Offered on occasion.

PHYS 691 - Research

Experimental or theoretical research in physics including a thesis.

Credits: 3
Offered: Offered on occasion.

POLI - Political Science

POLI 100 - Freshman Seminar

The Freshman Seminar in Political Science introduces students to some central aspects of thriving and surviving at Fredonia in academic and social terms and to what is going on in political science. It is an opportunity for freshmen in Political Science to get to know one another, since they will be sharing classes and learning for the next four years. It is also an opportunity for students and political science faculty to get to know one another, their interests, and fields. It is a modest effort to ensure that some fundamental ideas about learning at college are offered to students.

Credits: 1
Offered: Offered on occasion.

POLI 120 - Politics in American Life

We take a critical examination of the American political system through the lens of current and topical controversies. When major issues arise, what areas of the political system become involved, and how do they respond? Who gets to shape the political response? When do social classes or groups have an impact? When are the institutions themselves reshaped by the dynamics of the controversies?

Credits: 3
Offered: Every semester.

POLI 121 - American Public Policy

Introduction to the political economy of policy formation. Emphasis is placed upon the questions of why government intervention in the economy is necessary and the cost-benefit evaluation of the intervention. Political failure is contrasted with market failure in evaluating government public policies. Substantive policy areas such as health care and education policies will be analyzed.

Credits: 3
Prerequisite: POLI 120. Offered: Every semester.

POLI 150 - World Affairs

Studies key reasons for how and why countries behave as they do in international politics taking into account the world diversity in politics, cultures, historic trajectories and different levels of economic development. International Relations and Political Science theories and the research methods in the Social Sciences are applied to enhance the understanding of complex global issues such as human rights violations, ethnic conflict, large migration flows, environmental decay, human insecurity, and terrorism with an emphasis on worldâ€™s increasing interdependence.

Credits: 3
Offered: Every year.

POLI 200 - Statistics

Introduction to the substantive and technological methodology used in study of politics commonly employed by government and business offices. Attendance required. Note: Credit for at most one of the following courses may be applied towards a student's requirements for graduation: BUAD 200, ECON 200, EDU 200, POLI 200, SOC 200, and STAT 200.

Credits: 3
Offered: Every year.

POLI 210 - Research Methods

Introduction to the variety of methods of analysis employed in the empirical study of politics. Consideration of the debates concerning the character of social science. A discussion of normative and positive methods of analysis and evaluation of topics suited for quantitative and non-quantitative treatments. Research design, data analysis, and reporting of results.

Credits: 3
Prerequisite: POLI 200 or STAT 200. Offered: Every other year.
POLI 240 - Urbanization and Environmental Challenges
Focuses on the dilemmas posed by urbanization in developing countries, where the relentless process of city growth is challenging governments and placing an enormous burden on societies. The course addresses a key question underlying the studies on development and urbanization: how can cities develop economically, and at the same time preserve the quality of the urban space? The interdisciplinary course relies on concepts and theories drawn from the disciplines of political science, sociology and history, and from the subfields of international political economy, public policy, urban planning and environmental studies. It may be taught abroad with a fieldwork component directed by the instructor.

Credits: 3
Offered: Offered on occasion.

POLI 241 - Democracy Across Societies
An introduction to the general issues and methods of inquiry involved in comparative politics. Issues such as economic development, political system, government structure, representation, political culture, or failed states are discussed by examining in greater depth particular country cases from both the industrialized and developing world as well as those at different stages of democratization.

Credits: 3
Offered: Every year.

POLI 276 - Law and Society
Examination of basic concepts of law, and how these have changed over time; and of the interrelationships of American law to the social settings in which it is made, and which it in turn influences.

Credits: 3
Offered: Every semester.

POLI 277 - Understanding the Law
An examination of Anglo-American legal principles based upon the analysis of court cases and hypothetical fact situations. The range of topics covered includes criminal law and procedure, legal remedies, torts, and contracts. The course highlights the historical development of these principles and values that are explored through simulations and structured debates.

Credits: 3
Offered: Every year.

POLI 280 - Special Topics in Politics
Examination of a current topic in politics, such as presidential or congressional elections. May be taken more than once as topics change.

Credits: 1-4
Offered: Offered on occasion.

POLI 285 - Mock Trial I
Preparation of case materials for participation in the trial competition sponsored by the American Mock Trial Association. Competition includes both civil and criminal litigation.

Credits: 0
Offered: Every year.

POLI 287 - Mock Trial II
Preparation of case materials for participation in the trial competition sponsored by the American Mock Trial Association. Competition includes both civil and criminal litigation.

Credits: 3
Prerequisite: INDS 285 or POLI 285. Offered: Every year.

POLI 311 - Fundamentals of Public Administration
Examination of role of bureaucracy and administration in America. Initial focus on political setting of the bureaucracy as it interacts with other key actors and institutions. Then consideration of internal characteristics and processes, and examination of topics such as organization theory, decision-making, personnel, and budgeting.

Credits: 3
Prerequisite: POLI 120. Offered: Every year.

POLI 313 - American Power Structures
Examination of the power structures of the United States. Analysis of how factors such as economic class, race, or ethnicity influence who holds or controls political power in federal, state, and local governments. Contrasting theories of who governs are studied: pluralist, elite, and class-based models. Students will learn techniques of organizing people to exercise power in behalf of their common interests.

Credits: 3
Prerequisite: POLI 120. Offered: Every other year.

POLI 321 - Political Parties and Interest Groups
The role of political parties and interest groups in the shaping of government policies and the ordering of society is analyzed. Internal structures and membership of both parties and groups is emphasized, especially how the
collective action problem is solved. The influences of parties and interest groups upon public policies are evaluated. Proposals to reform parties and groups are presented.

Credits: 3
Prerequisite: POLI 120. Offered: Every other year.

**POLI 322 - New York Government**

Study of the legal framework of New York's state and local governments. Analysis of state and local executive organization, politics, political participation, and policy making. Critical examination of the economic competitiveness of N.Y. state in the U.S. and global economy. Attention also to the idea of reinventing government techniques and models.

Credits: 3
Prerequisite: POLI 120. Offered: Every other year.

**POLI 323 - Elections in America**

Critical examination of the social, psychological, and rational choice explanations of voting. Emphasis is placed on the evidence supporting the alternative explanations. In the process of evaluating the alternative explanations, the determinants of voting, the extent of ideological thinking trends in turnout, the political business cycle and historical changes in voting patterns are examined.

Credits: 3
Prerequisite: POLI 120. Offered: Every other year.

**POLI 324 - President and Congress**

Critical examination of the frequently overlapping and conflicting roles of the American President and Congress in making decisions about public policy in the U.S. Attention will be given to recruitment patterns and behavior while in office as well as the nature of the policy outputs. Analysis of institutional forms in other nations will be included to provide a comparative perspective.

Credits: 3
Prerequisite: POLI 120. Offered: Every other year.

**POLI 325 - Public Opinion and Participation**

The course examines public opinion, political participation, and civic engagement in American democracy. Study of the formation and change in attitudes, preferences, values and identity, and the influence of socialization, media, political and social context. Assesses public trust in government and political behavior including voting and protest. Provides theoretical and practical understanding through data collection and analysis.

Credits: 3
Prerequisite: POLI 120. Offered: Offered on occasion.

**POLI 326 - Media and Politics**

The study of mass media in American politics, investigating print, broadcast and new media sources and technologies, content and effect. An examination of the media's watchdog role, ownership, regulation, freedom of the press, news management and reform. Analyzes ongoing media coverage of political events, figures and issues, researching the impact of agenda setting, framing and priming on attention and learning.

Credits: 3
Offered: Every other year.

**POLI 328 - African American Politics**

African Americans have historically been confronted with a number of obstacles when attempting to act in the American political system. Students will critically assess how African Americans can best overcome the obstacles in order to obtain desired policy responses from the political system. In doing so, students will explore the historical context from which these constraints arose, how they have been overcome in the past, and contemplate what factors contribute to their persistence today. Included will be investigations into the role of parties and elections, protest politics, and the Supreme Court.

Credits: 3
Prerequisite: POLI 120. Offered: Offered on occasion.

**POLI 329 - Topics in American Politics**

Examination in depth of current topic in American politics not falling within any other American politics course. May be taken more than once as topics change.

Credits: 3
Prerequisite: POLI 120. Offered: Offered on occasion.

**POLI 330 - Western European Politics**

Comparative study and analysis of governments and politics of the United Kingdom, France, Germany, Italy, and other Western European nations. Considerable attention will be given to the changing socioeconomic characteristics of the nations in the context of the evolving European Community and the drive for European integration.

Credits: 3
Prerequisite: POLI 120 or POLI 150. Offered: Every other year.

**POLI 331 - Canadian Politics**

Examination of the background and socioeconomic foundations of contemporary Canadian politics with special emphasis to the impact of linguistic, cultural and geographic divisions and their impact on the institutions and decision making processes in Canada. Attention will
also be given to the influence of the U.S., the United Kingdom and France on Canada.

Credits: 3
Prerequisite: POLI 120 or POLI 150. Offered: Every other year.

POLI 332 - Russian Politics
Critical introduction to the theory and practice of Russian governmental institutions and political processes in light of Russian history, the Soviet and Marxist efforts to redirect that history, and the rapid political, social, economic and cultural changes in Russia and the former Soviet Union at the end of the 20th century.

Credits: 3
Prerequisite: POLI 120 or POLI 150. Offered: Every other year.

POLI 334 - African Politics
Study of contemporary African politics focuses upon processes of political change and conflict. It includes analysis of patterns of colonial rule, nationalist protest, modern political parties and political systems, ethnic conflict, problems of economic development, and the role of social groups, parties, the military, and ideology in the struggle for civil liberties and democracy. Studies of specific countries such as Nigeria, Ghana, South Africa.

Credits: 3
Prerequisite: POLI 120 or POLI 150. Offered: Every other year.

POLI 335 - Germany and Europe
The course seeks, through an analysis of post war developments in an occupied, then divided, Germany, to trace the origins of the "German Question" and its impact on Germany within the broader context of East-West relations in Europe. The course then seeks to analyze the changing nature of inter-German relations and the factors leading to the dramatic events of 1989/90 and to consider the implications for Germany and Europe.

Credits: 3
Prerequisite: POLI 120 or POLI 150 or HIST 116. Offered: Offered on occasion.

POLI 341 - Political Economy of Development
Examines the ways political-economic factors and relationships condition the patterns of economic development and political change. The course explores: how do economies develop? does class power, domestic and international, determine economic growth patterns and which social groups benefit? Contrasting Marxist and non-Marxist analyses are used. Contemporary and historical studies of development in Europe, the Middle East, Latin America, and Africa are used.

Credits: 3
Prerequisite: POLI 120 or POLI 150. Offered: Every other year.

POLI 343 - International Migration and Immigration Politics
Examination of immigration from a comparative historical and political perspective. The course explores theories of migration and its interrelation with globalization, and focuses on the sociology of immigration and integration. Beyond this comparative focus, current U.S. immigration politics and policies receive special attention.

Credits: 3
Prerequisite: POLI 241. Offered: Every other year.

POLI 344 - Comparative Public Policy
Survey and comparative analysis of public policies in advanced industrial democracies, with emphasis on the U.S., Western Europe, Japan, and Canada. Special emphasis on government-business relations, labor relations, regional trading blocs, industrial planning, public ownership of economic enterprises, privatization, tax policy, and government-delivered health care systems.

Credits: 3
Prerequisite: POLI 120. Offered: Every other year.

POLI 345 - Film and Politics
The course uses film to explore major aspects of political life and the cultural creation of meaning about social and political power, values, and activities. Films are studied as social and political products and to enhance understanding of political phenomena in the American and other cultures. These phenomena include social/political movements, war, law, and race, gender, and class differences and conflicts. Major feature films are used.

Credits: 4
Offered: Every other year.

POLI 346 - East Asian Political Economy
The course focuses on the political, social and economic institutions that have driven the economic development of these East Asian countries which are increasingly creating competitive problems for the United States. Extensive discussion of the role of government planning and group structures such as the keiretsu and chaebol. Also analyzed are the determinants and extent of the development of democratic government in Confucian societies.

Credits: 3
Prerequisite: POLI 120 or POLI 150. Offered: Every other year.
POLI 348 - The European Union
Study and analysis of the politics of the European Union (EU). Topics include: theories of international organization and functional integration; the EU institutions (e.g., EU Commission, Parliament, Council of Ministers, European Council); and the treaties and substantive policies. Students may participate in a model EU at SUNY Fredonia or in Europe in alternate years.

Credits: 3
Prerequisite: POLI 120. Offered: Every other year.

POLI 349 - Topics in Comparative Politics
Examination in-depth of current topics in comparative politics not falling within any other comparative politics course. May be taken more than once as topics change.

Credits: 3
Prerequisite: POLI 120 or POLI 150. Offered: Offered on occasion.

POLI 351 - The Inter-American System
Comparative course focusing on the political development of Western Hemisphere countries, encompassing North, Central, South America and the Caribbean. Examines the Americas as a continent of contrasts and similarities, sources of conflict, and the potential for cooperation in the region. Special emphasis on the political/economic relations between the United States, Mexico and South America; also explores the new role played by Canada as a conflict mediator in the continent.

Credits: 3
Prerequisite: POLI 150 or POLI 241. Offered: Every other year.

POLI 352 - World Political Geography
Examination of the ways humans have arranged the territory of the Earth's surface, including how personal space, territoriality, and perception inform an understanding of politics; the analysis of countries within a geopolitical framework; case studies of how geography has impacted empires, civil divisions, and international relations; comparison of distribution of major political systems and their applications to territory.

Credits: 3
Prerequisite: POLI 120. Offered: Every year.

POLI 353 - International Law and Organization
Examination of the role of public international law in regulating relations among sovereign states. Explores the sources of international law as well as its institutions, such as international organizations and international tribunals. Includes topics such as the use of force, the conduct of war, human rights, economics and the environment.

Credits: 3
Prerequisite: POLI 150. Offered: Every other year.

POLI 354 - Politics of the Middle East
Analysis of Middle East politics, society, and international conflicts. Covers the historical and cultural background of Middle East states, the rise of Arab, Israeli, and other nationalisms, and the contemporary politics and political economy of major Middle East states. Assesses three entangled dimensions of conflict: inter-Arab struggles, the Arab-Israeli conflict, and the contest for influence by external powers.

Credits: 3
Prerequisite: POLI 120 or POLI 150. Offered: Every other year.

POLI 355 - International Political Economy
Focuses on the dynamics of the international economy, economic policies and problems of major states, postwar international institutions, and trade and monetary systems. Considers theories and practices of the role of major powers and multinational corporations in the international economy. Interest in the dramatic changes in the division of world productive power, impact of globalization of capital and production upon the well-being of countries and outbreak of crises, and developing country struggles to change their economic relationships with the world economy. ECON 202 recommended.

Credits: 3
Prerequisite: ECON 201 or ECON 210. Offered: Every other year.

POLI 356 - U.S. Foreign Policy
Analysis of U.S. foreign policy in the post-World War II period. Assesses the corporate, ideological, institutional, and strategic influences in policy-making. Studies patterns of U.S. relations with the U.S.S.R., Europe, Latin America, and the Third World up to the present in the context of the Cold War, the arms race, Third World struggles, U.S. responses to revolutionary change, and U.S. efforts to maintain a world order.

Credits: 3
Prerequisite: POLI 150. Offered: Every other year.

POLI 359 - Topics in International Politics
Examination in-depth of current topic in international politics not falling within any other international politics course. May be taken more than once as topics change.

Credits: 3
Prerequisite: POLI 150. Offered: Offered on occasion.
POLI 360 - Classical Political Theory
Analytical treatment of main problems of political theory by examination of the writings of Plato and Aristotle. Discussion of contending theories of justice, equality, and political obligation.
Credits: 3
Prerequisite: POLI 120 or POLI 150 or POLI 276 or POLI 277. Offered: Every other year.

POLI 361 - Modern Political Theory
Analytical treatment of main problems of political theory by examination of the writings of Machiavelli, Hobbes, Locke, Rousseau, Marx, Mill, and Rawls. Discussion of contending theories of individual rights and obligations, as well as the justification and limits of the state.
Credits: 3
Prerequisite: POLI 120 or POLI 150 or POLI 276 or POLI 277. Offered: Every other year.

POLI 362 - Terrorism and Counterterrorism
The course is designed to introduce students to many aspects of modern terrorism, its evolution through history and efforts to counter it. Topics will cover both theoretical and conceptual questions in studies of terrorism as well as empirical case studies of terrorism.
Credits: 3
Prerequisite: POLI 150. Offered: Every year.

POLI 363 - Game Theory
The course will use rational choice theory to analyze how individuals and groups make decisions in strategic and non-strategic situations. Strategic situations are the result of the interdependent decisions of several individuals, e.g., nuclear deterrence or business competition. Problems covered include how computers beat humans at chess to the evolution processes of society. How do group norms arise where individual competition is the usual course of action? A low level of mathematical background is required.
Credits: 3
Prerequisite: POLI 200 or BUAD 200 or ECON 200 or EDU 200 or POLI 200 or PSY 200 or SOC 200 or STAT 200. Offered: Every other year.

POLI 365 - American Political Thought
Critical examination of the development of American political thought, Colonial period to the present. Discussion of questions regarding the status of rights, the limits of the state, equality, and social justice. Includes analysis of the role in American politics of such ideologies as liberalism, conservatism, communitarianism, and socialism.
Credits: 3
Prerequisite: POLI 120. Offered: Every other year.

POLI 369 - Topics in Political Theory
Examination in-depth of topics in political theory not falling within any other political theory course. May be taken more than once as topics change.
Credits: 3
Prerequisite: POLI 120 or POLI 150 or POLI 276 or POLI 277. Offered: Offered on occasion.

POLI 370 - American Constitutional Law
Study of nature and limitations of judicial review and Supreme Court decisions regarding distribution of powers among national and state governments, division of powers between president and Congress, and limitations upon congressional and presidential powers.
Credits: 3
Prerequisite: POLI 120 or POLI 276. Offered: Every year.

POLI 371 - Civil Rights and Liberties
Study of judicial cases involving safeguarding of individual civil and property rights, special emphasis upon recent developments in interpretation of the due process and equal protection of the law clauses and First Amendment of the U.S. Constitution.
Credits: 3
Prerequisite: POLI 120 or POLI 276. Offered: Every year.

POLI 375 - The Judicial Branch
American courts make decisions that impact major political issues. Justices are political appointees, and their decisions often reflect the biases of the president who selected them. The course examines the political role of courts in relation to the other branches of government, and to the political system as a whole.
Credits: 3
Prerequisite: POLI 120. Offered: Every other year.

POLI 379 - Topics in Public Law
Examination in-depth of topics in public law not falling within any other public law course. May be taken more than once as topics vary.
Credits: 3
Prerequisite: POLI 120 or POLI 150 or POLI 276 or POLI 277. Offered: Offered on occasion.

POLI 380 - Policy Evaluation
In-depth examination of the methods and techniques used to assess the success/failure of public policies. Students learn how to evaluate, acquiring skills that could be
applied to any policy area. Topics include choice of goals, identification of measures, collection of data, interpretation of data and use of an appropriate yardstick of success. Familiarity with statistics not required. Student learning reinforced by use of several case studies of specific evaluations.

Credits: 3
Prerequisite: POLI 120 and POLI 210 and (POLI 200 or STAT 200). Offered: Every other year.

**POLI 381 - Urban Politics and Policy**

Investigation of the events and processes that have shaped the development and decline of U.S. cities. Topics include the evolution of cities, urban form and design, theories of urban planning, urban politics and governance, urban policy and economics, racial and socioeconomic isolation, urban unrest, and the impact of technology.

Credits: 3
Prerequisite: POLI 120. Offered: Every other year.

**POLI 382 - Social Welfare Policy**

Examination of the politics and operation of the social welfare system in the United States. Emphasis on a policy analysis of current social welfare issues such as the Social Security crisis, welfare reform, the relationship between welfare and national economic policy, the functions of public welfare versus private charity, and the connections between direct service and social reform.

Credits: 3
Prerequisite: POLI 120 or SOCW 249. Offered: Every year.

**POLI 383 - Courts and Social Policy**

Examines role of the Supreme Court and other courts in the shaping of public policies in such areas as school systems in desegregation cases, mental hospitals, prisons, and nursing homes. The course will choose from current cases involving major social policy issues such as abortion, prayer in public schools, affirmative action, and capital punishment in order to illustrate the dramatic and controversial role of the courts, especially the Supreme Court, in the shaping of policies in America.

Credits: 3
Prerequisite: POLI 276. Offered: Every other year.

**POLI 387 - Environmental Policy**

A synthesis of the political, ecological, economic, historical and cultural events and issues shaping U.S. and international environmental policy. A broad range of topics are covered, including environmental history, population growth, the global commons, environmental justice, natural hazards, nuclear growth, the role of business, and regulations governing endangered species and habitats, waste disposal, water and air.

Credits: 3
Prerequisite: ECON 101 or ECON 102 or (ECON 201 or ECON 210) or (ECON 202 or ECON 205) or BIOL 111 or BIOL 115 or CHEM 107 or CHEM 113 or CHEM 114 or CHEM 115 or GEO 140 or GEO 141 or GEO 142 or GEO 145 or GEO 148 or GEO 149 or GEO 160 or GEO 165 or GEO 180 or PHYS 101 or PHYS 111 or PHYS 121 or PHYS 230. Offered: Every other year.

**POLI 389 - Topics in Public Policy**

Examination in-depth of topics in public policy not falling within any other public policy course. May be taken more than once as topics vary.

Credits: 3
Prerequisite: POLI 120 or POLI 150. Offered: Offered on occasion.

**POLI 401 - Washington (D.C.) Seminar**

Prior selection required.

Credits: 4
Offered: Every semester.

**POLI 402 - Washington (D.C.) Internship**

Prior selection required.

Credits: 1-12
Offered: Every semester.

**POLI 403 - Independent Study (Washington, D.C.)**

Prior selection required.

Credits: 3
Offered: Every semester.

**POLI 405 - Independent Study (Albany, N.Y.)**

Prior selection required.

Credits: 3
Offered: Every semester.

**POLI 406 - Seminar in State Politics - Albany, N.Y.**

Prior selection required.

Credits: 3
Offered: Every semester.

**POLI 407 - Albany (N.Y.) Internship**

Prior selection required.

Credits: 3-12
Offered: Every semester.
**POLI 419 - Directed Study: Public Administration**

Directed Studies courses are taken for individual work not available in regular courses, according to the field to be studied. Topics determined through prior consultation with instructor.

Credits: 1-3

Prerequisite: POLI 120 and POLI 311. Offered: Offered on occasion.

**POLI 429 - Directed Study: American Politics**

Directed Studies courses are taken for individual work not available in regular courses, according to the field to be studied. Topics determined through prior consultation with instructor.

Credits: 1-3

Prerequisite: POLI 311 or POLI 313 or POLI 321 or POLI 322 or POLI 323 or POLI 324. Offered: Offered on occasion.

**POLI 439 - Directed Study: Comparative Politics**

Directed Studies courses are taken for individual work not available in regular courses, according to the field to be studied. Topics determined through prior consultation with instructor.

Credits: 1-3

Prerequisite: POLI 120 and POLI 150 and (POLI 330 or POLI 331 or POLI 332 or POLI 334 or POLI 341 or POLI 344 or POLI 346 or POLI 352 or POLI 354 or POLI 355 or POLI 356). Offered: Offered on occasion.

**POLI 440 - Senior Seminar Preparation**

This course will prepare students for their senior seminar thesis, which will be written as part of POLI 450. The class will meet every other week. Each student will choose a research question, have it approved, choose a faculty member to supervise the thesis, and begin to review the literature relevant to the chosen topic.

Credits: 1

Offered: Every year.

**POLI 449 - Directed Study: Political Economy**

Directed Studies courses are taken for individual work not available in regular courses, according to the field to be studied. Topics determined through prior consultation with instructor.

Credits: 1-3

Prerequisite: POLI 120 and POLI 150 and (POLI 334 or POLI 341 or POLI 344 or POLI 346 or POLI 354). Offered: Offered on occasion.

**POLI 450 - Capstone Seminar**

A capstone seminar requiring Political Science majors to integrate the theoretical, empirical and methodological skills developed by previous course work in the major. Students will complete a research project and present it to the class. The seminar will emphasize the student's research and presentation skills. The course is required of all Political Science majors.

Credits: 3

Offered: Every semester.

**POLI 459 - Directed Study: International Politics**

Directed Studies courses are taken for individual work not available in regular courses, according to the field to be studied. Topics determined through prior consultation with instructor.

Credits: 1-3

Prerequisite: POLI 120 and POLI 150 and (POLI 341 or POLI 346 or POLI 354 or POLI 355 or POLI 356). Offered: Offered on occasion.

**POLI 469 - Directed Study: Political Theory**

Directed Studies courses are taken for individual work not available in regular courses, according to the field to be studied. Topics determined through prior consultation with instructor.

Credits: 1-3

Prerequisite: POLI 120 and POLI 150 and (POLI 360 or POLI 361 or POLI 363 or POLI 365). Offered: Offered on occasion.

**POLI 479 - Directed Study: Law**

Directed Studies courses are taken for individual work not available in regular courses, according to the field to be studied. Topics determined through prior consultation with instructor.

Credits: 1-3

Prerequisite: POLI 120 and (POLI 276 or POLI 277 or POLI 370 or POLI 371 or POLI 383). Offered: Offered on occasion.

**POLI 489 - Directed Study: Public Policy**

Directed Studies courses are taken for individual work not available in regular courses, according to the field to be studied. Topics determined through prior consultation with instructor.

Credits: 1-3

Prerequisite: POLI 380 or POLI 381 or POLI 382 or POLI 383 or POLI 387. Offered: Offered on occasion.
POLI 490 - Internship in Local Politics and Government
Assignment to office of county, city, or village administrative official, public service agency, legislator, political party, judge, or attorney. Provides opportunities for testing theories and concepts developed in classroom. Involves full-time work during part of semester.
Credits: 1-9
Offered: Every semester.

POLI 491 - Seminar in Local Politics and Government
Discussion and reporting on selected readings and experiences encountered in internships at local government level, including assessment of roles and/or power position of particular agencies, offices, or departments to which interns are assigned. Also involves writing a research paper.
Credits: 3
Prerequisite: POLI 490. Offered: Every semester.

POLI 492 - Legal Intern
Assignment to law-related office. Provides opportunities for testing theories and concepts developed in classroom. Involves full-time work during part of semester.
Credits: 3-6
Offered: Every year.

POLI 494 - Legal Internship Seminar
Discussion and reporting on selected readings and experiences encountered in legal internships. Also involves writing a research paper.
Credits: 3
Prerequisite: POLI 492. Offered: Offered on occasion.

POLI 495 - Political Science Honors Thesis I
A zero credit course to be taken in the fall of a student's senior year. The purpose of the course is to start a student on a major research paper. It is expected that the student will define their research question, and begin their bibliographic research and/or data collection during the fall semester. Only students admitted by the department to the honors sequence are eligible.
Credits: 0
Offered: Every year.

POLI 496 - Political Science Honors Thesis II
To be taken in the spring semester of a student's senior year. The course will allow the student the time to complete the writing of their research paper. The requirement for the course will be an oral presentation of the student's research presented at a joint student-faculty reception, and a major research paper. The length of the research paper will be at least 45 pages for an analytical or case study, and at least 25 pages for a quantitative research paper. Only students admitted by the department to the honors sequence are eligible.
Credits: 3
Prerequisite: POLI 495. Offered: Every year.

POLI 499 - Directed Study: Political Science
Directed Studies courses are taken for individual work not available in regular courses, according to the field to be studied. Topics determined through prior consultation with instructor.
Credits: 1-3
Prerequisite: POLI 150 and POLI 200 and POLI 210. Offered: Offered on occasion.

POLI 520 - Civic Education and Engagement
The course covers the evolution and contemporary shape of political knowledge, learning, and civic engagement in American democracy. To be studied is formation and change in political learning, attitudes, values and identities, and the influence of socialization, media, and the cultural and educational environment. Students learn how to gather data, conduct analysis, and report on the state of civic education and engagement through oral presentation, research, and written analysis.
Credits: 3
Offered: Offered on occasion.

POLI 525 - The Presidency and the Law
The course examines the intersection of the presidency, the Congress, and the judiciary under the dictates of the Constitution. Topics covered include: the powers and the weaknesses of the presidency as an institution; the authority of unilateral action; presidential prerogatives; presidential war powers; the relationship between the president and the Congress; the presidency and civil rights and civil liberties; presidential efforts to alter judicial interpretation.
Credits: 3
Offered: Offered on occasion.

POLI 530 - Seminar in Comparative Politics: Western Europe
Intensive cross national comparative study and analysis of the government and politics of several of the states of Western Europe including the United Kingdom, France, Germany and other countries. The course will also examine the growing impact of the European Union on domestic politics and growth of multilayered governance in an era of increasing social change and globalization.
Credits: 3
Offered: Offered on occasion.

**POLI 535 - Political Economy of Macro Political Institutions**
The course will compare and contrast the macro-institutions of societies. The course will review the theoretical literature, case studies and empirical tests of the various hypotheses of how macro-political institutions affect public policy and/or protect minority rights.
Credits: 3
Offered: Offered on occasion.

**POLI 548 - European Union**
The course covers, broadly, six areas: creating the new Europe, institutions and decision-making processes of the European Union (EU), policies of the EU, enlargement, EU in the world, and transatlantic relations.
Credits: 3
Offered: Offered on occasion.

**POLI 550 - Seminar in International Politics**
The graduate seminar focuses on the nature of foreign policy, the American foreign policy process and the challenges the United States faces abroad.
Credits: 3
Offered: Offered on occasion.

**POLI 595 - Special Topics in Political Science**
An in-depth examination of selected areas of political science for graduate students. Topics are determined by faculty and student interests and emphasize recent developments in the discipline. Examples of topics may include the following: Public Opinion and Elections, Issues in Constitutional Law, Comparative Political Institutions, The Foundations of Political Parties and Interest Groups, Congressional Delegation of Authority, The Growth of the Executive Branch and Topics in Public Policy.
Credits: 1-6
Offered: Offered on occasion.

**POLI 596 - Special Topics in Political Science**
An in-depth examination of selected areas of political science for graduate students. Topics are determined by faculty and student interests and emphasize recent developments in the discipline. Examples of topics may include the following: Public Opinion and Elections, Issues in Constitutional Law, Comparative Political Institutions, The Foundations of Political Parties and Interest Groups, Congressional Delegation of Authority, The Growth of the Executive Branch and Topics in Public Policy.
Credits: 1-6
Offered: Offered on occasion.

**PSY - Psychology**

**PSY 100 - Freshman Seminar**
New Psychology majors will learn about the department and what it has to offer. Career options will be explored and students will be introduced to the faculty. Students also will be made aware of campus resources and taught appropriate study skills.
Credits: 1
Offered: Every year.

**PSY 129 - Foundations of Psychology**
Basic concepts, methods, and points of view in psychology. Specific topics span the range from biological to personal to social determinants of behavior.
Credits: 3
Offered: Every semester.

**PSY 130 - Psychology Laboratory**
A series of computer-based laboratories to give the student hands on experience with a variety of phenomena in psychology. After the computer exercise, students discuss findings, implications, and applications in small groups. Attendance is required. PSY 129 must be taken at the same time, or must have been successfully completed in a
previous semester. The course is considered part of the department’s first year experience, therefore, it is taken by all majors who enter the program with under 30 hours of undergraduate coursework completed.

Credits: 1
Prerequisite: PSY 129*. Cross-Listed as: * Indicates that the course can be taken in the same semester. Offered: Every semester.

**PSY 200 - Statistics for Psychology**
Investigation of basic principles of descriptive and inferential statistics used in the social sciences. A sample of the topics covered includes probability, hypothesis testing (e.g., t-tests, analysis of variance, non-parametrics), correlation and regression. Both raw score formulas and computer software are employed for computational purposes.

Credits: 3
Offered: Every semester.

**PSY 227 - Careers in Psychology**
Discussion of emerging areas in psychology and the application of psychological principles to real-world settings. Focus on relationship between psychology and various other areas, such as law, medicine, business, and mental health.

Credits: 3
Prerequisite: PSY 129. Offered: Offered on occasion.

**PSY 237 - Sport Psychology**
An introduction to the basic concepts, principles, and techniques employed in the field of sport psychology. Major topics include research methods, behavioral principles, personality and assessment, the social psychology of sport, the coach, exercise psychology, youth sport, the female athlete, the minority athlete and ethical issues.

Credits: 3
Prerequisite: PSY 129. Offered: Every year.

**PSY 238 - Performance Enhancement**
An applied course for students interested in developing key psychological skills with the goal of performance enhancement. Especially recommended and designed for students in performance-related majors; e.g., sports, music, theatre, dance, etc. The course will teach mental skills such as focus/concentration, emotional control, arousal management, visualization, and goal setting. It also addresses special issues such as overcoming obstacles, building self-confidence, dealing with performance anxiety, and performance-related group issues.

Credits: 3
Prerequisite: PSY 129. Offered: Every other year.

**PSY 246 - Personality**
Biological and social determinants of personality and its development. Methods of studying personality.

Credits: 3
Prerequisite: PSY 129. Offered: Every year.

**PSY 247 - Health Psychology**
Explores the role of psychological factors in the prevention of illness and maintenance of good health, the treatment of already existing illness, and the recovery from or adjustment to ongoing illness.

Credits: 3
Prerequisite: PSY 129. Offered: Every other year.

**PSY 255 - Psychology of Women**
An examination of the biological, psychological and sociological factors that shape women’s lives. Attention to the intersection of gender with ethnicity, sexual orientation, and social class. Specific topics include theories of gender development, images of women in the media, work, childbirth and motherhood, violence, and physical and mental health.

Credits: 3
Prerequisite: PSY 129 or WOST 201. Offered: Every year.

**PSY 273 - States of Consciousness**
Scientific overview of ordinary consciousness and other states of consciousness including sleep and dreams, meditation, biofeedback, hypnosis, drug-induced states, and parapsychology. The potentials, limitations, and dangers of the various states of consciousness are considered.

Credits: 3
Offered: Offered on occasion.

**PSY 276 - Human Sexuality**
Introduction to theoretical explanations of empirical evidence regarding human sexual behavior. Consideration of reproductive anatomy and physiology; sexually transmitted diseases; sexual attitudes and behaviors throughout the life cycle; contraception; social issues related to sexuality; sexual dysfunctions; and communication in intimate relationships.

Credits: 3
Prerequisite: PSY 129. Offered: Offered on occasion.

**PSY 280 - Special Topics**
Special topics in psychology not covered in detail by regular courses and not offered on a regular basis.
Credits: 3
Offered: Offered on occasion.

**PSY 289 - Lifespan Human Development**
Survey of human life cycle, covering physical, mental, personality, and social development taking place during different periods (infancy, childhood, adolescence, adulthood). Attention to developmental issues and particular processes operating within and between specific periods (e.g., marriage, parenthood, career, death, and bereavement).

Credits: 3
Prerequisite: PSY 129. Offered: Offered on occasion.

**PSY 291 - Psychology of Religion**
Introduction to the major issues, theories, and research in the psychology of religion through critical analysis of classical and modern literature from Western and Eastern cultures. Topics discussed will help illuminate the role of religion as a powerful meaning system that can affect the lives of individuals in terms of their beliefs, motivations, emotions and behaviors.

Credits: 3
Prerequisite: PSY 129. Offered: Every other year.

**PSY 300 - Intermediate Statistics**
Application of statistical concepts to experimental design in psychological research.

Credits: 3
Prerequisite: PSY 200. Offered: Offered on occasion.

**PSY 315 - Research Methods**
Introduction to various research methodologies employed in the social sciences ranging from observational through experimental research. Students are familiarized with basic principles of research design, data collection, data analysis, and manuscript preparation (APA format).

Credits: 3
Prerequisite: PSY 129 and PSY 200. Offered: Every semester.

**PSY 317 - Psychological Assessment**
Introduction to the principles of testing including reliability and validity. The nature and application of different types of tests (measures of achievement, aptitude, intelligence, personality, and interests) are discussed. Both occupational and educational testing are covered.

Credits: 3
Prerequisite: PSY 129 and PSY 200. Offered: Every other year.

**PSY 328 - Positive Psychology**
Positive Psychology focuses on human strengths and positive outcomes. Research on positive psychological states such as optimism, hope, wisdom, courage, mindfulness, flow, and self-efficacy will be presented. We will consider how empathy, gratitude, and forgiveness contribute to positive interpersonal relations; and how our educational system, sense of community, and institutional priorities can contribute to our self-fulfillment.

Credits: 3
Prerequisite: PSY 129. Offered: Every year.

**PSY 342 - Perception**
An investigation of the mental operations involved in the process of obtaining information from one's everyday environment and constructing the psychological representations that form the basis of the capacity to adapt to that environment. Topics include the perception of space, motion, and form; perceptual constancies; perceptual organization; attention and search; learning and development.

Credits: 3
Prerequisite: PSY 129. Offered: Offered on occasion.

**PSY 343 - Cognitive Psychology**
Examines the mental operations involved in information processing at the conceptual level. Topics include pattern recognition and attention, memory structures and processes, imagery, the interaction of language and thought, the basic thought process of problem-solving, reasoning and decision-making.

Credits: 3
Prerequisite: PSY 129. Offered: Every semester.

**PSY 344 - Psychology of Language**
The study of human language and thought processes. The course covers the following topics: speech perception, the role of memory systems in processing sentences and storing knowledge, the development of the language rule system in children, the influence of mother's language on the acquisition process, and second language acquisition.

Credits: 3
Prerequisite: PSY 129. Offered: Every other year.

**PSY 345 - Social Psychology**
Introduction to interpersonal behavior. Topics include attraction, prejudice and discrimination, attitudes, social influence, aggression, social perception, and group behavior.

Credits: 3
Prerequisite: PSY 129. Offered: Every semester.
**PSY 347 - Organizational Psychology**
Examination of the dynamic nature of interpersonal behavior within an organizational context. Topics include motivation, group processes, leadership, stress, decision-making, and communication. Personnel matters including selection, training, and appraisal are discussed.

Credits: 3
Prerequisite: PSY 129. Offered: Every other year.

**PSY 349 - Child Psychology**
A review of research findings and normative data pertaining to children in such areas as perception, learning, cognition, and personality.

Credits: 3
Prerequisite: PSY 129. Offered: Every year.

**PSY 351 - Physiological Psychology**
Study of physiological basis of behavior.

Credits: 3
Prerequisite: PSY 129. Offered: Offered on occasion.

**PSY 355 - Group Dynamics**
Analysis and evaluation of concepts, hypotheses, techniques, and research in group dynamics.

Credits: 3
Prerequisite: PSY 129. Offered: Offered on occasion.

**PSY 356 - Abnormal Psychology**
Introduction to psychological disorders, focusing on theoretical approaches to conceptualizing abnormal behavior and current research regarding the symptomatology, etiology, and treatment of disorders. Methods of assessment and diagnosis of mental disorders will also be examined.

Credits: 3
Prerequisite: PSY 129. Offered: Every semester.

**PSY 358 - Psychology and the Law**
An examination of the legal system through the use of psychological concepts, methods, and research results. Controversial legal issues will be examined. Topics will include theories of crime, forensic assessment, the insanity defense, the trial process, and the impact of gender and ethnicity. Influential cases will be analyzed from a psychological perspective.

Credits: 3
Prerequisite: PSY 129. Offered: Every year.

**PSY 361 - Cognitive Neuroscience**
Cognitive neuroscience is the study of the biology of the mind. The disciplines of cognitive psychology, behavioral neurology, and neuroscience, have combined to form this relatively new field. The course will address the neural bases of cognition including topics such as perception, attention, memory, language, cerebral lateralization and specialization, motor control and development.

Credits: 3
Prerequisite: PSY 129. Offered: Every year.

**PSY 363 - Psychopharmacology**
Examines the effects of psychotropic substances on mood, sensation, cognition, and behavior, with a focus on the mechanism of action of drugs in the brain. General brain structure and function, from the neurochemical and psychological perspectives, will be studied for a wide range of psychoactive drugs, including legal and illegal substances and therapeutic/prescription medications used to treat psychological disorders.

Credits: 3
Offered: Every year.

**PSY 364 - Cognitive Development**
A study of the conceptual changes which occur during childhood. Topics include theories of cognitive development, infant perceptual capabilities, the evolution of representations, memory systems, language acquisition, and reasoning. Focus is on current research and theory.

Credits: 3
Prerequisite: PSY 129. Offered: Every year.

**PSY 365 - Social Development**
Explores the process of socialization. Theories and research relating to social development in areas such as achievement, self-concept, aggression, altruism, and gender roles are covered. Emphasis on the impact of and linkage between various socialization agents (e.g., parents, peers, and school). Social issues (e.g., divorce, drug abuse, etc.) and intervention programs will be considered.

Credits: 3
Prerequisite: PSY 129. Offered: Every year.

**PSY 366 - Psychology of Adulthood**
Examination of data and theory having to do with psychological issues of importance in adult development (perception, cognition, identity, intimacy, socialization, life phases, etc.), and implications of these for adults and those working with them.

Credits: 3
Prerequisite: PSY 129. Offered: Offered on occasion.
PSY 370 - Cross-Cultural Psychology
An introduction to psychological theory and research from the perspective of other cultures. Investigates the origins of psychological thought and overviews the development of the discipline in various historical and political contexts. Focus will vary from semester to semester depending upon instructor.

Credits: 3
Prerequisite: PSY 129. Offered: Every year.

PSY 373 - Human Factors
The study of how humans perceive, think about, and interact with technology and machines. Includes evaluating human performance with technological systems, and designing such systems for reducing human error.

Credits: 3
Prerequisite: PSY 129. Offered: Offered on occasion.

PSY 379 - Child Psychopathology
An introduction to the assessment, diagnosis, and treatment of abnormal behavior in children and adolescents, with consideration of variability in symptomatology and treatment as a function of developmental status.

Credits: 3
Prerequisite: PSY 129. Offered: Every year.

PSY 380 - Special Topics
Special topics in psychology not covered in detail by regular courses and not offered on a regular basis.

Credits: 1-3
Prerequisite: PSY 129. Offered: Offered on occasion.

PSY 391 - Multicultural Counseling
The course will focus on the effects of culture on the nature and behavior of individuals, their adaptations to institutions and environments, and their relations within and outside of their culture. The impact of concepts like ethnocentrism, stereotypes, racism and prejudice will be explored in-depth to help students understand how they are ever-present, especially during the counseling process. Issues relevant to providing effective multicultural counseling will be explored from a theoretical perspective. The course will provide a solid foundation for an applied course in multicultural counseling at the graduate level.

Credits: 3
Prerequisite: PSY 129. Offered: Every other year.

PSY 415 - Advanced Research Methods
Further exploration of methodologies employed in psychology, including factorial design. Students are familiarized with advanced principles of research design, data collection, data analysis, and manuscript preparation (APA format).

Credits: 3
Prerequisite: (PSY 315 or PSY 210). Offered: Every year.

PSY 429 - History and Systems of Psychology
An examination of the ideas, people, and historical contexts that have shaped psychology. Psychology will be explored as an outgrowth of philosophy and the natural sciences that have undergone major shifts in definition, methods, and focus. Special attention is given to the development, progression, and decline of schools of thought such as radical behaviorism and psychoanalysis.

Credits: 3
Prerequisite: PSY 210 or PSY 315. Offered: Offered on occasion.

PSY 430 - Theories of Psychology
A discussion of the principles, assumptions, construction, and application of various theories of human behavior. The content of this capstone course will differ depending on the instructor’s area of expertise.

Credits: 3
Prerequisite: PSY 210 or PSY 315. Offered: Every year.

PSY 439 - Senior Honors Seminar
In-depth analysis of selected topics.

Credits: 3
Prerequisite: PSY 210. Offered: Every year.

PSY 447 - Introduction to Counseling
Provides an overview to the fields of counseling and clinical psychology, focusing on current theoretical approaches to conducting psychotherapy and counseling, assessment tools and techniques used in the fields of clinical and counseling psychology, and the basic skills (e.g., interviewing, problem-solving, active listening) used in counseling interventions with clients. Abnormal Psychology is a recommended prerequisite.

Credits: 3
Prerequisite: PSY 129. Offered: Every semester.

PSY 458 - Practicum in Teaching
With supervision, learning assistants (LAs) experience various aspects of teaching including class preparation, leading discussions, and student evaluation. Each LA is responsible for sections of PSY 130 Psychology Laboratory.

Credits: 3
Prerequisite: PSY 210 or PSY 315. Offered: Every semester.

**PSY 479 - Internship in Psychology**

A number of internships are available to psychology students. These vary in setting but all involve work under supervision in a community setting. Students should see the department internship director for a description of internships available.

Credits: 1-6
Offered: Every semester.

**PSY 489 - Independent Study**

Individual student research conducted under guidance of selected instructors, with permission of instructor.

Credits: 1-3
Offered: Every semester.

**PSY 510 - Contemporary Issues in Psychology**

Critical review of recent contributions to the field, including topics such as motivation, learning, personality, perception, and social influence.

Credits: 3
Offered: Offered on occasion.

**PSY 550 - Studies in Psychology**

Exploration in-depth of selected topics in psychology. Major focus varies from semester to semester.

Credits: 1-3
Offered: Offered on occasion.

**PSY 2SA - 200 Level Study Abroad Elective**

A course taken during a study abroad experience that does not have a direct equivalency to a Fredonia course.

Credits: 0-15
Offered:

**RUSS - Russian**

**RUSS 100 - Introduction to Russian**

Students will be introduced to the language, familiarized with its basic vocabulary and grammar, and prepared to communicate at an elementary level. They will also be introduced to the distinctive features of the cultures where the language is spoken. The course is for students with none or very little background in the language.

Credits: 2
Offered: Every semester.

**RUSS 110 - Essential Russian**

Students develop essential communicative skills and cultural awareness necessary in order to interact with people from that culture, whether it is in their home country or in the United States. In order to take this course, students must have scored a level 2 or 3 in the approved placement test or have taken the introductory course RUSS 100 at Fredonia.

Credits: 3
Prerequisite: RUSS 100 or RUSS 115. Offered: Every semester.

**RUSS 115 - Elementary Russian I**

Designed for students with no previous preparation. Study of fundamental speech patterns in Russian. Initial emphasis on developing listening comprehension, speaking skills, including pronunciation, with progressive emphasis on reading and writing skills.

Credits: 3
Offered: Offered on occasion.

**RUSS 116 - Elementary Russian II**

Continuation of RUSS 115. Further introduction to fundamental speech patterns. For students with one semester of college level Russian or equivalent. Stress on listening comprehension, oral ability, reading, and writing skills.

Credits: 3
Prerequisite: RUSS 115. Offered: Offered on occasion.

**SCED - Science Education**

**SCED 105 - Nature of Science and Science Education**

The course provides an introduction to planning, teaching styles, classroom management, and instructional materials for the secondary classroom. It will also examine the history and foundations of education and the roles of school staff, students, parents and the community in student learning. In addition, the course will prepare (7-12) science teachers to have knowledge and skills in order to accurately represent what scientists do, how scientific knowledge is produced and debated, and what are the limits to scientific inquiry. Direct experiences with children are an integral part of the course via the field component, SCED 106.

Credits: 3
Corequisite: SCED 106. Offered: Every year.
SCED 106 - Nature of Science Education Field Experience
The course is the field component to SCED 105 and provides candidates the opportunity to gain experience teaching the nature of science in 7-12 classroom.
Credits: 0
Corequisite: SCED 105. Offered: Every year.

SCED 276 - Literacy and Technology for Science and Mathematics
The course provides an overview of the processes involved in literacy acquisition and instructional technologies available to enhance teaching in science and mathematics. The relationship of reading and writing, and aspects of writing development and writing process appropriate to each stage of reading development will be presented. Topics: conceptual and methodological issues related to instruction and acquisition of reading, the role and use of technology in literacy instruction, assessment of candidate's reading and writing, diversity in reading acquisition, and use of computers, graphing calculators and other multimedia applications.
Credits: 3
Offered: Every Spring Semester.

SCED 303 - Assessment for Inquiry-Based Science
Different models of evaluation and various techniques used in the assessment of science knowledge and skills will be developed. Examples and procedures directly related to the teaching of inquiry-based science will be stressed. The course will introduce students to action research, a form of self-reflective systematic inquiry by practitioners on their own practice.
Credits: 3
Prerequisite: SCED 105 and SCED 106 or (EDU 105 and EDU 106). Offered: Every year.

SCED 305 - Diversity in the Teaching of Science and Mathematics
The course provides a theoretical framework for exploring and developing a culturally responsive approach to the teaching of mathematics and sciences. In exploring different instructional formats, the course allows candidates to develop approaches that prepare them for an ever-increasing population of students that reflect diverse backgrounds and abilities. The field experience is a corequisite that allows the candidates the opportunity to apply their knowledge on the issues presented in the course work to a diverse population.
Credits: 3
Prerequisite: SCED 105. Corequisite: SCED 313. Offered: Every year.

SCED 313 - Diversity in Teaching Math and Science Field Experience
The course is the field component to SCED 305. Candidates will use different instructional formats to develop effective approaches for teaching science and math to students with different backgrounds and abilities in diverse educational learning environments.
Credits: 0
Corequisite: SCED 305. Offered: Every Fall semester.

SCED 419 - Adolescence Science Methods
The course is an active inquiry into how and why science is taught, considering from what science is, how science literacy could be achieved, what "learning" entails, and what kinds of curricula and teaching best enable science learning.
Credits: 3
Offered: Every year.

SCED 491 - Special Topics in Science Education
Courses which are interdisciplinary in science and education. Titles and topics will vary each semester based on instructor and student interest.
Credits: 3
Offered: Every year.

SCED 510 - Nature in the School Curriculum
Students will focus on using the local environment as a unifying theme for interdisciplinary learning at all grade levels. Field work will predominate. Students will investigate soils, rocks and fossils; plants; animals; and other components of natural systems; and how these factors interact to create ecosystems. Students will write and model lesson plans and accompanying assessments which will address N.Y.S. learning standards.
Credits: 3
Offered: Every year.

SCED 511 - Teaming with Nature
Students learn how to use a one-square-kilometer area surrounding their school as an outdoor laboratory for interdisciplinary learning. Students learn how to keep field journals, read and create maps, do ecological survey, use community resources, and create a plan for interdisciplinary place-based natural and cultural studies linked to their curriculum.
Credits: 3
Offered: Every year.
SCED 512 - Vernal Pool Project
Students will learn how to use a specific component of the local natural environment - vernal pools - in their standards-based curriculum. Students will learn how to keep field journals, read and create maps, identify vernal pool organisms, enter data into the project Website, and become part of a growing community of citizen scientists focused on these unique and threatened ecosystems.
Credits: 3
Offered: Every year.

SCED 540 - The Earth in Space
An examination of how science ideas are constructed in informal and formal social settings. Exemplary science teaching methods will be demonstrated and evaluated. Research focusing on elementary students' formal and naive science understanding concerning the relationships between the Earth, Moon, and the Sun will be investigated in detail.
Credits: 3
Offered: Every other year.

SCED 541 - Electricity and Magnetism
The behavior of simple electronic circuits is examined as a basis for the construction of scientific models, which allow for the prediction and explanation of electrical phenomena. The course concludes by examining magnetic interactions to develop a model of behavior of magnets and magnetic materials.
Credits: 3
Offered: Every other year.

SCED 542 - Light and Color
An examination of how science ideas are constructed in informal and formal social settings. The course investigates and begins with the investigation of the formation of shadows and images. The course then develops a mental model that helps students account for the behavior of light in the formation of images and the effects of color. Exemplary science teaching methods will be demonstrated and evaluated. Research focusing on elementary students' formal and naive science understanding of light and color will be examined.
Credits: 3
Offered: Every other year.

SCED 544 - Properties of Matter
An examination of how science ideas are constructed in informal and formal social settings. The course investigates some basic properties of matter. The course will also develop the concepts of mass, volume, and density and use these in the context of how students explain physical phenomena. The inquiry will be extended to the study of solutions while providing a context for developing the important scientific skills of proportional reasoning, reasoning by analogy, and control of variables.
Credits: 3
Offered: Every other year.

SCED 560 - Foundations of Teaching Science to Adolescent Learners
Participants will develop foundational science teaching knowledge, skills, and reflective dispositions that are characteristic of effective beginning secondary science teachers. The course is an active inquiry into the nature and purposes of teaching science. Participants will strengthen their content knowledge, learn ways to investigate their students' prior ideas in science, and design responsive instruction using inquiry approaches. Participants will develop professional reasoning and dispositions by participating in field experiences, professional activities in the community and science education organizations. The course is accompanied by a 50-hour field component.
Credits: 3
Offered: Every year.

SCED 561 - Foundations of Teaching Science Field Experience
This course is the field component to SCED 560: Foundations of Teaching of Science, and provides candidates the opportunity to observe teaching in diverse classrooms, and assist teachers with school related tasks, including beginning teaching. Candidates will reflect upon their experiences with reference to learning objectives and materials in SCED 560 and submit weekly reports with analysis. Candidates will spend 1-2 days weekly, or the equivalent in middle and high school classrooms, prior to student teaching. Co-requisite(s): SCED 561 Credits: 1
Credits: 1
Offered: Every Fall semester.

SCED 591 - Special Topics in Science Education
Courses which are interdisciplinary in science and education. Titles and topics will vary each semester based on instructor and student interest.
Credits: 1-3
SCED 600 - Graduate Seminar for Science Teachers
Presentations by students, faculty and visitors on current science teaching practices. Students will engage in professional literature searching, and the preparation and presentation of a professional seminar.
Credits: 1

SCED 660 - Developing Expertise in Science Teaching
Students in the course will use a reflective approach based on research and classroom experiences, to examine three aspects of teacher knowledge that are known to contribute to science teaching expertise: Teachers' knowledge about their subject area, knowledge of student's understandings and preconceptions, and ways teachers design instruction by transforming their subject so that it is accessible to their students. The "teacher as inquirer" disposition will be fostered through the planning of projects to teach problematic concepts and investigate student learning. Developing ways to effectively assess student learning throughout the instructional process will be a focus in the class. A 50-hour field component is also a part of the course.
Credits: 3

SCED 661 - Developing Expertise in Science Teaching Field Experience
This course is the field component to SCED 660 Developing Expertise in Science Teaching, and provides candidates the opportunity to observe teaching in diverse classrooms, and assist teachers with school related tasks, including beginning teaching. Candidates will reflect upon their experiences with reference to learning objectives and materials in SCED 660 and submit weekly reports with analysis. Candidates will spend 1-2 days weekly, or the equivalent in middle and high school classrooms, prior to student teaching. Co-requisite(s): SCED 661 Credits: 1

SCED 670 - Student Teaching - Middle School Science
A field assignment to teach middle school science. Assignments provided in grades 5 through 9; arrangements made by the Office of Field Experiences. Open only to students in the MAT Science program.
Credits: 6
Prerequisite: SCED 560 and SCED 660. Corequisite: SCED 680. Offered: Every year.

SCED 671 - Student Teaching - Secondary School Science
A field assignment to teach secondary school science. Assignments provided in grades 7 through 12; arrangements made by the Office of Field Experiences. Open only to students in the M.A.T. Science program.
Credits: 6
Prerequisite: SCED 560 and SCED 660. Corequisite: SCED 680. Offered: Every year.

SCED 680 - Inquiry into Science Teaching in Context
This seminar, which accompanies student teaching, is designed to provide the support necessary to apply and develop professional competencies while working with students and educators in the school setting. In this context, participants will have the opportunity to analyze student learning through action research projects, engage in collaborative problem solving with colleagues, and strengthen professional dispositions. Using classroom experiences as a focus, the class will use collaborative reflection, theories and research to frame new understandings of expertise in science teaching.
Credits: 3
Prerequisite: SCED 560 and SCED 660. Corequisite: SCED 670 or SCED 671. Offered: Every year.

SCED 690 - Graduate Research Project in Science Learning
Students will design, implement and analyze a research project concerning science learning in a 7-12 classroom. This will include an oral research proposal, written thesis and oral defense.
Credits: 3

SCI - Science
SCI 301 - Essential Science I
In-depth focus on key concepts in the areas of chemistry and physics. Application of these concepts to real world situations are emphasized.
Credits: 3
Offered: Every semester.

SCI 302 - Essential Science Lab
Designed for hands-on exploration of everyday phenomena, the laboratory engages students in experiments from biology, chemistry, geology and physics. Most of the experiments are interdisciplinary in nature. The students will plan and execute experiments and then evaluate their data and document their conclusions.
Evaluation will be based on laboratory notebook, written lab reports and oral presentation of experimental results.

**Credits:** 1

**Offered:** Every semester.

**SCI 303 - Essential Science II**

In-depth focus on key concepts in the areas of biology and geology. Applications of these concepts to real world situations are emphasized.

**Credits:** 3

**Offered:** Every semester.

**SCI 325 - Science Teaching Assistantship**

The course is designed to provide science education majors with science teaching experience guided by science faculty. Students will assist in curriculum development, preparation and instruction for interactive and laboratory experiments in the areas of biology, chemistry, earth science and physics. The students will be learning assistants for SCI 301, 302, and/or 303 and outreach to local schools.

**Credits:** 1-2

**Prerequisite:** SCI 301 and SCI 302 and SCI 303. **Offered:** Every semester.

**SCI 491 - Special Topics in Interdisciplinary Science**

Courses which are interdisciplinary in science. Titles and topics will vary each semester based on instructor and student interest.

**Credits:** 1-6

**Offered:** Every year.

**SCI 591 - Special Topics in Interdisciplinary Science**

Courses which are interdisciplinary in science. Titles and topics will vary each semester based on instructor and student interest.

**Credits:** 3

**Offered:** Every year.

**SDEG - Time Shortened Degree**

**SDEG 100 - Humanities**

Advanced English 12 class taken by students in the 3-1-3 Program. A year-long writing intensive course that provides a survey of western literary texts.

**Credits:** 3-6

**Offered:** Every year.

**SDEG 102 - Chemistry**

Students from specific area high schools earn general education credits for fourth year high school Chemistry. Students must pass the Regents or earn a C or better if non-Regents. For specific course description, contact 3-1-3 Program (Fourth Floor Reed Library (716) 673-3550).

**Credits:** 3-6

**Offered:** Every year.

**SEN - Seneca**

**SEN 115 - Elementary Seneca I**

For students with no previous preparation. Study of fundamentals of speech patterns. Initial stress on listening comprehension and oral ability. Progressively greater emphasis on reading and writing skills.

**Credits:** 3

**Offered:** Offered on occasion.

**SOC - Sociology**

**SOC 116 - Introductory Sociology**

The methods, insights, and perspectives of sociology; how sociologists do their work; how individuals are influenced by society and culture; how people learn to become members of society (the socialization process), and how people interact with others in it. Review of major topics of sociological interest and concern.

**Credits:** 3

**Offered:** Every semester.

**SOC 160 - Special Topics**

A course covering material not covered by existing courses. Offered on an occasional basis.

**Credits:** 3

**Offered:** Offered on occasion.

**SOC 200 - Statistics in the Real World**

An introduction to the place of statistics in the research process; develops understanding of statistics as a valuable tool in analyzing data. Deals with probability, sampling, tables, graphs, averages, measure of variation, measures of association, tests of significance, and multivariate statistics. Special emphasis given to analysis of survey data using computers. Note: Credit for at most one of the following courses may be applied towards a student's requirements for graduation: BUAD 200, ECON 200, EDU 200, POLI 200, SOC 200, and STAT 200.

**Credits:** 3

**Prerequisite:** SOC 116. **Offered:** Every semester.
**SOC 201 - Social Problems**

Review of the causes, nature, dynamics, and modes of alleviating some major social problems in contemporary U.S. Among the problems which may be reviewed are poverty, deviance, crime and delinquency, discrimination (racism, sexism, ageism), ecological-environmental threats, and over population, as well as problems of vital institutions (familial, medical, political, economic).

Credits: 3
Prerequisite: SOC 116. Offered: Every other year.

**SOC 204 - Social Psychology**

The forms of social interaction that relate people to each other in everyday life and the consequences for individuals of their social experiences. Theoretical models applied and evaluated for their explanatory power in illuminating such issues as socialization into roles, attitude formation, development of self concept, conflict resolution, etc.

Credits: 3
Prerequisite: SOC 116. Offered: Offered on occasion.

**SOC 215 - Introduction to Public Health**

Public Health is an interdisciplinary field concerned with the physical, mental and environmental health concerns of communities and populations at risk for disease and injury. Topics examined in this course include "traditional public health" issues: infectious and chronic diseases, injuries, diet, maternal/child health and threats to the natural environment. The course will also examine "newer public health" concerns including bioterrorism/superterrorism, human-generated and natural disasters, risk communication, and public health hoaxes.

Credits: 3
Offered: Every year.

**SOC 218 - Introduction to Social Work**

Introduction to theoretical and practical foundations of social work. Examination of values, knowledge, and skills underlying a generalist approach to social work. Analysis of role of social workers in such settings as hospitals, schools, mental health agencies, and family and child welfare agencies.

Credits: 3
Prerequisite: SOC 116. Offered: Every year.

**SOC 219 - Cultures of the World**

This course employs the methods and concepts of Anthropology to understand humanity through the study of cultural practices such as religion, social organization, economies, politics, and the arts. Includes describing and comparing cultural groups to appreciate both the diversity and interconnections of humans. The course broadly examines cultural change and survival in the contemporary world.

Credits: 3
Prerequisite: ANTH 115 or SOC 116. Offered: Every other year.

**SOC 230 - Our Populated Planet**

An introduction to social demography, the course provides an overview of the three basic demographic processes: fertility, mortality, and migration. It evaluates the relationships among these population processes and their interaction with population structures and characteristics, such as age, sex, marital status, race/ethnicity, social class and religion. It also examines contemporary social issues associated with the population processes, including equality, aging, urbanization, women and household structure, economic development and environmental concerns.

Credits: 3
Offered: Every year.

**SOC 272 - Exploring Community-Based Social Work**

Explores how communities and the social work profession respond to social problems. Traditional classroom-based learning is combined with service learning activities to increase student knowledge of the social service delivery system.

Credits: 3
Prerequisite: SOC 218. Offered: Every year.

**SOC 275 - Social Inequalities**

This class addresses the complexity and interactions of contemporary social inequality, as contemporary societies are stratified by a combination of social class, race/ethnicity, gender, and sexuality. Marginalized social groups construct moral systems to define dignity, a sense of worth, and social status. They display agency by challenging dominant regimes. Students will learn about social inequalities from a national and a global perspective, and explore how marginalized groups mobilize for rights and social equality.

Credits: 3
Prerequisite: SOC 116. Offered: Every year.

**SOC 300 - Research Methods**

A course concerned with knowing; emphasis is placed on the evaluation of information and the research process: conceptualization, design, measurement, and data collections methods of survey, experiment and observation are discussed.

Credits: 3
Prerequisite: SOC 116 and (SOC 200 or BUAD 200 or ECON 200 or EDU 200 or POLI 200 or PSY 200 or STAT 200). Offered: Every semester.

SOC 303 - Social Class and Inequality
Examines the sources, forms, and consequences of social inequality, with major emphasis on social stratification in the United States. Emphasis on social class, but also includes racial and ethnic stratification, and gender inequality. Also analyses on debate over the inevitability of inequality, and examines related issues in social policy.

Credits: 3
Prerequisite: SOC 116. Offered: Every year.

SOC 306 - Sex and Gender
Description and analysis of sex and gender roles and relationships from a variety of societies at different levels of socio-cultural complexity. Note: Also listed as ANTH 300 and WOST 302.

Credits: 3
Prerequisite: SOC 116 or ANTH 115. Offered: Every other year.

SOC 310 - Sociology of Deviant Behavior
The sociology of deviant behavior investigates social groups in society that deviate from dominant social norms. Deviance is relative to its historical context and place. Depending on your social position in society, you may find yourself defined as committing informal social deviance, in that you are different from the dominant norm, or you may commit formal deviance, in that you break the law and engage in criminal behavior. Committing an act of deviance does not make one abnormal, and deviant groups are still structured by familiar social norms. Deviance is an analytical concept to understand how difference organizes social oppression.

Credits: 3
Prerequisite: SOC 116. Offered: Every semester.

SOC 311 - Sociology of Addiction
Examination of all that behavior which has come to be identified as addiction including tobacco smoking, alcoholism, substance abuse, eating disorders and gambling. An analysis of competing theories of addiction and treatment. The political, economic and social ramifications of addiction control.

Credits: 3
Prerequisite: SOC 116. Offered: Offered on occasion.

SOC 312 - Plagues and Peoples
The course explores the impact of disease on human populations in terms of demographic, cultural and social changes. The rise of health care delivery systems is addressed as a response to epidemics. Examples include the bubonic plague of the 14th and 17th centuries, cholera, influenza, polio and AIDS. Note: Also listed as ANTH 301.

Credits: 3
Prerequisite: SOC 116 or ANTH 115. Offered: Every year.

SOC 316 - Minority Groups
Study of discrimination against ethnic groups (race, religion, national origins); major groupings within the U.S. such as blacks, Jews, Native Americans, Hispanics, and Asian Americans. Ethnic relations in countries throughout the world, with an emphasis on the impact of colonialism on ethnic relations.

Credits: 3
Prerequisite: SOC 116. Offered: Every year.

SOC 320 - Family Sociology
Overview of sociological perspectives on the family; emphasis on current state of the family in society. Topics include premarital sexual behavior and attitudes; dynamics of mate selection; marriage as an institution; marriage and sex roles; family dynamics (parenthood, childhood, family politics, violence in the family, divorce, etc.); marriage and the family as a subjective reality; alternative family forms; and the future of the family. Relationship between family and other social institutions.

Credits: 3
Prerequisite: SOC 116. Offered: Every year.

SOC 324 - City and Community
Urbanization and its consequences for people in metropolitan areas throughout the world. Process of urbanization, metropolitan social organization, ethnicity and lifestyle, community power structure, urban problems, and cities in developing nations.

Credits: 3
Prerequisite: SOC 116. Offered: Offered on occasion.

SOC 331 - American Utopian Communities
An examination of the background conditions producing utopias and an ethnographic/historical analysis of selected utopian ventures (e.g. Amish, Shakers, Counterculture Communes).

Credits: 3
Prerequisite: ANTH 115 or SOC 116. Offered: Every other year.

SOC 334 - Caribbean Societies and Cultures
Survey of the prehistory, history, and present day nature of the various cultures of the Caribbean region. Special
emphasis placed upon: economic life, family patterns, political movements, and expressive culture.

Credits: 3
Prerequisite: ANTH 115 or SOC 116. Offered: Every year.

**SOC 335 - Sociology of Sport**

Introduction to sport as a social institution; social function of sport; sport and culture, schools, and socialization; sport and women, race, and ethnic groups; sport and mass media; sport and stratification and social change.

Credits: 3
Prerequisite: SOC 116. Offered: Every year.

**SOC 337 - Sociology of Aging**

In-depth overview of social gerontology, focusing on aging in modern societies. How major institutional changes affect the aged. Review of major problems: status as a minority, retirement adjustment, income, social attitude towards the aged, kinship and other roles.

Credits: 3
Prerequisite: SOC 116. Offered: Offered on occasion.

**SOC 338 - Sociology of Death and Dying**

Examines the growing body of sociological and social psychological literature on humankind's last major status passage. Institutions which structure death are considered and the processes accompanying dying are investigated. Cross-cultural as well as American death phenomena are included.

Credits: 3
Prerequisite: SOC 116. Offered: Offered on occasion.

**SOC 340 - Medical Sociology**

Examines the social psychology of health and illness, social epidemiology and the social correlates of illness, and the organization of health care, including the doctor-patient relationship, the health professionals, and health institutions.

Credits: 3
Prerequisite: SOC 116. Offered: Every year.

**SOC 342 - Food and Culture**

This course offers a critical look at the role of foodways in human prehistory, history, and contemporary life. Food is examined as an integral part of culture in terms of creating social bonds, identity, economies, and political systems. These issues are explored through diverse topics such as gender, food taboos, ethnicity, industrialization, human health, and the environment. The course includes discussion of attempts to address problems related to food by looking at policy, technologies, and movements towards sustainable food systems.

Credits: 3
Prerequisite: ANTH 115 or ANTH 219 or SOC 116. Offered: Every year.

**SOC 345 - Women, Health and Society**

Examines ways in which health and illness for women are defined and managed. Topics include the medicalization of pregnancy and birth, adolescence and sexuality, addiction, mental health, menopause, body image, and, women as health care providers.

Credits: 3
Prerequisite: SOC 116. Offered: Every year.

**SOC 350 - Special Topics**

Special topics in sociology not covered in detail by regular courses and not offered on a regular basis.

Credits: 1-3
Prerequisite: SOC 116. Offered: Offered on occasion.

**SOC 361 - Law in the World**

Compares criminal law and justice systems of a variety of contemporary societies. Details characteristics of common law, civil law, and socialist law legal systems as contexts to explore the practices of specific countries. Examines crime patterns across countries.

Credits: 3
Prerequisite: SOC 116. Offered: Every other year.

**SOC 363 - Victimology**

Introduction to the study of victim-criminal relationships. Issues of conceptual and empirical interest covered include: history of the status of victims of crime in Western criminal justice systems; sociological characteristics of victims; victim-risk; victim-precipitated crimes; and victim compensation programs.

Credits: 3
Prerequisite: SOC 116. Offered: Every other year.

**SOC 364 - Juvenile Delinquency**

An examination of delinquent behavior and its distribution in society. Topical issues discussed include the juvenile justice system, theories of delinquency, and methods of social control of this behavior.

Credits: 3
Prerequisite: SOC 116. Offered: Every other year.
SOC 365 - Family Violence

The variety of forms of family violence child abuse, partner abuse, and elder abuse are examined with regard to its range and scope as well as legal and cultural issues. Explanations of and societal responses to the phenomena are detailed and evaluated. Junior standing required.

Credits: 3
Prerequisite: SOC 116. Offered: Offered on occasion.

SOC 380 - Sociological Theory

The evolution of sociological theory is traced from the traditions established by Marx, Durkheim, Weber, and Mead through contemporary phenomenological, critical, feminist, postmodern, and late modern schools of thought in order to understand the different assumptions and claims about what human beings are like, what society is, and what society can know about the two that have arisen in different social contexts.

Credits: 3
Prerequisite: SOC 116. Offered: Every year.

SOC 400 - Senior Seminar

A capstone course required for senior sociology majors designed to provide the opportunity to engage in an intensive examination of a topic of broad and enduring social and sociological significance. The topic will be of sufficient breadth to raise theoretical, methodological, and substantive issues, some of which may have been already encountered in other courses. The seminar format and the senior status of its members will provide a context in which these issues can be examined in greater depth and integrated into a more developed and coherent sociological perspective through extensive reading and writing. The seminar format also demands that students assume greater responsibilities for their own learning and that of their fellow members.

Credits: 3
Prerequisite: SOC 116 and SOC 300 and SOC 380. Offered: Every year.

SOC 415 - Seminar in Public Health

In-depth exploration of selected topics in public health, with special emphasis on epidemiological investigations and applications. Major focus varies from semester to semester depending on interests of students and instructor. The general goal of the course is to help students (a) further develop their skills in epidemiology, the science of public health; and (b) integrate course topics and themes from disciplines comprising the Public Health minor, so that they can use this knowledge to explore jobs, careers and graduate education in public health. Students must have completed 15 hours of course work in the Public Health minor, including Introduction to Public Health. Permission of instructor required.

Credits: 1
Prerequisite: SOC 215. Offered: Every year.

SOC 470 - Directed Study

One to 3 credit hours of credit for individualized study under guidance of a member of the faculty. Permission of instructor.

Credits: 1-3
Offered: Every semester.

SOC 472 - Sociology Internship

Supervised placement with a public or private organization. A limited number of opportunities to observe and participate in sociology-related endeavors in the workplace. Permission of department.

Credits: 1-15
Prerequisite: SOC 116. Offered: Every semester.

SOC 2SA - 200 Level Study Abroad Elective

A course taken during a study abroad experience that does not have a direct equivalency to a Fredonia course.

Credits: 0-15
Offered:

SOCW - Social Work

SOCW 249 - Toward a Great Society

What was, and is, a “Great Society”? This question serves as the historical and metaphorical theme as we journey from 1600 to 1968 exploring how and why the United States helps, or doesn’t help, vulnerable citizens. Ideas related to democracy, policy, social contracts, human rights, oppression, social justice, benevolence, and social control are explored.

Credits: 3
Offered: Every year.

SOCW 315 - Child Welfare

A survey of the child welfare field of practice. Emphasis is on services provided to children and their families and the local, national, and state policies that guide them.

Credits: 3
Prerequisite: SOC 116 or SOC 218. Offered: Every other year.

SOCW 325 - Foundations of Generalist Practice

The first of four sequenced social work practice courses in which students learn generalist social work practice theory
and method. In-depth presentation and study of the foundation layers of knowledge needed to implement generalist problem-solving within and between micro, mezzo and macro systems. Advanced status required.

Credits: 3

Offered: Every year.

**SOCW 340 - Human Behavior in Social Environment I**

Introduces theory and knowledge used in the person-in-environment perspective to prepare a foundation on which to build generalist practice skills. A focus on systems theory approach will lead to an understanding of how the biological, psychological, and social systems are interrelated and affect human development throughout the lifespan. Advanced status required.

Credits: 3

Prerequisite: BIOL 110*. Corequisite: SOCW 325. Cross-listed as: * Indicates that the course can be taken in the same semester. Offered: Every year.

**SOCW 341 - Human Behavior in Social Environment II**

Builds on the knowledge and theory learned in Human Behavior in Social Environment I. A combination of social systems and life span theoretical frameworks will continue to be utilized to provide a foundation for understanding human behavior from middle adulthood through late adulthood.

Credits: 3

Prerequisite: SOCW 340. Offered: Every year.

**SOCW 370 - Generalist Practice Skills**

Second course in the social work course practice sequence builds on SOCW 325. Focus is on the skills needed to implement the generalist problem solving method within and between micro, mezzo and macro systems.

Credits: 3

Prerequisite: SOCW 325. Offered: Every year.

**SOCW 385 - Social Work Practice in Health Care**

This elective course provides knowledge and skills essential for competent social work practice in an integrated health care setting, such as a hospital, primary care clinic or nursing home. Topics include health behavior theory, health care policy, research-informed practice in health care, and intervention in health care social work.

Credits: 3

Prerequisite: SOCW 370. Offered: Every year.

**SOCW 390 - Practice with Individuals, Families and Small Groups**

The third practice methods course challenges the students to increase their generalist problem-solving, communication, assessment, and intervention skills with multiple systems. The Monitoring and Evaluation stage of generalist problem solving is highlighted.

Credits: 3

Prerequisite: SOCW 340 and SOCW 341 and SOCW 370. Corequisite: SOCW 480 or SOCW 485. Offered: Every year.

**SOCW 399 - Selected Topics**

Variable-content course; topic will be announced in the online Course Offerings each semester offered.

Credits: 3

Offered: Every semester.

**SOCW 400 - Practice with Organizations and Larger Social Systems**

This final course in the practice sequence builds on all the preceding practice courses with a specific focus on indirect practice. The content and activities are designed toward mastery of the skills, values and knowledge competencies needed to work with, and in, organizations, communities, political institutions and global contexts.

Credits: 3

Prerequisite: SOCW 390. Corequisite: SOCW 490 or SOCW 495. Offered: Every year.

**SOCW 470 - Independent Study**

In-depth exploration of a social work topic under the direction of a social work department faculty member, who is willing to sponsor the student. Students should have specific topics in mind before approaching an instructor and are expected to complete a research project and present his or her findings to the professor on the agreed upon topic. Once an Independent Study has been arranged and prior to the semester beginning, the student must complete the Independent Study Contract with the sponsoring faculty member.

Credits: 1-3

Offered: Every semester.

**SOCW 480 - Field Practicum I**

The first semester of a professionally supervised 500 total hour placement in a human services agency. Students are expected to complete 250 hours of direct service to individuals, families, groups or communities and/or other duties expected of a beginning-level social worker during the semester. Students are expected to apply social work theory, knowledge and method to actual cases, identify
areas of professional growth, process their experiences, and begin assessing their practice using standard research methods. Social Work majors only.

Credits: 3
Prerequisite: SOCW 325 and SOCW 340 and SOCW 341 and SOCW 370 and SOC 300 and POLI 382. Corequisite: SOCW 390 or SOCW 485. Offered: Every year.

**SOCW 485 - Field Practicum I with Seminar**

An extension of SOCW 480: Field Practicum I allowing for the sectioning of practicum students into small peer groups for weekly group meetings. Students are divided into sections and assigned faculty field liaisons who assist students develop and implement an individualized professional learning contract for their practicum placements. Weekly meetings are held to analyze issues discovered through the practicum experience. Faculty liaisons monitor and evaluate student performance for the entire practicum experience (SOCW 480 and 485).

Credits: 3
Prerequisite: SOCW 325 and SOCW 370 and SOC 300 and POLI 382. Corequisite: SOCW 390 or SOCW 480. Offered: Every year.

**SOCW 490 - Field Practicum II**

The continuation of the student's experiential learning at the same agency in which the student was placed in during SOCW 480. Students need to complete 250 or more hours of direct service practice and/or other duties expected of the beginning level social worker.

Credits: 3
Prerequisite: SOCW 480 and SOCW 485 and SOC 300 and POLI 382. Corequisite: SOCW 490 or SOCW 480. Offered: Every year.

**SOCW 495 - Field Practicum II with Seminar**

An extension of SOCW 490: Field Practicum II which allows for the sectioning of practicum students into small peer groups for weekly group meetings. Expectations for student performance increase and new Learning Contracts are constructed and implemented. Weekly meetings focus on the critical assessment of the student's use of skill, knowledge, and theory in their practicum placement. Faculty field liaisons facilitate group meetings and monitor the practicum experience, evaluating student performance for both SOCW 490 and 495.

Credits: 3
Prerequisite: SOCW 480 and SOCW 485. Corequisite: SOCW 490. Offered: Every year.

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**SPAN - Spanish**

**SPAN 100 - Introduction to Spanish**

Students will be introduced to the language, familiarized with its basic vocabulary and grammar, and prepared to communicate at an elementary level. They will also be introduced to the distinctive features of the cultures where the language is spoken. The course is for students with none or very little background in the language.

Credits: 2
Prerequisite: Spanish Lang Placement Score of an 1 or better. Offered: Every semester.

**SPAN 110 - Essential Spanish**

Students develop essential communicative skills and cultural awareness necessary in order to interact with people from that culture, whether it is in their home country or in the United States. In order to take this course, students must have scored a level 2 or 3 in the approved placement test or have taken the introductory course SPAN 100 at Fredonia.

Credits: 3
Prerequisite: SPAN 100 or Spanish Lang Placement Score of an 2 or better or Spanish Lang Placement Score of an 3 or better or SPAN 115. Offered: Every semester.

**SPAN 115 - Introduction to Spanish**

Introduction to the fundamentals of the Spanish language. Emphasis will be given to all four communicative skills: speaking, writing, listening, and reading. Course is designed for students with less than two years of high school Spanish or no background at all. Enrollment by permission of the department.

Credits: 3
Offered: Every semester.

**SPAN 116 - Elementary Spanish II**

Continuation of SPAN 115. Further introduction to fundamental speech patterns. For students with one semester of college-level Spanish or equivalent. Stress on listening comprehension, oral ability, reading and writing skills.

Credits: 3
Prerequisite: SPAN 115 or NY Regents Spanish Exam Score of an 80 or better. Offered: Every semester.

**SPAN 120 - Spanish in Action: Online Component**

Provides intensive practice of Spanish vocabulary and grammatical structures. Online activities are self-paced and are required preparation for SPAN 121. Successful completion of SPAN 120 and 121 fulfills the College Core Curriculum Foreign Language requirement at the
proficiency level for students enrolled in programs granting the B.A. degree. For students with two or more years of high school Spanish or equivalent.

Credits: 2
Corequisite: SPAN 121. Offered: Every year.

**SPAN 121 - Spanish in Action: In-Class Component**

The course builds on the fundamentals of Spanish and applies them to real situations. It is also an introduction to the different Hispanic cultures. It emphasizes communicative skills applying the vocabulary and grammar concepts learned in SPAN 120. Successful completion of SPAN 120 and 121 fulfills the College Core Curriculum Foreign Language requirement at the proficiency level for students enrolled in programs granting the B.A. degree. For students with two or more years of high school Spanish.

Credits: 2
Corequisite: SPAN 120. Offered: Every year.

**SPAN 215 - Intermediate Spanish I**

Increases proficiency in listening, speaking, reading and writing skills in Spanish. Further development of vocabulary and grammar. Selected cultural and literary readings.

Credits: 3
Prerequisite: SPAN 116 or (SPAN 120 and SPAN 121) or NY Regents Spanish Exam Score of an 85 or better or SPAN 110 or Spanish Lang Placement Score of an 4 or better. Offered: Every semester.

**SPAN 216 - Intermediate Spanish II**

Development of listening, speaking, reading and writing skills to attain proficiency required for upper level courses in Spanish. Expansion of vocabulary and advanced grammar. Selected cultural and literary readings.

Credits: 3
Prerequisite: SPAN 215 or Spanish Lang Placement Score of an 5 or better. Offered: Every semester.

**SPAN 280 - Topics in Spanish**

The mini course provides an in-depth study of a specific topic of Spanish language or culture. Students can repeat course as its content changes

Credits: 1
Offered: Every year.

**SPAN 301 - Intensive Spanish Grammar**

An in-depth examination and review of grammar categories in Spanish. It will provide extensive oral and written practice.

Credits: 3
Prerequisite: SPAN 216. Offered: Offered on occasion.

**SPAN 307 - Special Topics**

Topics in Spanish language and literature.

Credits: 3
Prerequisite: SPAN 216. Offered: Offered on occasion.

**SPAN 308 - Advanced Spanish Phonetics and Diction**


Credits: 3
Prerequisite: SPAN 216. Offered: Every year.

**SPAN 313 - Spanish Conversation**

Oral-aural drills, conversational exercises to provide practice in understanding and speaking Spanish. Emphasis on improving pronunciation and fluency.

Credits: 3
Prerequisite: SPAN 216. Offered: Every semester.

**SPAN 314 - Spanish Composition**

Writing colloquial and formal Spanish. Translations and free compositions.

Credits: 3
Prerequisite: SPAN 216. Offered: Every year.

**SPAN 315 - Readings in Spanish**

The course will improve the students’ reading comprehension in Spanish through a varied array of texts, from social media to literature. The class begins with a study of what it involves reading in the language. The last part of the course will be devoted to literary texts and their analysis.

Credits: 3
Prerequisite: SPAN 216. Offered: Every year.

**SPAN 319 - Survey of Spanish Literature I**

Principal literary movements and writers studied against historical, social, and cultural backgrounds. Selected masterpieces through the 17th century. Outside readings.

Credits: 3
Prerequisite: SPAN 315. Offered: Every year.

**SPAN 320 - Survey of Spanish Literature II**

Principal literary movements and writers studied against historical, social, and cultural backgrounds. Selected masterpieces from the 18th century to the present. Outside readings.
SPAN 325 - Survey of Spanish-American Literature
Principal literary movements in Spanish America from Colonial period. with emphasis on post-Independence literature.
Credits: 3
Prerequisite: SPAN 315. Offered: Every year.

SPAN 329 - Introduction to Spanish Linguistics
The course introduces students to the various areas of modern Spanish linguistics concentrating in phonology, morphology, and syntax, with special reference to contrasts with English. It will also explore areas of pragmatics, sociolinguistics, and second language acquisition.
Credits: 3
Prerequisite: SPAN 314 and SPAN 315. Offered: Every other year.

SPAN 340 - Cultural Issues in the Hispanic World
The study of a cultural issue or theme during a specific period and/or region. Students will gain insight into what the issues are and their ramifications, while developing an understanding of the diversity and complexity of contemporary societies in the Spanish-speaking world.
Credits: 3
Prerequisite: SPAN 314 and SPAN 315. Offered: Every other year.

SPAN 375 - Themes in Hispanic Literature
The course focuses a major theme or issue in literature written in Spanish. Students will follow the explorations of different writers in order to gain a better understanding of the issue at hand.
Credits: 3
Prerequisite: SPAN 314 and SPAN 315. Offered: Every other year.

SPAN 377 - Special Topics
Topics in Spanish language and literature.
Credits: 1-3
Prerequisite: SPAN 315. Offered: Offered on occasion.

SPAN 388 - Spanish Civilization and Culture
A comprehensive introduction to aspects of Spanish civilization and culture: geography, history, social customs, political movements, literature and art.
Credits: 3

Prerequisite: SPAN 313 or SPAN 314 or SPAN 317. Offered: Offered on occasion.

SPAN 400 - Special Topics in Spanish
Special areas in Spanish language, literature, or culture and civilization not covered by regular courses.
Credits: 1-3
Prerequisite: SPAN 313 or SPAN 314 or SPAN 317. Offered: Offered on occasion.

SPAN 401 - Imperial Spain
Analysis of main currents of Spanish culture in Siglo de Oro through readings in history, sociology, and literature.
Credits: 3
Prerequisite: SPAN 319. Offered: Offered on occasion.

SPAN 407 - Special Topics
Special areas in Spanish not covered by regular courses.
Credits: 3
Offered: Every year.

SPAN 410 - Directed Study
Individual directed study of a particular area or topic in Spanish language or literature. Periodic meetings with instructor, writing of a substantial paper.
Credits: 1-3
Offered: Offered on occasion.

SPAN 413 - Advanced Communication in Spanish
Practice of different styles and levels of communication such as narrative, critical commentary, debate, and dramatic dialogue to strengthen oral skills and develop advanced oral proficiency. Study of idiomatic expressions.
Credits: 3
Prerequisite: SPAN 313 and SPAN 314. Offered: Every year.

SPAN 415 - Individual Oral Proficiency Development In Spanish
Student will develop a list of weekly activities, such as watching movies, listening to music, reading of articles and books, etc. that will further enhance the student’s oral proficiency in Spanish. Student will meet once a week with instructor to discuss the activities. The course will end with retaking of Oral Proficiency Interview (OPI) exam. Student is responsible for the cost of the exam.
Credits: 1
Offered: Every year.
SPAN 423 - Senior Seminar
In-depth study of a literary or cultural topic selected by the instructor. Major written paper and oral presentation required. All work to be done in Spanish.
Credits: 3
Prerequisite: (SPAN 319 and SPAN 320) or (SPAN 319 and SPAN 325) or (SPAN 320 and SPAN 325). Offered: Every year.

SPAN 424 - Spanish Creative Writing
Study of literary techniques. Direct composition in Spanish to encourage incorporation of these devices into student’s own writing.
Credits: 3
Prerequisite: SPAN 315 and (SPAN 318 or SPAN 314). Offered: Every year.

SPAN 425 - Spanish-American Fiction
Prose fiction in Spanish America with special emphasis on 20th century authors.
Credits: 3
Prerequisite: SPAN 325. Offered: Offered on occasion.

SPAN 427 - The Art and Craft of Translation
Discussions of translation theory and problems of translation, followed by translation from Spanish to English, ending with translation from English to Spanish.
Credits: 3
Prerequisite: SPAN 315 and (SPAN 318 or SPAN 314) and (SPAN 320 or SPAN 325). Offered: Every year.

SPAN 472 - Hispanic Literary Figures
The course focuses on a writer whose work has made significant contributions to the literature written in Spanish. The writer’s work provides new ways of examining and understanding the history and culture of the Spanish-speaking world.
Credits: 3
Prerequisite: SPAN 315 and SPAN 319 or SPAN 320 or SPAN 325 or SPAN 375. Offered: Every other year.

SPAN 478 - Great Moments in Hispanic Literature
The study of a significant period or movement in literature written in Spanish; how the intersections of artists, writers, and cultural ideas of that moment have impacted what we now know as the Spanish-speaking world. SPAN 315 is required, at least one 300 level Spanish course recommended.
Credits: 3
Prerequisite: SPAN 315 and SPAN 319 or SPAN 320 or SPAN 325 or SPAN 375 or SPAN 424 or SPAN 425 or SPAN 427 or LANG 327. Offered: Every other year.

SPAN 480 - Internship in Spanish
Students will be sponsored by a faculty in the Modern Languages and Literature department. Additionally, they must have completed the application required by the campus Office of Internships.
Credits: 1-6
Offered: Offered on occasion.

SPAN 485 - Undergraduate Learning Assistant for Spanish
Students serve as undergraduate learning assistant for the hybrid course, Spanish in Action. Assistants help the instructor both in the classroom as well as outside the classroom monitoring class activities online and offering tutoring. Assistants are also responsible for developing and teaching a lesson on a topic agreed upon with the instructor. Assistants learn and develop best practices in language teaching. Students in education certification programs preferred.
Credits: 3
Prerequisite: SPAN 313 and SPAN 314 and SPAN 315. Offered: Every semester.

SPAN 500 - Special Topics
Special areas in Spanish not covered by regular courses.
Permission of department required.
Credits: 3
Offered: Offered on occasion.

SPAN 507 - Special Topics in Spanish
Special areas in Spanish not covered by regular courses.
Credits: 1-3
Offered: Every year.

SPAN 510 - Directed Study in Spanish
Individual supervised study of particular area or topic in any of the department’s Spanish language or literature offerings. Periodic meetings with instructor and writing of a substantial paper. Permission of department required.
Credits: 1-3
Offered: Offered on occasion.

SPMG - Sport Management
SPMG 100 - Pathway to Success
The course is intended to help students to succeed and become lifelong learners. It introduces the student to the
academic and social aspects of college coupled with a general orientation to functions and available student resources. In addition, it will help build a support network with faculty, staff and peers while improving study skills both within and outside the classroom.

Credits: 3
Offered: Every year.

SPMG 210 - Principles of Sports Management
The course provides the student with an overview of the basic philosophies, principles and organizational structure of sport programs. The course will cover leadership, communications, business structure, marketing, management styles, sportsmanship, ethical behavior, diversity, liability, and child abuse. The course further explores career opportunities and the skills needed to manage sport programs ranging from youth sports to professional sports.

Credits: 3
Offered: Every semester.

SPMG 211 - Facility Management
The course is designed to provide the students with comprehensive knowledge on the operation and management of sport facilities. It covers mastering of 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
Prerequisite: SPMG 210. Offered: Every year.

SPMG 212 - Event Management
The course will provide comprehensive information on sport event management. The students 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
Prerequisite: SPMG 210. Offered: Every year.

SPMG 218 - Technology in Sports
The course introduces the student to the fundamentals of videoing and video editing utilizing the Dartfish Software platforms. Additionally the course covers video breakdown for game strategy, situations, sound and music enhancements and creating highlight and recruiting videos. Further exploration includes the use of technology in a variety of sport contexts including social media and the evolving role of technology in the sport industry.

Credits: 3
Prerequisite: CSIT 104 or CSIT 151. Offered: Every semester.

SPMG 220 - Health Sciences Applied to Coaching
The course will fulfill the NYSED Health Sciences Applied to Coaching requirement for certification as a coach in New York State. The components for certification include a basic knowledge of health sciences, including anatomy, physiology, kinesiology, human growth and development and maturation, risk minimization, sport-specific fitness and conditioning, and coaching psychology.

Credits: 3
Prerequisite: HLTH 115. Offered: Every year.

SPMG 221 - Philosophy, Principles and Organization of Athletics in Education
The course will fulfill the NYSED Philosophy, Principles and Organization of Athletics in Education requirement for certification as a coach in New York State. The components for certification include a basic knowledge of coaching philosophy, and principles and organization of associations and leagues. Child maltreatment and abuse are also covered in the course.

Credits: 3
Offered: Every year.

SPMG 230 - Sport in Diverse Societies
This course examines the philosophical and sociological foundations of sport in a global society. Through lecture, small and large group discussions, film, personal reflection, and research, students will explore the cultural contributions, challenges, and outcomes that diverse populations have provided to global sport. Students will be challenged to reflect upon how sport has been influenced by various cultures and diverse groups to develop their own personal philosophy and explore current issues in sport through this historical lens.

Credits: 3
Offered: Every semester.

SPMG 250 - Digital Marketing for Sport Management
The course will introduce students to digital marketing technologies associated with sport management. It will discuss business models, media best practices, building fan communities, construction of marketing web sites, online security and payment systems, and inbound marketing. Guerilla marketing, third party online retail and distribution options, online press, promotion, and advertising options, analytics and measurement, ethical and social issues associated with online marketing, as well
as collaborative online marketing and supply chain management will also be covered.

Credits: 3

Offered: Every year.

**SPMG 298 - Pre-Internship**

The course is a prerequisite to SPMG 400 Internship. The intent of the pre-internship is to increase a student's awareness of the critical aspects of preparing for an internship. The experiences are designed to give students an opportunity to begin career exploration, develop skills to make contacts in the Sport Management and Exercise Science profession, and apply what they learn to real world situations. At least sophomore standing required.

Credits: 1

Offered: Every semester.

**SPMG 300 - Sport Law and Risk Management**

The structure of the legal system, introduces the case study method, aspects of constitutional law, labor and anti-trust law, tort law, product liability, contract law, administrative and statutory law applicable to the sport industry. The course also covers establishing a risk management system for facilities and sports programs.

Credits: 2

Prerequisite: SPMG 211 or PHED 211. Offered: Every year.

**SPMG 305 - Economics of Sport**

Course covers the principles of macro and micro economics related to the sport industry on a regional and national level, supply and demand, growth of the sport industry, venues and events, economic impact of facilities manufacture and television on intercollegiate and professional sport.

Credits: 3

Prerequisite: (ECON 201 or ECON 210) and (ECON 202 or ECON 205). Offered: Every year.

**SPMG 321 - Theory and Techniques of Coaching**

A course designed to introduce the prospective coach to the basic skills, strategies and coaching techniques required in organizing a particular sport. While the course is one of several courses designed to meet state mandates for interscholastic coaching, the student is expected to have completed all other courses in the mandate before enrolling in SPMG 321 or attain the permission of the instructor.

Credits: 2

Offered: Every semester.

**SPMG 328 - Marketing and Public Relations in Sport**

The course is designed to prepare students with the tools needed to develop effective marketing and public relations strategies for sports and athletic programs. A myriad of topics such as marketing, advertising, public relations theories, consumer behavior and practical applications will be explored. Emphasis will be on developing students' written and verbal communication skills. The course content is in line with recommendations of the relevant professional associations regarding the marketing and public relations of sport management.

Credits: 3

Prerequisite: (ECON 201 or ECON 210) and (ECON 202 or ECON 205). Offered: Every year.

**SPMG 330 - Leadership and Management in Sport**

The course investigates the important aspects of leadership theory, management practices and human resource allocation for sports management. The course follows the guidelines of the North American Association for Sports Management. The guidelines mandate that students learn to define the elements of leadership theory and describe the various skills, roles and functions of sport managers as they relate to managerial responsibilities. Students will learn about the role of leadership, management and resource allocation for sport operations.

Credits: 3

Prerequisite: SPMG 210 or PHED 210. Offered: Every year.

**SPMG 398 - Pre-Internship**

The course is a prerequisite to PHED 400 Internship. The intent of the pre-internship is to increase a student's awareness of the critical aspects of preparing for an internship. The experiences are designed to give students an opportunity to begin career exploration, develop skills to make contacts in the Sport Management and Exercise Science profession, and apply what they learn to real world situations.

Credits: 1

Offered: Every semester.

**SPMG 399 - Special Topics in Sport Management**

Variable-content course; topic announced in the online Course Offerings each semester.

Credits: 1-6

Offered: Every semester.

**SPMG 400 - Sport Studies Internship**

Working under supervision in a community setting, the internship will emphasize theory, knowledge and skills needed when working with and within groups and
organizations. Student will be expected to complete 67 clock hours of direct service to individuals, groups or organizations for each credit hour awarded. A learning Contract encompassing job requirements, learning objectives and methods will be utilized in student's evaluation.

Credits: .5-12
Prerequisite: SPMG 298 or SPMG 398. Offered: Every semester.

SPMG 410 - Sport Law and Risk Management
The structure of the legal system, introduces the case study method, aspects of constitutional law, labor and anti-trust law, tort law, product liability, contract law, administrative and statutory law applicable to the sport industry. The course also covers establishing a risk management system for facilities and sports programs.

Credits: 3
Prerequisite: SPMG 211. Offered: Every year.

SPMG 428 - Marketing and Public Relations in Sport
The course is designed to prepare students with the tools needed to develop effective marketing and public relations strategies for sports and athletic programs. A myriad of topics such as marketing, advertising, public relations theories, consumer behavior and practical applications will be explored. Emphasis will be on developing students' written and verbal communication skills. The course content is in line with recommendations of the relevant professional associations regarding the marketing and public relations of sport management.

Credits: 3
Prerequisite: ENGL 100 and (SPMG 211 or PHED 211) and (SPMG 212 or PHED 211) and (ECON 201 or ECON 210) and (ECON 202 or ECON 205). Offered: Every year.

SPMG 440 - Data Analytics for Sport Management
The course explores decision-making methods and software to measure performance and gain advantage in the competitive sports arena. It aims at developing analytical skills from practical points of view useful in sport management. Topics include data and data management; decision making approaches; metrics; regression, decision trees, time series; simulation; performance measurement and prediction; and team and players ratings. These topics will be explored using data analytic software for data visualization, statistical functions, data storage in various formats, and data interfaces. The theoretical knowledge will allow sport professionals to solve typical sport management problems such as predicting team performance; creating winning strategies; player analysis; player or team ranking and others. The classes will be a mix of lectures, practical data exploration, and software use.

Credits: 3
Prerequisite: (STAT 200 or ECON 200 or BUAD 200 or POLI 200 or SOC 200 or PSY 200) and (CSIT 104 or CSIT 151). Offered: Every year.

SPMG 450 - International Sport Management
The students will research several transformational forces in the world today: the end of communism, the global economy, the electronic village, and their impact on management within the sport industry. As the sport industry continues its global expansion, this course serves as an invaluable guide for students as they build careers that require an international understanding of the relationships, influences, and responsibilities in sport management.

Credits: 3
Prerequisite: SPMG 210. Offered: Every year.

SPST - Special Studies

SPST 101 - Biology Study Skills
The course, offered by the Educational Development Program, is designed to meet the needs of program participants enrolled in BIOL 111 Foundations of Biology. Intended for students with limited biological backgrounds, it enhances the understanding of biological skills in the following areas: biological chemistry, energy, genetics, evolution, physiology, development, and ecology.

Credits: 1
Corequisite: BIOL 111. Offered: Every year.

SPST 107 - Writing in the Arts and Sciences
Study of the writing and analysis process used for the explanatory and persuasive prose for the humanities, social sciences, and natural sciences. The course work focuses on coherence, development, organization, and conventions of writing papers in each discipline.

Credits: 3

SPST 114 - Survey of Pre-calculus Lab
The course, offered by the Educational Development Program, is designed to meet the needs of program participants enrolled in MATH 105, Survey of Precalculus. Intended for students with a limited mathematics background, it enhances the understanding of skills necessary for success in precalculus and calculus in the following areas: algebra, solutions to equations, factoring, simplification of algebraic expressions, etc.

Credits: 1
Corequisite: MATH 105. Offered: Offered on occasion.
SPST 115 - College Communication Skills
Entry level skills in written and oral communication. Presents systematic introduction to skills needed for success in mastering content of materials used by academic disciplines. Augments and strengthens skills needed for continuing success in college level courses.
Credits: 1
Offered: Every Fall semester.

SPST 118 - Survey of Calculus Laboratory
The purpose of the course is to provide students enrolled in the Educational Development Program with the opportunity to develop and improve the study skills necessary to successfully complete the required coursework for MATH 120.
Credits: 1
Corequisite: MATH 120. Offered: Every year.

SPST 127 - Educational Development Program Freshman Orientation I
Designed to assist Educational Development Program students manage the demands of the college experience by helping them develop life management and study skills necessary to reach their academic and personal goals.
Credits: 1-2
Offered: Every year.

SPST 128 - Writing Lab
A 1-credit interdisciplinary, supplemental instruction course designed to instruct, supplement, and assist Educational Development Program students in a variety of areas including: active reading, enhanced vocabulary, brainstorming, organization, sentence and paragraph construction, addressing a specific audience, revision, editing, and understanding the author’s responsibility in college-level discourse.
Credits: 1
Offered: Offered on occasion.

SPST 132 - Topics in Contemporary Science Recitation
A 1 credit recitation course mainly to supplement PHYS 101 Topics in Contemporary Science for students from the Educational Development Program. Provides additional drill for solving simple physics problems to understand PHYS 101 topics.
Credits: 1
Corequisite: PHYS 101. Offered: Every semester.

SPST 147 - Educational Development Program Freshmen Orientation II
A continuation of SPST 127 focusing on assisting students develop the basic tools necessary to engage in self-discovery, acquaint them with career planning and exploration of major and career choices.
Credits: 1
Offered: Every year.

SPST 160 - Project Success
SPST 160 is a 1 credit, satisfactory/unsatisfactory course designed to provide resources, tools, and skills for students who are not in good academic standing. Class meetings will include discussions, activities, and assignments related to motivation, attitude, study aids, concentration, learning styles, and other student-success techniques.
Credits: 1
Offered: Every semester.

SPST 199 - Special Topics
Topics of special interest or need offered periodically and taught from an interdisciplinary perspective. Topics will vary each term based on instructor.
Credits: 1-5
Offered: Offered on occasion.

SPST 302 - Exploring Leadership and Ethics
Through this course students will gain a broad understanding of historical and current theories of leadership and management and the shift from the dominant paradigm to the emergent paradigm. Students will also explore how normative ethics affects their leadership philosophy and decision making. As a way to recognize their leadership strengths, students will participate in several instruments that will assist them in defining their leadership strength and style.
Credits: 3
Prerequisite: SPST 201. Offered: Every Fall semester.

SRT - Sound Recording Technology
SRT 105 - Recording Techniques for Music
A non-technical introduction to recording technology. Students will learn established recording techniques, how to make good audition tapes, the possibilities of digital editing, how to purchase the right equipment, and other recording essentials.
Credits: 1
Offered: Every year.
SRT 200 - Recording Practicum
Applied instruction in basic audio techniques. Includes studio instruction in the use of microphones, loudspeakers, tape recorders. Taken concurrently with SRT 250-251. Open to majors only.
Credits: 2
Corequisite: SRT 250. Offered: Every year.

SRT 201 - Recording Practicum
Applied instruction in basic audio techniques. Includes studio instruction in the use of microphones, loudspeakers, tape recorders. Taken concurrently with SRT 250-251. Open to majors only.
Credits: 2
Corequisite: SRT 251. Offered: Every year.

SRT 250 - Recording Techniques
A two-semester course in recording, including audio measurements, use of loudspeakers, microphones, tape recorders, and mixing consoles. Emphasis on stereophony, live recording, and the development of high standards of audio craft. Open to majors only.
Credits: 2
Offered: Every year.

SRT 251 - Recording Techniques
A two-semester course in recording, including audio measurements, use of loudspeakers, microphones, tape recorders, and mixing consoles. Emphasis on stereophony, live recording, and the development of high standards of audio craft. Open to majors only.
Credits: 2
Offered: Every year.

SRT 300 - Recording Practicum
Applied instruction in multi-track recording, sound reinforcement, and audio systems analysis techniques. Includes in-depth study of mixing consoles, tape recorders, and signal processors. Students will record assigned projects and assist seniors in production projects. Taken concurrently with SRT 350-351. Open to majors only.
Credits: 2
Prerequisite: SRT 200 and SRT 201 and SRT 250 and SRT 251. Corequisite: SRT 350. Offered: Every year.

SRT 301 - Recording Practicum
Applied instruction in multi-track recording, sound reinforcement, and audio systems analysis techniques. Includes in-depth study of mixing consoles, tape recorders, and signal processors. Students will record assigned projects and assist seniors in production projects. Taken concurrently with SRT 350-351. Open to majors only.
Credits: 2
Prerequisite: SRT 200 and SRT 201 and SRT 250 and SRT 251. Corequisite: SRT 351. Offered: Every year.

SRT 310 - Studio Installation and Maintenance
Provides maximum hands-on experience in recording studio installation and maintenance. Students will learn to analyze signal flow and troubleshoot equipment with passive (resistors, capacitors, inductors) and active components (transistors and op-amps). Transmission lines are discussed by evaluating principles and standards of connectors and cabling for audio and video. Further emphasis is placed on the phenomenon of noise in audio/video circuits and transmission lines: evaluating and measuring noise in individual components and systems, and minimizing or eliminating noise through the principles of grounding, shielding and filtering. Students will learn soldering and wiring techniques as well as a variety of audio measurement procedures.
Credits: 1
Offered: Offered on occasion.

SRT 320 - Studio Installation and Maintenance Laboratory
The one semester, 1-credit hour course, provides maximum hands-on experience in recording studio installation and maintenance. Students will learn to analyze signal flow and troubleshoot equipment with passive (resistors, capacitors, inductors) and active components (transistors and op-amps). Transmission lines are discussed by evaluating principles and standards of connectors and cabling for audio and video. Further emphasis is placed on the phenomenon of noise in measuring noise in individual components and systems, and minimizing or eliminating noise through the principles of grounding, shielding and filtering. Students will learn soldering and wiring techniques as well as a variety of audio measurement procedures.
Credits: 1
Prerequisite: MATH 121 or MATH 123 and PHYS 123. Offered: Offered on occasion.

SRT 350 - Technology and Practices of the Recording Industry
A two-semester course in multi-track recording technology, and Digital Signal Processing (DSP). Open to majors only.
Credits: 3
Prerequisite: SRT 200 and SRT 201 and SRT 250 and SRT 251. Offered: Every year.
SRT 351 - Technology and Practices of the Recording Industry
A two-semester course in multi-track recording technology, and Digital Signal Processing (DSP). Open to majors only.
Credits: 3
Prerequisite: SRT 200 and SRT 201 and SRT 250 and SRT 251. Offered: Every year.

SRT 450 - Senior Seminar/Project
Each student will prepare a professional quality recording production and a research paper. In addition, the seminar will address areas of professional concern, including career development and survival skills, current studio developments, and elements of style in recording. Open to majors only.
Credits: 2
Prerequisite: SRT 300 and SRT 301 and SRT 350 and SRT 351. Offered: Every year.

SRT 451 - Senior Seminar/Project
Each student will prepare a professional quality recording production and a research paper. In addition, the seminar will address areas of professional concern, including career development and survival skills, current studio developments, and elements of style in recording. Open to majors only.
Credits: 2
Prerequisite: SRT 300 and SRT 301 and SRT 350 and SRT 351. Offered: Every year.

SRT 460 - Independent Study
Studies in studio maintenance, booking, traffic management, and research are available on a limited basis. Maximum of 6 credit hours of MUS, MUED, or SRT independent study. Open to majors only.
Credits: 2
Offered: Every semester.

SRT 461 - Independent Study
Studies in studio maintenance, booking, traffic management, and research are available on a limited basis. Maximum of 6 hours of MUS, MUED, or SRT independent study. Open to majors only.
Credits: 1-3
Offered: Every semester.

SRT 470 - Studio Supervision
Students supervise recording studio inventory and use. Open to majors only. Permission of instructor required.

Credits: 2
Offered: Offered on occasion.

SRT 480 - Internship
A 15-week, full-time work position in a facility appropriate for the individual student's goals. Duties are specified by college and sponsoring firm. Open to majors only.
Credits: 1-15
Offered: Every semester.

SSED - Social Studies Education

SSED 204 - World Regional Geography
Interrelationship of location, climate, landforms, and natural resources with the history and cultural economic and political systems of the world's realms and regions.
Credits: 3
Offered: Every year.

SSED 205 - Economics in Global History
The course provides an introduction to micro- and macroeconomic concepts and global economic history with a special emphasis on the ability to weave those basic tools of analysis into the presentation of a narrative of global history.
Credits: 3
Offered: Every year.

SSED 299 - Special Topics in Social Studies Adolescence Education
Varies in content from semester to semester. Students should consult the online Course Offerings and department notices for specific subject covered each semester.
Credits: 3
Offered: Offered on occasion.

SSED 419 - Secondary (Adolescence) Social Studies Teaching Methods
Principles, materials and methods for teaching social studies in the secondary schools. Note: Must be taken before student teaching. Required for Adolescence Education.
Credits: 3
Offered: Every year.

SSED 420 - Student Teaching Colloquium
The course complements the student teaching practicum in Adolescence Social Studies Education. Candidates receive detailed instruction in the completion of the applied
teaching and learning projects associated with their student teaching placements.

Credits: 3

Prerequisite: SSED 419. Corequisite: SSED 430 or SSED 431. Offered: Every Spring Semester.

**SSED 430 - Student Teaching for Social Studies/Adolescence Education - Grades 7-9 Placement**

Student Teaching is a full-semester, full-time, full-day, clinical component of the teacher preparation program for State University of New York at Fredonia students seeking initial teacher certification. The primary purpose of the student teaching experience is to provide you with a carefully mentored experience to help you develop and enhance the knowledge, skills, and dispositions necessary to positively impact student learning and development.

Credits: 6

Prerequisite: SSED 419. Corequisite: SSED 420 or SSED 431. Offered: Every semester.

**SSED 431 - Student Teaching for Social Studies/Adolescence Education: Grades 10-12 Placement**

Student Teaching is a full-semester, full-time, full-day, clinical component of the teacher preparation program for State University of New York at Fredonia students seeking initial teacher certification. The primary purpose of the student teaching experience is to provide you with a carefully mentored experience to help you develop and enhance the knowledge, skills, and dispositions necessary to positively impact student learning and development.

Credits: 6

Prerequisite: SSED 419. Corequisite: SSED 420 or SSED 430. Offered: Every semester.

**STAT - Statistics**

**STAT 150 - Statistical Ideas**

Introduction to the field of statistics, including sampling, experiments, measurement, descriptive statistics, probability, inference, correlation, regression and prediction. The emphasis will be on data and concepts rather than on calculations and mathematical theory. Not open to students who have completed a 200-level statistics course with a grade of C- or better. Background assumed: N.Y.S. Algebra II and Trigonometry (or Math B), or equivalent.

Credits: 3

Offered: Offered on occasion.

**STAT 200 - Statistical Methods I**

An introductory study of statistical methods with applications to business, economics, education, and the social sciences. Topics covered include: descriptive statistics and graphs, probability and probability distributions, estimation, confidence intervals, hypothesis testing and linear regression. The course focuses on when to use each of the different methods. Note: Credit for at most one of the following courses may be applied towards a student's requirements for graduation: BUAD 200, ECON 200, EDU 200, POLI 200, SOC 200, and STAT 200. Background assumed: N.Y.S. Algebra II and Trigonometry (or Math B), or equivalent.

Credits: 3

Offered: Every semester.

**STAT 250 - Statistics for Scientists**

Introduction to statistical methods with special emphasis on uses in the natural sciences. Topics will include descriptive statistics, data collection, probability distributions, confidence intervals, hypothesis testing, regression, and analysis of variance. The course will include use of analytical labs and statistical computer packages. Background assumed: N.Y.S. Algebra II and Trigonometry (or Math B), or equivalent.

Credits: 3

Offered: Every year.

**STAT 260 - Introduction to Data Science**

An introduction to the art and science of transforming data into information. Working with data using R and RStudio; data collection, wrangling, modelling, and visualization; data storytelling. Background assumed: N.Y.S. Algebra II or equivalent.

Credits: 3

Offered: Every year.

**STAT 300 - Statistical Methods II**

Continuation of STAT 200. Review of the basics of estimation, confidence intervals and hypothesis testing. Simple and multiple regression, time series, analysis of variance and non-parametric methods. A statistical software package will be used extensively.

Credits: 3

Prerequisite: STAT 200 or BUAD 200 or ECON 200 or EDU 200 or POLI 200 or PSY 200 or SOC 200 or STAT 250 or STAT 350. Offered: Offered on occasion.

**STAT 350 - Probability and Statistics**

Basics of probability; descriptive statistics; discrete and continuous distributions; confidence intervals and tests of hypotheses concerning means and proportions; simple
linear regression; statistical software. MATH 210 is recommended, in addition to the prerequisites listed.

Credits: 3

Prerequisite: MATH 121 or MATH 123. Offered: Every semester.

**STAT 351 - Regression and Analysis of Variance**

Simple linear regression and multiple regression including inference, diagnostics and transformations. One-way and multi-way analysis of variance including inference, diagnostics and transformations. Use of professional statistical software.

Credits: 3

Prerequisite: (STAT 350 or STAT 250 or STAT 200 or BUAD 200 or ECON 200 or SOC 200 or POLI 200 or PSY 200). Offered: Every other year.

**STAT 352 - Categorical Data Analysis**

Techniques for analyzing categorical response data â€“ confidence intervals, tests of significance for a proportion, the difference of two proportions, contingency tables, regression, odds, odds ratios, logistic regression, logit models, loglinear models and diagnostics.

Credits: 3

Prerequisite: (STAT 350 or STAT 250 or STAT 200 or BUAD 200 or ECON 200 or SOC 200 or POLI 200 or PSY 200). Offered: Every other year.

**STAT 354 - Probability with Applications**

A first course in probability with selected applications. Definition of probability and basic axioms; calculation of probabilities; mutually exclusive and independent events; conditional probability and Bayes Theorem; discrete random variables and distributions; continuous random variables and distributions; calculation of expected value, mode, median, percentiles, variance, standard deviation, and coefficient of variation; functions of random variables and transformations. Applications selected from Markov chains, random walks, queueing theory, and inventory theory.

Credits: 3

Prerequisite: MATH 121 or MATH 123. Offered: Every other year.

**STAT 355 - Mathematical Statistics**

Multivariate distributions, functions of random variables, sampling distributions and central limit theory, theory of estimation, the method of moment and maximum likelihood, and hypothesis testing.

Credits: 3

Prerequisite: MATH 223 and STAT 354. Offered: Every other year.

**STAT 360 - Topics in Data Science**

A continuation of STAT 260: statistical foundations of data science; bootstrap methods; supervised learning; unsupervised learning; simulation; interactive data graphics; working with spatial data and text; working with large data sets.

Credits: 3

Prerequisite: STAT 260. Offered: Every year.

**STAT 400 - Independent Study**

Independent study of a selected list of readings approved by the faculty advisor. Departmental approval required.

Credits: 1-3

Offered: Offered on occasion.

**STAT 405 - Statistics Seminar**

This is a capstone course for the statistics minor. Students will complete a major statistics project. It will include designing an experiment, collecting the data, analyzing the data, and giving oral and written reports explaining the analysis and conclusions. Departmental permission is required.

Credits: 1

Offered: Every Spring Semester.

**STAT 407 - Special Topics**

Selected readings, discussions, data analysis on a topic in statistics. Permission of department required.

Credits: 1-2

Offered: Offered on occasion.

**STAT 408 - Special Topics**

Selected readings, discussions, data analysis on a topic in statistics. Permission of department required.

Credits: 3

Prerequisite: (STAT 200 or STAT 250 or STAT 350 or PSY 200 or SOC 200 or ECON 200 or BUAD 200 or EDU 200 or POLI 200). Offered: Offered on occasion.

**STAT 451 - Time Series**

Study of linear time series, moving averages and auto regressive models. Estimation, confidence intervals, forecasting and data analysis with time series models will be examined.

Credits: 1

Corequisite: STAT 351. Offered: Offered on occasion.

**STAT 460 - Risk Management for Actuarial Science**

Development of fundamental mathematical tools and language of quantitative risk management. Multivariate
probability distributions including joint, conditional and marginal distributions, probabilities, moments, variance and covariance.

Credits: 2
Prerequisite: MATH 223 and STAT 350. Corequisite: STAT 355. Offered: Every other year.

THEA - Theatre Arts

THEA 100 - Theatre Majors Seminar
An introductory course for first year students declared as theatre majors. Introduction to policies, procedures and academic requirements in the theatre program.

Credits: 1
Offered: Every year.

THEA 101 - Theatre and Dance Productions
Laboratory in performance or production involving applications of theatre techniques to the various aspects of departmental productions. Majors and minors only.

Credits: 1
Offered: Every year.

THEA 102 - Theatre and Dance Productions
Laboratory in performance of production involving applications of theatre techniques to the various aspects of departmental productions. Majors and minors only.

Credits: 1
Offered: Every year.

THEA 103 - Fundamentals of Theatre Technology
Students will be assigned slots to complete all three rotations of instruction. Each rotation will consist of four sessions. Sessions will cover demonstrations and hands-on repetition of fundamental skills in Scenery, Costume and Lighting. This will include power tool safety and basic use, fundamental sewing/wardrobe skills and techniques, operating the rigging system, basic sound skills and hang/focus of lighting instruments.

Credits: 1
Offered: Every semester.

THEA 110 - Practicum
Areas of theatre not covered in regular curriculum such as travel courses, practical experiences in the field, etc. May be repeated for credit. Permission of instructor.

Credits: .5
Offered: Offered on occasion.

THEA 114 - Introduction to the Performing Arts
A broad introduction to the Performing Arts including an historical perspective, elements of the performer's craft and repertoire, representative contributors to each Performing Art and the role of the audience member. The Performing Arts areas include theatre, music, dance, musical theatre and opera. Attendance at five Performing Arts events is required.

Credits: 3
Offered: Every semester.

THEA 117 - Script Analysis
Explores the process in evaluating/discovering production and performance values in a playscript.

Credits: 3
Offered: Every year.

THEA 121 - Introduction to Technical Theatre
One-semester course covering terminology and processes of stage production including stagecraft, materials, lighting, sound, properties, costumes, etc. Lecture and laboratory participation. Concurrent enrollment in THEA 101 or 102 by majors and minors strongly suggested. Written production critiques required.

Credits: 3
Offered: Every semester.

THEA 123 - Introduction to Technical Production
Explores the responsibility of technical personnel, safety and organization of the backstage and scene shop, stage rigging, drafting for the stage, scenic materials and hardware. Practical work on department productions may be required. Lab fee required.

Credits: 3
Prerequisite: THEA 121. Offered: Offered on occasion.

THEA 125 - Drawing and Drafting for the Theatre
Provides the student with a working knowledge of hand drafting as applied to theatre. Includes but is not limited to reading and interpreting set design plans, light plots, costume pattern drafting, creation of single and multiple plate drafting packets including plan views, design and construction elevations, section views, and detail drawings. B.F.A. Theatrical Production and Design majors only. Other theatre majors by permission of instructor.

Credits: 3
Prerequisite: THEA 121. Offered: Every year.

THEA 129 - Backstage Magic
Ever been to a play, musical, opera or rock concert and wonder, How did they do that? This course will
study the elements of design, tools and technology in the behind the scenes creation for the performing arts. This course delves into the areas of scenic, lighting, costume, and sound design and how they are implemented. The student will critique selected works as well as the works of classmate projects. Concurrent enrollment in THEA 229 CAD Lab is required and includes a $40 lab fee.

Credits: 3
Corequisite: THEA 229. Offered: Offered on occasion.

**THEA 130 - Acting for Non-Majors**

Basic techniques of acting with emphasis on improvisation, script analysis and scene study. Attendance at campus theatrical events required.

Credits: 3
Offered: Every semester.

**THEA 131 - Acting Studio: Acting I**

Introduction to basic craft skills of acting with emphasis on self-awareness and discovery, spontaneity, and improvisation. B.F.A Acting and Musical Theatre majors only.

Credits: 3
Offered: Every year.

**THEA 132 - Acting Studio: Acting II**

Introduction to theory and practice of the basic principles of Stanislavski realism with emphasis on character exploration and analysis. B.F.A. Acting and Musical Theatre majors only.

Credits: 3
Prerequisite: THEA 131. Offered: Every year.

**THEA 133 - Introduction to Acting**

Basic craft skills of acting with emphasis on improvisation, character study, analysis and scene work. B.A. Theatre Arts majors and minors only.

Credits: 3
Offered: Every year.

**THEA 140 - Stage Dialects**

Acquisition of basic skills by the performer or director in the use of major dialects. B.F.A. Acting and Musical Theatre majors only.

Credits: 3
Offered: Every other year.

**THEA 201 - Theatre and Dance Productions**

Continuation of THEA 101-102.

Credits: 1

**THEA 202 - Theatre and Dance Productions**

Continuation of THEA 101-102.

Credits: 1
Offered: Every year.

**THEA 215 - Movement For The Stage**

This course is an introductory course designed to support the actor in freeing the physical instrument for creative use. It is designed to enhance the study of acting by placing considerable focus on how the body is used in the creation of character on stage.

Credits: 3
Offered: Every Fall semester.

**THEA 220 - Makeup**

Selection, application, and evaluation of stage makeup. Includes wigging and facial hair techniques. Theatre majors and minors only.

Credits: 1
Offered: Every year.

**THEA 221 - Digital Tools for the Performing Arts**

Introduces the student to the use of discipline-specific software programs and peripheral hardware used in the creation of designs and preparation of drawings used in technical production and for scenic costumes and lighting design. Includes in-depth training in Computer Aided Drafting techniques, and the study of VectorWorks software. 2-D drafting will be covered with an introduction to drawing in 3-D.

Credits: 3
Prerequisite: THEA 125. Offered: Every year.

**THEA 222 - Stagecraft I**

Hands-on introductory course that covers standard theatrical scenic construction methods including metal and wood tools and fabrication, rigging and safety. Shop participation required. Lab fee required.

Credits: 3
Prerequisite: THEA 121. Offered: Every year.

**THEA 223 - Lighting and Sound Technology**

This course is an introduction to the mechanics of stage lighting and sound. It includes basic electricity, tools, equipment, distribution and control for theatrical lighting and sound. The course will deal with the many aspects of implementing lighting and sound for a production.

Credits: 3
THEA 226 - Scene Painting I
Color theory, preparation of painting surfaces, and basic painting techniques as they pertain to the theatre. B.F.A. Theatrical Production and Design majors only.
Credits: 3
Prerequisite: THEA 123 or THEA 125. Offered: Every year.
THEA 228 - Costume Construction I
Laboratory exploration of basic costume construction techniques. Majors only.
Credits: 3
Offered: Every year.
THEA 229 - Computer Aided Drafting Lab
Non-credit lab allowing the B.F.A Theatrical Production and Design student access to the theatre CAD Lab. Open to B.F.A. Theatrical Production and Design majors only.
Credits: 0
Offered: Every semester.
THEA 230 - Introduction to Scene Study
The course will present the fundamental principles of approaching the creation of a character on stage using the techniques of Stanislavski realism. B.A. Theatre Arts majors only.
Credits: 3
Prerequisite: THEA 133 and THEA 117. Offered: Every year.
THEA 231 - Acting Studio: Scene Study I
Skills and techniques for role analysis and performance in realistic plays. B.F.A. Acting and Musical Theatre majors only.
Credits: 3
Prerequisite: THEA 132. Offered: Every year.
THEA 232 - Acting Studio: Scene Study II
Skills and techniques for role analysis and performance in realistic plays. B.F.A. Acting and Musical Theatre majors only.
Credits: 3
Prerequisite: THEA 231. Offered: Every year.
THEA 233 - Acting Lab I
A laboratory for exploration and development of scene study technique.
Credits: 1
Offered: Every year.
THEA 234 - Acting Lab II
A laboratory for exploration and development of scene study technique.
Credits: 1
Offered: Every year.
THEA 242 - Acting Studio: Introduction to Voice and Movement I
Designed to support the actor in freeing the voice/body and imagination for creative response. Physical/vocal awareness and ability are enhanced through the exploration of relaxation, alignment, flexibility, strength, breath, sound, and resonance.
Credits: 3
Prerequisite: THEA 132. Offered: Every year.
THEA 243 - Acting Studio: Introduction to Voice and Movement II
A continuation of THEA 242 in supporting the actor in freeing the voice/body and imagination for creative response. Exercises to reinforce basic skills and further develop the actor's physical and vocal range, power, flexibility, and articulation.
Credits: 3
Prerequisite: THEA 242. Offered: Every year.
THEA 245 - Sound for the Theatre
Study of the artistic elements of sound for the theatre and build upon the technical elements studied in THEA 223 Lighting and Sound Technology. Areas of study include: sound systems, electricity, recording techniques, script analysis for sound design, principles of sound design and the controllable qualities of sound. Each will be studied through class lectures, practical examples, and projects.
Credits: 3
Prerequisite: THEA 315 and THEA 223. Offered: Every other year.
THEA 301 - Theatre and Dance Productions
Continuation of THEA 201-202.
Credits: 1
Offered: Every year.
THEA 302 - Theatre and Dance Productions
Continuation of THEA 201-202.
Credits: 1
Offered: Every year.
THEA 303 - Rendering Technique I
Explores the graphic media and drawing techniques used by the designer in preparing drawings for the theatre with a focus on freehand sketching, gridding, and drop point perspective.
Credits: 3
Prerequisite: THEA 125. Offered: Every year.

THEA 304 - Rendering Technique II
Continuation of THEA 303. Explores the graphic media, drawing techniques, color theory and composition used by the designer in preparing drawing and painting for the theatre. With emphasis in graphite, water color, guache, acrylic and marker.
Credits: 3
Prerequisite: THEA 303. Offered: Every year.

THEA 305 - Rendering Technique III
Continuation of THEA 304. Explores the graphic media and drawing techniques used by the designer in preparing drawings for the theatre.
Credits: 1
Prerequisite: THEA 123 and THEA 125. Offered: Offered on occasion.

THEA 315 - The Dramatic Imagination
Design students study the nature of the relationship between playscripts and theatrical designs through script and text analysis, literary criticism and research. Exploration of how dialogue and themes can be visualized through design. B.F.A. Theatrical Production and Design majors only.
Credits: 3
Prerequisite: THEA 121. Corequisite: THEA 229. Offered: Every year.

THEA 319 - Costume Construction II
Intensive laboratory exploration of advanced costume construction techniques. Focus on growth of stitching skills.
Credits: 3
Prerequisite: THEA 228. Offered: Every year.

THEA 320 - Advanced Makeup
Design and application of special effects, 3-D prosthetics, and appliances. Majors only.
Credits: 3
Prerequisite: THEA 220. Offered: Offered on occasion.

THEA 321 - Costume Crafts, Dyeing and Painting
A rotation of basic costume accessory design and construction including but not limited to millinery, mask making, leather work, etc. As well as a laboratory exploration of the art and craft of dye/paint techniques for costumes. Union, acid, and fibre-reactive dyes, silk and fabric paints, and health and safety for costume artisans are covered. B.F.A. Theatrical Production and Design majors only. Theatre and Dance majors by permission.
Credits: 3
Offered: Every year.

THEA 322 - Stagecraft II
Course covers the planning, organization and management skills needed to execute the construction of a theatrical scenic design. Lecture and computer lab participation required. Lab fee required.
Credits: 3
Prerequisite: THEA 222. Offered: Every year.

THEA 324 - Lighting Design I
Principle of Stage Lighting Design and its application to a theatrical production. Will study the what and why lighting can bring to a production through practical projects.
Credits: 3
Prerequisite: THEA 315. Offered: Every year.

THEA 325 - History of Costume
Chronological survey of clothing and fashion; their sociological and artistic implications from the Egyptians to the 20th century.
Credits: 3
Offered: Every year.

THEA 326 - Scene Design I
Principles, procedures, and development of scene design. Students must enroll in THEA 303, 304 or 305 simultaneously. B.F.A. Theatrical Production and Design majors only.
Credits: 3
Prerequisite: THEA 315. Offered: Every year.

THEA 327 - Costume Design I
Costume design methods and concepts. Students must enroll in THEA 303, 304 or 305 simultaneously. B.F.A. Theatrical Production and Design majors only.
Credits: 3
Prerequisite: THEA 325. Offered: Every year.
THEA 328 - Costume Design II
Continuation of THEA 327: development of more complicated sophisticated concepts. Students must enroll in THEA 303, 304 or 305 simultaneously. B.F.A. Theatrical Production and Design majors only.
Credits: 3
Prerequisite: THEA 327. Offered: Every year.

THEA 329 - Flat Patternning
Flat pattern techniques as applied to the costume cutter. Use of slopers, methodology, and interpretation of sketches are emphasized. B.F.A. Theatrical Production and Design majors only.
Credits: 3
Prerequisite: THEA 228. Offered: Every year.

THEA 330 - Introduction to Styles
A continuation/culmination of the Intro to Acting (technique and craft), Intro to Scene Study (elements of characterization, scene arc, fine tuning craft) sequence. The Introduction to Styles allows a modified departure from the Realism we have studied to heightened language and period movement (Shakespeare, Coward, Moliere), physicalization (Comedy, Restoration, Melodrama) or elements of both (Soap Opera, Slap-stick, Sit-com, Simon).
Credits: 3
Prerequisite: THEA 230. Offered: Offered on occasion.

THEA 331 - Acting Studio: Styles
Introduction to various acting tools for creating and sustaining characters and action in elevated and poetic texts from major periods of theatre history. Emphasis on ability to approach historical periods and genres while remaining intimately connected to personal truth.
Credits: 3
Prerequisite: THEA 230. Offered: Offered on occasion.

THEA 334 - Digital Tools for the Performing Arts II
Exploration in creating theatre in a digital age. The class will focus on digital rendering but will also include some drafting, budget tracking and an artist's digital presence on the web. Programs explored in the class will be Photo Shop, Corel Paint, Vectorworks and others.
Credits: 3
Prerequisite: THEA 221 and THEA 304. Offered: Every year.

THEA 337 - Properties for the Stage
This course is an introduction to the craft, process, and administration associated with the work of the theatrical properties artisan and master. Topics covered will include found properties, refurbishment, creation of new properties, consumables, budgeting, and tracking.
Credits: 3
Prerequisite: THEA 121 and THEA 125. Offered: Every other year.

THEA 338 - Special Topics
Study of selected areas of theatre arts not covered in regular curricular program. May be repeated for credit. Permission of instructor.
Credits: .5-3
Offered: Offered on occasion.

THEA 339 - Stage Management
Introductory course that covers the organizational and interpersonal skills needed to stage manage live productions of theater, musical theater, or dance. Topics include the stage manager's role during casting, design process, rehearsals, technical production and performance.
Credits: 3
Prerequisite: THEA 121. Offered: Every other year.

THEA 341 - Acting Studio: Shakespeare
An introduction to the basic techniques used in Shakespearean acting. Major emphasis is placed on approaching Shakespeare through a careful analysis of the use of language and construction of the text. Enrollment limited to B.F.A. Acting/Musical Theatre majors or permission of instructor.
Credits: 3
Prerequisite: THEA 230 or THEA 232. Offered: Every year.

THEA 345 - Acting Studio: Voice and Movement III
Explores additional methods to increase flexibility and range in speaking with an emphasis on heightened responsiveness to imagery and rhythms, along with additional methods to increase precision and range of movement with an emphasis on physical character work. B.F.A. Acting and Musical Theatre majors only.
Credits: 3
Prerequisite: THEA 243. Offered: Every year.

THEA 346 - Acting Studio: Voice and Movement IV
Explores additional methods to increase precision and range of movement with an emphasis on unarmed and armed stage combat.
Credits: 3
Prerequisite: THEA 242 and THEA 243. Offered: Every year.
THEA 347 - Stage Combat: Unarmed
This is a preliminary acting class designed to instruct students in the performance techniques, skills and illusions of unarmed stage combat.
Credits: 3
Prerequisite: THEA 215. Offered: Every year.

THEA 350 - Introduction to Musical Theatre
The course will offer an introduction to the techniques of performing in, and auditioning for, musical theatre. Students will work on duet, solo, and group dance numbers, and on finding appropriate audition material. The class will focus on strengthening all aspects of the performer: singing, acting, and dancing. The class will treat musical theatre material with respect, approaching the texts as actors, as well as singers/dancers.
Credits: 3
Prerequisite: THEA 131 and THEA 133. Offered: Every other year.

THEA 353 - History of Musical Theatre
Development of the theatrical genre known as musical theatre. Special emphasis on musical comedy roots in 19th century America to the present.
Credits: 3
Offered: Every other year.

THEA 359 - Commedia dell'Arte
A performance based course exploring the masks, characters, movement, scenarios, and history of the Italian commedia dell'arte.
Credits: 3
Prerequisite: THEA 232 and THEA 243. Offered: Every year.

THEA 381 - Technical Theatre Seminar
Discussion seminar on problems and procedures of mounting theatrical productions. Includes scheduling personnel, weekly rehearsals and other pertinent current production needs. Does not apply to the required hours for major in Theatre Arts. May be repeated.
Credits: .5
Offered: Every semester.

THEA 382 - Musical Theatre Styles I
The course, through scene study of musical theatre repertory, focuses on integration of song, dance and acting skills for the junior B.F.A. Musical Theatre student.
Credits: 3
Prerequisite: THEA 232 and MUS 236. Offered: Every year.

THEA 383 - Acting Studio: Theatre Games
Through the study of improvisational techniques in the theatre, students will be exposed to a variety of long-form improvisation techniques designed to enhance spontaneity on the stage, develop sensory and perceptive skills, and approach character creation from a non-analytical perspective.
Credits: 3
Prerequisite: THEA 232. Offered: Every other year.

THEA 384 - History of Architecture and Decor for Theatre
This course is a study of architecture, decorative arts, and stage technology throughout history as they impact design for theatre. This course will look at periods of design from ancient Greece to the early Twentieth Century.
Credits: 3
Prerequisite: THEA 125 and THEA 315. Offered: Every year.

THEA 401 - Theatre and Dance Productions
Continuation of THEA 301-302.
Credits: 1
Offered: Every year.

THEA 402 - Theatre and Dance Productions
Continuation of THEA 401.
Credits: 1
Offered: Every year.

THEA 410 - Acting for Media I
This course is designed to introduce the actor to fundamental theories and practices of acting for the camera.
Credits: 3
Offered: Every semester.

THEA 411 - Acting for Media II
THEA 411, Acting for Media II, will acquaint students with intermediate-level theories and practices of acting for the camera.
Credits: 3
Prerequisite: THEA 410. Offered: Every year.
THEA 415 - Stage Combat: Medieval Weapons
This is an advanced acting class designed to instruct students in the performance techniques, skills and illusions of medieval weapons for stage combat.
Credits: 3
Prerequisite: THEA 347. Offered: Every year.

THEA 416 - Stage Combat - Renaissance Weapons
This is an advanced acting course designed to instruct students in the safe and effective performance techniques, skills, and illusions of Stage Combat involving the use of Renaissance Weapons.
Credits: 3
Prerequisite: THEA 347. Offered: Every Spring Semester.

THEA 420 - Special Studies in Technical Theatre
Seminar and laboratory experience exploring a variety of processes and techniques in depth. B.F.A. Theatrical Production and Design majors only.
Credits: 3
Offered: Every semester.

THEA 422 - Stagecraft III
Intermediate to advanced scenic construction techniques as well as an introduction to scenic automation. Topics covered include: simple engineering principles and structural analysis, pneumatic power, electric motors and control systems.
Credits: 3
Prerequisite: THEA 222. Offered: Every other year.

THEA 423 - Acting Studio: Alternative Acting Styles
An exploration of alternative acting techniques such as non-realistic and non-western styles of acting. B.F.A. Acting/Musical Theatre majors only.
Credits: 3
Prerequisite: THEA 232. Offered: Every year.

THEA 424 - The Business of Acting
Intensive study of skills needed by actors to increase their marketability in today's theatre. Open to B.F.A. Acting and Musical Theatre majors only.
Credits: 3
Prerequisite: THEA 232. Offered: Every other year.

THEA 426 - Scene Design II
Continuation of Scene Design I with specific emphasis on artistic requirements of the production. B.F.A. Production and Design majors only.
Credits: 3

THEA 427 - Scene Painting II
An intensive laboratory experience exploring advanced techniques in painting, dimensional texture and surface treatments. May require practical work on productions. Will also co-supervise and mentor Scene Painting I students on some projects as part of learning how to run a paint crew. B.F.A. Theatrical Production and Design majors only
Credits: 3
Prerequisite: THEA 226. Offered: Every year.

THEA 429 - Lighting Design II
This course is an introduction to the mechanics of stage lighting and sound. It includes basic electricity, tools, equipment, distribution and control for theatrical lighting and sound. The course will deal with the many aspects of implementing lighting and sound for a production.
Credits: 3
Prerequisite: THEA 324. Offered: Every other year.

THEA 432 - Musical Theatre Styles II
Advanced scene study and techniques for integrating all resources of the singing actor in musical theatre. B.F.A. Musical Theatre majors only or by permission of instructor.
Credits: 3
Prerequisite: THEA 232. Offered: Every year.

THEA 434 - Musical Theatre Styles Lab
A co-requisite for THEA 432, the laboratory allows for exploration, musical coaching and preparation for the Musical Theatre Styles acting class.
Credits: 1
Prerequisite: THEA 232. Offered: Every year.

THEA 435 - Rehearsal and Performance
Application of advanced techniques in preparation for studio and major productions.
Credits: 1
Offered: Every semester.

THEA 436 - Design/Technical Production
Application of advanced production techniques in a leadership position, preparing and executing Mainstage productions for the Department of Theatre and Dance.
Credits: 1-3
Offered: Every semester.
THEA 441 - Directing I
Director’s functions and responsibilities including play selection, auditioning/casting, staging techniques and script analysis using the motivational unit as a basis of approach. Emphasis on preparation and presentation of a one-act play. Majors only. Junior or senior standing in the department.
Credits: 3
Offered: Every semester.

THEA 442 - Directing II
Continuation of THEA 441; emphasis on theories of directing, as well as concerns and responsibilities of the director in productions involving period styles and/or alternative forms of staging. Majors only.
Credits: 3
Prerequisite: THEA 441. Offered: Offered on occasion.

THEA 451 - History of the Theatre I
A survey of theatre history from pre-Greek to the 18th century. Performance and production elements in all ages will be covered. Junior or senior standing.
Credits: 3
Offered: Every year.

THEA 452 - History of the Theatre II
A survey of theatre history from 18th century to present. Performance and production elements in all ages will be covered. Prerequisite: Junior or senior standing.
Credits: 3
Offered: Every year.

THEA 460 - Performing Arts Organization and Management
Performing Arts management including philosophy, management procedures, budgets, publicity/promotion, ticket office and house management procedures for educational, community and professional resident performing arts organizations. For Theatre, Dance and Music majors, Arts Administration minors, or permission of instructor.
Credits: 3
Offered: Every year.

THEA 467 - Meisner Technique
This course explores the basic tenets of the Sanford Meisner acting technique, including repetition, activities, preparation, and scene work.
Credits: 3
Prerequisite: THEA 231 or THEA 330. Offered: Offered on occasion.

THEA 468 - Devising Theatre
The course is designed to give the student of theatre opportunities to create original theatre in a workshop setting. The course will introduce students to various processes of creating original theatre texts, scenarios and performances through group collaboration for a variety of contexts. Permission of instructor is required.
Credits: 3
Offered: Every year.

THEA 481 - Senior Projects Seminar
A seminar course that discusses challenges that BA and BFA students often face after graduation and starts to prepare them for their capstone projects. Topics may include, but are not limited to: resumes, cover letters, graduate schools, portfolios, and life as an artist.
Credits: 1
Offered: Every year.

THEA 482 - Directed Study
Intensive individual study of some particular aspect of theatre involving preparation of a paper or project in support of the findings. Request for enrollment must be made in the form of a written proposal prior to the end of the second week of the semester. May be repeated for credit. Permission of department required.
Credits: 1-3
Offered: Every semester.

THEA 490 - Professional Theatre Intern
Approved and supervised work-training experience in professional theatre company. Permission of department required.
Credits: 1-15
Offered: Every semester.

THEA 498 - Senior Project
Development of a capstone project intended for public presentation. Students will be expected to execute a theatrical project in either performance, design, or other area in theatre as approved by faculty advisement. The project should demonstrate competence in all aspects of the student’s degree program.
Credits: 3
Prerequisite: THEA 481. Offered: Every semester.
THEA 499 - Performance/Production Seminar
Development and public presentation of a creative project as a senior recital. Senior standing; B.F.A. Acting or Theatrical Production and Design majors only.
Credits: 3
Offered: Every semester.

THEA 530 - Selected Studies in Theatre Arts
In-depth study of various specific areas in the theatre, either literature or production. Student should have an undergraduate degree in Theatre; permission of department required.
Credits: 1-12
Offered: Offered on occasion.

THEA 531 - Selected Studies in Theatre Arts
In-depth study of various specific areas in the theatre, either literature or production. Student should have an undergraduate degree in Theatre; permission of the department required.
Credits: 1-12
Offered: Offered on occasion.

WGST - Women-Gender-Studies
WGST 200 - CMA Service Learning
This one-credit service learning course allows students who are on the executive board of one of the Center for Multicultural Affairs student groups to further their knowledge about the relationship between the student group and the academic pursuits of ETHN minors and WGST majors and minors.
Credits: 1
Offered: Every semester.

WGST 201 - Topics in Gender Studies
Interdisciplinary study of the social construction of gender and its relationship to class, race, age, ethnicity, nationality and sexual identity. Analysis of the causes and implications for the changing definition of women in the contemporary world, especially in the United States.
Credits: 3
Offered: Every year.

WGST 202 - Foundations of Social Justice
This course introduces students to foundational concepts in the study and practice of social justice in American society, historically and at present, and in comparative global perspective. The course can include social justice topics as related to: racism; classism; religious oppression; sexism; heterosexism; transgender oppression; ableism; ageism; and environmentalism. The course will also engage students in the process of putting thought into practice by introducing various research methodologies such as quantitative, qualitative, and cultural studies approaches. Students will explore the course concepts, coupled with research methodologies, to identify and analyze social problems and to use information to formulate and engage in problem-solving strategies for social change.
Credits: 3
Offered: Every year.

WGST 203 - Chicana Writers/Visual Artists
Who is the Virgin of Guadalupe? When was the Mexican Revolution? What is a “Zootsuit”? Students will explore these questions and more in the interdisciplinary course taught in English. In the class, students will become familiar with Chicana Mexican American history and culture through installation art, mural art, altar designs, and paintings by artists such as Frida Kahlo, Judy Baca, Amalia Mesa-Bains, and Yolanda Lopez among others. Students will also discuss issues of race, class, gender, and sexuality through texts by Chicana writers Gloria Anzaldua, Ana Castillo, Sandra Cisneros, and Demetria Martinez.
Credits: 3
Offered: Offered on occasion.

WGST 205 - Women in Art
A thematic and topical course exploring women’s roles as both productive subjects and depicted objects in western visual culture. Cross-listed as ARTH 205.
Credits: 3
Prerequisite: ART 115 or ARTH 101 or ART 116 or ARTH 102 or WOST 201. Offered: Every other year.

WGST 210 - LGBTQ Literature & American History
This course will take an interdisciplinary approach to the study of LGBTQ American identities, combining historical and literary analysis and methodologies. We will examine major events, developments, themes, and concepts within LGBTQ American history from the nineteenth-century to the present. Sexual orientation and gender identity will also be examined in relation to other marginalized identity positions and systems of privilege and oppression.
Credits: 3
Offered: Every other year.

WGST 255 - Psychology of Women
An examination of the biological, psychological and sociological factors that shape women’s lives. Attention to the intersection of gender with ethnicity, sexual
WGST 301 - Theories of Gender
A multidisciplinary approach grounded in the humanities and arts will be employed to account for the social, economic, political, historical and cultural ways that gender is constructed and represented in contemporary societies.

Credits: 3
Prerequisite: ENGL 345 or WGST 201. Offered: Every year.

WGST 302 - Sex and Gender
Description and analysis of sex and gender roles and relationships from a variety of societies at different levels of socio-cultural complexity. Cross-listed as ANTH 300/SOC 306.

Credits: 3
Prerequisite: SOC 116 or ANTH 115. Offered: Every other year.

WGST 304 - Latina Literary and Cultural Studies
An examination of contemporary Latina literary productions in the context of representations of Latinas in mainstream U.S. society. The focus of the course is on women of Hispanic descent living and writing in the United States, including work by and about Chicanas, Puerto Ricans, Dominican Americans, and Cuban Americans. Previous course work in Latina/Latino literature not required, but some previous course work related to African American or other ethnic literature, women’s literature/feminism, and/or film studies is strongly recommended. Cross-listed as ENGL 304/INDS 304.

Credits: 3
Offered: Every other year.

WGST 314 - Women Writers
An in-depth study of novels written by women. The course explores questions regarding gender, language, perception, and experience through the genre of the novel. Cross-listed as ENGL 314.

Credits: 3
Offered: Every other year.

WGST 335 - American Women
A survey of women’s history from colonial times to present with emphasis on the changing status and definition of women’s roles, race and ethnicity, and women’s writings. Cross-listed as HIST 355.

Credits: 3
Prerequisite: HIST 106 or HIST 133 or WGST 201 or WOST 201. Offered: Offered on occasion.

WGST 336 - African American Women’s History
Explores the history of women of African descent in the Americas, with a particular focus on the United States. Covers black women’s experience from their African origins, through the Middle Passage, in enslavement, and in freedom. Issues addressed include labor, the black family, cultural expression, and radical identity (in comparative perspective). Cross-listed as HIST 336.

Credits: 3
Prerequisite: HIST 333 or HIST 334 or ENGL 240 or ENGL 340. Offered: Every other year.

WGST 340 - Black Women Writers
Study of the literature written by and often about black women, including poetry, short and long fictions, novels, drama, biography, and autobiography from the 18th century to the present. Cross-listed as ENGL 340.

Credits: 3
Offered: Every other year.

WGST 359 - Ethnicity and Race
Interdisciplinary approach to race and ethnicity in the United States and other contemporary multiethnic/multiracial societies. Because these courses are equivalents, students who have earned credit for HIST/INDS/WOST 220 are not able to earn credit for this course.

Credits: 3
Prerequisite: SOC 116. Offered: Every year.

WGST 373 - Gender and Communication
Using a variety of theoretical models and critical approaches, students examine everyday communication
practices to identify how gender, communication, and culture create a complex and dynamic web of meaning with significant implications for individuals and society. Cross-listed as COMM 373.

Credits: 3
Prerequisite: COMM 101 or WOST 201 or WGST 201.
Offered: Offered on occasion.

**WGST 377 - Special Topics**

Variable content course. Topics announced in the online Course Offerings when offered.

Credits: .5-6
Offered: Offered on occasion.

**WGST 386 - Women in Global Cinema**

A study of films by and about women in global cinema. The course focuses on women filmmakers primarily, and their uses of documentary, experimental, and/or narrative forms.

Credits: 4
Offered: Every other year.

**WGST 401 - Gender and Social Change**

Directed study of students' own area of interest within gender studies, serving as a capstone to the interdisciplinary experience of the Women's Gender Studies Program. The capstone may be a final project, undergraduate thesis, or community-based internship. For Women's Gender Studies majors and minors only. Includes a required weekly meeting time with all WGST 401 enrollees.

Credits: 3
Offered: Every semester.

**WGST 405 - French Women Writers**

An evaluation of the contributions of French women writers to the social, economic, and political institutions which form the basis of Western philosophical tradition.

Credits: 3
Offered: Every year.

**WGST 406 - Women in French Literature**

An examination of how texts about women written by Francophone males have through history described women, defined their lives and destinies in keeping with the needs and requirements of these writers.

Credits: 3
Offered: Every year.

**WGST 430 - Independent Study**

For non-Women's Studies minors only. Independent Study of an issue using gender as a primary category of analysis. Students must find an instructor willing to supervise the project - all disciplines are appropriate. Students must develop a proposal, obtain necessary approval of instructor and obtain final approval from the Women's Studies director.

Credits: 1-3
Offered: Every semester.

**WGST 450 - Internship in Women's and Gender Studies**

Participation in on-campus or off-campus professional and subject related experience. Requires learning contract proposal prepared in consultation with direct supervisor and faculty sponsor, describing the experience, learning goals, and method of evaluation. Approval of Women's and Gender Studies Coordinator required in advance.

Credits: 1-4
Offered: Every semester.

**WGST 490 - Portfolio Completion**

Required for all Women's Studies majors. Involves compilation of papers from courses in the Women's Studies core, reflecting engagement with the goals of the major. Must be taken concurrently with WGST Gender and Social Change.

Credits: 0
Offered: Every semester.

**WGST 491 - Social Change Capstone**

Capstone seminar in which students will investigate current and contemporary issues in the field of Ethnic and Gender Studies, engage in activism on campus, and complete a research-based paper or project under the guidance of a faculty mentor. Students will also compile an e-portfolio that reflects upon their experiences as Ethnic and Gender Studies students and for use in future professional development.

Credits: 3
Offered: Every year.

**WGST 2SA - 200 Level Study Abroad Elective**

A course taken during a study abroad experience that does not have a direct equivalency to a Fredonia course.

Credits: 0-15
Offered:
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 and the Henry C. Youngerman Center. Also included in the Educational Community Outreach section are a few of the programs hosted by the College of Education and a description of the Fredonia College Foundation, the not-for-profit corporation that assists Fredonia in fundraising and development efforts, as well as alumni connections.

Academic Advising at Fredonia

At Fredonia, faculty and staff partner with students in a formal academic advising process. Academic advisors are dedicated to enhancing each student’s academic goals, while assisting students in making decisions and developing educational and career plans.

As part of the orientation program, new students have an opportunity to discuss educational objectives with a knowledgeable advisor who will help them understand their schedule for the first semester. Prior to the start of the first semester, students are assigned an academic advisor by their department. Students can find out the name of their advisor by going on the university website at http://home.fredonia.edu/, and then signing on to “Your Connection.”

Students are required to make an appointment with their advisor prior to each semester’s course registration period to discuss their academic future, review their mid-semester grade report, and plan a program of study for the coming semester.

Mission

By emphasizing advising as part of the learning process, Fredonia facilitates students’ development and implementation of plans to achieve their educational, career, and life goals. At Fredonia, academic advising is an intentional, educational partnership between advisors and students.

Vision

• Respect: We value the student as an individual with whom we share academic advising responsibility.
• Accountability: We seek to offer students timely and accurate information with focused intent on their goals.
• Integrity: We seek to thoughtfully assess students’ plans and goals and encourage their self-reflection and redirection, as necessary.

Student Responsibilities in the Advising Process:

• Become knowledgeable about the university’s program requirements, policies and procedures.
• Be familiar with and access university tools for monitoring academic progress, such as Degree Works.
• Understand your department’s program requirements including course prerequisites and sequencing.
• Seek assistance in the appropriate department if a second major or minor has been declared.
• Maintain communication and appointments with your academic advisor, clarifying personal values and goals and discussing questions or concerns.
• Keep a personal file of all academic progress including related documents.
• Accept responsibility for your academic decisions and performance.
• Understand that you have the right to change your advisor, with department chair approval.

Advisor Responsibilities in the Advising Process:

• Stay informed of and communicate current and changing university policies and program requirements.
• Monitor students’ academic progress using tools such as Degree Works and document all exchanges from advising interactions in the academic advising file.
• Proactively contact and be available for student advisees on a regular basis through a variety of communication modes such as office hours and email.

• Listen carefully to questions and concerns, encouraging students’ self-reflection to assist them in clarifying personal values and professional goals.

• Provide students with information and resources to promote academic progress.

• Empower students to take responsibility for their academic success.

• Refer students to campus services relevant to their individual needs.

• Collaborate with peers to help students meet cross disciplinary requirements.

• Engage with peers through professional development to exchange ideas, information and philosophies to improve the advising process.
Campus Life Office

Campus Life Office
G113 Williams Center
716.673.3143
Website: 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:

• Daytime Programming (Campus Connections)
• Advisement to student organizations
• Provide a meeting place, by reservation, for groups and organizations
• Maintain leadership workshops for students, organizations and advisors
• Facilitate advertisement for campus/organization events
• Encourage students to participate in Volunteer and Community service projects
• Provides student portal for club/organization business functions
• Leadership of the Greek Life system, Welcome Weeks and student leadership conferences for Greeks and Rising Leaders
• Manage the Williams Center (student union), which serves as the hub of the campus’ student activities

In addition to the above services, the Campus Life Office plans Family Weekend and works closely with Residence Life events, Admissions, Intercultural Center, First-Year and Transition programs, Health and Counseling Center.

For more information regarding Campus Life, students should contact the Campus Life Office at (716) 673-3143 or email campus.life@fredonia.edu.
Career Development Office

http://www.fredonia.edu/cdo

The Career Development Office (CDO) provides students with a link between the campus and the workplace. Professional career counselors help freshmen through alumni to:

- explore options and make career/major/job choices
- plan strategies to gain experience and skills to become competitive
- identify and apply for internship opportunities
- develop skills to implement a successful job search
- learn how to apply to graduate or professional school
- locate information and opportunities to make decisions or implement plans
- get connected to employers and graduate schools

**CDO Services**

**Individual Counseling.** Students are encouraged to make an appointment early in their university experience to examine the expectations they may have for a degree program, major, and possible occupations. Career assessments, career information, and informational interviewing are used to supplement counseling appointments. A counseling appointment is also recommended to find internships, review cover letter and resume drafts, identify job search strategies and resources, apply to graduate or professional school, or to prepare for interviews.

**Career Videos and Information.** Students can explore careers by viewing over 4,900 online video interviews from professionals in a wide variety of careers. Career advice videos and links are available on the CDO website, containing information about work tasks, desired academic background, personal qualities and experiences, salary, hiring organizations, and the job market. A series of Fredonia intern videos and Wall of Fame web page are also available for students considering internships.

**Career Pathways.** Learn about career pathways and get connected to programs at Fredonia. Explore majors, career outlooks, sample job titles, internships and job opportunities, student organizations and clubs, as well as industry-specific professional associations. Videos of professionals working in related industries are included.

**Internships.** An internship is a learning experience gained by working in a position related to a student's major or career field. Internships provide hands-on experience that can confirm or reject tentative career choices; help to develop useful career building skills; show potential employers evidence of the ability to apply skills in a related work environment; and make students more attractive candidates for employment or graduate school.

Internships are available in a variety of disciplines, including: art and photography, biology and environmental science, business and accounting, chemistry, communication, computer and information sciences, counseling, law enforcement and legal offices, journalism and public relations, health administration, music industry, sound recording technology, sport management, exercise science, and theatre arts.

Credit bearing internships are open to any registered student who has completed at least 30 credit hours and has a minimum GPA of 2.0. Internships may be in a student’s major or in another department. Students may earn up to 15 hours of internship credit per semester and may count a maximum of 24 hours of internship credit toward the 120 hours required for an undergraduate degree. Students must complete a Learning Contract and have it approved by their faculty sponsor, internship site supervisor and the Internship Coordinator in the CDO. In addition, they must register for the appropriate course and pay the registration fee to receive credit.

The **Internships** section of the CDO website lists a wide variety of internship opportunities, resources to find internships, 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. Advice about how to look for a job, interviewing, writing cover letters and resumes, as well as sample resumes, are available online and on the job search information shelves in the resource area.

**Job Vacancy Listings.** FREDNetwork, powered by Handshake, is a web-based system that each enrolled student has a personal account in. The platform provides access to internship, student employment, summer, and professional job listings; an
employer database; and a listing of career-related events. Search agents provide email alerts of job and internship opportunities. Additional job databases, directories and resources are available with over four million organizations represented.

**Resumes/Cover Letters.** Assistance is available in developing resumes and writing cover letters, including individual appointments with career counselors, access to sample resumes, handouts, and online resources.

**Practice Interviews.** Students can practice interview skills by scheduling a mock interview with a CDO counselor or practice from home with Big Interview. With Big Interview, 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, online information and books on financial aid, how to write an application essay, as well as test preparation software, books and videos for the GRE, GMAT, LSAT, MCAT and PCAT are available in the resource area. Each year the CDO sponsors a Graduate School Fair on campus with over 70 programs represented.

**Workshops.** Career counselors make customized presentations to student clubs, classes and residence halls about career options, internships, summer jobs, resume writing, job searching, social media, interviewing, and graduate or professional school applications.

**Career Resources.** Explore careers by viewing over 4,000 online video interviews from professionals in a wide variety of careers and browsing the Careers/Majors section of the CDO website. Check out the CDO’s Pinterest page to learn about interviewing, writing resumes and cover letters, researching employers, conducting a successful internship or job search, applying to graduate school, and more. The CDO library consists of books and magazines about a variety of career fields; directories of potential employers, internships and graduate school programs; and how to write resumes, cover letters, find a job and interview successfully. A series of handouts on career choice, internships, resumes and cover letters, interviewing, job search, and graduate school is also available. Resources are organized for easy browsing online and on shelves in the resource area. These materials are also available for sign-out.

**Recruitment and Networking Events.** Each year employers visit the campus to interview students about prospective job and internship opportunities. Students can participate in special annual events such as the Job & Internship Expo, Network on the Go, Teacher Recruitment Day, and WNY Career & Internship Fair. Employers also visit the campus to make presentations about career fields, as well as internship and job opportunities through the Network on the Go and CDO Spotlight programs.

**First Destination Survey.** Each year the office contacts the graduates of the university to determine their plans for the first year after graduation. Members of each class choose to accept diverse opportunities for further study and employment. Education organizations are the most frequent first-time employers of Fredonia graduates, followed by business and industry; non-profit/social service; government; media or arts organizations and self-employment. Graduates are pursuing advanced degrees in science, law, business, education, music, medicine, and a variety of other disciplines at graduate institutions across the country, many widely recognized for their excellence. Information about the first year plans of recent graduates is available on request from the Career Development Office.

**Contact Information.** The Career Development Office is located on the second floor of Gregory Hall. Appointments can be made online from the CDO website at http://www.fredonia.edu/cdo/, in person at the reception desk or by phone at (716) 673-3327. The CDO can also be contacted via fax at (716) 673-3593 or by email at careers@fredonia.edu.
Counseling Center
Office: LoGrasso Hall
(716) 673-3424
Jeff Janicki, Clinical Director of Mental Health Services
Email: counseling.center@fredonia.edu
Website: http://students.fredonia.edu/student-life/counseling

In support of Fredonia’s strategic plan and institutional learning goals, the Counseling Center promotes student’s mental health, wellness, growth and development. The Fredonia Counseling Center (FCC) recognizes research based practices which promote dramatic improvements during the early stages of a therapy experience. We approach most sessions from a single-session mindset, organizing each session as if it might be the last, to optimize maximum effectiveness of each session.

The goal of each session is for the client to leave with a sense of emotional relief, increased hope, and some sort of positive outcome as defined by the client. Within the context of the counseling relationship, both the counselor and client work diligently to harness motivation to address a specific concern that promotes the client’s vision of their better self.

The primary concern of the Counseling Center is to remove the barriers of access to services and to provide Fredonia students with the assistance they need when the need it most.

The Counseling Center offers daily walk-in services, individual and group counseling sessions, informal, drop-in consultations, skills workshops, outreach presentations and includes services aimed at preventing substance abuse and interpersonal violence on campus. Professional counselors work individually and with groups to help students understand themselves better, resolve problems, come to terms with difficult issues, and/or address important decisions. Additionally, a psychiatric consultant visits weekly to assist those students in need of psychiatric evaluation and medication. Free, confidential mental health counseling services are available to all registered students.

Prevention, Advocacy, and Wellness Services (PAWS), an outreach services of the Fredonia Counseling Center, strives to create a campus culture in which members make informed and responsible decisions regarding their personal and community health. PAWS works to reduce the incidence, prevalence, and severity of substance abuse and interpersonal violence related problems among Fredonia students.

This comprehensive program coordinates initiatives; facilitates collaboration; provides training, advocacy, and intervention services; and educational opportunities in the following areas:

- Alcohol and other drugs
- Rape and sexual assault
- Relationship issues including dating and domestic violence
- Stalking and harassment
- Sexual health

PAWS provides advocacy and support for Fredonia students that are survivors of interpersonal violence (rape, sexual assault, dating/domestic violence, stalking, and harassment). We can answer questions, be someone to talk to, offer emotional support, and provide referrals. You can make an appointment with the PAWS office at the Counseling Center, in person at LoGrasso Hall, calling the office at (716) 673-3424, or emailing the PAWS coordinator at Julie.Bezek@fredonia.edu.

For more information on the services offered through Prevention, Advocacy and Wellness Services, please contact the Counseling Center or visit the website https://www.fredonia.edu/student-life/substance-abuse-and-violence-prevention.

The Counseling Center is located in LoGrasso Hall. Appointments can be made in person at the reception desk or by telephone at 673-3424. Daily walk-in services (no appointment necessary) are available when classes are in session during the academic year. Information about services being offered for the current semester including groups, workshops, and wellness ideas can be accessed through the website: http://students.fredonia.edu/counseling/.

In most circumstances, the difficulties that students face can be addressed through the usual process of setting up an appointment with a counselor or utilizing walk-in services and discussing the issues concerning the student. However, there are circumstances when crisis situations in which immediate or same-day intervention by a counselor is called for. Emergency psychological services are provided to the campus community by Counseling Center staff for such crises.
Crisis Services

During Working Hours:

• In the event of an emergency requiring medical assistance, call University Police 716-673-3333.
• Contact the Counseling Center directly by either calling 716-673-3424 or by going directly to the office located in LoGrasso Hall.
• When students come to the Counseling Center in crisis, they should make the secretary aware that they require immediate and/or same-day assistance

After Hours:

• Students can contact the Chautauqua County Crisis Hotline (1-800-724-0461) for after hours mental health emergencies that require a response by mental health professionals.
• Students living on campus may notify their Resident Advisor (RA) or Resident Director (RD) of the crisis, who may then decide to engage emergency services. (Contact Residence Life)
• In the event of an emergency that requires assistance from the police, students should call University Police at 716-673-3333.

Other supportive resources:

• Suicide Prevention Lifeline (1-800-273-8255 or see https://suicidepreventionlifeline.org/ for a chat option).
• Text HOME to 741741 for free 24/7 crisis support in the US https://www.crisistextline.org/
• Domestic Violence & Sexual Assault (1-800-252-8748)
• Non-Crisis Peer Support daily 5pm-11pm Warm Line Call: 1-877-426-4373 Text: 716-392-0252

A Note About Confidentiality
Counseling Center client information is confidential within ethical and legal guidelines. Information can only be released with the written consent of the student, except in situations where a student poses a threat of serious harm to self or to others, or in the case of abuse/neglect of a minor, or in the case of a court-ordered release of information.
Community Outreach

Advancement, Engagement, and Economic Development

The Division of Advancement, Engagement, and Economic Development (AEED) facilitates and supports university-community collaborations that enhance the intellectual, cultural, artistic and economic vibrancy of the region. Such collaborations include active community engagement and partnerships with local and regional organizations, governments, businesses and universities.

Fredonia Technology Incubator (FTI)

The Fredonia Technology Incubator promotes economic growth in the Western Southern Tier of New York State by supporting entrepreneurship and the development of new, innovative, arts and technology-based companies into successful business ventures. FTI also serves as a regional economic development hub. The Fredonia Technology Incubator is located at 214 Central Avenue in Dunkirk, NY. Visit www.fredonia.edu/incubator for more information or call the office at (716) 680-6009.

StartUp NY Program

StartUP NY creates tax free zones on or near approved colleges and universities throughout New York State. The goal is to attract businesses that would not otherwise locate in the state, and it provides incentives to retain and expand jobs. It is intended to benefit all residents through new direct spending, resident taxes, and home-ownership demand in communities. StartUP NY provides major tax incentives for businesses to relocate, start or expand businesses in the state. Approved businesses will be granted ten years of state tax benefits if they operate on or near academic campuses. New employees of sponsored businesses will not pay state income tax while in the program. In addition, businesses may be eligible for additional incentives. Businesses must be approved and sponsored by a campus that has an approved Campus Plan. For more information, visit www.fredonia.edu/engagement or contact (716) 673-3758.

Career Development Office

The Career Development Office indulges students with a platform to establish connections between campus and the workplace. Students at Fredonia utilize all suitable resources to explore and make career/major/job decisions while attending the university, promising students with an effective ground plan after graduation. Visit www.fredonia.edu/cdo for more information or call (716) 673-3327.

Native American SUNY: Western Consortium

The Native American SUNY: Western Consortium focuses upon educational access, opportunity, and development for Native American students and communities. The consortium is comprised of Tribal representatives and Western New York region SUNY Campuses. For more information, contact their office at (716) 673-3170.

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-inkind, as well as planned gifts such as bequests and gift annuities, have enabled the university to move forward, even in times of budgetary restraint. The work of the Fredonia College Foundation is overseen by a volunteer board of directors, whose members serve three-year terms. The board is drawn from alumni, as well as local and regional community leaders. For information on opportunities for giving through the Fredonia College Foundation, interested persons should visit the Foundation’s website at http://home.fredonia.edu/foundation or email college.foundation@fredonia.edu.

Henry C. Youngerman Center for Communication Disorders

The Henry C. Youngerman Center for Communication Disorders is located in Thompson Hall. The center, a major component of the Department of Communication Disorders and Sciences, contains an audiology clinic, a speech-language clinic, laboratories and classrooms. Speech, language, and hearing evaluations and treatment are provided to students and residents of the neighboring communities. Students in Communication Disorders and Sciences participate as observers and as clinicians under the supervision of licensed and certified speech pathologists and audiologists.
**Extended Learning**

The Office of Extended Learning is located in Fenton Hall. This program brings together a unique combination of university and community support services.

**Non-Credit Courses, Conferences, Institutes, and Workshops**

The office works with university faculty and staff, community groups, and local industry to identify and provide for their specialized education and training needs.

**Lifelong Learning Credit Program**

Designed for those who would like to begin their college studies on a part-time basis, this program enables individuals to enroll in regular undergraduate courses for credit without the more formal college admissions procedures associated with full-time study. Although the application process is greatly simplified, Lifelong Learning Credit Program students are held to the same academic standards as their matriculated colleagues – and experience the same high-quality Fredonia education.

Applications for admission are available in the Office of Extended Learning, 2146 Fenton Hall, or the Office of Admissions, Maytum Hall, 6th Floor, Fredonia, N.Y. 14063. Qualified students are eligible to enroll in regular day or evening courses, including a number scheduled in the late afternoon and early evening. The Lifelong Learning Credit Program is especially appropriate for those who wish to pursue non-degree university studies on a part-time schedule - for personal growth, job advancement, or other reasons.

Academic advisement is provided to assist students with course selection. After a designated number of credit hours, students are encouraged to seek admission to a baccalaureate degree program at that time. Credit earned through Lifelong Learning course work will apply toward any degree program at the university. A student with prior academic experience who is seeking degree study on a full-time or part-time basis should pursue admission as a transfer applicant (see Transfer Admissions).

**Visiting Student Program**

Students presently enrolled at another college or university who wish to pursue academic study at Fredonia for one or two semesters may apply for admission through the Visiting Student Program. Advantages of the program, in addition to expanding academic options, include getting to know other new students, faculty and geographic areas, as well as having an opportunity to see oneself, one's education, and future plans from a new perspective. To qualify for the program, students must receive approval for a proposed academic program from an appropriate official at their present college. Applications are reviewed following the procedures used in evaluating requests for admission from transfer applicants. Registration in specific courses is offered on a space-available basis.

For information on any of the above, students should call (716) 673-3177, email extended.learning@fredonia.edu or visit Extended Learning in 2146 Fenton Hall.

**J-Term and Summer Sessions**

Many community members take advantage of summer and J-Term offerings, which include study on campus, online, and abroad. Extended Learning coordinates the schedules for these intersessions. More information can be obtained on the web regarding these opportunities - http://home.fredonia.edu/jterm and http://home.fredonia.edu/summer.

**Educational Development Program**

The Educational Development Program (EDP), known statewide as the Educational Opportunity Program (EOP), is an academic and student support services program administered by the State University of New York. It is designed to provide college access to talented students who have not had an opportunity to realize their full academic potential. EDP serves students from diverse backgrounds with priority for admission given to the “historically disadvantaged.”

In addition to support at the undergraduate level, EDP graduates may apply for a waiver of tuition for full-time graduate study upon acceptance at any SUNY college or university.

The Educational Development Program is a comprehensive, academically oriented program offering supportive services in three areas:

1. **Academic Support**
   a. First-Year Seminar course
b. Tutorial assistance

c. Supplemental instruction

2. Counseling Services
   a. Academic advisement
   b. Individual and group
   c. Career
   d. Personal and social
   e. Peer advising

3. Financial Assistance
   a. Financial aid for qualified students
   b. Financial planning

Scholarships and awards that are given to program students who excel academically and are involved in leadership and community service are include: Chi Alpha Epsilon National Honor Society, Dr. Jeffrey J. Wallace Scholarship, the Alan and Annmarie Nichter Going Above and Beyond EDP Scholarship, Arthur O. Eve Scholarship, Director’s Award, Gregory Antonio Fund Award, and the Ralph Wilson, Jr. EDP Book Award.

Students interested in the program should visit the EDP home page at http://www.fredonia.edu/edp or email edp.office@fredonia.edu.

Full Opportunity Program

The Full Opportunity Program is a Fredonia-based program for students who fall slightly shy of our traditional admissions criteria. In selecting students for the program, Admissions looks holistically at each applicant to determine his or her potential for success. Admissions decisions are based on a student’s ability to be academically successful in a rigorous college setting.

FOP is a vibrant support program designed to assist students in navigating their way through the college experience. Flexible, individualized and compassionate support from professional staff and peer mentors provides guidance for students as they develop a strong foundation for success.

Because we are committed to your success, the Full Opportunity Program offers a wide range of programs and services to help you have the most fulfilling experience during your time at Fredonia. Students will have the opportunity to take advantage of:

• Individual tutoring
• Academic advising
• Guided study sessions
• Enroll in ENGL 100 (Craft of Writing) first semester
• FOP Mentoring for Success Program

For more information about the Full Opportunity Program support services, interested persons should refer to the Full Opportunity Program at www.fredonia.edu/fop.

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 OnCourse 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 OnCourse services.
Students are encouraged to purchase laptops and are required to maintain current security updates and anti-virus protection on all devices connected to the campus network. Recommended laptop specifications are available at http://answers.fredonia.edu/display/SC/Student+Computer+Purchasing+Program

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://answers.fredonia.edu/display/SC/Computer+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 $20 of print quota provided to each student per semester. Additional information about the print quota is available at https://www.fredonia.edu/about/offices/information-technology-services/printing-quota.

The ITS Service Center is the initial point of contact via the Tracker incident request system at https://tracker.fredonia.edu. For questions or assistance regarding the computing environment at Fredonia, please contact ITS via (716) 673-3407.

For more information regarding suggested personal computer configurations, email configurations, google groups policy and the Fredonia Computer and Network Usage Policy, interested persons should refer to the ITS website at https://www.fredonia.edu/about/offices/information-technology-services.
Intercultural Center

Khristian King, Executive Director, Intercultural Programs and Services
Office: S226 Williams Center
(716) 673-3398
Email: khristian.king@fredonia.edu
Website: http://students.fredonia.edu/intercultural

The Intercultural Center is the foundation for intercultural programming and outreach on Fredonia's campus and in the surrounding community. Through advocacy, education and program development, the center supports the formation of a diverse university community. Programs for faculty, staff and students are created in order to increase cultural awareness and sensitivity, enhance the student population's academic development and build their commitment to social justice.

Student Support & Programming
The center provides various supports to enhance student development and success including: mentoring programs, leadership trainings and workshops, student internships and various campus-wide diversity initiatives. The Intercultural Center has collaborated with the Counseling Center to host an embedded counselor in our center, to address mental health issues or concerns unique to our students. Also, the center supports a growing list of multicultural groups and organizations. Each of the groups provide a wide array of educational, social and cultural programming and enrichment to the campus and community.

International Student Services
The International Student Services (ISS) is an essential office on Fredonia’s campus. The ISS serves as a resource for international students and provides support, guidance and mentoring to assist students, with not only the transition to college, but also the United States. The ISS strives to provide them with a welcoming and educational environment to assure they are successful while at Fredonia. The ISS office is located at S226A Williams Center and can be contacted by phone at (716) 673-4975.

Scholarships
The center maintains two scholarship programs: Keeper of the Dream Scholarship and the Rosa Parks Scholarship Competition. Keeper of the Dream scholarships are awarded competitively to entering first-year students based on high school achievement, community service and a demonstrated commitment to multiculturalism. Recipients are expected to demonstrate personal leadership and commitment to cultural pluralism and cross cultural dialogue while on campus.

The Rosa Parks Scholarship Competition was established in 1989 by Dr. Vivian Garcia, the Rosa Parks Scholarship was designed to give all students of The State University of New York at Fredonia an opportunity to voice their opinion on the subjects of social injustice, cultural perspective, and activism.
International Education

Office of International Education
Thompson Hall E230
(716) 673-3451
Email: international.education@fredonia.edu
Website: http://home.fredonia.edu/internationaleducation

The mission of the Office of International Education at SUNY Fredonia is to build international partnerships and programs and provide leadership for global learning opportunities in order to support student, faculty and staff efforts to become skilled, connected, creative and responsible global citizens.

Fredonia students are encouraged to take an active role in global society by engaging in a variety of initiatives designed to strengthen their international awareness. The Office of International Education provides opportunities from a variety of international and global perspectives, and encourages faculty to include an international point of view in course work and curriculum across the disciplines.

International Health Insurance

Health and accident insurance is required of all State University of New York study abroad program participants. Students who study abroad are automatically enrolled in a policy that is designed especially for students studying abroad and includes overseas urgent and emergency medical care, mental health, accidental death and dismemberment coverage, and medical evacuation and repatriation coverage. 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. More information about the SUNY insurance coverage is available at http://home.fredonia.edu/studyabroad/health-safety-abroad.

Neither the State of New York, through its agents, nor the State University of New York through its agents and employees, is responsible in any manner whatsoever for the payment of any claim for health-related services provided to individuals covered under this insurance policy. The State of New York and State University of New York are not responsible for obligations incurred by individuals who are not covered by this insurance policy. All individuals participating in the University’s health insurance programs described herein are responsible for reviewing all descriptions of the scope and level of coverage offered by this policy. Such participants will be solely responsible for obtaining additional coverage not provided under this program if such is deemed necessary by the participant.

International Pathways Program

English Language Learning and the International Pathway Program

Fredonia offers an English Language Learning Program for students with a wide range of English language proficiency needs including an International Pathway Program and a full time ESL program.

Fredonia’s International Pathway Program combines ESL support classes with credit bearing courses designed for students who want to develop their English and English for Academic Purposes skills before continuing to a Fredonia degree program. Students in the undergraduate IPP earn 21-27 credits, which count toward the Fredonia Foundations degree requirements. The graduate IPP helps students earn 9-10 credits toward degrees in Master of Music in Music Education Studies, Master of Music in Performance, Master of Music in Theory/Composition, or the Master of Music in Music Therapy. The pathway programs run over the course of the regular Fall and Spring semester with an additional summer term as part of its three-term design.

Students can also pursue English language learning (ESL) full time or part time as a stand-alone program, as a voluntary supplement to regular Fredonia courses, or as a visiting student.

Contact: pathway@fredonia.edu, Jewett Hall 111, 716-680-6045

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 assists in all facets of application processing. Fredonia has a large number of programs for students to choose from including semester or academic year programs, and winter/summer programs. These days, Fredonia students are choosing to do internships, service learning,
and even student teaching abroad to give themselves a marketable edge in the workplace. For more information, interested persons should visit Fredonia’s Office of International Education’s webpage at http://home.fredonia.edu/internationaleducation or email international.education@fredonia.edu.
Tutoring Services

Tutoring Services, located on the fourth floor of Reed Library, is a place where any Fredonia student can go to get help from student tutors. Tutoring is free and is available in most subject areas on a drop-in basis. Subject areas include but are not limited to: math, English/writing, computer science, physics, chemistry, psychology, sociology, Spanish, economics, business administration, accounting, biology, geology and history.

The philosophy of Tutoring Services 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 resources available to help develop successful study skill strategies, and to get assistance with understanding course material.

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.

Professional Development Center

The Fredonia Professional Development Center in Reed Library strives to meet the professional development needs of all Fredonia employees by coordinating and providing educational opportunities for faculty and staff at various stages in their careers, and providing consultation and training opportunities. 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/.

Reed Library

Daniel A. Reed Library plays a vital role in the teaching and learning process at Fredonia by providing a wide array of materials, services, and spaces needed for collegiate study.

Through Reed Library, thousands of books, millions of articles, and various media are available in electronic and print forms. Interlibrary Loan gives students and staff access to additional resources from around the world.

Reference librarians provide assistance using these materials in a variety of ways including drop-in assistance at the Reference Desk, individual research appointments, email, phone, text, and a 24/7 virtual reference chat service. From the Library's website, subject-specific databases and research guides make scholarly exploration efficient and accessible from any location.

Reed Library houses strong specialized collections in Music, the Holland Land Company, the Coalition on West Valley Nuclear Waste, saxophonist Sigurd Rascher, and author Stefan Zweig. The Library is also the site of exhibits, quiet and group study spaces, computers, copy machines, printers, and scanners.

To learn more, please visit Reed Library in person, or online at www.fredonia.edu/library, or call the Reference Desk at (716) 673-3222. We look forward to working with you.
Student Health Center

Office: LoGrasso Hall
(716) 673-3131

Deborah Dibble, Director
Email: deborah.dibble@fredonia.edu
Website: http://students.fredonia.edu/healthcenter

The Student Health Center provides currently enrolled Fredonia students with confidential primary care of acute illness and injury, health education, immunizations, preventative health and laboratory services. Most services provided in the Student Health Center are provided without any additional charge to the student as they are funded by the mandatory health fee paid each semester. PPD tests are provided for an additional charge to the students on their FRED card.

The Student Health Center is open Monday through Friday from 8:00 a.m.–5:00 p.m. during the academic year. The medical staff includes a board certified physician, nurse practitioners and registered nurses. When necessary, referrals can be made to private physicians or specialists in the local area. For more information regarding the Student Health Center services and staff, please visit the center's website at http://www.fredonia.edu/healthcenter. Specific questions can be directed to our email at health.center@fredonia.edu, or by calling the Student Health Center at (716) 673-3131.

When the Student Health Center is closed, emergency care is always available at Brooks Memorial Hospital. The hospital is located at 529 Central Ave., Dunkirk, approximately 3 miles from the campus. For any emergency on campus or when an ambulance is needed, the University Police should be called at 673-3333. If there is an emergency when you are off campus, dial 911.

All services provided outside the Student Health Center, such as outpatient laboratories, x-rays, and emergency room visits are the student's responsibility, and are not covered by the student health fee.
ACADEMIC INFORMATION AND STUDENT SUPPORT

The typical undergraduate program at Fredonia consists of four groups of courses:

- General Education Program, consisting of courses in various branches of learning that are focused upon developing a range of skills and are required of all students, whatever their principal interest;
- courses required to complete a major;
- courses needed to complete a minor and supporting courses in subjects related to the major field, as well as courses which may be required for teacher certification; and
- electives necessary to complete the minimum of 120 semester hours of credit required for the baccalaureate degree. The student may also take special concentrations, minors, and second majors.

Academic Calendar

**Fall 2020**

Aug. 21 (F)  New Student Orientation and Registration
Aug. 22 (S)  Residence Halls Open
Aug. 24 (M)  First Day of Classes
Aug 24-28 (M-F)  Schedule Changes - Internet
Aug 30 (F)  Final Day to Drop a Full-semester Course

Sept. 1 (M)  Last Day to Add a Full-semester Course
Sept 7 (M)  Labor Day - classes in session
Sept 11 (F)  Final Day to Apply for December Graduation
Sept 11 (F)  Final Day to Elect PASS/FAIL*

Oct 14 (W)  Mid Semester Grades Due
Oct 15 (R)  Mid Semester Grades Available to Students
Oct 16 (F)  Spring 2021 Graduate Registration Begins
Oct-Nov 26-10 (M-T)  Academic Advising & Course Selection
Nov 2 (M)  Undergraduate Registration Begins
Nov 2 (M)  Spring 2021 Registration Seniors
Nov 4 (W)  Spring 2021 Registration Juniors
Nov 6 (F)  Final Day to WITHDRAW from Full-Semester Courses
Nov 6 (F)  Spring 2021 Registration Sophomores
Nov 10 (T)  Spring 2021 Registration Freshmen
Nov 20 (F)  Last Day of Face-to-Face Instruction
Nov 20 (F)  Last Day to Completely Withdraw from the University
Nov. 23-24 (M-F)  Thanksgiving Break - No Classes
Nov 30 (M)  Classes resume via remote instruction
Dec. 4 (F)  Last Day of Classes
### Dec. 7-11 (M-F)
Remote Final Exams

### Dec 16 (W)
Final Grades Due from the Faculty by 11:50 PM

### Dec 17 (R)
Final Grades Available to Students after 3:00 PM

### Spring 2021

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan. 30-31 (S-Sun.)</td>
<td>Residence Halls Move In</td>
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<tr>
<td>Feb. 3 (W)</td>
<td>First Day of Classes</td>
</tr>
<tr>
<td>Feb. 3-9 (W-T)</td>
<td>Schedule Changes - Internet</td>
</tr>
<tr>
<td>Feb. 9 (T)</td>
<td>Final Day to Drop a Full-semester Course</td>
</tr>
<tr>
<td>Feb. 11 (R)</td>
<td>Last Day to Add a Full-semester Course</td>
</tr>
<tr>
<td>Feb. 12 (F)</td>
<td>Final Day to Apply for May Graduation</td>
</tr>
<tr>
<td>Feb. 24 (W)</td>
<td>Final Day to Elect PASS/FAIL*</td>
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<tr>
<td>March 24 (W)</td>
<td>Mid Semester Grades Due</td>
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<tr>
<td>March 25 (R)</td>
<td>Mid Semester Grades Available to Students</td>
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<tr>
<td>March 26 (F)</td>
<td>Spring 2021 Graduate Registration Begins</td>
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<tr>
<td>March-April 29-13 (M-T)</td>
<td>Academic Advising &amp; Course Selection</td>
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<tr>
<td>April 5 (M)</td>
<td>Undergraduate Registration Begins</td>
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<tr>
<td>April 5 (M)</td>
<td>Spring 2021 Registration Seniors</td>
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<tr>
<td>April 7 (W)</td>
<td>Spring 2021 Registration Juniors</td>
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<tr>
<td>April 9 (F)</td>
<td>Final Day to WITHDRAW from Full-Semester Courses</td>
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<tr>
<td>April 26 (M)</td>
<td>Last Day to Completely Withdraw from the University</td>
</tr>
<tr>
<td>May 7 (F)</td>
<td>Last Day of Classes</td>
</tr>
<tr>
<td>May 10-14 (M-F)</td>
<td>Final Exams</td>
</tr>
<tr>
<td>May 15 (S)</td>
<td>Commencement</td>
</tr>
<tr>
<td>May 19 (W)</td>
<td>Final Grades Due from the Faculty by 11:50 PM</td>
</tr>
<tr>
<td>May 20 (R)</td>
<td>Final Grades Available to Students after 3:00 PM</td>
</tr>
</tbody>
</table>
Academic Organization of the Campus

Below is a listing of the Deans, Associate Provosts, and Associate Deans all reporting to the Provost. All of the undergraduate programs, graduate degree programs, and advanced certificate programs registered with the State University of New York and New York State Education Department fall under one or more of the individuals listed below.

Division of Academic Affairs

Dr. Kevin Kearns, Interim Provost and Vice President for Academic Affairs
801 Maytum Hall
(716) 673-3335
provost@fredonia.edu

College of Liberal Arts and Sciences

Dr. J. Andy Karafa, Dean
806 Maytum Hall
(716) 673-3173
clas@fredonia.edu

School of Business

Dr. Linda Hall, Interim Director
E336B Thompson Hall
(716) 673-3505
business.school@fredonia.edu

College of Education

Dr. Anna Thibodeau, Interim Dean
704 Maytum Hall
(716) 673-3311
christine.givner@fredonia.edu

School of Music

Dr. Daniel Ihasz, Interim Dean
1140 Mason Hall
(716) 673-3151
daniel.ihasz@fredonia.edu

Graduate Studies, Sponsored Research, and Faculty Development

Dr. Judith Horowitz, Associate Provost
803 Maytum Hall
(716) 673-3335
judith.horowitz@fredonia.edu

Curriculum, Assessment, and Academic Support

Dr. Carmen Rivera, Interim Associate Provost
810 Maytum Hall
(716) 673-3717
apcas@fredonia.edu

Associate Deans

Dr. Justin Conroy, Interim Associate Dean (Biology, Geology/Environmental Sciences, Computer & Information Sciences, Chemistry & Biochemistry, Mathematical Sciences, Physics)
804 Maytum Hall
Convocation

Every year, the Convocation Committee identifies a theme around which a series of campus events will occur. Those events are highlighted by a keynote lecture which presents a major scholar of national reputation to the campus community. Other events include roundtables, lectures, film screenings, and other gatherings of students, faculty, staff, and community which engage participants with a unique interpretation of the theme. Recent keynote lecturers have included actress and author Rita Moreno, who addressed the theme "Creativity and Perseverance"; ethnographer and author Wade Davis, whose photographs and findings challenged the campus to consider the "Diversity of the Human Spirit"; and Bill Nye "The Science Guy," who discussed "The Joy of Discovery." Other speakers have included 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.

Fredonia Institutional Learning Goals

Fredonia’s mission is to ensure that all Fredonia students, utilizing knowledge developed through a broad range of intellectual experiences, will be:

• Skilled (develop Intellectual and applied Skills, Literacies and Knowledges),
• Connected (engage Community and Diversity: Local Stewardship, Global Citizenship),
• Creative (demonstrate Scholarship, Artistry, and Innovation), and
• Responsible (activate Sustainability, Ethics, Leadership, and Professionalism)

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 Director of Academic Advising, 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 Director of Academic Advising, Fourth Floor, Reed Library, (716) 673-3188, or by emailing advising.center@fredonia.edu. See http://home.fredonia.edu/advising.
Liberal Arts

Liberal Arts students are those students who are exploring the major options offered at Fredonia. The Liberal Arts program is not a major. Exploration will occur as the student takes courses that fulfill the General Education Program required of all students. Declaration of a major is not required until the second semester of the sophomore year, the semester in which one customarily completes 60 credit hours. Most students decide on their major during the sophomore year, prior to reaching 60 credit hours.

Academic Advising Services are the primary advisor for Liberal Arts students and is located on the fourth floor in the Carnahan-Jackson wing of Reed Library.

Pre-Professional Programs

Students may arrange pre-professional programs to prepare for specialized training in engineering; health related areas such as medicine, optometry, 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 and other health related programs may be obtained from the Health Professions Advising Committee through the Department of Biology, located in the Science Center. Students interested in these careers are encouraged to register with the selection committee through the biology department as early as possible to ensure appropriate advising on matters of course and major choices, and application procedures to professional school.

Advisement for pre-law is available along with LSAT preparation workshops. Students should choose a major within any department and enroll in the Pre-Law Advisement group as soon as possible, to ensure appropriate advising on course choices and law school application procedures.

For information on Pre-Medicine and Allied Sciences (p. 150), see those program pages.

For information on Pre-Law Advisement (p. 150), 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) (p. 97) portion of the catalog.
Office of Sponsored Programs

Office: 127A Reed Library  
**Dr. Kathleen Gradel, Interim Director**  
(716) 673-3528

Website: [https://www.fredonia.edu/about/offices/sponsored-programs](https://www.fredonia.edu/about/offices/sponsored-programs)

Fredonia's Office of Sponsored Programs (OSP) provides comprehensive grants development and management support to faculty and staff. The office offers a wide range of pre- and post-award services for external grants and contracts, including proposal and budget development, export control guidance, campus administration approvals, proposal submission, contract negotiation, and account establishment.

The OSP serves as liaison to The Research Foundation for SUNY (RF), the campus's fiscal agent for grants and contracts, and is responsible for the full range of post award functions through close-out, including budget and modification approvals and all expenditures and grant-funded employee processing.

Fredonia's Institutional Review Board (IRB), the Human Subjects Review Committee, is administered by the OSP, and can be reached at Human.Subjects@fredonia.edu. The office also works closely with the campus Institutional Animal Care and Use Committee (IACUC).

For more information, please visit [http://home.fredonia.edu/sponsoredprograms](http://home.fredonia.edu/sponsoredprograms) or email [http://home.fredonia.edu/sponsoredprograms/contact](http://home.fredonia.edu/sponsoredprograms/contact).

Student Creative Activity and Research

The mission of the Office of Student Creative Activity and Research (OSCAR) is to promote and support student scholarly activity and creative work across the Fredonia campus. Such an endeavor is integral to the teaching and learning experience. It provides an opportunity for students to become closely affiliated with a faculty mentor and to develop skills and knowledge that will benefit them in the future. Both students and faculty gain from such activity and the institution has made a concerted effort to promote such collaborations. Funding is available for student travel to conferences and an annual exposition is held in the spring to celebrate student achievements. For more information, students should contact the Office of Student Creative Activity and Research at (716) 673-3123 or the Office of Graduate Studies, Sponsored Research, and Faculty Development at (716) 673-4708, or visit OSCAR's web page at [http://www.fredonia.edu/oscar](http://www.fredonia.edu/oscar).
3-1-3 Program

Fredonia's Early Admission 3-1-3 program provides an opportunity for academically eligible high school seniors, who reside within driving distance of the university, to take courses at Fredonia with the support of their family and local high school. The 3-1-3 program is a combined year of simultaneous high school and college coursework. The advantage of such a program is the potential for shortening the time to a B.A. or B.S. degree completion (depending on the number of credit hours earned) and the ability to uniquely prepare for the academic rigor of college through a truly immersive university experience.

3-1-3 students are selected by the Fredonia admissions staff on the same basis as regularly admitted students.

During their 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 New Student and Transition Programs Office at (716) 673-4969 for more information on the 3-1-3 program.
ACADEMIC POLICIES

Unit of Academic Credit
The State University of New York at Fredonia defines the credit hour in accordance with United States Department of Education regulations, *USDE Guidelines for Preparing/Reviewing Petitions and Compliance Reports*, January 2012, p. 74.

**Credit hour:** A credit hour is an amount of work represented in intended learning outcomes and verified by evidence of student achievement that is an institutionally established equivalency that reasonably approximates not less than—

1. One hour of classroom or direct faculty instruction and a minimum of two hours of out of class student work each week for approximately fifteen weeks for one semester or trimester hour of credit, or ten to twelve weeks for one quarter hour of credit, or the equivalent amount of work over a different amount of time; or

2. At least an equivalent amount of work as required in paragraph (1) of this definition for other academic activities as established by the institution including laboratory work, internships, practica, studio work, and other academic work leading to the award of credit hours.

Academic Forgiveness Policies
Fredonia offers three options to help undergraduate students repair their academic records: First-Year Student Forgiveness, the Restart Option, and Academic Bankruptcy.

1. Students may use only one of the three options during their undergraduate career.

2. Forms are available to active students through your Google Drive. Follow the instructions at the beginning of each form regarding completion and sharing of the document.

3. Students initiate the application process for any Academic Forgiveness Policy, after speaking with their academic advisor.

4. When a course previously passed with a grade of D-, D, or D+, it is excluded from the GPA calculation. Under any of these policies, credit is lost for those courses and they will not count towards any degree requirements, including general education.

Academic Bankruptcy

**Who is this for?**
- For the student who normally maintains satisfactory academic standards, but whose grades suffer for one semester due to unusual or unfortunate circumstances.

**What does it do?**
- If the application to bankrupt a semester is approved, the student’s grades for that semester will be excluded when calculating the student’s GPA, but the student will receive credit only for those courses in which the student earned a grade of C- or above (including S grades).

**When do students apply?**
- To apply for this option, the student must be in good academic standing (excluding the semester for which bankruptcy is sought) and must have re-established the pattern of satisfactory academic progress that existed prior to the semester for which bankruptcy is sought.

This policy may be applied only to one semester of work completed at the university.

The application form to apply for academic bankruptcy is available on the Registrar's web page, under "Academic Policies."

First-Year Student Forgiveness

**Who is this for?**
- For First-Year Students (not transfers) admitted Fall 2007 and later.

**What does it do?**
• Allows up to 18 credits of "D" or "F" grades to be excluded from the g.p.a. Students will lose credit when a "D" grade is forgiven, and those courses will not count for general education nor for any other degree requirements.

When do students apply?
• A student applies for this option after changing or declaring his or her major and improving academically, but before the completion of 50 cumulative credit hours.
• In most cases, approval will be for courses that were taken to satisfy program requirements that no longer apply, due to the change in major.
• General education courses should be repeated rather than forgiven.

The application form for First-Year Student Forgiveness is available through the Registrar's web page, under "Academic Policies."

Restart Option

Who is this for?
• For students with an interruption in their studies at Fredonia, and who were readmitted/reinstated Fall 2008 and later.

What does it do?
• Allows a new grade point average to be established from the time of readmission/reinstatement. The student’s academic record from the time of initial enrollment at Fredonia will be reflected on the transcript, but the student will receive credit only for those courses in which the student earned a grade of C- or above (including S grades).

When do students apply?
• A student applies for this option after returning to the University, and after the successful completion of at least 12 additional credits, using the online form available.
• Students approved for this option must successfully complete 45 credit hours after readmission of "regular" graded work (excluding S and P grades) at Fredonia prior to graduation.

The application form to apply for the restart option is available on the Registrar's web page, under "Academic Policies."

Academic Integrity Policy

I. Opening Statement
The State University of New York at Fredonia holds that the life of the mind and personal integrity go hand in hand, and are inseparable. Adherence to this philosophy is essential if we are to facilitate and promote the free and open exchange of ideas upon which our university mission relies. An essential component of the academic experience at Fredonia is the conviction that academic goals must be achieved by honorable means. It is expected, therefore, that all students attending the State University of New York at Fredonia will support and abide by all provisions of the following Academic Integrity Policy. It is further understood that by enrolling in courses, students are agreeing to the rules and regulations set forth below.

In order to protect the value of the work accomplished by each student and instructor, our academic community depends upon certain honorable standards of behavior from all its members. Fredonia trusts all students will refrain from participating in any behavior that will inhibit the pursuit of honest academic advancement. To help students avoid activities that can be construed as dishonest or as violations of academic integrity, a partial list of prohibited behaviors and activities is outlined below. This policy is not intended to limit decisions of faculty of professional programs that operate under more restrictive policies and/or have externally monitored procedures for addressing violations of academic integrity.

II. Violations of Academic Integrity Policy
Violations of academic integrity are described within four broad, overlapping categories: Fraud, Plagiarism, Cheating, and Collusion. Some examples of violations of academic integrity are described in the four categories listed below. If a student has any questions about what may or may not be an academic integrity violation, the student should discuss this with their professor.

A. Fraud
Behaving deceptively, misrepresenting one's self or another person, and falsifying official print and/or electronic documents are actions that seriously undermine the integrity of any social institution and may result in criminal prosecution.
In a university setting, fraudulent behavior includes but is not limited to:

1. Forging or altering official school documents, whether in print or electronic form, such as grade reports or transcripts, enrollment documents, transfer credit approvals, etc.

2. Forging or tampering with any University correspondence or medical excuses.

3. Tampering with attendance records, such as one student signing for another student.

4. Tampering with or interfering with grading procedures.

5. Misreporting or misrepresenting earned credentials, including academic status, class standing, and GPA.

6. Taking an exam in place of another student.

7. Failing to disclose necessary information on official University forms.

8. Falsely claiming that electronic systems or computer equipment is at fault for the student's inability to complete academic course work (e.g., inability to complete assignments due to problems with software or the printers/computers in a certain lab) or to complete administrative functions (e.g., inability to make schedule changes via "Your Connection.")

B. Plagiarism

Plagiarism consists of presenting the work of others as one's own. It is unethical to copy directly the words or work of other authors or artists without giving them credit. It is also unethical to rearrange or add a few words to another author's text while leaving the majority unaltered or to take an author's unique idea or discovery and to represent it as one's own.

Specific examples of plagiarism include, but are not restricted to, the following examples:

1. Copying the work of another author and/or artist without giving proper credit in the text or reference to the artwork, presentation or performance; neglecting to cite the original in a footnote; and/or failing to identify full and proper documentation in the list of works cited or sampled for presentation or performance.

2. Implying that another author's words, works, or ideas are one's own. Quoting without the use of quotation marks falsely implies originality and is, therefore, an act of plagiarism.

3. Incorporating material into a paper or assignment without acknowledgement, verbatim corrections, or other suggestions that were made by someone other than oneself, the instructor, or an assigned editor.

4. Taking information from one source (such as the Internet) and citing it as coming from another source (such as a required text or article).

C. Cheating

In all academic situations, any behavior that subverts the purpose of an academic assignment constitutes cheating, whether one actively commits the act of dishonesty on one's own behalf or enables someone else to do so. All materials prepared and/or assigned for a course by an instructor are for the students' educational benefit. *Unless expressly permitted by the course syllabus, students may not photograph, record, reproduce, transmit, distribute, upload, sell, or exchange course materials without the prior written permission of the instructor. “Course materials” includes all instructor-prepared and assigned materials, such as lectures, lecture notes, discussion prompts, study aids, tests and assignments, and presentation materials such as PowerPoint slides, Prezi slides, or transparencies and course packets or handouts. (Exceptions to accommodate students with disabilities may be granted with appropriate documentation.) Students are prohibited from selling to others or uploading to external commercial websites lecture notes they have prepared in connection with a course, without the written permission of the instructor. Specific examples of cheating include, but are not limited to, the following:

1. Copying someone else's work or permitting one's own work to be copied. All work should be original to the student. Whether involvement in the copying process is active or passive, these acts constitute violations of academic integrity if a student is at all complicit.

2. Using unsanctioned materials, notes, software, and or equipment (such as a programmable calculator).

3. Intentionally providing or seeking questions to an exam that will be given in a later section or used as a make-up exam.

4. Communicating or sharing information during an exam obviously constitutes cheating, as does taking an exam for someone else.

5. Reusing work from another course without explicit instructor permission.

6. Reusing work in a repeated course without explicit instructor permission.
D. Collusion
Most colleges and universities support opportunities for collaborative learning. However, unauthorized collaboration is considered collusion. Unless collaboration is expressly permitted by the instructor, students should work independently. Even when an instructor authorizes collaboration, collusion may still occur. In all cases, work submitted should reflect a student’s individual effort.

Examples of collusion include, but are not limited to, the following situations:

1. Two or more students study a problem and one student formally writes and/or types the results, the other members of the group copy the results, and each individual submits the work as their own.

2. A pair or larger group of students work on a series of problems or tasks, each student completes a portion of the problem set or task, the students combine their work, and each student submits the entire problem set or task as his/her own.

3. A course instructor assigns a task or problem to be completed outside of class and explicitly instructs students not to discuss the task or problem with one another. A pair or larger group of students discuss or work together on the task or problem, and each individual submits the results as their own.

III. Violations of Academic Integrity Procedures

A. Classroom Level

1. An instructor who suspects a violation of the Academic Integrity Policy will collect all information and materials related to the offense. The instructor will contact the student to present the student's charge(s) and the student will be given an opportunity to answer and explain. If the instructor and the student then agree that no violation has occurred, the matter is resolved and the process ends at this point.

2. If, however, the instructor finds that a violation has occurred, whether the student admits or does not admit guilt, the matter must be reported to their Department Chairperson using the Academic Integrity Incident Report Form.

B. Departmental Level

1. For all cases in which the instructor determines that the student has plagiarized, cheated, colluded, or committed any act of academic dishonesty, the instructor will submit an Academic Integrity Incident Report Form to the department chairperson. The instructor will maintain copies of all information and materials related to the offense and will disseminate the copies per request of the departmental chairperson or the Academic Integrity Review Board.

2. After appropriate consultation and review of the materials, the chairperson and the instructor will jointly decide if the case is to be dismissed. If the case is not dismissed, they may attempt to resolve the case at the Department level or send the case on to the Academic Integrity Review Board. If charges are going to be brought against the student, the Department Chair will contact the Office of Student Conduct to determine if the student has a previous record of academic misconduct on file. If the student has a prior violation of the Academic Integrity Policy on file, the case must be sent on to the Academic Integrity Review Board for adjudication. The Academic Integrity Review Board will consider repeated violations of any or all of the provisions in the Academic Integrity Policy as grievous.

3. If the student has no prior record of academic dishonesty, the chairperson and the instructor must decide if the case is a serious enough violation to result in suspension or expulsion. If so, the case must be sent on to the Academic Integrity Review Board for adjudication. If the charges are less serious, the Department may propose departmental sanctions including but not limited to one or more of the following sanctions: a formal warning; a grade of zero being assigned to the particular performance; a failing grade being given for the course; and/or academic disciplinary probation for one semester or one year.

4. At this stage of the process, the Department Chair sends the Academic Integrity Incident Report Form to the appropriate Dean. In the case of a student enrolled in a teacher education program, this report should also be sent to the Dean of the College of Education. The Academic Integrity Incident Report Form will serve as a routing slip and require appropriate signatures.

C. Notification of Departmental Sanction or Referral for Hearing by the Dean

1. The Dean will communicate the proposed departmental sanctions or referral to the Academic Integrity Review Board to the student. The Dean will also include a description of the charges to the student. A student may not drop or withdraw from a course in order to avoid a course sanction or to suspend judicial proceedings.

2. If departmental sanctions are being proposed, the student must accept the proposed sanctions within 5 working days by signing the Academic Integrity Incident Report Form (if applicable), or appeal (See Section D) of the departmental
decision. If the student does not appeal, the departmental sanctions will be imposed and the Dean will send the final Academic Integrity Incident Report Form to the academic department that originated the Academic Integrity Incident Report Form and the Office of Student Conduct.

3. Because a student may plagiarize and/or violate the provisions of the Academic Integrity Policy in more than one department, the Office of Student Conduct will maintain the final copy of the Academic Integrity Incident Report Form in the student’s file.

D. Appeal Process

1. Within five (5) working days of official notification, the student may decide to appeal the departmental proposed sanctions. If so, the student must officially respond and notify the Dean (via the student's official university email account). The Dean should then forward the notice of the student’s intent to appeal to the Provost, the appropriate department chair, the Director of Student Conduct, and the Chair of the Academic Integrity Review Board, who will call together the members of the board for a formal hearing. The Director of Student Conduct will then schedule a meeting with the student for clarification of the appeal and hearing process. Throughout the appeal process, the charged student is assumed not responsible and in most circumstances, they have the right to remain in class.

2. After the same five (5) working days, if the student has not accepted the sanctions or appealed, the University will act upon the assumption that the student has accepted the departmental decisions and any sanctions therein.

3. If the department has recommended sanctions outside the departmental purview (e.g. academic disciplinary probation longer than one year, suspension or expulsion), the Chair of the Academic Integrity Review Board and Director of Student Conduct will be notified by the Dean and a hearing will be scheduled in a timely manner. All original materials for the hearing will be transmitted to the Director of Student Conduct and a copy sent to the Chair of the Academic Integrity Review Board.

4. With all decisions in the appeal process, enforcement of sanctions and notification of outcomes to all parties involved will be the responsibility of the office of the appropriate Dean.

E. Academic Integrity Review Board

1. The Academic Integrity Review Board will be convened to hear and rule on a case under any of the following circumstances:
   a. the student who has been charged has chosen to appeal the department decision,
   b. for a suspension or expulsion level case, or
   c. whenever a second or subsequent academic misconduct violation is submitted. Before the hearing, the student will attend a counseling session with the Director of Student Conduct who will fully inform the student about the process and possible outcomes. The student may decide at this point to drop or continue with the appeal process, if that was the reason for the hearing.

2. A charged student has the right to select a willing student, faculty member, or an administrative staff member of the University to advise them throughout the review process. To avoid conflicts of interest, this advisor may not be selected from the members of the Academic Integrity Review Board. If the student wishes to have an attorney present at the hearing as an advisor, the Chair will need to be notified at least 72 hours in advance of the hearing. The attorney may advise the student during the hearing, but will not be permitted to respond for the student.

3. The Provost will establish a pool of eligible members to serve on the Academic Integrity Review Board. These members will undergo training before serving on a convened hearing board. Members will serve for two-year terms with the option of renewal. Terms should be staggered whenever possible to provide continuity. At least one member from each category below is required to hold a hearing. A quorum of four members including at least one student representative will be selected from the following categories:
   a. The Chair of the Academic Integrity Review Board is a full-time tenured faculty member, appointed by the Provost and subsequently approved by the University Senate. The Chair’s term will be two years with the option of renewal, pending reappointment and approval. The Chair of the Board will have the responsibility of determining whether a hearing should be held, convening the Board, and presiding over hearings.
   b. The Director of Student Conduct, or other representative of the Office of Enrollment and Student Services, will provide the Board access to pertinent Student Disciplinary records and will participate as an ex officio, non-voting member of the Academic Integrity Review Board. Before witnesses speak or before questions are asked, the representative from
Enrollment and Student Services will present a brief summary of the case, based on the evidence submitted and the interview with the student.

c. At least one, but preferably two, undergraduate (or graduate, if pertinent) student representatives. These two students should have majors in different academic units. Students may be selected from the pool of students serving as Campus Judicial Board members.

d. A chairperson from an academic department other than the department in which the charge originated.

e. At least one faculty member, but preferably two, from departments other than the department initiating the charges and the department chair serving on the committee. Such members may be selected from the pool of faculty serving as members of the Campus Judicial Board.

4. Other parties and witnesses may be invited by the Chair of the Academic Integrity Review Board or by the student. These witnesses may be called before the Academic Integrity Review Board to provide testimony. Normally, the faculty member bringing the charges is also invited to the hearing to answer any questions that arise.

5. After the presentation of the summary of the case by the Director of Student Conduct, the student will answer to the charges by pleading responsible or not responsible. The Chair of the Academic Integrity Review Board (after prior consultation with the assembled Board) may call witnesses. The student who has been charged may also call witnesses. All participants in the hearing will be informed that deliberations are to remain strictly confidential. Hearings of the Academic Integrity Review Board will be recorded to provide a record of the proceedings and these recording will be stored in the Office of Enrollment and Student Services.

6. After the hearing, the Academic Integrity Review Board will deliberate in private and make a formal decision. In the final determination, each of the members of the acting board, including the Chair of the Board, and excluding the Director of Student Conduct, will cast a single and equally weighted vote. In the event of a tie vote concluding a case, the Chair of the Board will cast an additional vote. Voting will be conducted by written ballot, and will be tallied by the Chair of the Board. The results will be disclosed to acting Board members, who are not to disclose either the board’s determination or any specifics related to the voting.

7. Within one week of the final determination of the case, the Chair of the Academic Integrity Review Board will complete a written hearing report and will send electronic copies to the Provost and the Dean that referred the case. The final report of the Academic Integrity Review Board will include the following:

a. A determination of “Not Responsible” (no violation of the Academic Integrity Policy has been found) or Responsible (the student has been found responsible for the charged violation on the basis of the evidence submitted or has admitted guilt).

b. If the student has been found “Responsible” for violating the Academic Integrity Policy, the penalty must be specified. Sanctions or penalties imposed should be commensurate with the offense and will take into account any previous violations of the Academic Integrity Policy as evident in the student disciplinary records on file.

8. The Provost will send an official notification letter informing the student of the hearing outcome, sanctions imposed, if any, and an explanation of the appeal process. A copy of this letter will also be sent to the Director of Student Conduct. If the student has been suspended or expelled, a copy of the official letter will also go to the President’s Office. On the same day the Review Board’s decision is communicated to the student by the Provost, the instructor, chairperson in whose department the charge originated, chairperson of the student’s major department, and the Vice President for Enrollment and Student Services will be informed of the board’s decision electronically (i.e. via Fredonia e-mail). If the student is a teacher education student, the Dean of the College of Education will also be notified.

9. Should the student decide to appeal the Academic Integrity Review Board’s decision, he or she may do so in a written justification to the President of the University, but only if/when the substance of the presented case has changed (i.e., additional and significant new evidence is discovered) or if there has been some sort of procedural error that would affect the outcome of the hearing. The written appeal must be received within 5 working days following the student notification of the hearing outcome.

F. Maintenance of Academic Integrity Records
Records of all academic integrity violation cases will be kept in the Office of Enrollment and Student Services for 10 years.
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 on probation whose record of achievement becomes academically irreparable may be dismissed.

At the close of each semester, a student whose cumulative quality point average places them within the range of Academic Dismissal will be notified via “Your Connection.” Students may appeal this dismissal to their department chairperson/program director, through an online process in “Your Connection”. The Academic Standings Committee then reviews the appeals of each student. The Academic Standings Committee is comprised of the Provost and Vice President for Academic Affairs (or designee), the Associate Provost for Curriculum, Assessment, and Academic Support, the academic deans, the Vice President for Enrollment and Student Services (or designee), the Coordinator for Academic Advising & Liberal Arts and the Registrar. The decision of the Academic Standings Committee is final.

Chosen Names

The State University of New York at Fredonia (Fredonia) recognizes that many persons identify themselves using a name that is different from their legal name. Fredonia will refer to this name as the “Chosen Name” and will use it when possible in the course of university activities.

Your legal name will still be accessible to university personnel when it is necessary to carry out the duties of the institution.

Whenever possible, an F# should be collected. If names conflict, check the F# to confirm an individual’s identity.

Any participant in the chosen name program who directs an outside agency to correspond with the State University of New York at Fredonia bears the responsibility for clarifying their name with all agencies.

Your Chosen Name will appear in the following areas:

- Student Health Center
- Counseling Center
- ID card (FREDCard)
- Class rosters
- Learning management system (OnCourse)
- Student, faculty, staff portal (Your Connection)
- Student Information System
- Email address
Your legal first name will continue to appear in the following areas:

- Transcripts
- Paychecks and pay stubs
- Financial Aid records
- Tax Documents
- Human Resources records
- Any off campus communications (such as any letters sent to a permanent address, communication with emergency personnel, licensing boards)
Adopting a Chosen Name
Any person with an F# can request to use a chosen name.

Students, faculty and staff may make no more than two requests to change their Chosen Name within a 365-day period.

Students, faculty, and staff who would like to enroll should contact jennifer.hildebrand@fredonia.edu.

Although an individual may select any Chosen Name, the university reserves the right to deny or remove a Chosen Name if it is inappropriate or used for an improper purpose. Inappropriate Chosen Names include but are not limited to those that avoid legal obligation, misrepresent, harass, threaten, or are otherwise objectionable. In most cases, a Chosen Name should not be a message, company, or group name, especially if it is for promotional purposes. Individuals with a Chosen Name deemed inappropriate can either select a different Chosen Name or continue to use the legal name.

Click for more information about Fredonia’s Chosen Name policy.
Click to read answers to Frequently Asked Questions.

Obtaining a New Fredonia ID Card
Students, faculty and staff who adopt a Chosen Name must obtain a replacement ID card within two weeks of the change.

While students, faculty and staff may change their Chosen Name more than once, they are entitled to only one free replacement card. The individual is responsible for any replacement card charges associated with subsequent changes.

Chosen Names Policy
Title: Chosen Names Policy
Contact: Director, Office of Diversity, Equity, and Inclusion
Passed by University Senate: 1-27-17
Approved by Cabinet: 8-23-17

I. Reason for Policy
Chosen names can be vitally important to our students, faculty, and staff for a variety of reasons. For those within the LGBTQ community, they allow the use of a name that properly expresses one’s gender identity. In some cases they help individuals avoid reminders of past trauma. They allow international students to use a westernized name that makes them feel more comfortable in their new setting. Whatever reason an individual has for using a chosen name, this policy communicates to individuals that they are welcome and valued on our campus; it can be a vital tool in recruitment and retention strategies.

II. Policy Statement
Fredonia recognizes that many persons identify using a name that is different from their legal name. Fredonia will refer to this name as the “Chosen Name” and will use it when possible in the course of university activities.

A. Definitions:
1. LGBTQ: The acronym stands for Lesbian, Gay, Bisexual, Transgender, and Queer. This is an umbrella term used to refer to a community of individuals whose sexual or gender identities can create shared political and social experiences. The acronym is not meant to be exclusionary; there are other identities, including but not limited to asexual and intersex, that fall under this umbrella term.
2. Transgender, Trans: An umbrella term that represents individuals whose gender identities do not match the sex assigned to them at birth.
3. Cisgender, Cis: An individual whose gender identity matches the sex assigned to them at birth.
4. Chosen Name: The name that an individual uses regardless of the name that was assigned to them at birth. Sometimes referred to as a “preferred name.”
5. F#: The number assigned to any student, faculty, or staff member when they begin an official relationship with Fredonia.
6. FREDCard: An identification card used on the Fredonia campus issued by the Fredonia Student Association (FSA).

B. Scope:
1. When the program is fully implemented, an individual’s Chosen Name will be utilized in the following:
   a. Student Health Center
   b. Counseling Center
c. ID card (FREDCard)
d. Class rosters
e. Learning management system (OnCourse)
f. Student, faculty, staff portal (Your Connection)
g. Student Information System
h. Email address
i. Advising folders
j. Campus Directory
k. Residence Life Directory
l. Commencement programs
m. Diploma
n. Library
o. Athletics
p. Business Cards
q. Office Signage

2. An individual’s legal name will continue to be utilized in the following:
   a. Transcripts
   b. Paychecks and pay stubs
   c. Financial Aid records
   d. Tax Documents
   e. Human Resources records
   f. Any off campus communications (such as any letters sent to a permanent address, communication with emergency personnel, licensing boards)

C. Participation in Fredonia’s Chosen Name program:
   1. Any person with an F# can request to use a Chosen Name.
   2. When the program is fully implemented, participants will be able to self-enroll

D. Limitations:
   1. An individual’s legal name will still be accessible to university personnel when it is necessary to carry out the duties of the institution.
   2. Although an individual may select any Chosen Name, the university reserves the right to deny or remove a Chosen Name if it is inappropriate or used for an improper purpose.
      a. Inappropriate Chosen Names include but are not limited to those that avoid legal obligation, misrepresent, harass, threaten, or are otherwise objectionable.
      b. In most cases, a Chosen Name should not be a message, company, or group name, especially if it is for promotional purposes.
      c. Characters in a Chosen Name: So that Chosen Names can be fully integrated into our information technology systems, the following character limitations have been implemented. A Chosen Name:
         i. Must contain at least one alpha character (A-Z, upper or lowercase). That is, the Chosen Name field cannot be blank.
         ii. May contain the following non-alpha characters: space, hyphen, apostrophe, and period.
iii. May not contain numbers (although a number may be spelled out in a person’s Chosen Name).

iii. May not contain symbols.

d. If a Chosen Name is questioned, it will be referred to an advisory group under the authority of the Office for Diversity, Equity, and Inclusion, which will make a recommendation to the Chief Diversity Officer (CDO). The CDO has ultimate responsibility for approving or disapproving a Chosen Name.

e. Individuals with a Chosen Name deemed inappropriate can either select a different Chosen Name or continue to use the legal name.

3. Students, faculty and staff may make no more than two requests to change their Chosen Name within a 365-day period.

E. Confirming identity internally: Whenever possible, an F# should be collected. If names conflict, check the F# to confirm an individual’s identity.

F. Communication with outside agencies: Any participant in the chosen name program who directs an outside agency to correspond with Fredonia bears the responsibility for clarifying their name with all agencies.

G. FREDCards:

1. Students, faculty and staff who adopt a Chosen Name must obtain a replacement ID card within two weeks of the change.

2. While students, faculty and staff may change their Chosen Name more than once, they are entitled to only one free replacement card. The individual is responsible for any replacement card charges associated with subsequent changes.

3. The FREDCard is not recognized as a legal form of identification.

III. Related Documents

A. Chosen Name Policy passed by University Senate, 1-27-17
B. Final Report of the Chosen Name Task Force

IV. Website Address for this Policy

http://home.fredonia.edu/diversity/chosen-name-policy

V. Authority for Policy

Authority for policies is the President's Cabinet.
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 Enrollment and Student Services in the event of an unusual series (three or more consecutive days) of absences due to serious health issues or personal reasons. The office will then notify instructors.

Each instructor is responsible for establishing a policy concerning cases in which regularly scheduled graded work is missed and for determining whether the reason for having missed such work is valid. If the instructor determines that a student has a valid reason for missing the work, the instructor may choose to give the student an opportunity to make it up or may, in exceptional cases, base the grade for the course on other work. In the event of a disagreement over the validity of the absence, the student may appeal to the instructor’s chairperson. When a student is directly participating in a university-sponsored program that takes him/her away from classes (e.g., athletics or research conference), the department sponsoring the program will provide the student with documentation indicating the activity in which the student is involved and the date(s) and time(s) of that involvement. Such participation will be considered a valid reason for missing the work. Thus, instructors should offer the student an opportunity to make up the work or may base the grade for the course on other work. In the event of a disagreement over the validity of the absence, the student may appeal to the instructor’s chairperson or supervisor.

If a student anticipates having to miss regularly scheduled graded work, the student should contact the instructor ahead of time. The instructor may expect the student to complete the work before the scheduled time when that is feasible.

If a student must be absent due to religious beliefs, he/she has the right to make up examinations, etc. In the same vein, professors may feel compelled to cancel an in-person class session to attend a religious observance or professional conference. Students might be asked to complete alternate assignments for that particular class session.

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 State University of New York at Fredonia. In addition, auditors are not provided certain other university services, such as email, internet access, etc. However, access to OnCourse is available as needed. 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 Extended 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.

Current full-time students, faculty and staff, Fredonia emeriti faculty and staff, and community members 60 years of age and older (with documentation) 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 noncredit courses offered through Extended Learning, nor in any internship, directed study, practicum, OpenSUNY, or international study program/course.

Course Challenge Option

Students may enter the university already possessing the skills or knowledge taught in a particular university course. If such a course is required or is a prerequisite for other courses, and if the students can prove to the satisfaction of the department offering the course that they indeed possess the skills or knowledge in question, the requirement will be waived or the students will be placed in the course for which they qualify, without receiving credit for the prerequisite or required course.

In unusual cases, academic departments may be willing to grant college credit for a given course to students who can demonstrate prior knowledge of the course materials or skills. The course in question will not be one in which the classroom process itself is an important focus, as it is in courses dependent on small group discussion or problem-solving, computer work, laboratory experiments, group projects, and the like. To “challenge” a suitable course by demonstrating that one can pass the
course without taking it, a student must first apply to the chairperson of the department offering the course. The application should include a detailed description of the manner in which the student has already met the goals and objectives of the course. If the chairperson deems the course available for challenge and if he or she believes the student’s application to have merit, the department will determine the manner in which the student is to demonstrate his or her knowledge and/or proficiency. If, in the department’s opinion, the student’s performance is adequate, the chairperson will recommend to the Registrar that the student be awarded credit for the course. No grade will be given, and the student’s quality point average will not be affected.

Semester Credit Load

Undergraduate students must be registered for at least 12 credits for full-time status. The normal credit load for most undergraduate programs is 15 or 16 per semester.

A student who wishes to register for more than 18 credit hours must secure the approval of their department chairperson/program coordinator, subject to the following restrictions:

- Students on academic probation are not permitted to register for more than 18 credits.
- Students in good standing with a GPA less than 3.00 may request permission to register for up to 21 credits.
- Students with a GPA of 3.00 or higher may request permission to register for up to 24 credits.

Any exceptions to the above restrictions must be approved by the Associate Provost for Curriculum, Assessment, and Academic Support, 809-810 Maytum Hall.

Course Prerequisites and Corequisites

Many courses offered by the university are open to any interested student, space permitting. However, some courses have prerequisites - other courses or test scores a student must have had before taking the course in question. A few courses have corequisites, 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 prerequisites have been met before enrolling in a course.

Course Repeat Policy

A student may repeat a course and have the prior grade(s) excluded from the calculation of their cumulative quality point average if the course is an exact equivalent (subject and course number) 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 repeat a course at another college and have the grade excluded for a course already taken at Fredonia must secure prior approval from the chairperson of his or her major program (or department of advisement) and have the chairperson certify that the course to be taken is the equivalent of the course the student wishes to repeat. For this option, transfer credit is accepted only if the student earns a “C” or better for the course being repeated and transferred. In that case, the credit (not the grade) will be noted on the transcript. The option of using transfer credit for course repeat may not be utilized by students who have been academically dismissed, unless the student is reinstated and completes courses leading to a degree program at Fredonia.

When courses are repeated, the prior grade(s) will remain on the transcript, but an "E" will appear to the right of the prior grade(s) earned, indicating that this grade is excluded from the grade point average calculation.

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 semester quality point average of 3.30 or higher with a course load of at least 12 credit hours. (Courses with P or S grades are not included in the 12 hours.)

Field of Study Definitions and Declaration

Definitions:

Major: A major represents a student’s primary field of study for those pursuing a registered degree program. A major is a structured plan of study requiring a minimum of 30 credit hours. It must be feasible for students to complete degree
requirements within the minimum 120 credit hours required for an undergraduate degree. The major appears on the transcript but does not appear on the diploma.

**Minor**: A minor is a structured plan of study requiring a minimum of 18 credit hours. A minor should require significant additional coursework beyond what is already required for a related major. The minor appears on the transcript, but does not appear on the diploma.

**Concentration/Track**: A concentration/track is a structured plan of study within a major. The number of credit hours for a concentration varies, but is included within the credit hours for the major. The concentration/track appears on the transcript but does not appear on the diploma.

**Declaration Procedures and Information:**

- Students who wish to declare or change their field of study must obtain the appropriate form from the Office of the Registrar and secure the signature of the department chairperson or program coordinator of the intended additional major, minor or concentration/track.
- The declaration of major program, as well as changes in the major, minor or concentration/track, should be made well in advance of course selection and at least a semester prior to the date of graduation.
- 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.
- 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.
- 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.
- 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; Geology with Earth Science; Mathematics with Mathematics Adolescence Education; Applied Mathematics with any other Mathematics major; Music (all majors); and Physics with Physics Adolescence Education or Industrial Management.
- Students who are interested in declaring more than one minor program are to follow the procedure outlined above.

**Disability Support Services: Policies and Procedures**

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. The student and coordinator will meet and discuss the student’s needs, on the basis of the clinical diagnosis that has established the existence of the disability, and will decide on the kinds of assistance and/or reasonable accommodations the student will need to gain equal access to the university's programs, activities and services. It is advised that students self-identify upon admittance to the university in order to provide a seamless transition. Early self-identification can facilitate reasonable accommodations and other services that may be delayed by the process of obtaining appropriate documentation with later self-identification. To receive such services, the student must meet with the Coordinator of the DSS office and fill out an intake form. The Coordinator and the student will then meet and assess which services will be available to the student. It is important to note that Fredonia does not have a shuttle service between classes, nor does the campus provide transportation expenses to allow students to get to class.

With the student’s written request, the coordinator will inform the relevant professor(s) or office(s) of the student’s accommodation needs for the particular class or service the accommodation is needed. The coordinator will be confirming the existence of a disability and the need for the accommodations requested. The student must then identify him/herself to the professor or office providing the accommodation, and where necessary, discuss the accommodations or alternative accommodations. In the event of a disagreement between the student and the professor or office about the need for the requested accommodation, the Coordinator of Disability Support Services will serve as mediator.
Fredonia is prepared to respond to the individual needs of students with disabilities. For specific information about services and facilities for students with disabilities, students should contact Jennifer Ruhland, Coordinator of Disability Support Services, Reed Library (fourth floor), by telephone at (716) 673-3270, or by email at disability.services@fredonia.edu.

**Final Examinations**

*Final Exam Schedule* – A tentative schedule of final examinations is available on the Registrar’s web pages. Requests from instructors for deviations from the schedule (group examinations or room changes) must be approved by the Registrar. The Registrar’s office will publish a final schedule, including group exams, at least three weeks prior to finals week. Once this schedule has appeared, no changes can be made.

Final examination week is part of the regular semester and should be interpreted in that context. Students who are asked to take final examinations (variously interpreted as terminal, non-comprehensive, etc.) prior to the regular examination week are put at a decided disadvantage. Faculty members who do not give final examinations during the regular period scheduled for such examinations are expected to use that period for review or to utilize the time in some formal way in a classroom setting.

All students have the right to take their final examination at the time scheduled by the Registrar’s office.

*Three-Finals-In-One-Day Conflict* – It is university policy that students not be required to take three final examinations in one day. However, the published final examination schedule may contain some three-finals-in-one-day conflicts. In this situation, a student has the right to take one of the examinations on a different day.

- If the conflict arises due to an individual professor rescheduling his/her final examination from the time initially scheduled by the Registrar's Office, it is the responsibility of that professor to arrange for an equivalent examination for the student at a suitable time during examination week. If a suitable time is not agreed to, the student may appeal to the chairperson of the department in which the course is taught.

- If the conflict arises due to the scheduling of a group examination for several sections of the same course, the department scheduling the group examination must make equivalent examinations available to students for whom the scheduled group examination creates a three-finals-in-one-day conflict. When a student finds that a group examination creates such a conflict, he/she shall meet with the chairperson of the department scheduling the group examination who will arrange for the equivalent examination to be given to the student at a suitable time during examination week. If a suitable time is not agreed to, the student may appeal to the dean responsible for the area in which the course is taught.

- If a conflict arises from neither of the above reasons and if a student is taking one of the three courses in his/her major field, it is the responsibility of that instructor to arrange for an equivalent examination to be given to the student at a suitable time during examination week. If a suitable time is not agreed to, the student may appeal to the department chairperson.

Students should resolve any three-finals-in-one-day conflicts before the beginning of examination week.

**Grade Appeals**

A student who feels that a final grade reported to him/her is incorrect has the right of appeal. This appeal must be initiated within one semester after final grades are posted, using the following procedure:

1. He or she first discusses the grade with the instructor.
2. If, after this discussion, the student is still unsatisfied, the student may take his or her case to the chairperson of the department. This appeal should be in writing, outlining the reasons why the student feels the initial grade was incorrect and supplying any relevant documentation (e.g. graded material, syllabi, etc.) in support of the grade change.
3. If the chairperson decides that the student’s case merits further investigation, and after the chairperson has discussed the appeal with the instructor involved, the chairperson appoints an *ad hoc* committee composed of two members of the faculty in the department, other than the faculty member involved, and one student who is a major in the department.
4. If the chairperson decides that the student’s case does not merit further investigation, the student may appeal this decision to the dean, supplying the same supporting materials as presented to the chairperson. If, after discussion with the chairperson, the dean decides that the student has a case that merits investigation, the dean may appoint an *ad hoc* committee of the same composition to that described above to investigate the student’s case.
5. The committee reviews the case, interviews the student and the instructor separately, and reaches a judgment by majority vote. The judgment is communicated to the chairperson or the dean who, in turn, reports it to the affected parties.
6. If the committee recommends a change in grade, the instructor may initiate a change, or the committee’s recommendation is forwarded to the appropriate dean or Provost and Vice President for Academic Affairs for their consideration. In such cases, the Provost and Vice President for Academic Affairs may modify the grade if the committee so recommends.

7. At any time during this process prior to when a final decision is made, the student may withdraw his/her appeal, or the instructor may initiate a grade change consistent with the student’s appeal. Either of these actions ends the appeal process.

For information on graduate grade appeals, please see "Graduate Grade Appeals (p. 604)" in the Graduate Studies section of the catalog.
Grading System

Student transcripts are updated at the conclusion of each semester, summer session, or special term. The symbols used to record achievement on the permanent record card of the student at the end of each semester are as follows:

- **A**  Excellent
- **A-**
- **B+**  Very Good
- **B**
- **B-**
- **C+**  Fair
- **C**
- **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.
- **NR**  Grade not reported by faculty member.
- **E**  Indicates course has been repeated, and will appear on a student's transcript to the right of the original grade earned. This symbol is also used to exclude grades not calculated due to an approved Academic Forgiveness Policy.
- **S**  Satisfactory completion of requirements. The S does not count as part of the cumulative quality point average.
- **U**  Unsatisfactory performance or failure. The U does not count as part of the cumulative quality point average. Note: The letters S and U are used for student teaching and certain other courses, including some independent study and skill courses. In contrast to Pass/Fail, Satisfactory/Unsatisfactory grades are given as departmental options for certain courses, and require that the instructor prepare an appropriate supplemental evaluation of each student’s performance to be filed with the department.
- **W**  Indicates withdrawal from the university.
- **WC**  Withdrawal from a course.
X Indicates continuing enrollment in a course that continues past the end of the semester. An X grade that has not been converted to a credit-bearing grade by the end of the second regular semester after the semester for which the X was given will change to an F grade.

Y Indicates a course completed with a grade of C- or better during a semester accepted for “academic bankruptcy.” Credit is awarded for such courses but the grades are not included in the student’s average. Prior to Fall 2009, the Y represents all passed courses during a bankruptcy semester.

Z Indicates a course completed with a grade of D+ or lower during a semester accepted for “academic bankruptcy.” Credit is not awarded, and grades are not included in the student’s average. Prior to Fall 2009, the Y represented failed courses during a bankruptcy semester.

Graduation with Honors

Students whose cumulative quality point average indicates high scholastic attainment will be awarded the degree as follows:

1. **Summa Cum Laude** - Quality Point Average 3.7 or higher.
2. **Magna Cum Laude** - Quality Point Average between 3.50 and 3.69.
3. **Cum Laude** - Quality Point Average between 3.30 and 3.49.

Students may graduate with honors only when they have completed at least 45 hours of graded work at Fredonia. Graded work includes all courses which carry quality points and excludes courses which are graded “satisfactory-unsatisfactory” or “pass-fail.”

Only those credits earned at Fredonia will be computed in the final average.

Leave of Absence Policy and Continuing Enrollment

A leave of absence may be obtained for the following reasons: medical, military service, or jury duty. In most cases, a student must have a minimum 2.0 cumulative grade point average and at least a 2.0 average in his/her major. The purpose of a Leave of Absence is to permit the student to return without applying for readmission.

A leave of absence form can be obtained from the Office of Academic Advising Services on the 4th floor Reed Library. Or at this link [https://www.fredonia.edu/academics/academic-advising/leave-absence](https://www.fredonia.edu/academics/academic-advising/leave-absence)

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.

A student who voluntarily terminates enrollment from the university may return to the university through reinstatement or readmission.

Legal Name Changes

A student whose name is legally 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.

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.

Observance of Regulations and Standards

All students are expected to observe the regulations and standards governing student life, both in and out of the classroom. Failure to do so may be considered grounds for suspension or dismissal. Each student should read with care the full statement on Student Rights and Responsibilities (p. 617).
Pass-Fail Option

The Pass-Fail Option permits a student, with the advisor’s approval, to take certain courses and earn a grade of P (Passing) or F (Failing), rather than a traditional letter grade (A,B,C,D). Quality points will not be used for pass-fail courses when the student receives a passing grade. However, a failing grade will carry the usual penalty for failure in a course.

The following courses may NOT be taken Pass-Fail:

- Courses at the 100-level
- Courses that are part of the professional semester
- Courses required for a major, a minor or the General Education Program

Departments may designate other courses as not applicable to the pass-fail option; such courses are identified in the online Course Schedule each semester.

Within the limitations given, students may enroll for courses as free electives on the pass-fail basis:

1. Completion of a minimum of 39 semester hours toward the bachelor’s degree is required before enrollment in pass-fail courses.

2. No more than 16 semester hours may be taken on a pass-fail basis; no more than two such courses may be taken in any one semester. All courses taken as pass-fail are counted towards the 16 hour maximum whether the student receives a P or an F.

3. In the event a student transfers to a department in which he or she has taken a pass-fail course, the student may petition the Registrar to rescind the pass/fail option for the course.

Pass-fail applications are available in the Office of the Registrar. A student who decides to enroll on a pass-fail basis is required to obtain his or her advisor’s signature on the application within the three-week period following the beginning of the semester. He or she may not thereafter change status in the course(s).

Permission to Take Graduate Courses While an Undergraduate

Undergraduates who have completed 90 credit hours and whose grade point average is 3.0 or better may be allowed to enroll in suitable graduate courses numbered 500-599. Permission is not automatic, however; in each instance, students must request approval of the department offering the course and of the Associate Provost for Graduate Studies. The forms for this purpose may be found in the Registrar’s office or online at http://www.fredonia.edu/gradstudies/forms.asp.

Students may use such graduate courses either to meet undergraduate degree requirements or to meet degree requirements in a Fredonia graduate program they enter at a later time. In the latter case, a student will be charged the difference between undergraduate and graduate tuition when the credit is applied to the graduate transcript. No course may be used for both purposes by the same person. In no case will an undergraduate be allowed to enroll in a course numbered 600 or above.
Grade 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 grade point average for a semester is determined by dividing the total quality points earned by the number of hours carried that semester; the cumulative grade 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 grade point average in the major or minor.
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 The Registrar. Applications are reviewed by the appropriate academic dean and department chairperson and must be in good financial and judicial standing.

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 2.0 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." Students

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.

Registration

While the university provides enough courses and seats for each accepted student to register for, a full schedule of courses each semester pertinent to their 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.

Early Registration is held during the latter part of the regular spring and fall semesters preceding the semester for which enrollment is sought. The exact dates of early registration will be announced by the Registrar through e-mail and the Registrar’s web page, and in campus publications. Students wishing to register must meet with their academic advisor and discuss their academic plan for the upcoming semester. Students will then register according to published guidelines.

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.

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 may withdraw from a course.

A fee of $20 will be assessed for each course added after the established add deadline. Transactions involving a switch from one section of a course to another will be charged one $20 fee.

Following the drop deadline and ending with the withdrawal date published by the Registrar each semester, a student may withdraw from a course after consultation with their advisor and course instructor. 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.

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.
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.

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.

Graduation from the university with the award of the appropriate degree (Bachelor of Arts, Bachelor of Science, Bachelor of Science in Education, Bachelor of Fine Arts, or Bachelor of Music) will be granted to students who fulfill the following requirements.

1. They must earn a minimum of 120 unduplicated credit hours.

2. They must complete all required courses in a particular major program, the General Education requirements of the General Education Program, and sufficient elective credits to make up the total required credit hours, with a minimum cumulative quality point average of 2.00. The student must also have a minimum cumulative quality point average of 2.00 in courses required for his/her major, minor, and concentration. Students should see department sections for any variation from this requirement.

3. Except for certain programs, students pursuing the B.A. or B.S. degree must earn a minimum of 66 hours in credits from disciplines other than their major discipline. For either the B.A. or B.S., students in multi-discipline major programs may not apply more than 45 hours in any one discipline toward credits needed for graduation.

4. All students must take a minimum of 45 semester hours at Fredonia. In order to count towards this requirement, a course must be taught by a SUNY Fredonia faculty member. This shall include courses taught by Fredonia faculty via distance education and up to 15 credits earned through study abroad under the INED subject code.

5. Under ordinary circumstances, students will have 10 consecutive years during which to complete the requirements for the undergraduate degrees in effect at the time they began their studies. If they wish to complete the degree after 10 years, their record of studies will be reviewed by the chairperson of the academic department in which their major falls, and by their academic dean, to determine how much of their earlier credit is still applicable. This rule applies not only to credit earned at Fredonia, but also to credit transferred to Fredonia from other colleges or universities. In addition, after 10 years, students will generally be required to complete the current General Education Program requirements. The student’s record of studies will be reviewed to determine how much of his/her earlier general education credit is still applicable. This policy notwithstanding, to the extent that certifying agencies change the requirements for a particular degree within the student’s original 10-year period or later, students will be bound by the new requirements of the agency.

6. Candidates in a program leading to certification to teach in New York State must satisfactorily complete all student teaching requirements. No grade less than S gives credit in student teaching.

7. Music students must meet certain accompanying and performance standards, and secondary Instrument competencies. Details on these requirements may be secured from the School of Music.

8. Students must meet all their financial obligations to the university and any or all of its supporting agencies.

9. A student who expects to graduate at a given date must make application through the Registrar’s office, not later than the third full week of classes of the final semester of attendance.

10. All students seeking an undergraduate degree must complete 45 credit hours at the upper-level (300 level courses and above). Please see your advisor for additional information regarding courses that will satisfy this requirement.

NOTE:

- Only 4 credit hours of physical education activities courses (100-level courses) may count toward the total number of credit hours needed for graduation.

- Not more than 6 credit hours of arts ensemble courses (e.g., MUS 021-047, DANC 110) may be counted toward the total number of credit hours needed for graduation, unless this rule is overridden by a requirement/limit stipulated by the student’s major.

- A maximum of 24 credit hours of internship credit may count toward the number of credit hours needed for graduation.
• Credit for a course may not be counted more than once, unless the course has been designated by the department as an exception to this rule.

Requirements for a Second Baccalaureate Degree

1. Some students will complete two major programs, but in most cases will only earn one degree. Fredonia students wishing to earn two separate degrees concurrently must complete a minimum of 150 semester hours and complete the requirements for the two degrees during the semester in which they have applied for graduation. The two degrees may not be of the same type as registered by the New York State Education Department. For example: a B.A. and a B.S. would be appropriate, but two B.A. degrees would not, as the latter can be accomplished in the declaration of a second major.

2. Fredonia graduates seeking an additional bachelor’s degree after conferral of the first degree must take a minimum of 30 semester hours at the university and must successfully complete the requirements of their additional major or program.

3. New students seeking an additional bachelor’s degree must take a minimum of 45 semester hours at Fredonia, to meet the residency requirement, and must successfully complete the requirements of their additional major or program.

4. A minimum of 15 credit hours must be successfully completed in the discipline of the second degree program. Of these 15 credit hours, no more than 3 credit hours may be taken as an independent study or internship. The department chairperson of the proposed degree program will prepare a written contract outlining the required courses, prior to admission to the program.

5. The student must have a minimum cumulative quality point average of 2.00 in all courses required for the second degree and in courses required for the second major or program. Students should see the department sections for any variation from this requirement.

6. Students must meet all their financial obligations to the university and any or all of its supporting agencies.

7. A student who expects to graduate at a given date must make application through the Registrar’s office, not later than the third full week of classes of the final semester of attendance.

Course Numbering System

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.

Courses numbered from 600 to 699 are open to graduate level students only.

Class Level Definitions

Students are given class designation according to the number of credit hours successfully completed, as follows:

- Freshman: fewer than 30 credit hours
- Sophomore: 30 or more and fewer than 60 credit hours
- Junior: 60 or more and fewer than 90 credit hours
- Senior: 90 or more credit hours

Student Identity Verification in Online and Distance Education Courses

Online classes at Fredonia are offered through the campus-supported Learning Management System (LMS). Students are required to log in to the system using their campus-assigned student eServices User I.D. account retrieved from the Student Information System Self-Service Portal (Your Connection). The credentials for Your Connection are issued to the student upon applying to the institution. When the institution receives the student’s paid admissions deposit the student’s eServices User I.D. and password is provisioned. Enrollment information is transferred from the campus Student Information System (SIS) to the LMS to ensure that students have access to all (and only those) courses for which they are enrolled.
Student Identity Verification

Access to the LMS is controlled by the student’s eServices user I.D./password, and official communication with the student is through a campus-assigned email account. The student’s eServices User I.D. account credentials are retrieved through the Student Information System Self-Service Portal (Your Connection). This interface provides Fredonia students initial access to user-specific information, including User I.D. and password information for use of electronic resources and computing facilities at Fredonia. The login credentials to Your Connection utilize the student’s Fredonia I.D. (FID) as the UserID and an assigned PIN for the initial PIN. The student is forced to change the PIN immediately upon logging in for the first time. Students must provide ID when requesting password resets at the ITS Help Desk (or answer a series of challenge questions when making the request by phone). All accounts are generated by Fredonia – students do not self-enroll in any online-access accounts.

Protection of Student Privacy

All processes related to the verification of student identity for online course access are automated, protected by campus information security and privacy policies and procedures, and in compliance with FERPA regulations. Such information security provisions include secure authentications and connections to electronic resources, password integrity guidelines, password complexity and length requirements, self service password resets, required account security questions, and various levels of encryption.

Charges Associated with Identity Verification

There are no charges to students associated with identity verification.

Responsibility for Identity Verification

Information Technology Services is responsible for the consistent application of the automated electronic processes related to student identity verification for online courses.

Student Responsibility for Safeguarding Credentials

Students are responsible for safeguarding their student accounts and for all activity associated with those accounts. Sharing of login credentials with the intention of anyone other than the registered student completing course work is considered a violation of the Academic Integrity Policy and Computer and Network Usage Policy.

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 (p. 533).)

Transfer Credit

Enrolled students must secure prior approval from the chairperson of their major program (or department of advisement), from the chair of their minor, if applicable, and from the Registrar, before credit taken at another college or university will be transferred to the student’s record at Fredonia. Students applying for such approval should provide the chairperson and Registrar a copy of the course description from the other college catalog. Transfer Credit Approval forms are available in the Office of the Registrar.

Students who have been required to withdraw from the university may not complete degree requirements by taking courses at another college, unless they are subsequently readmitted and enrolled in courses leading to a degree program at Fredonia.

Credit for non-collegiate sponsored instruction will be awarded upon the recommendation of the appropriate dean, following consultation with department chairpersons as appropriate. Where applicable, the guidelines found in College Credit Recommendations (published by the Board of Regents/State Education Department) should be followed.

Credit will be subject to these limitations:

1. It is to be considered transfer credit.
2. It is elective credit.
3. A maximum of 12 credit hours may be counted toward graduation.
4. Consistent with university policy, physical education credit should be limited to 4 credit hours.
Upper Level Requirement

All students seeking an undergraduate degree must complete 45 credit hours at the upper-level (300 level courses and above). Please see your advisor for additional information regarding courses that will satisfy this requirement.

Withdrawal and Honorable Dismissal

A student who finds it necessary to leave the university before the end of a semester must officially withdraw by the established deadline, be sure to check the academic calendar for “dates and deadlines” to ensure you have not missed the deadline to non-medically withdraw from Fredonia. To begin the process start by downloading and filling out the 'Withdrawal Form,' which can be found in the Office of Academic Advising Services located on the 4th floor Reed Library or at the this link https://www.fredonia.edu/academics/academic-advising/withdrawal

Failure to follow the required procedure may prejudice the right to an honorable dismissal and to any refunds.

A student withdrawing during a term may be eligible for certain refunds. Please check the Admissions & Financial Aid (p. 545) section of the catalog for more information.
ADMISSIONS AND FINANCIAL AID

For Undergraduate Admissions
Office of Admissions
606 Maytum Hall
State University of New York at Fredonia
Fredonia, NY 14063
Telephone: (716) 673-3251 / (800) 252-1212
FAX: (716) 673-3249
E-mail: admissions@fredonia.edu

To apply online: www.fredonia.edu/apply

For Graduate Admissions contact:
Office of Graduate Studies
606 Maytum Hall
State University of New York at Fredonia
Fredonia, NY 14063
Telephone: (716) 673-3808

To apply online: https://www.fredonia.edu/academics/graduate-studies

Financial Aid website: https://www.fredonia.edu/admissions-aid/financial-aid

Undergraduate Admissions
http://home.fredonia.edu/apply

Submitting the Application
The State University of New York at Fredonia accepts both the SUNY Application and the Common Application. We encourage you to apply online at https://www.fredonia.edu/admissions-aid/apply. The fee for applying is $50, but eligible students can submit a fee waiver based on financial need through their school counselor. As a transfer student from a SUNY community college who is graduating with an associate degree, you can have the application fee waived by talking to your advising office on your campus and completing the SUNY Application.

Your application will be reviewed individually by our Admissions Committee. A complete application for first year students consists of a high school transcript, admissions essay, resume, at least 1 letter of recommendation, and standardized test scores (SAT or ACT for domestic students). Transfer students will need to submit their college transcript and proof of high school graduation, we encourage an essay and resume (not required). Students can send in all supporting materials directly to the Office of Admissions, 606 Maytum Hall, 280 Central Avenue, Fredonia, N.Y. 14063.

While there is no stated application deadline, we recommend that you submit your request for admission as soon as possible, as there are a limited number of openings in some academic programs. Consider November 1 for the spring semester and March 1 for the fall semester as recommended deadlines.

Campus Visit
A campus visit is extremely important. It is your opportunity to learn more about the university from those directly involved in the educational process at Fredonia.

You are invited to visit the campus to discuss your application with an admissions counselor, meet with a faculty member in your chosen field of study, and tour the facilities. We offer small group information sessions and campus tours weekdays while classes are in session. There are a number of special visitation programs throughout the academic year. Visits are also possible on select Saturdays throughout the year. You may visit during the summer as well. Request information about specific dates and times for arranging an appointment with the Office of Admissions by calling (716) 673-3251, dialing toll-free at (800) 252-1212, accessing our website at https://www.fredonia.edu/admissions-aid/visit-tour or email admissions@fredonia.edu.
We host an Accepted Student Reception for admitted 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 academic major 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.

Additional advance deposits are required to secure a 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.

**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. Admission to college is a matter of meeting the competition among applicants, as well as having a comprehensive, challenging university preparatory program combined with good achievement. 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**

To ensure your success in a timely and cost-effective manner, we have implemented "Fredonia in 4", a program for first-time freshmen which stipulates that the university pledges to adhere to a commonly understood agreement to provide the necessary courses and academic advising which will guarantee that you finish your degree program in four years (with the exception of Music Therapy which will require a clinical internship of at least an additional six months).

**SUNY Transfer Applicants**

SUNY is committed to helping SUNY students complete their baccalaureate goals. Students are guaranteed a minimum of 60 credits (which is junior standing) for earning an A.A. or A.S. degree. SUNY students can also feel confident that the courses they took to complete their general education requirements (SUNY-GER) at their current school will apply towards the general education requirements at any SUNY school. In addition to your official SUNY college transcript, we will receive a General Education Transcript Addendum (GETA). The GETA lists the SUNY General Education Courses that you completed at your previous SUNY institution. We will award SUNY General Education credit as indicated on your GETA. SUNY Transfer Paths were developed to help students select appropriate lower division courses to apply towards major requirements at any SUNY institution. Additional information on SUNY’s commitment to seamless transfer can be located on the SUNY Transfer Mobility website: [http://www.suny.edu/attend/get-started/transfer-students/](http://www.suny.edu/attend/get-started/transfer-students/).

**Transfer Admission**

Fredonia considers all requests for admission from 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 our certification programs in teacher education requires a minimum 3.0 GPA to be eligible for consideration. Admission to the Communication Disorders and Sciences Program requires also requires a 3.0 GPA.

We require an official transcript from every college you previously attended (even if you didn’t earn credit), and a high school transcript (SAT or ACT results are required if you have completed less than 30 credit hours at the time you apply). If you have been out of high school for more than two years, SAT or ACT scores are not required. All transfers students must submit an official final high school transcript for verification purposes, unless they graduate with an A.A. or an A.S. degree.

**Special Admissions Programs**

**Full Opportunity Program**
The Full Opportunity Program (FOP) is a campus-based program for students who fall slightly shy of our traditional admissions criteria. In selecting students for the program, Admissions looks holistically at each applicant to determine their potential for success. Admissions decisions are based on a student’s ability to be academically successful in a rigorous college setting.

FOP is a vibrant support program designed to assist students in navigating their way through the college experience. Flexible, individualized and compassionate support from professional staff and peer mentors provides guidance for students as they develop a strong foundation for success.

Because we are committed to your success, FOP offers a wide range of programs and services to help you have the most fulfilling experience during your time at Fredonia. Students will have the opportunity to take advantage of:

- Individual tutoring
- Academic advising
- Guided study sessions

More information about the Full Opportunity Program support services is available here [https://www.fredonia.edu/academics/full-opportunity-program](https://www.fredonia.edu/academics/full-opportunity-program).

**Educational Development Program (Educational Opportunity 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, or EDP, 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 EOP 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 “academically eligible” means you do not meet the usual Fredonia admissions standards, yet you must demonstrate academic potential, 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 an EOP-type program, then we attempt to determine whether you would have been deemed eligible for EOP at the time of your high-school graduation.

For more information about the Educational Development Program support services, interested persons should refer to the Educational Development Program.

**Joint Admission**
Fredonia has implemented joint admission agreements with several two-year colleges, both public and private. Joint admission program students request admission to Fredonia by applying to the admissions office at the two-year college and completing requirements for the associate degree.

You must meet all requirements as stated in our University Catalog and the joint admission agreements in order to continue with your studies at Fredonia. You may obtain information from our transfer counselor in the Office of Admissions at Fredonia or the two-year college.

1. Time-Shortened Degree Program. Students enrolling at Fredonia may select from a variety of individually determined and contracted time-shortened degree options. Because some academic programs at the university are incompatible with the time-shortened degree, counseling from an academic or admissions counselor is advisable.

**Pathway Programs**

*Early Admission 3-1-3 Program.* Accelerated high school juniors who wish to begin college coursework during their senior year of high school may wish to explore this opportunity and apply for early admission. We expect applicants to have completed the majority of their coursework in college preparatory mathematics and sciences, a sequence in foreign languages with above-average academic achievement, and present above-average test results on the PSAT, SAT or ACT scores. Your high school counselor must submit a recommendation in support of your request for early admission. Interested students should work with their high school counselor and submit the SUNY application available online and select curriculum code 0199. Your high school counselor will develop your joint college and high school class schedule.

https://www.fredonia.edu/student-life/new-student-and-transition-programs/students-interested-3-1-3

**Transfer Credit from Other Institutions**

After a student has been admitted to Fredonia, the Office of the Registrar evaluates transcripts from other colleges and/or universities. Faculty are consulted in establishing course equivalencies. Credit will be awarded for parallel liberal arts courses, taken at regionally accredited institutions, in which a passing grade was earned. However, academic departments may have minimum grade requirements and courses may need to be repeated. Students should consult the academic program section in the college catalog for minimum grade requirements. Official transcripts are required for evaluation. College credit that is more than 10 years old will be reviewed by the academic department and may not apply to current degree requirements. The student is responsible for requesting course descriptions from the original institution if deemed necessary.

**Students entering Fredonia in FALL 2020 or SPRING 2021:**

- may apply a maximum of 75 transfer credits towards their baccalaureate degree.

**Students entering Fredonia in FALL 2021 or later:**

- may apply a maximum of 60 transfer credits at the lower-division (Fredonia equivalent courses at the 100/200 level) towards their baccalaureate degree
- may apply an additional 15 credits at the upper-division (Fredonia equivalent courses at the 300/400 level) towards their baccalaureate degree.

Your academic department chairperson or designee determines the distribution of specific courses in fulfillment of departmental requirements in your chosen field of study and provides information about which courses you will need to complete degree requirements in a timely manner.

Your grade point average does not transfer; only credit hours are awarded. Your Fredonia transcript will only display the transfer college name and the total number of credits accepted by Fredonia. You must fulfill all university and departmental requirements for the baccalaureate degree, including a residency requirement of 45 semester hours of credit at Fredonia. Additional requirements for the Bachelor’s Degree are located in the All Programs (p. 15) section in the catalog.

Visit our Transfer Student Services web page https://www.fredonia.edu/student-life/transfer-student-services to view our transfer credit equivalency database and a list of current articulation agreements. As a prospective transfer student, we encourage you to visit the university to discuss transfer credit and graduation requirements with a departmental academic advisor or our admissions transfer counselor.
Transfer Credit Appeal Process

The appeal process can be used when a student wishes to contest the way his or her transfer course was evaluated (that is, whether the course was equated to a specific Fredonia course or applied to a particular degree requirement). The appeal must be made during the student’s first semester of enrollment at Fredonia.

The appeal process is initiated in the Registrar’s Office where a counselor will explain the process and determine if a formal appeal needs to be made. Students wishing to pursue the appeal process must complete the transfer credit appeal form and submit it to the appropriate department for review. Instructions regarding this process and the appeal form are available on our transfer student services web page: https://www.fredonia.edu/student-life/transfer-student-services

Students transferring from SUNY schools, who are not satisfied with Fredonia’s final decision, can appeal to the SUNY Provost. The appeal form and instructions are available at: http://system.suny.edu/academic-affairs/student-mobility/student-transfer-appeal-process/.

Prior Credit and Credit by Examination

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. Students may not earn duplicate credit for both a college course and a proficiency exam for the same subject area. For example, students cannot earn credit for US history by taking both the AP US History Exam and a college course in US History. The following website includes all credit by examination that are area acceptable: http://www.fredonia.edu/admissions/advance_credit_list.asp#ap.

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 Fredonia Foundations general education Program

College-Level Examination Program: CLEP General Examinations substitute for some of the Fredonia Foundations requirements. Subject Examinations substitute for specific course requirements. To determine which examinations are acceptable for credit, check with the Registrar’s Office 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; some exams require a higher score. Students who have earned more than 60 college credits may earn credit for CLEP Subject Exams but not General Exams.

College Coursework Completed in High School: A number of first year applicants seek transfer credit for college courses successfully completed while enrolled in high school. Submit an official transcript from the college awarding credit to the Registrar’s Office. 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 academic programs 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.

Cambridge International Exams: Students who have earned a C or higher on the Advanced Subsidiary Exams (AS Level) and/or the Advanced Level Exams (A Level) may earn college credit. Students will need to submit official test results from Cambridge International to the Registrar’s Office to earn transfer credit.
International Admissions

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 online application (https://www.fredonia.edu/admissions-aid/international-admissions) 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 Admissions at admissions@@fredonia.edu or by visiting https://www.fredonia.edu/admissions-aid/international-admissions.
Undergraduate Tuition and Fees

This section presents an estimate of the cost of attending Fredonia for one year. University charges (tuition, fees, room rent, board) are paid on a semester basis, at one-half of the rates listed below. The semester charges must be paid on or before the registration date for each semester. Students will receive up-to-date information concerning charges and payment procedures several weeks prior to the registration date.

All charges are subject to change.

**Annual University Charges Applicable to all Students**

Estimated expenses per year for a full-time (12 or more credit hours) undergraduate:

* Undergraduate Tuition
  
  | In-State         | $7,070.00 |
  | Excelsior        | $6,470.00 |
  | Out-of-State     | $16,980.00|
  | College Fee      | $50.00    |
  | Student Services and Programs Charge | $1,597.00 |

New students who have paid a $50 Advance Admission Deposit will have this amount deducted from the tuition charge for their initial semester at Fredonia.

All rates and fees are subject to change. Individuals should view the Student Accounts web page for the current university charges at fa.fredonia.edu/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 $2,500 - $3,000

**Additional Charges for Residents in Residence Halls**

| Room Rent | $7,800 - $9,400 |
| Board (Food Service) | $4,300 - $5,430 |

**Student Services and Programs Charge**

The Student Services and Programs Charge combines all university fees for student services, programs and activities in one composite amount for all students. As a result, there are no general university fees and no additional mandatory fees once a student arrives on campus (although some departments may assess individual departmental fees). The Student Services and Programs Charge includes support for the following programs and activities:

Advanced Technologies for Classroom Use
Alumni Affairs
Blue Devil Fitness Center
Campus Community Bus
Campus Internet Access
Campus Microcomputer Labs and Support
Campus Fine Arts
Fredonia Ticket Office (Student Discounts)
Counseling Center
Coupons for Discounts at Area Merchants
Family Weekend Events
Intercollegiate Athletic Sports Program
Intramural and Recreational Program
Legal Services
Homecoming Weekend Events
On-Campus Student Employment
On-site Medical Care
Health Education Programs
Medical Laboratory Work
Over-the-Counter Medications
Prescription Medications
Wellness Checkup
Parking Services
Parking Shuttle Service
Student Engagement
Student Government
Student Organizations and Clubs
Student Scholarships
University Special Events
University Transcripts
Upper Class Buddy Program
Van Service to Hospital/Clinic

The Student Services and Programs Charge waiver policy (Policy 003) can be found at fa.fredonia.edu/policy.

**Room Charge**
The standard rate when two students are assigned to a room is $3,900 per semester. Single rooms are available in limited quantities for $4,300 per semester. Kitchen suites (double occupancy), where available, are $4,100 per semester. Single and double rooms in University Commons are $4,500 and $4,100 per semester, respectively. University Village Townhouses (single occupancy) are $4,700 per semester. Inquiries as to charges and accommodations should be addressed to the Office of Residence Life, Gregory Hall. (Figures reflect 2020-2021 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 https://www.fredonia.edu/student-life/residence-life, 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 Eisenhowe r kitchen suites, University Village Townhouses and commuter students are not required to maintain a meal plan, however, they may choose any plan. Also, resident freshmen are required to maintain Meal Plan 1 for their first semester and may change plans for future semesters.

Meal plans are not active during recess or break periods in excess of four days such as Thanksgiving week, winter recess, spring break, and summer recess.

The FSA offers a combination of declining balance (points) and traditional meal plans to suit the needs of each student. The costs for meal plans are priced per semester and are subject to change annually. Costs begin at $2,150 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 Schedule for specific courses and charges. Students majoring in Arts in Music (which includes 5 tracks - Performance, Entrepreneurship, Jazz, Music History & Literature and Music & Technology), Music Performance, Music Education, Music Composition, Sound Recording Technology, Music Therapy, Music Applied, Fine Arts in Musical Theatre, Music Education Masters in Five, Master of Music in Music Education, Master of Music in Music Education Studies, Master of Music in Education, Master of Music in Performance, Master of Music in Performance - Collaborative Piano, Master of Music in Theory/Composition and Master of Music in Music Therapy are assessed a $250 Music Fee each semester.

In addition, the State University authorizes charges for such items as returned checks ($20), late registration ($40), first-year orientation ($150), transfer orientation ($80), late payment/administrative (up to $50), and drop/add fees ($20). Fines are
authorized for parking violations, the late return or loss of library materials, and failure to return physical education or infirmary equipment. All fees are subject to change.

**Part-Time Study**

* In-State Tuition  
  $295.00 per credit hour

* Out-of-State Tuition  
  $708.00 per credit hour

College Fee  
$ 1.70 per credit hour

Student Services and Programs Charge  
$ 66.55 per credit hour

* State University policy requires that a student be a resident of New York State for one year prior to registration in order to qualify for in-state resident tuition charges. Persons should contact the Student Accounts Office for complete information governing residency requirements.

All rates and fees are subject to change. Persons should see the Student Accounts web page for the current university charges at fa.fredonia.edu/studentaccounts.

Full-time rates do not apply for summer or J-Term semesters; tuition is calculated at the part-time per credit hour rate.

**College Fee**

This is a uniform, mandatory charge for all students, established by the State University of New York.

**Student Health Insurance**

All students are strongly encouraged to have Health Insurance coverage. Fredonia does not offer health insurance coverage due to the Affordable Care Act. Please note that all International students must carry health insurance. International students must consult with the Office of International Education for more information regarding specific insurance needs by calling (716) 673-3451 or by emailing international.education@fredonia.edu.

**State University Refund Policies**

*The Advance Admission Deposit of $50 is refundable until April 30 (November 1 for spring enrollment) or 30 days after the day of acceptance, whichever is later. After this it may not be refunded except in cases of withdrawal for reasons beyond the control of the student and with approval of the University President or his/her designee.*

*The Advance Room Deposit of $50 is refundable until July 1 (December 1 for spring enrollment). Refunds may not be made after this date except in cases of withdrawal for reasons beyond the control of the student and with approval of the University President or his/her designee.*

**Tuition**  
A student withdrawing from the university or individual courses during the fall or spring semester is eligible for the following tuition refunds:

- 100 percent for withdrawal during the first week of classes
- 70 percent for withdrawal during the second week of classes
- 50 percent for withdrawal during the third week of classes
- 30 percent for withdrawal during the fourth week of classes
- 0 percent for withdrawal beyond the fourth week of classes

A full refund of tuition may be granted if a student must withdraw for reasons beyond his/her control with the approval of the University President or his/her designee.

*Please note that Thanksgiving and Spring Break do not count as a week during the semester for Title IV and calculation purposes. 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.
Undergraduate Financial Aid

The primary objective of financial aid is to ensure that all eligible financial aid applicants benefit from federal, state, institutional and private financial assistance for higher education related expenses. Students are encouraged to go online at Fredonia’s financial aid website at http://home.fredonia.edu/finaid for current information.

How Do I Apply for Financial Aid?

How do I apply for Federal Financial Aid?
The Department of Education’s Federal Student Aid (FSA) programs are the largest source of student aid in the U.S. Last year, undergraduate and graduate students received more than $100 billion in financial aid. You should file the FAFSA as soon after October 1 as possible. Follow the three steps outlined below:

Step 1: Apply for an FSA ID and password. An FSA ID and password lets you apply, "sign" your online FAFSA, make corrections to your application information and more – all online. Go to https://fsaid.ed.gov 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 October, in order to meet school and state aid deadlines. Apply online at www.fafsa.gov. 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.

How Do I Apply for the New York State Tuition Assistance Program (TAP)?
It is also recommended that you apply for TAP online at www.tapweb.org. As mentioned above, you should start the application process with the online Free Application for Federal Student Aid (FAFSA) at www.fafsa.gov. The New York State Higher Education Services Corporation (HESC) will use the FAFSA data as part of your online TAP application. After completing your FAFSA, there will be a link to the online TAP application on your FAFSA Confirmation Page.

To apply for TAP online, you need a HESC PIN (Personal Identification Number). Use the HESC PIN to “sign” your TAP application, keep track of your application information, or make changes. Once you have the HESC PIN, complete your TAP application online and insert SUNY Fredonia’s TAP School Code (0915 undergraduate). Information from your FAFSA and your family's calculated New York State net taxable income are pre-filled on your online TAP application. You will be able to check the status of your TAP application online at any time.

Please be alert to HESC e-mails and respond to any requests or instructions. If you received TAP the year before and your application information is unchanged, you may only have to file a FAFSA to get TAP. The TAP application deadline is May 1 of academic year for which aid is sought.

Early application is strongly encouraged for both federal and state financial aid. Since funds are limited, early applications are given first consideration.

When Will I Hear About My Financial Aid?
1. For the 2020-2021 aid year, new students will receive an initial Financial Aid Award Letter in December that will list all federal, state, and institutional aid that the applicant is eligible to receive. Returning students will receive an email notifying them that their aid is now available in Your Connection to view.

2. If you have been awarded a Federal Work Study position, the TEACH Grant, and/or a Federal Direct 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 must be accepted by July 31 or the award will be cancelled and offered to another student. Refer to our website or the Financial Literacy Guide for instructions.

3. To move federal awards to an authorized status for billing purposes, applicants may be required to go through the federally mandated verification process. If requested, federal tax information and W-2 forms (if applicable) for the student and parents, as well as a verification worksheet, must be submitted. This information is needed in order to verify the accuracy of the data reported on the original FAFSA application (see below).

4. Throughout the summer the Financial Aid Office processes student aid paper work with the intention of making aid authorized for credit on the university bill by mid-July. Students must submit paperwork on a timely (as early as possible) basis in order to ensure that this occurs.
How is Aid Awarded?
Applicants for aid are considered based on all of the following criteria:

1. Funds available to the university from governmental, institutional and private sources.
2. Financial eligibility as determined by the U.S. Department of Education's FAFSA processing.
3. Date of receipt of FAFSA results from the Federal Central Processor.

Verification

Federal Verification of FAFSA Information
Many financial aid applicants will be required to verify the information that is reported on the FAFSA/Renewal FAFSA completed each year. Financial data, such as income, 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:

- 2020-2021 Federal Verification worksheet;
- Parent(s)/Student tax filer income information either by the IRS Data Retrieval Process, 2018 IRS Federal Tax Return Transcript or a signed and dated copy of the 2018 Federal Tax Return and all applicable schedules;
- If the Parent(s) did not file a Federal tax return, an IRS Verification of Non-filing letter confirming their non-tax filing status will be required for each parent on the FAFSA along with proof of income earned such as 2018 W-2's;
- Parent(s)/Student's signed 2018 Amended Federal Tax Return IRS Form 1040X (if applicable);
- Parent(s)/Student's signed and dated copy of pages 1 & 2 of their 2018 Federal tax return for their untaxed Pension/IRA distribution;
- High School Completion Status-Certain applicants will be required to verify their high school completion status - high school diploma, recognized equivalent of a high school diploma, or home school, if requested;
- Identity/Statement of Educational Purpose - Certain applicants will be required to verify their identity and resubmit a Statement of Educational Purpose, as was originally provided as part of the FAFSA submission, if requested.

To request an IRS Federal Tax Transcript, go to www.irs.gov and use Form 4506-T, or quickly request a transcript by clicking on "Get Your Tax Record," or call 1-800-908-9946.

FAFSA applicants who are selected for Verification must complete this process in order to move their Federal financial aid towards their direct charges. The FAFSA Verification process takes a minimum of four to six weeks, so it is highly recommended that students file their FAFSA early and turn in all requested Verification paperwork as soon as possible.

Updating FAFSA Through The Mandated IRS Data Retrieval Process
All FAFSA on the web applicants, and the parents of dependent applicants, who indicate that they have filed their Federal tax returns prior to completing their FAFSA and who are otherwise eligible will be directed to use the FAFSA-IRS Data Retrieval process to complete their FAFSA more easily and accurately. Applicants who choose not to use this process, or who retrieve IRS data but subsequently change it on their FAFSA, will be informed that they will be subject to being selected for the FAFSA Verification process and will be required to support their reported FAFSA data with information obtained directly from the IRS. We strongly encourage families to file their initial FAFSA as soon after October 1.

Good Academic Standing and Receipt of Undergraduate Financial Aid

Requirements
State and federal regulations require that all financial aid recipients maintain program pursuit and make satisfactory academic progress toward completion of degree program requirements. The Financial Aid Office at Fredonia evaluates student aid academic progress according to state requirements for TAP, SUNYTC, SUSTA, APTS, and PTAP at the completion of each semester and according to federal requirements for SEOG, PELL, TEACH, Work Study, Direct Stafford and Direct Plus loans at the completion of the academic year. All three criteria in the charts below must be met in order to retain financial aid for the following semester. If a student withdraws from a course, it may affect his/her aid for the next semester.
### New York State Good Academic Standing Chart for Undergraduate Students who first received TAP in 2010-11 and thereafter (TAP, SUNYTC, SUSTA, APTS, PTAP)

Before receiving this TAP payment you must meet all 3 criteria below:

<table>
<thead>
<tr>
<th>Receive passing/failing grade for this percent of credit hours attempted during last semester</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9*</th>
<th>10*</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>ft=6</td>
<td>ft=6</td>
<td>ft=9</td>
<td>ft=9</td>
<td>ft=12</td>
<td>ft=12</td>
<td>ft=12</td>
<td>ft=12</td>
<td>ft=12</td>
<td>ft=12</td>
</tr>
</tbody>
</table>

Must have accrued at least this many total credits:

| 0 | 6 | 15 | 27 | 39 | 51 | 66 | 81 | 96 | 111 |

Maintain at least this Grade Point Average:

| 0 | 1.5 | 1.8 | 1.8 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 |

* Only students in approved five-year programs (EOP and Public Accountancy) are eligible for 10 semesters of undergraduate TAP. All other students are limited to eight semesters of undergraduate TAP.

### New York State Good Academic Standing Chart for EOP Undergraduate Students and Students Whose First TAP Payment was 2006-07 through 2009-10 (TAP, SUNYTC, SUSTA, APTS, PTAP)

Before receiving this TAP payment you must meet all 3 criteria below:

<table>
<thead>
<tr>
<th>Receive passing/failing grade for this percent of credit hours attempted during last semester</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9*</th>
<th>10*</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>ft=6</td>
<td>ft=6</td>
<td>ft=9</td>
<td>ft=9</td>
<td>ft=12</td>
<td>ft=12</td>
<td>ft=12</td>
<td>ft=12</td>
<td>ft=12</td>
<td>ft=12</td>
</tr>
</tbody>
</table>

Must have accrued at least this many total credits:

| 0 | 3 | 9 | 21 | 33 | 45 | 60 | 75 | 90 | 105 |

Maintain at least this Grade Point Average:

| 0 | 1.10 | 1.20 | 1.30 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 |

* Only students in approved five-year programs (EOP and Public Accountancy) are eligible for 10 semesters of undergraduate TAP. All other students are limited to eight semesters of undergraduate TAP.

### Repeated Courses

Courses in which the student has already received a passing grade cannot be included in meeting full-time study requirements for state-sponsored financial aid. Repeated courses may be counted toward full-time study requirements if a student repeats a failed course, if a student repeats the course for additional credit, if a student has received a grade that is passing at the institution but is unacceptable in a particular curriculum, or when a student repeats a previously withdrawn course.

### Notification Procedure

The Financial Aid Office will notify the student within one month after the conclusion of the Fall semester if good academic standing requirements were not met while the student received State aid, and within one month after the Spring semester while the student received State aid. The letter will inform the student of loss of aid at Fredonia for the semester immediately following the one in which the program pursuit and satisfactory academic progress standards were not met and will also apprise the student of the waiver procedure to follow if the student feels financial aid should be reinstated.

### Waiver Procedure

A request to reinstate State aid for the next semester at Fredonia will be evaluated and granted only if exceptional circumstances (e.g., family illness or death, personal illness, personal emotional disturbances, other unusual circumstances) 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 their aid for that semester at Fredonia must complete and submit the waiver form along with appropriate documentation to the Office of Financial Aid for evaluation by the published deadline.

**Good Academic Standing Chart for Federal Aid (PELL, SEOG, TEACH, Work Study, Direct Stafford, Direct Plus Loan)**

<table>
<thead>
<tr>
<th>Grade Level 1</th>
<th>Grade Level 2*</th>
<th>Grade Level 3</th>
<th>Grade Level 4</th>
<th>Grade Level 5</th>
<th>Grade Level 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Receive passing/failing grades for this percent of credit hours attempted during the last two semesters</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0 ft=0 pt=0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>50% ft=12 pt=6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>75% ft=18 pt=9</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>100% ft=24 pt=12</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>100% ft=24 pt=12</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Must have accrued this many total credits</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>54</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>78</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>102</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maintain at least this cumulative Grade Point Average</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ft = full-time pt = part-time</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Receipt of federal aid is limited to 12 semesters (for students enrolled full-time), according to Federal Regulation 34CFR PART 668.16.

Students should be aware that course repeats do not count as a completion in determining Good Academic Standing.

Part-time students enrolled beyond 12 semesters (up to 24 semesters maximum) must continue to complete 100 percent of hours attempted and maintain a 2.0 GPA.

As a rule, students should always check with the Financial Aid office when considering a withdrawal from courses or the university.

**Federal Satisfactory Academic Progress (SAP)**

Final regulations published in the Federal Register on October 29, 2010 (668.16 and 668.34) by the U.S. Department of Education require institutions that participate in the student financial aid programs under Title IV of the Higher Education Act of 1965, as amended to (the HEA), to implement new guidelines, effective July 1, 2011; tied to the annual Satisfactory Academic Progress (SAP) review for federal student aid. Fredonia conducts a review of Satisfactory Academic Progress tied to the receipt of federal student aid on an annual basis, at the completion of the Spring semester. If a student fails to achieve satisfactory academic progress at that time, the institution may not award and disburse federal Title IV program funds to the student.

**Incompletes and WD’s**

Effective July 1, 2011, 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 they fail to meet federal Satisfactory Academic Progress requirements.

- If the student chooses to appeal the loss of federal student aid for the subsequent semester, they 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 by the published deadline.
• 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, and/or other unusual circumstances.

• 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 electronic means.

• If the federal aid waiver is approved, and the student has an overall GPA below a 2.0, they are placed in a **Financial Aid Probation** status for the semester in which they are requesting their aid be reinstated for.

• 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 Advisor/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 student’s mandate to meeting federal Satisfactory Academic Progress requirements in place of the standard federal SAP Chart.

### 2020-2021 University Costs

<table>
<thead>
<tr>
<th></th>
<th>N.Y.S. Resident</th>
<th>Out-of-State Resident</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tuition</td>
<td>$7,270</td>
<td>$16,980</td>
</tr>
<tr>
<td>Fees</td>
<td>$1,675</td>
<td>$1,675</td>
</tr>
<tr>
<td>Room</td>
<td>$7,850</td>
<td>$7,850</td>
</tr>
<tr>
<td>Food</td>
<td>$5,390</td>
<td>$5,390</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>$22,195</strong></td>
<td><strong>$31,895</strong></td>
</tr>
</tbody>
</table>

Although every effort is made to keep university costs as low as possible, the costs can change during the year. The above figures are estimates and are subject to change but were accurate at the time of printing. Students should plan on other indirect expenses (books, transportation, and personal costs) which may range from $2,000 to $3,000 for an academic year.
Graduate Admissions

Graduate Admission Requirements

Students who wish to pursue an advanced degree or certificate must complete the online application. Fredonia does not have a general application deadline and applications are accepted up to a week prior to the start of the desired admission term. Some degree programs may specify application deadlines; please check the requirements for your desired program. All applicants must pay a $75 application fee.

Funding opportunities, including graduate assistantships, are available to graduate applicants. These opportunities often have deadlines starting early in the calendar year. Please check the Graduate Studies website or contact the office if you have questions about funding opportunities.

Admission to graduate study is based on the following requirements:

- Completion of a baccalaureate degree or equivalent from an accredited post-secondary 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 desired degree program. Decisions about appropriateness of undergraduate preparation are made on an individual basis during the department review process.

- Completion of the online graduate application and payment of the application fee.

- Submission of official transcripts from all post-secondary institutions attended. Submission of Fredonia transcripts is not required.

- Submission of appropriate academic and professional references. Most programs require two letters of recommendation, preferably written during the last six months, from individuals who can attest to the applicant’s qualifications for advanced study. Some degree programs may have different requirements for references; please check the requirements for your desired program.

- Submission of proof of appropriate certification, a requirement for applicants to advanced teacher certification degree programs.

- Submission of program-specific requirements. Some degree programs may have additional admission requirements; please check the admission requirements for your desired program.

Once an application is considered complete (all admission requirements have been met), the applicant will be notified that the application is in department review status. Applicants will receive a decision email once the department review process is complete; accepted students will receive a welcome packet shortly thereafter. Important information for new students can be found at the Getting Started page. Please email or call the Graduate Studies office with questions about the application process.

For additional information, please see Graduate Admissions in the Admissions and Financial Aid section of the catalog.

International Graduate Application Requirements

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, in certain cases, international students can get certification. Students should contact Graduate Studies at (716) 673-3808 or email graduate.studies@fredonia.edu.

In addition to the general application requirements, international applicants are required to submit additional materials in order to complete immigration paperwork necessary to study in the United States.

International applicants must submit the following additional materials, available on the Graduate Studies website (http://home.fredonia.edu/gradstudies):
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:

FSA form: Financial Statement: All international applicants must submit evidence of full financial support for all expenses at Fredonia as a condition of being issued immigration documents for an F-1 student visa. 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 must send the FSA-4 form and supporting documentation to the Assistant Director of International Student Services, S226A Williams Center, Fredonia, NY 14063 (or email to iss@fredonia.edu).

Persons who have further questions about these requirements should contact the Assistant Director of International Student Services iss@fredonia.edu.

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, and/or departmental websites.

Non-degree Study

Reasons for applying to become a non-matriculated (non-degree) student vary, but usually fall into the following categories:

Personal or professional development: Those who have earned a master's degree or higher at Fredonia or elsewhere are welcome to apply for non-degree graduate study for the purpose of personal or professional development. A maximum of 9 credit hours is allowed, but may be waived.

Pre-graduate preparation: Students who have earned a bachelor's degree and need to take graduate-level coursework in order to bolster a weak undergraduate GPA or to prove capability for graduate-level work may apply for non-degree study and, if approved, take a maximum of 9 credit hours.

Visiting graduate students: Graduate students who attend other schools and are interested in taking course work at Fredonia may apply for non-degree graduate study and, if approved, take a maximum of 9 credit hours.

To help maintain the quality of Fredonia's graduate programs and to ensure appropriate enrollment capacity, the university asks that applicants explain reasons for requesting non-matriculated admission and indicate from which department(s) desired classes are sought.

A maximum of 9 credit hours (6 credit hours of education course work) taken as a non-degree student is allowed. The credits may later be applied to a graduate degree program at Fredonia upon the student’s request.

As a general rule, students taking graduate courses without pursuing a degree who decide to apply for a degree program must have a grade point average of at least 3.0 at the time they apply. Under unusual circumstances, chairpersons may accept students with a lower GPA into a degree program, but in that case, the students enter with conditional status, with one semester in which to improve their records.

To apply as a non-degree graduate student, please contact the Extended Learning office.
Graduate Financial Aid

Financial aid information can be obtained by visiting the office’s 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. If they are not enrolled full-time, they may only be eligible for a portion of their federal aid awarded to them. Students must be enrolled in at least 6 credits to be eligible to receive a DIRECT Unsubsidized Loan.

- 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, Direct Stafford and Direct Graduate PLUS loans at the completion of the academic year. Please refer to the chart below.

Good Academic Standing Chart for Graduate Financial Aid

<table>
<thead>
<tr>
<th>Before receiving Federal aid prior to this semester, you must meet all the three criteria below</th>
<th>3rd</th>
<th>5th</th>
<th>7th</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage of attempted hours that must be completed with a passing or failing grade</td>
<td>65%</td>
<td>85%</td>
<td>85%</td>
</tr>
<tr>
<td>Student must have accrued at least this many credits</td>
<td>12</td>
<td>24</td>
<td>48</td>
</tr>
<tr>
<td>With a minimum grade point average of</td>
<td>2.50</td>
<td>2.75</td>
<td>3.00</td>
</tr>
</tbody>
</table>

Notification Procedure

Compliance with guidelines for receipt of federal financial aid (see chart above) is evaluated for all graduate students on a yearly basis at the end of the Spring semester. The Financial Aid Office will notify students who become ineligible for financial aid within one month after the Spring semester if they have not met the eligibility requirements. The notification letter will inform the student of loss of aid at Fredonia for the subsequent semester and it will also outline the waiver procedure that must be followed if the student chooses to appeal the decision.

Waiver Procedure

Reinstatement of graduate federal financial aid may be approved only when unusual circumstances prevented the student from meeting the expected criteria (see chart above) and there is sufficient documentation supporting the request for reinstatement. A request to reinstate federal graduate financial aid for the next semester is initiated via the Waiver Application Form sent to you by the Financial Aid Office and will be evaluated based on the student’s documentation of the unusual circumstances that led to the cancellation of such aid. A student choosing to use the waiver process to request reinstatement of financial aid must complete and submit the Waiver Application Form along with appropriate documentation to the Graduate Studies Office, 6th Floor Maytum Hall, for evaluation by the committee.

Graduate Opportunity Tuition Waiver

The Graduate Opportunity Waiver Program provides a full waiver of tuition to former EOP, SEEK, or HEOP students who are accepted or enrolled as full-time students in a graduate degree program. To apply, students should submit proof that they were enrolled as undergraduates through one of the special admission programs named. Contact any EOP or HEOP office for information.
Veteran's Administration Educational Benefits

Those veterans or dependents who are, or feel they are, eligible for federal financial assistance through the Veterans Administration should contact the School Certifying Officer, Office of Financial Aid, 209 Maytum Hall, (716) 673-3253, 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, dates of service, discharging papers, and any other VA claim information. Students must complete a VA Form 22-1990 at https://www.va.gov/education/how-to-apply and the Veterans Fact Sheet at https://sites.google.com/a/fredonia.edu/veteransfactsheet in order for VA benefits to be certified.

Adult Career and Continuing Education - Vocation Rehabilitation (ACCESS-VR)

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.

Graduate Tuition and Fees

Certain types of financial aid (e.g. the TEACH grant) may have different credit hour requirements for full time status designation. Students who plan to take student loans should consult individually with a financial aid counselor to ensure optimal financial aid distribution.

Graduate tuition is charged by credit; tuition is capped at 12 credit hours.

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 https://www.fredonia.edu/about/offices/student-accounts for updated charges.

Graduate Degree Tuition and Fees

Full-time, per semester (12+ credit hours):

*New York State Resident Tuition $ 5,655.00
Out-of-State Resident Tuition $11,550.00
College Fee $25.00
Student Services and Programs Charge $798.50

Part-time (per credit hour):

...
*New York State Resident Tuition  $ 471.00
Out-of-State Resident Tuition  $ 963.00
College Fee  $ 1.70
Student Services and Programs Charge  $ 66.55

All rates and fees are subject to change. Individuals should view the Student Accounts web page for the current university charges at https://www.fredonia.edu/about/offices/student-accounts.

Full-time rates do not apply for summer or J-Term semesters; tuition is calculated at the part-time per credit hour rate.

* State University policy requires that a student be a resident of New York State for one year prior to registration in order to qualify for in-state resident tuition charges. Students should contact the Student Accounts Office for complete information governing residency requirements.

**NOTE:** Non-matriculated graduate students are charged tuition according to the level of the course. During the fall and spring semesters only, students taking 12 or more hours will be charged according to the course level combination with a minimum charge equal to the full-time undergraduate rate and the maximum capped at the full-time graduate rate, determined also by their residency status.

### Billing Procedures and Payment Requirements

**Billing Procedures**

The Student Accounts Office creates an electronic bill (eBill) for students who have course selected prior to the start of a semester. Semester bills are created in mid-July for the Fall semester and mid-December for the Spring semester. Upon creation, an email notification is sent to the student's Fredonia email address in addition to any authorized users email address. Students and authorized users may also enroll to receive text messages when an eBill is created. If the student would like their parent, guardian or another person to receive a copy of their semester bill, the student needs to sign them up as an Authorized User in our TouchNet system, or they may print a copy of the eBill and mail it. Authorized Users have access to view semester eBills, 1098-T tax notifications and current account activity, make payments, and enroll in payment plans.

A student must submit the required payment prior to the billing due date. Failure to make payment by the due date will result in the assessment of a late payment/administrative fee. Late fees are assessed as follows: $30 for balances less than $1,000.00; $40 for balances $1,000.00-$1,999.99, and $50 for balances $2,000.00 or more. It is the responsibility of the student to notify the Academic Advising 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, FRED Debit Account, Orientation, Course and Music fees may also be included on the eBill. A deduction from the total billed amount is made for the Advance Admission Deposit ($50) and Advance Housing Deposit ($50) when applicable. Deferments are granted only for authorized deferrable financial aid.

**Deferment Policy**

Deferment of university charges is not permitted except for approved, deferrable financial aid. Estimated financial aid awards may not be used as deferments. Financial aid awards that may be used as deferments against university charges include:

- Excelsior
- Excelsior Tuition Credit
- Tuition Assistance Program (TAP Awards)
- SUNY Tuition Credit
- Stafford Student Loans
- Veteran benefits (only when they are payable directly to the university)
- PELL Awards
- TEACH grant
• Supplemental Education Opportunity Grants (SEOG)
• Aid for Part-Time Study (APTS)
• Private Scholarships (only when they are payable directly to the university)
• Parent Loans
• Alternative Student Loans
• SUSTA
• NYS STEM Incentive Program

Work Study Awards and personal loans are not deferrable against university charges.

Payment Requirements and Distribution of Financial Aid

Full payment, less approved deferrable financial aid and pre-payments, must be made by the due date. Cash, personal checks, money orders, VISA, MasterCard, Discover, and American Express are all acceptable forms of payment. Payments can be made online via personal check, MasterCard, VISA, Discover, or American Express by logging on to “Your Connection.”

Fredonia Installment Payment Plans (FIPP) are available to all students. Students and authorized users can enroll in a two-, three- or four-payment plan on a semester basis; the plan includes all semester charges less any approved financial aid. Students/Authorized users would need to enroll each semester, and can enroll online when viewing the eBill. Payments can be scheduled to automatically be taken from a credit card, checking or savings account, or can be initiated for each individual due date by logging in and making the payment.

Students attending In-Person Registration will have an eBill created and receive email notification at their Fredonia email address and text message (if they have provided a cell phone number in Personal set up under My Profile Setup) near the end of the first week of classes. The due date for payment will be September 15th for the Fall semester and February 15th for the Spring semester. A late payment/administrative fee of up to $50 will be added to an account outstanding as of the close of business on the due date.

The majority of financial aid is distributed during the third and fourth week of classes. Tuition Assistance Program (TAP) and SUNY Tuition Credit funds are not distributed until mid-semester. Students who file for their financial aid late will receive their aid later in the semester.

All financial aid received by the university is applied to student accounts on a first-received, first-applied basis after allowing for a pending Tuition Assistance Program (TAP) Award. Excess financial aid is generally returned to students within two business days. Checks that are not picked up in the Student Accounts Office are mailed to home addresses.

Failure to Pay University Charges

Changes in a student’s registration status or credits, residence hall occupancy, food service selection or a reduction in financial aid may result in a balance due after the initial payment has been made. The Student Accounts Office will bill students monthly throughout the semester. Students who fail to make timely payments will be assessed a late payment/administrative fee up to $50 each time their account is billed.

A student who fails to pay any university related charges (this includes tuition, fees, library and parking fines and expenses for equipment and supplies) prior to the end of the current semester will be placed on “hold.” A student on “hold” will not: receive a diploma at graduation, be permitted to register for additional semesters at Fredonia or receive a university transcript.

A student who fails to make payment to the university at the end of the semester will be referred for further collection efforts to the New York State Attorney General’s Office in Albany or to a collection agency contracted by the university. Accounts transferred to these agencies will be subject to additional charges for interest and collection costs of up to 22 percent.

College Fee

This is a uniform, mandatory charge for all students, established by the State University of New York.
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 eBill. Students should consult the Course Schedule online for specific courses and charges.

Students majoring in any program within the School of Music (both undergraduate and graduate) are assessed a $250 Music Fee each semester.

In addition, the State University authorizes charges for such items as returned checks ($20), late registration ($40), First-Year orientation ($150), Transfer orientation ($80), late payment/administrative (up to $50), and drop/add fees ($20). Fines are authorized for parking violations, the late return or loss of library materials, and failure to return physical education or infirmary equipment. All fees are subject to change.

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, PELL grant, SEOG grant, TEACH grant) and discontinues study prior to the completion of the semester for which the Title IV funds were disbursed, a Title IV repayment calculation must be completed.

A student’s charges will be reduced based on the refund policy. The purpose of the repayment calculation is to determine the amount of Title IV federal aid the student is eligible for and insure that the student has not been over awarded federal financial aid due to the student’s withdrawal. The initial step in the calculation is to identify all of the Title IV federal aid that the student was awarded in the semester that the student withdrew. If a student is subject to the 30-day delayed disbursement, as a first time borrower, and withdraws during the first 30 days, the student is not eligible for the Stafford Loan, and it will not be included in the calculation.

The next step is to determine the number of days the student was enrolled for the semester and divide that by the total number of days in the semester to calculate the percentage of Title IV federal aid earned by the student. If this percentage is greater than 60 percent, the student is eligible for 100 percent of their Title IV federal funds. (Note: Any break of five or more consecutive days is excluded from the calculation. For example: Thanksgiving and Spring Break would be excluded.) If the percentage of Title IV federal aid earned is less than or equal to 60 percent, the percentage is then multiplied by the amount of Title IV federal aid the student has been awarded for the semester. This determines the amount of Title IV federal aid that the student is eligible for and can be applied toward their charges for the semester they withdrew.

A comparison is done between the amount of Title IV aid that the student is eligible for and the amount that has already been disbursed into the account. If the disbursed amount is less than the eligible amount, any additional funds up to the eligible amount may be disbursed to the student’s account and then to the student if any excess funds are available. If loan proceeds are to be utilized as a late disbursement, the student (or parent for a PLUS Loan) will be notified. If the disbursed amount is greater than the eligible amount, the student has been over awarded due to their discontinuance of study. When a student has been over awarded, the amount of earned aid is subtracted from the amount of disbursed aid to determine the amount that the student is not eligible for. Any Title IV federal aid that the student is not eligible for must be returned to the appropriate federal program. Title IV federal aid is returned in the following order: Unsubsidized Stafford Loan, Subsidized Stafford Loan, PLUS Loan, PELL grant, Federal SEOG grant, TEACH grant and other Title IV program aid excluding Federal Work-Study.

For additional information regarding the repayment of Title IV federal aid, persons should contact the Student Accounts Office at (716) 673-3236, 306 Maytum Hall, or email student.accounts@fredonia.edu.

State University Refund Policy

**Tuition.** A student withdrawing from the university or individual courses during the fall or spring semester is eligible for the following tuition refunds:

- 100 percent for withdrawal during the first week of classes
- 70 percent for withdrawal during the second week of classes
- 50 percent for withdrawal during the third week of classes
- 30 percent for withdrawal during the fourth week of classes
- 0 percent for withdrawal beyond the fourth week of classes

A full refund of tuition may be granted if a student must withdraw for reasons beyond his/her control with the approval of the University President or his/her designee.

The **College Fee** is not refundable after registration.
Refunds for the *Student Services and Programs Charge* are granted based on the week of withdrawal following the same schedule listed above for tuition.

Please note that Thanksgiving and Spring Break do not count as a week during the semester in the Title IV aid calculation. As a rule, students should always check with the Financial Aid office when considering a withdrawal from courses or the university.

**Student Services and Programs Charge**

The Student Services and Programs Charge combines all university fees for student services, programs and activities in one composite amount for all students. As a result, there are no general university fees and no additional mandatory fees once a student arrives on campus (although some departments may assess individual departmental fees). The Student Services and Programs Charge includes support for the following programs and activities:

- Advanced Technologies for Classroom Use
- Alumni Affairs
- Blue Devil Fitness Center
- Campus Community Bus
- Campus Internet Access
- Campus Microcomputer Labs and Support
- Campus Fine Arts
- Fredonia Ticket Office (Student Discounts)
- Counseling Center
- Coupons for Discounts at Area Merchants
- Family Weekend Events
- Intercollegiate Athletic Sports Program
- Intramural and Recreational Program
- Legal Services
- Homecoming Weekend Events
- On-Campus Student Employment
- On-site Medical Care
- Health Education Programs
- Medical Laboratory Work
- Over-the-Counter Medications
- Prescription Medications
- Wellness Checkup
- Parking Services
- Parking Shuttle Service
- Student Engagement
- Student Government
- Student Organizations and Clubs
- Student Scholarships
- University Special Events
- University Transcripts
- Upper Class Buddy Program
- Van Service to Hospital/Clinic

The Student Services and Programs Charge waiver policy can be found at [http://fa.fredonia.edu/policy](http://fa.fredonia.edu/policy).
Scholarship Opportunities
Fredonia offers approximately $8 million annually in recruitment and retention-based scholarships to qualified students. Students are automatically notified of scholarship eligibility. For scholarship information and eligibility criteria, go to http://home.fredonia.edu/finaid/scholarship-opportunities.

For the 2020-2021 aid year, scholarship recipients will be notified on a rolling basis beginning in October 2020. 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 Financial Aid Office, 209 Maytum Hall, (716) 673-3253 or email financial.aid@fredonia.edu. For departmental scholarships for specific majors, persons should contact the appropriate department.

Fredonia College Foundation
Department Scholarships/Awards/Funds (as of 5/1/18)
Following is a list of scholarships/funds that are awarded through the academic departments. The awards are based on academics, talent, financial need or other criteria established within the discipline. Interested persons should contact the department in their major directly to obtain specific requirements and application procedures for the awards.

Athletics
James H., ’38 and Eleanor Annis, ’40 Endowment Athletics Department*
Blue Devil Boosters Club*
Blue Devil Boosters Individual Funds*
Blue Devil Director of Athletics*
Corydon Crowell Memorial Fund (alumnus ’80)
Depledge/Poummit Basketball Award (alumni ’31, ’33, respectively)
The Gregory Fund
Sandra Haught Memorial Scholarship
Kirk J. Krull Basketball Endowment (alumnus ’78)
Jim and Mike Lawlor Soccer Program Endowment (alumni ’73, ’74, respectively)
Doris Newman Memorial Scholarship
Phillips Cross Country and Track/Field Endowment
Greg and Linda Prechtl Scholarship (alumni ’69, ’71, respectively)

Biochemistry
Adele Maytum Hunter Scholarship
Kelly Family Scholarship Endowment (alumnus ’82)
Mary J. Marletta Memorial Scholarship

Biology
1929 Graduate’s Award - Bioethics
Constantine Barker Fund
Biology Department Endowment
Biology Department Fund*
Bruner Scholarship for Science
Double A Vineyards Rak Family Biology Scholarship
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)
Frederick Guerriero and Irene Reynolds Guerriero Scholarship (alumni ’71, ’71, respectively)*
The Holmberg-Wettingfeld/Dr. Robert Wettingfeld Science Endowment
Adele Maytum Hunter Scholarship
Kourelis-Stavrides Award for Outdoor Interests (alumna ’46)*
Kourelis-Stavrides Scholarship Endowment
Ken Mantai Endowment
Medical Technology Program Fund*
Molecular Genetics and Recombinant Gene Technology
Dr. Diane Pennica Biology Faculty Research Award
Major Alice M. Sam, USAF Ret. Biology Scholarship
Willard Stanley Memorial Scholarship
Michael Yochoy Biology Scholarship
Yunghans-Dietter Research Award (formerly Merlin Biology Fund)
Yunghans-Mirabelli Science Achievement Scholarship

Business Administration
Bennett Accounting Endowment
Donald C. Brandt Memorial Scholarship
Business and Accounting Fund*
Business Administration Alumni Achievement Scholarship
Business Administration Alumni Fund
Morton and Barbara Cherney Educational Scholarship
Enactus Endowment (formerly SIFE)
Enactus Music Business Award (formerly SIFE)
Fancher Family Scholarship
Franklin B. Krohn Memorial Scholarship Endowment
Raymond Lai Professional Development Fund for International Business (alumnus ’75)
Mancuso Family Fund
M.R. Poummit Achievement Award (alumnus ’33)
John Richter Family Endowment
Michael James Quatroche Scholarship
School of Business Fund*
Gary M. Tripp Memorial Scholarship (alumnus 2002)
Stephen and Carol Eck Ward School of Business Scholarship (alumna ’81)

*Department Funds

Chemistry
Raffaele Borriello, M.D. and Suzanne T. Casden Chemistry Department Endowment (alumni ’77, ’76, respectively)
Prudence Bradley First Generation Student Scholarship Endowment
Chemistry Department Fund*
Frank J. Costanza’s Greenhouse Memorial Fund
david Dingledy Memorial Scholarship
Gavin Family Scholarship (alumni ’92, ’93, respectively)
Hillel STEM Scholarship by Walter I. Levy, ’71
James J. Kaminski Scholars Endowment (alumnus ’69)
Kelly Family Scholarship Endowment
Dr. Robert Maytum Scholarship
Carolyn Ruth Moos Scholarship
Gilbert and Ruth Moos Outstanding Senior Award
OUR (Outstanding Undergraduate Research) Future Award
Dr. Jerome H. Supple Memorial Scholarship
Byron A. Thumm Scholarship

*Department Funds

College of Liberal Arts and Sciences
Arts and Sciences Fund
Title III Endowment

Communication
Louis C. and Dr. S. David Adler Scholarship (alumni ’52, ’48, respectively)
Dan Berggren Excellence in Audio/Radio (EAR) Scholarship
Anne Bernstein Memorial Scholarship (alumna ’82)
Ann Reynolds Carden Public Relations Star Award
Chilberg Applied Communication Award
Communication Department Endowment
Corydon Crowell Memorial Fund (alumnus ’80)
Edward S. Edelman Scholarship
Anthony J. Ellis Memorial Scholarship
Arthur R. Maytum Scholarship
Kathleen McDonough Communication Scholarship
Arlie Muller Parks Award (alumna ’59)
A.J. Pierce Scholarship
Richard G. and Pamela C. Ryan Endowment Scholarship Fund

*Department Funds

Communication Disorders and Sciences
Constantine Barker Fund
Mitchell R. Burkowsky Memorial Award
Communication Disorders and Sciences Department Fund*
Friends Forever – Class of 1958 Scholarship
Kristen M. Luther Memorial Scholarship (alumna 2001, 2002)
Alan Nichter and Annamarie Woloszyn Nichter Scholarship in Communication Disorders and Sciences (alumni ’69, ’70, respectively)
Esau A. and Susan S. Sam Family Scholarship
Schaffer Family Scholarship
Rebecca Snyder Memorial Scholarship (alumna ’83)
Gustave and Geraldine Werner Scholarship (alumna ’29)
Lt. Gen. Louis E. Woods Scholarship
Henry C. and Ida H. Youngerman Scholarship

*Department Funds

Computer and Information Sciences
John Beck Memorial Scholarship
Feng Chiang Scholarship
Computer Science Endowment
Computer Science Fund*
Debbie Joy Scholarship (alumna ’76)
Arthur R. Maytum Scholarship

*Department Funds

Cooperative Engineering
Herbert P. Carlyon Scholarship for Cooperative Engineering
Cooperative Engineering Scholarship
Dr. Robert Maytum Scholarship
Pendyala Scholarship

Criminal Justice
Steven C. Croglio Endowment (alumnus ’97)
Charles H. Patrick Jr. Memorial Scholarship
University Police Criminal Justice Endowment

Diversity, Equity and Inclusion
Collingwood Diversity Endowment
Collingwood Distinguished Lecture for Diversity
Culver-Wollaston Family Scholarship

Economics
Christine Dilacqua Endowment (alumna ’75)
Economics Department Fund*
Hart-Gorman Economics Fund
Arthur R. Maytum Scholarship

*Department Funds
Education

Bill and Peg ’81 Adams Pay it Forward Endowment
Baross-Clothier Scholarship (alumni ’47, ’43, respectively)
Fanny Bartlett Award
Jessica Mary Beal Scholarship
Faith Elizabeth Bean Memorial Scholarship
Karen Palmatier Blankenship ’77 Childhood Education Fund
Thelma Brynolfson Scholarship (alumna ’38)
Winifred Budd Elementary Education Scholarship
Helen Buderkin Award
Laura A. Cirrincione Education Scholarship (alumna ’76)
Class of 1953 Dr. Neil Postman Memorial Award for Education
Class of 1954 Scholarship
Class of 1955 Scholarship
Class of 1965 Scholarship
Clifton Scholarship (alumna ’66)
College of Education Alumni - Committee of Friends Scholarship
College of Education Endowment Scholarship
College of Education Fund*
Dr. Estelle M. Crino Educational Leadership Scholarship for Promising Women Leaders (alumna ’77)
Anthony M. Deiulio Scholarship
Charles R. and Shirley Miller Erbsmehl Award (alumna ’58)
Dr. Jay William Erickson and Alliene Terry Erickson Scholarship for Science Education and Childhood Education
Tom Everett, ’68 Memorial Scholarship
Friends Forever – Class of 1958 Scholarship
Frederick Guerriero and Irene Reynolds Guerriero Scholarship (alumni ’71, ’73, respectively)
Heichberger Family and Scholars of Leadership Endowment
Dr. Harold Johnson Hamburg Fredonia Internship Program Endowment Fund
Helen L. Johnson Legacy Scholarship (alumna ’52)
Lou and Bea Joy Memorial Scholarship
Dr. Arthur L. Kaiser and Katherine Kaiser Burch Education Scholarship (alumni ’44, ’53, respectively)
Annette Hartigan Koch, ’52 Elementary Education Scholarship
Philip Kochman Scholarship
Helen Kelly Lillie Memorial Scholarship (alumna ’37)
Richard and Arlene LoGuidice Award (alumni ’65)
Marilyn Chrzanowski Lojek Elementary School Teacher Scholarship
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
Salvatore ’53 and Barbara Randazzo ’67 Teaching Training Fund
Louis E. Raths Scholarship
Byron E. and Carrie L. Record Fund
Reinbold Elementary Education Scholarship (alumna ’53)
Dr. Daniel Roselle - Class of 1956-1957 Scholarship
Margaret Sawkins Award (alumna, ’44)
Ruth Meda Cutis Wheeler Scholarship
Colonel C. Ross Willson ’39 and Phyllis Willson ’39 Scholarship
Marjorie E. Woods Scholarship
Sanford and Lillian Zeman Award

*Department Funds
Educational Development Program

Educational Development Program*
The Gregory Fund
Alan and Annmarie Nichter Above and Beyond Scholarship
Jeffrey J. Wallace Leadership and Excellence Endowment (alumnus ’68)
Ralph Wilson Jr. EDP Book Award
Barbara Yochym EDP Transfer Scholarship

*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
English Department*
Crescence Ehmke Graham Scholarship
Howard Herkimer and Hildegarde Maytum Strong Scholarship (alumni 1911)
Terry Mosher Writing the Natural World Endowment
Mac Nelson Scholarship
Dr. John Robert (Bob) Quatroche Scholarship
Henry F. Salerno Scholarship
Dr. Robert and Joanne L. Schweik Scholarship
Mary Louise White Fund

*Department Funds

Geology and Environmental Sciences

Walther M. Barnard Scholarship
Walther M. Barnard Geosciences Lab Endowment
Florence M. Eikenburg Scholarship in Geosciences
Fahnstock Memorial Fund
Bruce and Nancy Garlapow Memorial Scholarship (alumni ’74, ’75, respectively)
Geographic Information Systems*
Geosciences Alumni Scholarship Fund
Geosciences Department*
Gary and Eileen Lash Geosciences Endowment
David and Carol Larson Field Camp Endowment
Herbert Clark Mackie and Marion C. Mackie Award
Roy A. MacDiamid Award
Susan J. Mara Scholarship (alumna ’73)
Dr. Robert Maytum Scholarship
Mark D. and April Hoeftner Orgren Scholarship (alumni ’75, ’76, respectively)
Dr. John Robert (Bob) Quatroche Scholarship
Willard Stanley Memorial Scholarship
Paul D. Willette Scholarship (alumnus ’70)
Dr. Michael P. Wilson Award for Spatial Studies
Dr. Michael P. Wilson Award for Temporal Studies

Graduate Studies

Mitchell R. Burkowsky Memorial Award
Clifton Scholarship (alumna ’66)

Len and Carole Faulk Graduate Scholarship
Granger Percussion Graduate Award (alumnus ’66)
Robert and Elinor Grennell Scholarship
Kristen M. Luther Memorial Scholarship (alumnas 2001, 2002)
Mallette Family Scholarship
Suzanne McLain Scholarship
Schaeffer Family Scholarship
Rebecca Snyder Memorial Scholarship (alumna ’83)

History

David H. Carnahan Scholarship
William and Helen Chazanof Award
Scholarship in Honor of Dr. Kenneth E. Cutler
Graeber-Bennett History Department Cultural Fund
History Department*
History Department Endowment
Kim Korhummel Scholarship
MacPhee Scholarship
John J. and Helen B. Mancuso Scholarship (alumnus ’56)
Robert and Marilyn Maytum Scholarship
Robert f Sabia Endowment
Zimmer History Scholarship

*Department Funds

International Education

Graham E. Andrus Memorial Scholarship
Deming Family International Scholarship
Debbie Joy Scholarship (alumna ’76)
Raymond Lai Scholarship (alumnus ’75)
Lundquist International Fellowship
Xylia Peterson Memorial Fund (alumna ’85)
James J. Spann, Esq. Study Abroad Scholarship (alumnus ’77)
Winch Endowment Fund

Library

Carnahan Jackson Library Endowment
William and Helen Chazanof Award
Jack T. Ericson Endowment
Friends of Reed Library
Holland Land Company Project
Holocaust Library Fund
Nichols Fund*
C. Malcolm and Jeanette Nichols Fund
Reed Library*
Reed Library Archives and Special Collections Endowment
Reed Library Endowment
Robert f Sabia Endowment for Library Archives
Schaeffer Family Library Fund
Zweig Collection*

*Department Funds
Mathematical Sciences

John Beck Memorial Scholarship
Kenneth and Mary Boynton Scholarship in Mathematical Sciences
Mark Buckenmeyer Scholarship
Feng Chiang Scholarship
Costello Interplay Award for Science and the Arts
Myron T. Dana and Dana McKinstry Wheelock Scholarship
Santa A.B. DiPasquale Memorial Scholarship
Mathematics Department*
Mathematics Endowment
Earl G. Mathewson Scholarship
Frank R. Olson Scholarship
Dr. Nelson and Louise A. Wood Scholarship
Dr. Marvin C. Zastrow Excellence in Mathematics Scholarship

*Department Funds

Music

School of Music Scholarships are awarded to qualified new and returning students. A prospective student whose audition for admission is outstanding will be considered for music scholarships. Scholarships for returning music students are awarded on the basis of music talent, academic achievement, service to the School of Music, and other criteria specified by the awards.

Carol Hepp Adragna Music Education Scholarship (alumna '66)
Charles D. Arnold Scholarship
Donald Bohlen Music Composition Scholarship
Lucia Gracia Bolton Scholarship
Bromeley Piano Scholarship (alumna '81)
Lisa Nielsen Burkett Piano Scholarship
Elizabeth S. Carlyon Scholarship for Piano Performance
Class of 1953 Award for Excellence in Music Education
Class of 1954 Scholarship
Class of 1955 Scholarship
Class of 1961 Jazz Program Fund
Class of 1965 Scholarship
Max and Anne Davis Piano Scholarship
Diers Family Endowment
John C. Dubnicki Jr. Scholarship
John C. Dubnicki Sr. Scholarship
Charles C. Eikenburg Scholarship in Opera/Vocal Performance
Craig Einhorn Guitar Award and Fellowship
Charles R. and Shirley Miller Erbsmehl Music Scholarship (alumna '58)
David Evans Voice Performance Scholarship
Frauer Percussion Scholarship
Friends Forever – Class of 1958 Scholarship
Friends of Music Fund*

Dr. Homer Garrettson and Dr. Louis Richardson String Scholarship
Corinne D. Gast Memorial Scholarship (alumna '44)
Granger Percussion Educational Discretionary Fund
Granger Percussion Graduate Award (alumnus '66)
Dr. Gerald Gray Choral Scholarship Fund
Gary M. Green and Justine Ferguson Green Scholarship (alumni '70 and '57, respectively)
Gary M. Guerriero and Irene Reynolds Guerriero Scholarship
Lois V. and Herbert W. Harp Scholarship
Dr. Robert Hesse Violin Scholarship Endowment (alumnus '53)
Hillman Memorial Music Association Endowment
Hillman Opera Fund*
Donald F. Iannuzzi Sr. Memorial Scholarship
Robert and Marilyn Maytum Music Scholarship
Virginia Whipple Maytum Music Scholarship
Carl V. Mazzio Memorial Trombone Scholarship
Harry Milgram-David Luterman Scholarship in Music Therapy
Gloria C. Miller '54 Music Scholarship
Lauren Miller Memorial Scholarship
Monroe-Poummit Big Band Award (alumni '34, '33)
Vincent Morette Memorial Scholarship (alumnus '58)
Phyllis Geer Murphy '56 Music Education Scholarship
Delores J. Nelson Scholarship
New York State Federation of Home Bureaus/Elizabeth Marsh Scholarship
Oasis Guitar Jury Award
Sid Olshin Memorial Scholarship
Frank A. and Maureen Pagano Scholarship (alumna '66)
Percussion Fund*
Dr. W. Clarke Pfleeger '42 and Lucile Harness Pfleeger '42 Music Education Fund
Dr. Linda Phillips Fredonia Jazz Ensemble Fund
A.J. Pierce Scholarship
Poummit Concert Master Award (alumnus '33)
Poummit Faculty Recognition Award in Memory of Vivian Robe and Catherine Lane (alumnus '33)
Sigurd M. Rascher Memorial Scholarship Endowment
Franz Roehmann (alumnus '58) Music Composition Scholarship
Juliet J. Rosch School of Music Endowment (alumna '30)
Dr. Susan Royal Flute Scholarship
Lawrence Schaufler Scholarship
Peter J. Schoenbach Music Endowment
School of Music*
School of Music Scholarship
School of Music Bassoon Scholarship
Dr. Richard Sheil Memorial Music Scholarship
Greg Snow Music Technology Award
SoonRan Foundation Endowment for Music Theory
Claudette Sorel Piano Scholarship Endowment
Isaac Stern String Scholarship
Stonefelt Distinguished Professor Percussion Scholarship
Anthony S. Strychalski Memorial Scholarship
Daniel and Laurie Tramuta Scholarship (alumni '78, '82, respectively)
Albert E. and Lillian Uprichard Scholarship Endowment
A.L. Van Keuren Music Scholarship
Francella Pattyson Widmer Endowment
Constance Willeford Award for Music Therapy
George L. Wurtz String Bass Memorial Scholarship
Margaret Shuler Wyckoff Scholarship (alumna '30)
Lucille and Jack Yellen Music Composition Scholarship
Marie Kaufman Yochym Music Scholarship
Bob and Betty Young Endowment
*Department Funds

Philosophy
Philosophy Department*
*Department Funds

Physics
Hack Arroe Memorial Scholarship
John J. Connelly Physics Scholarship
Dr. Robert Maytum Scholarship
Pendyala Scholarship
Physics Department Endowment
Physics Development Fund*
Physics Research Fund
*Department Funds

Politics and International Affairs
Erma G. and J. Murdoch Dawley Memorial Scholarship
Morgan Dowd Pre-Law Fund
Fredonia Alumni Lawyers Scholarship
Dr. James Hurtgen Endowment
Jon and Wilma Kraus Scholarship
Michael J. Livingston Memorial Scholarship (alumnus '89)
Robert and Marilyn Maytum Scholarship
Political Science Alumni Endowment
Politics and International Affairs Department Fund*
Politics and International Affairs Faculty Endowment
John R. Quatroche Jr. Endowed Scholarship in Political Science
Schiavone Family Endowment (alumnus '78)
J.R. Soukup Pi Sigma Alpha Scholarship

*Department Funds

Psychology
Donald John Lehr Endowment
Psychology Department Fund*
Psychology Endowment
Elizabeth Scarborough Psychology Scholarship Fund
*Department Funds

Science
James D. Burdick Memorial Fund
David H. Carnahan Student/Faculty Research Endowment
Costello Interplay Award for Science and the Arts
Lake Shore Savings Science Education Outreach Endowment
Making a Difference Endowment for Scholarship and Research in Environmental Leadership
Dr. Robert Maytum Scholarship
Lawrence A. Patrie Science Scholarship
Science Equipment Endowment Fund
Sons of Karen West
George Todaro Scholarship Fund in Memory of Dr. Willard Stanley
*Department Funds

Sociocultural and Justice Sciences
Social Work Fund*
Sociology Department Fund*
*Department Funds

Sport Management and Exercise Science
Health, Wellness and Recreation Fund*
*Department Funds

Theatre and Dance
1929 Graduate’s Award - Classical Ballet
Alice Bartlett Memorial Award
The Harry John Brown and Paul W. Mockovak Scholarship in Performing Arts (alumnus '77)
The Carnahan Jackson Dance Scholarship
Jack L. Cogdill Scholarship
Keith Cronin Memorial Scholarship
Robert L. Gloor Endowment for Theatre and Dance (alumnus '96)
Walter Gloor Scholarship  
Trent Illig Memorial Scholarship (alumnus '96)  
Tim Douglas Jensen Class of 1990 Scholarship Fund  
Robert W. and Kay M. Marvel Scholarship  
Gertrude Prushaw Maytum Scholarship  
Midtown Realty Musical Theatre Endowment  
John S. Mintun Scholarship  
Myers and Murphy Endowment for Dance  
New York State Federation of Home Bureaus/Sally Bulger Scholarship  
Playground Drama Day Camp  
Carol Prevet Dance Scholarship  
Mary and Steve Rees Rising Junior Award for Technical Production  
Paul F. and Mary Joyce Schaefer Scholarship  
Theatre and Dance Department Fund*  
Bea Ullman Scholarship  
Dr. Georgiana von Tornow Endowment  
Bruce K. Walfo rd Scholarship (alumnus '76)  
*Department Funds  

Veterans  
Courage and Honor Scholarship Fund  
Fredonia Veterans Scholarship  
Smith-Viggiani Veterans Scholarship  

Visual and Performing Arts  
Costello Interplay Award for Science and the Arts  
Marion International Fellowship for the Visual and Performing Arts (alumna '79)  
Robert W. and Kay M. Marvel Scholarship  
Florence and Cynthia Norton Scholarship Endowment Fund for the Arts  

Visual Arts and New Media  
Art Gallery Fund  
Alford Bjurlin Art Scholarship  
George Booth Visual Arts Scholarship  
Colonel David Correll Imaging Scholarship  
Crafts Alliance Award for Excellence in Art  
Fredonia Potter’s Co-op Scholarship  
Graphic Arts Account*  
Thomas E. Malinoski Endowment for the Visual Arts  
Marano/Ginirke Scholarship  
Cathy and Jesse Marion Art Gallery Endowment (alumna '79)  
Robert W. and Kay M. Marvel Fund  
Media Arts Fund*  
Carl J. Nordell Art Gallery Endowment  
Carl J. Nordell Memorial Scholarship Endowment  
Dr. Daniel D. Reiff Art History Scholarship  
Visual Arts Department Fund*  
Rodney W. Welling Memorial Scholarship  
Wendel Scholarship  
*Department Funds  

Women's and Gender Studies  
Jeanette McVicker Scholarship for Women's Studies  
Women's History/Studies Fund*  
*Department Funds  

World Languages and Cultures  
Myron T. Dana and Dana McKinstry Wheelock Scholarship  
Thomas Goetz-Robert Rie Scholarship for Excellence in the Modern Languages  
Modern Languages and Literatures*  
*Department Funds  

Other Scholarships and Awards open to all Majors  
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 Scholarship Committee within the Office of Financial Aid. Separate applications are not typically required. In most cases qualified students are automatically considered for selected scholarships and awards based on pre-established criteria.  

Alumax Scholarship  
Alumni Scholarships  
American Association of University Women (AAUW) Scholarship  
Graham E. Andrus Memorial Scholarship  
Hope Antz Memorial Scholarship  
Dallas K. and Elizabeth W. Beal Award  
Jessica Mary Beal Scholarship  
Beaver Club Scholarship  
Dr. Paul G. Blanchet Students with Disabilities Scholarship (alumna '88)  
Borzilleri-Gugino Scholarship (alumni '14, '26, '28)  
The James R. Brown Scholarship  
Dr. Roland C. Burton Scholarship  
Ruth Tice Callahan Award  
Carnahan Jackson Scholarship  
Mary B. and Joseph A. Caruso Memorial Scholarship  
Brenda S. Chiappetta Memorial Endowment  
Class of 1939 Scholarship  
Class of 1942 and 1943 Scholarship  
Class of 1950 Scholarship  
Class of 1952 Scholarship  
Class of 1962 Honoring Former Faculty Scholarship  
Class of 1964 Dr. Oscar E. Lanford Memorial Scholarship  
Laura B. Cole Scholarship  
Evelyn Lawson Coleman President’s Scholarship (alumna '29)  
Robert E. and Shirley P. Coon Recognition Award (alumnus ’50)  
Costello Scholarship  
Council for Women’s Concerns/Marion Sonnenfeld Scholarship
Courage and Honor Scholarship Fund
Patrick R. Damore Scholarship Fund
Midge Dean Memorial Scholarship
Deming Family International Scholarship
L. Michael Dimitri Scholarship
Theresa Dispenza Emergency Student Grant Endowment
Dunkirk-Fredonia Rotary Scholarship
Kelly Early Scholarship
Robert and Edith B. Eck Scholarship
Emeritus Scholarship
Empire State Minority Scholarship
Faculty/Staff Scholarships
Faculty Student Association Fredonia Scholarship Award
Faculty Student Association President’s Scholarship
Len and Carole Faulk Graduate Scholarship
Fiat Lux (Let there be light)
William E. Finn, ‘83 and Rachel Martinez-Finn ‘82 Endowment Fund
Foundation First-year Scholarships
Gileen Widmer French and Nancy Ann Eberz Second Chance Scholarship
Malcolm J. French Memorial Scholarship
Maureen Fries Scholarship
Joseph T. Gallagher Memorial Scholarship
Steve and Parker Goldstein Endowment (alumnus ’89)
Willie Mae Goodwine Scholarship
Zola Graf Scholarship
The Gregory Fund
Robert and Elinor Grennell Scholarship
Lena M. Harmon Scholarship
Velyne and Lynn A. Hawkins Scholarship
Fanny A. Hayward Award
Dennis and Jan Hefner Presidential Scholarship
David and Barbara Herman Keeper of the Dream Scholarship
S.C.W. Hom Parent Scholarship
Harold Hopkins Memorial Scholarship
Manjro Inoue Fund
International Student Assistance Fund
Franklin Nelson and Harriet Lyon Jewett Fund
Marlene E. Jimerson Native American Scholarship (alumnus ’98)
Velu and Ira Jordan Minority Scholarship
Keeper of the Dream Scholarship
S.C.W. Hom Parent Scholarship
Harold Hopkins Memorial Scholarship
Manjro Inoue Fund
International Student Assistance Fund
Franklin Nelson and Harriet Lyon Jewett Fund
Marlene E. Jimerson Native American Scholarship (alumnus ’98)
Mamie and Ira Jordan Minority Scholarship
Keeper of the Dream Scholarship
S.C.W. Hom Parent Scholarship
Harold Hopkins Memorial Scholarship
Manjro Inoue Fund
International Student Assistance Fund
Franklin Nelson and Harriet Lyon Jewett Fund
Marlene E. Jimerson Native American Scholarship (alumnus ’98)
Mamie and Ira Jordan Minority Scholarship
Keeper of the Dream Scholarship
George and Elane King Award
Kourelis-Stavrides Award for Outdoor Interests (alumnus ’46)
Raymond Lai Scholarship (alumnus ’75)
Lake Shore Savings Scholarship
Charlotte Putnam Landers Scholarship
Lanford Presidential Prize
Horace O. Lanza Scholarship (alumnus 1899)
Reginald A. and Elizabeth S. Lena Scholarship
Michael J. Livingston Memorial Scholarship (alumnus ’89)
Lundquist International Fellowship
M & T Keeper of the Dream Scholarship
John Malcolm Scholarship Endowment
Dorothy French Manley Scholarship
David E. Manly Scholarship
Maytum Family President’s Scholarship
Vivian R. McCullor Scholarship
Jeanette Wheeler Mills Scholarship
Thomas E. Morrisey Scholarship
Stephen Morse Memorial Fund (alumnus ‘92)
Nabta Scholarship
Dr. Marwan El Nasser Scholarship
Charles M. Notaro Family Scholarship (alumnus ’68)
Jenny Creccraft Olsen Award
Anthony Patti Memorial Scholarship
Patton/Kirkland Memorial Fund
Xylia Peterson Memorial Fund (alumnus ’85)
Morris and Marian Pommitt Scholarship (alumnus ’33)
R. Elizabeth Praetorius Memorial Scholarship
Pursue Excellence LaceLocker Scholarship
The Renyhart Family Scholarship
Robert R. Rie Fund
Barbara Rose Memorial Scholarship
Patricia M. Rushboldt Credit Union Scholarship
Betty Norr Saveth Scholarship
Lawrence M. Silvio Memorial Scholarship
Kurt and Sibylia Sonnenfeld Scholarship
Stein Family Scholarships
Thomas Stocky Memorial Scholarship
John R. Symans Memorial Endowment
David M. Tiffany and Margaret M. Tiffany Family Scholarship Endowment
Clifton C. Turner, ’84 Endowment for Student Academic Excellence in Memory of Theoplis and Eliza Moore Turner
Undergraduate Alumni Council
Valvo-Ringler-Bozzella Scholarship
Wal-Mart Scholarship
Waring Family Work Ethic Scholarship (alumnus ’80)
Wilma E. Watson Memorial Scholarship (alumnus ’19)
Welch’s/National Scholarship
Wendel Scholarship
William and Mary J. Whipple Keeper of the Dream
Louise E. Wilder Scholarship
Yvonne Wenzl Scholarship
Theresa Dubnicki and Lawrence Williams Scholarship
Wine Endowment Fund
Woods and Earl Memorial Fund (alumnus ’21)

Special Funds
The following funds are held by the Fredonia College Foundation and used for the enhancement of university programs:

25 Year Anniversary Gifts
50 Year Anniversary Gifts
Alumni House Fund
Jurgen P. Banse-Fay Production Management Internship Award (alumnus ’88)
Dallas K. Beal Community Access Fund
Campus and Community Children's Center Endowment
Carnahan Jackson Fund for the Humanities
Catania/Gossett Family Scholarship (alumnus ’76)
Grant Cooper Endowment
Costello Interplay Award for Science and the Arts
Counseling Center Fund
Gail and Ted DeDee Endowment Fund
DFT Communications Technology Endowment Fund
Samuel L. Drayo, Jr. Founders Day Fund
Judy Elwinger Career Development Internship
Office of Diversity, Equity and Inclusion
Amy Elizabeth Everett Memorial Award
European Union Institute Fund
Excelco Developments, Inc. and Newbrook Machine Corporation Scholarship
Fredonia Veterans Scholarship
Dr. John A. and Joan L. Glenzer Endowment (alumnus ’57)
William T. and Charlotte Hagan Young Scholar/Artist Award
Hahn Family Freedom Marxonia Fund
Health Services Administration
Dennis and Jan Hefner Academic Enhancement Endowment
E. Louise Hoag Opera Fund
Holocaust Genocide Fund
Institute for Composer Diversity
Franklin Nelson and Harriet Lyon Jewett Fund
Robert Jordan Piano Scholarship and Distinguished Lectureship
Leadership Program
John A. and Joan L. Glenzer Endowment (alumnus ’57)
William T. and Charlotte Hagan Young Scholar/Artist Award
Hahn Family Freedom Marxania Fund
Health Services Administration
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E. Louise Hoag Opera Fund
Holocaust Genocide Fund
Institute for Composer Diversity
Franklin Nelson and Harriet Lyon Jewett Fund
Robert Jordan Piano Scholarship and Distinguished Lectureship
Leadership Program
Olga Cielnicky Leone Fund (alumna ’47)
Sara Jane Lippincott Fund (alumna 1844)
Litchfield-French Internship
Lodge Fund
Ann James Manly Scholarship
Monica Mannery Fund for Student Wellness and Support
Cathy and Jesse Marion Art Gallery Endowment
Maytum Distinguished Lecture Endowment
Multicultural Affairs Fund
Native American Consortium Fund
Phyllis W. and Lawrence A. Patrie Endowment for the Sciences
Poummit Secretarial Award in Memory of Janet Marks (alumnus ’33)
President’s Award for Excellence
Public Safety Programs Fund
Recruitment Initiative Scholarship
Residence Life Fund
Rockefeller Arts Center 50th Anniversary Endowment
Rockefeller Arts Center Fund

Unrestricted Endowments
For priority needs determined by the Fredonia President or Fredonia College Foundation Board of Directors:
Dorothy L. Anderson Memorial Endowment
Gertrude Maytum Garland Endowment
Walter Gotowka Family Endowment (alumni ’81, ’80, respectively)
Kathryn Hakes Endowment
Arthur R. Johnson Endowment (alumnus ’56)
Richard and Michele Johnson Family Endowment (alumna ’73)
James and Marcia Merrins Dance Theatre Endowment
Merrins Szekely Arts Center Endowment
Mintun Family Fund
AI Newman Fund
William Rees and Eileen Ort Rees Endowment
Star/Franklin Property Endowment
Title III Endowment
George and Barbara Luke Weaver Fund (alumna ’44)
State Authorization Disclosure

State Authorization

The State University of New York at Fredonia is able to deliver online programs through the State Authorization Reciprocity Agreement (SARA) process. SARA is an agreement among member states, districts and territories that establishes comparable national standards for the approval of interstate postsecondary distance education courses and programs.

On September 13, 2016, the New York State Board of Regents adopted new regulations requiring out-of-state institutions of higher education to seek and obtain New York State Education Department (NYSED) approval to offer distance education to New York State residents, and to permit the Department to enter into the State Authorization Reciprocity Agreement (SARA). New York State joined SARA on December 9, 2016.

New York State institutions participating in SARA are authorized to conduct distance education activity in other SARA member states under the terms and provisions of SARA. Please refer to the National Council for State Authorization Reciprocity Agreements (NC-SARA) website for more information about SARA eligibility, coverage, and procedures. A list of states and institutions participating in the State Authorization Reciprocity Agreement is available on the NC-SARA Directory webpage.

Complaint Resolution

Federal regulations require institutions delivering distance education courses to provide students and prospective students with contact information for filing complaints with the state approval or licensing entity in the student’s state of residency and any other relevant state official or agency that would appropriately handle a student complaint.

SARA requires the College to provide all students taking courses under SARA’s provisions with information on the College’s and SARA’s complaint resolution policies and procedures. SARA applies solely to distance education activity conducted across state lines. It does not apply to distance education activities inside New York State. Only those complaints resulting from distance education courses or activities offered to students in other SARA states come under the terms of SARA. Complaints from instate students are to be resolved under the College’s provisions, not those of SARA.

All Fredonia students taking distance learning courses should first follow the campus procedures for attempting to resolve complaints.

Students residing in state’s other than New York may, after exhausting campus procedures, file complaints according to the policies of the state in which they reside. To assist students, the State Higher Education Executive Officers (SHEEO) has compiled the appropriate contact information for each state. This document provides contact information by State and Agency. Students should follow the procedure for their state of residence.

State University Refund Policy

Click here for the policy (p. 553)

Licensure/Certification

Completion of one of our certificate/licensure programs will prepare qualified candidates for licensure/certification in New York State. The State University of New York at Fredonia is able to deliver online programs through the State Authorization Reciprocity Agreement (SARA) process. SARA is an agreement among member states, districts and territories that establishes comparable national standards for the approval of interstate postsecondary distance education courses and programs. New York State joined SARA on December 9, 2016. New York State institutions participating in SARA are authorized to conduct distance education activity in other SARA member states under the terms and provisions of SARA. Please refer to the National Council for State Authorization Reciprocity Agreements (NC-SARA) website for more information about SARA eligibility, coverage, and procedures. A list of states and institutions participating in the State Authorization Reciprocity Agreement is available on the NC-SARA Directory webpage.

New York State also participates in the National Association of State Directors of Teacher Education and Certification (NASDTEC). This interstate agreement makes it possible for an educator who completed an approved program and/or who holds a certificate or license in one jurisdiction to earn a certificate or license in another state or jurisdiction. Fredonia has not currently made a determination if this program will specifically meet licensure/certification requirements of any state other than New York. You are encouraged to contact the appropriate state licensing body in your state with any questions relating to professional licensure or certification as each state is responsible for its own certification/licensure requirements. Additionally, licensing/certification requirements vary by state and relocating could impact whether you will meet eligibility requirements for licensure. Check with the state licensing agency where you
desire licensure before relocating to ensure that you will be eligible for licensure or reciprocity. You can also visit NASDTEC to review specific state-by-state requirements.
Types of Aid

Student Financial Aid Summary Chart
<table>
<thead>
<tr>
<th>Student Aid Program</th>
<th>Type of Aid</th>
<th>Program Details</th>
<th>Annual Award Limits</th>
<th>How to Apply</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal PELL Grant</td>
<td>Grant: does not have to be repaid.</td>
<td>Available almost exclusively to undergraduates; all eligible students will receive the Federal PELL Grant amount they qualify for.</td>
<td>$639 to $6,345</td>
<td>Complete the FAFSA. Expected Family Contribution (EFC) must be $5,711 or below.</td>
</tr>
<tr>
<td>Federal Supplemental Educational Opportunity Grant (FSEOG)</td>
<td>Grant: does not have to be repaid.</td>
<td>For undergraduates with exceptional financial need; priority is given to Federal PELL Grant recipients; funds depend on availability at school.</td>
<td>$100 to $4,000</td>
<td>Complete the FAFSA. Early application is critical.</td>
</tr>
<tr>
<td>Federal TEACH Grant</td>
<td>Grant: does not have to be repaid.</td>
<td>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 <a href="http://home.fredonia.edu/financial">http://home.fredonia.edu/financial</a>.</td>
<td>$470.50 - $3,764 for TEACH grants disbursed prior to Oct. 1, 2020; After Oct. 1, 2020, the amount will be adjusted.</td>
<td>Complete the FAFSA. Must be in eligible major and meet the academic criteria.</td>
</tr>
<tr>
<td>Tuition Assistance Program (TAP)</td>
<td>Grant: does not have to be repaid.</td>
<td>Awards are based on New York State net taxable income and tuition charges. Students can receive TAP for eight semesters.</td>
<td>$500 to $5,165</td>
<td>Complete the FAFSA and TAP application. Student must be full-time, taking coursework applicable to their program of study.</td>
</tr>
<tr>
<td>SUNY Tuition Credit (SUNYTC)</td>
<td>Tuition credit</td>
<td>Award based on student's New York State TAP award as determined by NYSHEC.</td>
<td>$145 to $1,895</td>
<td>Complete the FAFSA and TAP application.</td>
</tr>
<tr>
<td>Aid for Part-Time Study (APTS)</td>
<td>Grant: does not have to be repaid.</td>
<td>For undergraduate students who satisfy eligibility criteria.</td>
<td>$885 to $2,000</td>
<td>Complete the FAFSA / TAP application and the SUNY Fredonia APTS application.</td>
</tr>
<tr>
<td>Part-Time TAP (PTAP)</td>
<td>Grant: does not have to be repaid.</td>
<td>Must meet income guidelines as set by NYS, be enrolled between 6-11.5 hours and have earned 12 credits in each of the two consecutive semesters.</td>
<td>Dollar amount dependent on TAP award and credit hours enrolled.</td>
<td>Complete the FAFSA and the TAP application.</td>
</tr>
<tr>
<td>Financial Aid Program</td>
<td>Details</td>
<td>Notes</td>
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<tr>
<td>Federal Work Study</td>
<td>Money is earned while attending school; does not have to be repaid.</td>
<td>Complete the FAFSA. Early application is critical.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Federal Direct Subsidized Loan</td>
<td>Loan: must be repaid. Interest Rate: fixed 4.529% for undergraduate students only.</td>
<td>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.</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Freshman: $3,500, Sophomore: $4,500, Junior/Senior: $5,500.</td>
<td>Complete the FAFSA. Students must have unmet need.</td>
<td></td>
</tr>
<tr>
<td>Federal Direct Unsubsidized Loan</td>
<td>Loan: must be repaid. Interest Rate: fixed 4.529% for undergraduate students; fixed 6.079% for graduate students.</td>
<td>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.</td>
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<tr>
<td></td>
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<td>Freshman: $5,500, Sophomore: $6,500, Junior/Senior: $7,500, Graduate: $20,500 (includes any unsubsidized amounts for the same period).</td>
<td>Complete the FAFSA.</td>
<td></td>
</tr>
<tr>
<td>Loan Type</td>
<td>Loan Information</td>
<td>Maximum Amount</td>
<td>Go to</td>
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</tr>
<tr>
<td>Federal Direct PLUS Loan</td>
<td>Loan: must be repaid. Available to parents of dependent undergraduate students who are enrolled at least half-time. Interest Rate: fixed 7.079%.</td>
<td>Maximum amount is cost of attendance minus any other financial aid the student receives.</td>
<td>Go to <a href="http://home.fredonia.edu/finaid/federal-direct-plus-loan-program">http://home.fredonia.edu/finaid/federal-direct-plus-loan-program</a> . Apply online.</td>
<td></td>
</tr>
<tr>
<td>Federal Direct Grad PLUS Loan</td>
<td>Loan: Must be repaid. Available to graduate students who are enrolled at least half-time. Interest rate: fixed 7.079%.</td>
<td>Maximum amount is cost of attendance minus any other financial aid the student receives.</td>
<td>Go to <a href="http://home.fredonia.edu/finaid/federal-direct-graduate-plus-loan">http://home.fredonia.edu/finaid/federal-direct-graduate-plus-loan</a> . Apply online.</td>
<td></td>
</tr>
<tr>
<td>Private Loan</td>
<td>Loan: must be repaid. Interest Rate: based on Prime or LIBOR and a credit check performed by the lender. The interest rates for these private loans may be significantly higher than the interest rates associated with federal loans. Borrowers will be evaluated on credit history, debt to income ratio, and work history. A student can be approved when applying alone but will typically require a co-borrower.</td>
<td>Maximum amount is cost of attendance minus any other financial aid the student receives.</td>
<td>Go to <a href="http://home.fredonia.edu/finaid/alternative-loans">http://home.fredonia.edu/finaid/alternative-loans</a> . Apply online. Filing a FAFSA is not required to receive Private Loan funds. However, you must contact the Financial Aid Office if you wish to waive your right to federal aid.</td>
<td></td>
</tr>
<tr>
<td>Parent Private Loan</td>
<td>Loan: must be repaid. Interest Rate: based on Prime or LIBOR, a credit check performed by the lender, and the repayment term. Borrowers will be evaluated on credit history, debt to income ratio, and work history.</td>
<td>If loan requires school certification, the maximum amount is the cost of attendance minus any other financial aid the student receives.</td>
<td>Go to <a href="http://home.fredonia.edu/finaid/alternative-loans">http://home.fredonia.edu/finaid/alternative-loans</a> for more information. Apply online through the lender. Filing a FAFSA is not required to receive Private Loan funds. However, you must contact the Financial Aid Office if you wish to waive your right to federal aid.</td>
<td></td>
</tr>
</tbody>
</table>
Scholarships

Refer to Scholarship (p. 568) section.

An Excelsior Scholarship recipient can receive up to $5,500 from the Excelsior Scholarship, minus any amounts received for TAP, Pell or other scholarships. The remainder of your tuition charge will be covered through a tuition credit paid through SUNY or CUNY.

Complete the FAFSA and TAP applications first, and then complete Excelsior application. Visit hesc.ny.gov for more information.

NYS Excelsior Scholarship

For 2019-2020, 2017 Federal Household adjusted gross income must be less than $125,000

Other Sources of Aid

New York State has a variety of military scholarship available. For more information, please visit https://www.hesc.ny.gov/pay-for-college/military-corner.html#horizontalTab3.

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 School Certifying Officer, Office of Financial Aid, 209 Maytum Hall, (716) 673-3253, 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, dates of service, discharging papers, and any other VA claim information. Students must complete a VA Form 22-1990 at https://www.va.gov/education/how-to-apply and the Veterans Fact Sheet at https://sites.google.com/a/fredonia.edu/veteransfactsheet in order for VA benefits to be certified.

State Aid to Native Americans

Application Procedures

Application forms can be obtained from the Office of Native American Education, New York State Education Department, Room 475 EBA, Albany, NY 12234 or online at www.p12.nysed.gov/natamer/ 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 is also required (obtained from your Education office of the tribe). 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 descendant 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; and
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 Financial Literacy Guide.
EXTENDED LEARNING

2146 Fenton Hall
(716) 673-3177
Eric Skowronski, Director
Email: extended.learning@fredonia.edu
Website: https://home.fredonia.edu/extendedlearning

Extended Learning offers a diverse set of education and training opportunities, both credit bearing and noncredit. There are six main program categories affiliated with this office, including the Extended Learning Credit Program, Noncredit Continuing Education, Course Auditing, Summer Sessions, J-Term (Joining Term), and Online Learning.

For additional information on any of these programs, please contact Extended Learning or visit https://home.fredonia.edu/extendedlearning.

SUNY Online

Credit-bearing, instructor-led, asynchronous online courses are offered by many SUNY colleges and universities across New York State, including Fredonia, in conjunction with SUNY Online, http://navigator.suny.edu.

For additional information, please contact Extended Learning or visit https://home.fredonia.edu/extendedlearning.

Joining Term (J-Term) at Fredonia

Every winter, Fredonia offers a select group of undergraduate and graduate courses - on campus, online and abroad. Most offerings begin and end within two or three weeks. For additional information about Fredonia’s J-Term, please contact Extended Learning or visit https://home.fredonia.edu/jterm.

Summer Sessions at Fredonia

During Summer Sessions, students have the opportunity to get ahead in their studies, explore courses outside of their disciplines, get back on track, or launch their college studies early. Every summer, Fredonia offers a comprehensive program of undergraduate and graduate course work – on campus, online, and abroad.

For additional information, please contact Extended Learning or visit https://home.fredonia.edu/summer.
Art Exhibitions
Each season, many art exhibits are presented on campus. The 2,000 square-foot Cathy and Jesse Marion Art Gallery, housed within the Michael C. Rockefeller Arts Center, hosts several curated contemporary art exhibits each season. The emphasis of the shows is on contemporary work in painting, printmaking, photography, sculpture, graphic design and media arts. The gallery also hosts exhibits by the visual arts department faculty current students. All exhibits feature a public reception open to students, faculty, and community residents. The Emmitt Christian Gallery on the second floor of the arts center is used to exhibit class projects, solo student shows, visiting artist work, and other small exhibits throughout the year.

Athletics
Fredonia has a long and storied history of successful competition on athletic fields, courts and rinks across the state. A highly respected coaching staff has produced over 120 collegiate All-Americans, a number of National Champions, and a plethora of team championships at the conference and regional level.

Fredonia's coaches also serve on advisory committees throughout the east and have held top positions in a number of statewide, regional and national organizations.

Offering a wide range of programs for students wishing to participate at a competitive level, Fredonia sponsors athletic teams for men in the following sports: baseball, basketball, cross country, hockey, soccer, swimming, and track and field. Offerings on the women's side include: basketball, cheerleading, cross country, lacrosse, soccer, softball, swimming, tennis, track and field, and volleyball.

All full-time undergraduate students are eligible to try out for Fredonia's athletic teams. Athletic eligibility is determined through the office of the Director of Athletics. Varsity athletes must comply with all appropriate rules and regulations of Fredonia, as well as those of all playing conferences with which Fredonia is affiliated. In addition to being certified eligible to participate through the Athletic Director's office, each prospective student-athlete must receive clearance from the Student Health Center prior to participating in team activities including practice, staff-supervised pre-season conditioning, and contests. All student-athletes are encouraged to enroll in the university's insurance program or provide the Director of Athletics with evidence of personal health and accident insurance coverage.

The athletic policies of Fredonia are developed by the Director of Athletics in conjunction with the Intercollegiate Athletic Board, an advisory board to the University President composed of faculty, students and administrators. Athletic affiliations are maintained with the NCAA and SUNYAC. While programs range in strength from national level competition to competitive conference play, the university encourages students to try out for teams if their ability warrants.

Intramural and Recreational Activities
Office: 154 Dods Hall
(716) 673-3590
Geoff Braun, Director
Email: recreational.sports@fredonia.edu
Website: http://www.fredoniabluedevils.com/

The Intramural and Recreational Sports Program is conducted under the direction of the Department of Athletics and Recreation, and is funded by the State of New York and Student Association fees.

The university facilities are outstanding and include Dods Hall, with its classrooms, gymnasium, fitness center, dance studio, and racquetball courts, and Steele Hall, which contains an ice rink, basketball courts, an indoor track, and a natatorium. Facilities also include outdoor tennis and basketball courts, an outdoor track, and numerous playing fields. A new complex, containing both a natural grass field and a state-of-the-art artificial turf field, serves as home to the varsity soccer and lacrosse teams as well as recreational space for intramurals and club teams.

Intramurals offers a variety of sports and recreational activities to meet the needs of the campus population while striving to provide a safe and fun environment for the students, faculty, and staff. Intramurals employs approximately 45 students to serve as sport commissioners, field supervisors and officials. In the fall programs include dodgeball, sand volleyball, flag football, broomball and indoor volleyball. The spring semester includes basketball, floor hockey, soccer, tennis, softball, innertube
waterpolo and broomball. Women's, men's, and co-ed leagues are offered for each sport and leagues can run four to ten weeks during the semester.

The program also oversees a strong club sport offering which includes Club Ice Hockey, Blackhorse Rugby (Men's & Women's), Ultimate Frisbee, Extreme Sports, Field Hockey, Soccer, Figure Skating, Basketball, Soccer, Dance, Volleyball (Men's & Women's) and Men's Lacrosse.

**Blue Devils Fitness Center**
Fredonia held a ribbon cutting ceremony for its new $3.25 million dollar Blue Devil Fitness Center in March of 2013. The 7,900 square foot state-of-the-art facility consists of four work-out areas - a cardio zone, a selected circuit zone, a free weight zone and a rock climbing wall. In addition to providing a well-planned and extremely attractive fitness space, the wide variety of exercise equipment meets the needs of Fredonia's recreational users as well as more highly trained students and athletes.

**Dods Hall Gymnasium**
The Dods Hall gymnasium is adjacent to the fitness center and consists of over 9,000 square feet of space in which the department conducts aerobics and step aerobics classes and a variety of recreational, intramural and athletic activities. The space can accommodate large fitness classes of over 100 students per class. The department's facility schedule can be accessed by visiting http://www.fredonia.edu/athletics.

**Steele Hall Fieldhouse**
The fieldhouse measures 155 feet x 130 feet (19,500 sq. ft.) and is capable of seating 3,500 people. The Steele Hall Fieldhouse houses a varsity basketball court, two intramural/recreational courts, four competitive volleyball courts, a four lane all weather indoor track, and a walking aerobic exercise area for students, faculty and staff. The area is also used for special events, Commencement, and concerts.

**Outdoor Tennis and Basketball Facilities**
Eight outdoor lighted tennis courts were constructed in 2000. There are two outdoor basketball courts adjacent to the new tennis courts. These additions to the university's facilities allow the department to offer beginning and advanced tennis, recreational and intramural programs and intercollegiate tennis for women.

**University Stadium**
The University Stadium is composed of a natural grass playing field and a synthetic turf field. Both areas are lighted for evening games and intramural and recreational sports activities.

**Steele Hall Ice Rink**
The Steele Hall Ice Rink measures 200 feet x 85 feet. The rink hosts many student activities including beginning, intermediate and advanced skating classes, figure skating classes, and student club sports such as figure skating and club hockey. Recreational skating is offered to students at no charge on Monday, Friday, Saturday and Sunday evenings. Intramural broomball and floor hockey are conducted in this area once ice is removed in the early spring.

**Natatorium**
The natatorium, which officially opened in the fall of 2001, consists of an eight-lane competitive swimming pool and separate diving area which houses two 1-meter and one 3-meter diving boards. The permanent bleacher area seats 650 spectators. The pool deck has a special extra wide teaching area. Space is available for on-deck fitness equipment for the training of competitive swimmers. A separate area is available for the SCUBA cascade system that allows the university to offer both beginning and advanced SCUBA classes. The natatorium programs consist of intercollegiate swimming and diving; beginning, intermediate and advanced swimming classes; fitness through swim classes; aqua-aerobics; intramural water polo and water basketball; recreational swim and learn to swim classes. A large meeting-special event room exists adjacent to the natatorium and is available for meetings and special events.

**Other Student Clubs and 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 the Campus Life website at https://www.fredonia.edu/student-life/campus-life. 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
Adolescent Development Club
African Student Union
Alpha Lambda Delta
Alpha Phi Omega
Alpha Psi Lambda
Alpha Psi Omega
Alternative Break Program
American Choral Directors Association
American Democracy Project
American Institute of Graphic Arts
American Marketing Association
American Sign Language
American Society for Quality Group of SUNY Fredonia
American String Teachers Association
Animation & Illustration Club
Applied Communication Association
Art Forum
Artists Alliance
Astronomy Club
Beta Beta Beta
Biology Club
Black Horse Rugby
Black Student Union
Blue Ice Step Team
Bowling Club
Brother 2 Brother
Business Club
Caribbean Student Association
Catholic Student Fellowship at Fredonia
Chemistry Club
Chess Club
Chinese Club
Chi Tau Omega
Club Hockey
Cinema Alternatives
Club Lacrosse
Club Ultimate Frisbee
Colleges Against Cancer
Comic Culture Forum
Computer Science Club
Conductor’s Guild
Council for Exceptional Children
Criminal Justice Club
Delta Chi
Delta Phi Epsilon
Dungeons and Dragons Fellowship
Dynamic Intonation
Enactus
Engineering and Computing Dynamics
Engineering and Physics Society
Envied Xpression
e-Sports Club
Ethos
Enfusion
Figure Skating Club
Fred A.S.S.I.S.T.
Fredonia Anime Club
Fredonia Bass Society
Fredonia Brass Association
Fredonia Dance Team
Fredonia Democracy Initiative
Fredonia Feminists
Fredonia Field Hockey
Fredonia Film Society
Fredonia Jazz Workshop
Fredonia LARPing Fellowship
Fredonia Mock Trial
Fredonia Musicological Society
Fredonia Radio Systems
Fredonia State Keyboard Association
Fredonia State Pep Band
Fredonia Woodwind Association
Fredonia's Divine Sound
Friends Across Borders
Fun & Logic Club
FUSITT
Geology Club
Golden Key International Honor Society
Guitar Society
Habitat For Humanity
Harry Potter Club
Health Professions Club
Hillel
History Club
Immersive Theatre
Improv Collective
Immersive Theatre
International Club
InterVarsity Christian Fellowship
Japanese Club
Kappa Delta Pi
Kappa Sigma
Latinos Unidos
Life Stories
Love Your Melon
MAC (Makeup Artist Club)
Men's Club Soccer
Model European Union
Much More Chill
Music Listening Club
Music Industry Club
Music Therapy Club
NAfME
National Alliance for Mental Illness
Native American Student Union
New York State Band Directors Association Collegiate Chapter
Nerf Club
Noteworthy
NSSLHA
Operation Smile
Orchesis Dance Company
Partners in Health Engage
Percussion Guild
Performing Arts Company
Phi Mu Alpha Sinfonia
Play on Words
Political Science Association
Premium Blend
Pride Alliance
Psi Chi
Psychology Club
Public Relations Student Society of America
Random Acts
Residence Hall Association
Resident Assistant Advisory Board
Rince: Fredonia Irish Dance
Rotaract
S.T.E.P.S.
Sci-Fi and Fantasy Enthusiasts
Sierra Club
Sigma Alpha Iota
Sigma Gamma Phi
Sigma Kappa
Sigma Phi Epsilon
Sigma Tau Delta
Sister Circle
Ski and Ride Club
Social Work Club
Social Work Honor Society
Society for Professional Journalists
Some Like it Hot
Sound Services
Spectrum
Spikeball Club
Sport Management and Exercise Science Club
String Teachers Guild
Student Dance Organization
Student National Association of Teachers of Singing
Student Opera Theatre Association
Student Veterans of SUNY Fredonia
Tau Sigma
Teachers Education Club
The Guerrillas
The Leader
The Ring Road Singers
The Riveters
Tönmeisters
Trading Game Card Alliance
Transfer Student Organization
Trombone Workshop
Ukulele Club
Under This Bonnet
Unione Italiana
Video Game Development Club
WNYF-TV
Women's Club Soccer
Women's Club Volleyball
Writers' Ring

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.

**Student Association**

All fee-paying students at Fredonia are members of the Student Association. The Representative Assembly, which is the governing body, is divided into the five classes (freshman through graduate) and has one elected representative for every 100 students in the class.

The representatives have a very important responsibility. Besides representing their constituents at the assembly meetings, they are individually appointed to faculty committees of their choice. Through these committees, students voice their opinions on
such matters as academics, food services and Student Affairs. Student membership on these committees is not limited to assembly members; however, everyone is encouraged to participate.

The association also has committees and departments of its own which require student input.

Elections for the office of president and vice president of the Student Association are held every November for a one-year term that runs from January to December. The Student Association President has the privilege of appointing a comptroller. The Speaker of the House is nominated and elected annually by the 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 G112. 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.

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 Choir, a group of mixed voices selected by individual auditions for musical ability, flexibility, quality, and rhythmic sense, performs frequently both on and off campus.

The College Choir, with approximately 60 selected mixed voices, studies and performs major choral works in addition to standard sacred and secular music.

The Fredonia Camerata 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 130 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 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.

Other student music groups include various a cappella groups, student chapters of the American Choral Directors Association (ACDA) and American String Teachers Association (ASTA), Conductor’s Guild, Ethos (new music association), Fredonia Bass Society, Fredonia Brass Association, Fredonia’s Divine Sound Gospel Choir, Fredonia Guitar Society, Fredonia Jazz Workshop, Fredonia Student Keyboard Association (FSKA), Fredonia Trombone Workshop, Fredonia Woodwind Association, Improv Collective, Musicological Society, New York State Band Directors Association Collegiate Chapter (NYSBDA), Noteworthy (show choir), Percussion Guild, Phi Mu Alpha Sinfonia, Ring Road Singers, Sigma Alpha Iota (SAI), Student National Association of Teachers of Singing (SNATS), Student Opera Theatre Association (SOTA), Tonmeisters (sound recording technology), and the Ukulele Club.

**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.
The Faculty Student Association (FSA) is a New York State not-for-profit corporation governed by a board of directors composed of seven students, three university administrators, three faculty, one classified staff member, and one alumni member all representing the State University of New York at Fredonia. It operates under a contract with Fredonia in conformance with guidelines established for all campuses. The FSA receives no government subsidies, and is self-supporting through revenues generated from its services. Any income after operating expenses is used to benefit the university by supporting campus programs. The FSA administrative offices are located in Gregory Hall. For general information, students should call (716) 680-6228 or visit the FSA website at fsa.fredonia.edu or email fsa.office@fredonia.edu.

Dining Services Operations

_Cranston Marché_ – Our open kitchen All-You-Care-To-Eat dining hall was designed for total transparency leaving out any mystery. All of our Chef's creations and made-to-order entrees are prepared and served right in front of you at four platforms – Pantry, Pizza and Pasta, Grill, and Ice Cream. The Marche is located on the second floor of University Commons.

_Centre Pointe_ features a variety of grab-and-go quick-serve selections, in addition to sushi, a salad bar, fresh fruit, and more. El Diablo Azul, Mexican Grill, presents fresh Mexican recipes. Both facilities are located in the Centre Pointe Lounge on the lower level of the Williams Center.

_Cafes and Concessions_, strategically placed across campus, serving coffee, pastries, soup, salads, and hot and cold sandwiches. _Starbucks®,_ located on the ground floor of the University Commons, offers rich-brewed coffee, espresso and blended beverages, _Teavanna® teas, La Boulange® pastries, breakfast and lunch hot sandwiches served all day, and a variety of giftware and merchandise.

_Tim Horton's Café and Bakeshop_, on the ground floor of the Williams Center, featuring hot and iced beverages, donuts and other pastries, sandwiches, paninis and soups.

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 and weddings. Customers should contact the FSA catering office at (716) 680-6227, email fsa.catering@fredonia.edu, or visit the FSA catering website at http://fsa.fredonia.edu/Catering/AboutFSACatering.aspx for more information.

Other FSA Services

_ID Cards_ - A university ID card; the FREDCard is required for all enrolled Fredonia students. The cards are initially issued free of charge to students by the FSA office. In addition to being a required form of identification on campus, they are also the official card used for all meal plans, Fredonia debit and FREDFunds accounts. More information can be obtained at http://www.MyFREDCard.com.

The _University Bookstore_ provides new and used textbooks as well as a variety of reference and study aids. Located on the ground floor of University Commons, the bookstore also offers school and art supplies, health and beauty aids, imprinted items, clothing, greeting cards and a unique array of gift items including products from local artists and vendors. The store's computer department features hardware, software and a wide range of peripherals. The _Convenience Store_, located adjacent to the bookstore, offers health and beauty aids, beverages, and a variety of food items. FREDEXpress, located in Thompson Hall, offers a variety of grab and go items. For more information, please email fsa.bookstore@fredonia.edu.

The _Fredonia Debit Account_ is a prepaid taxable debit account. The account offers the convenience of making purchases at any FSA location without carrying cash. Students signing up for a Fredonia Debit Account Plan of $600.00 or more are entitled to take advantage of the Textbook Pre-Pack option. The bookstore will prepackage a student's textbooks and subtract the cost from the student's Fredonia Debit Account. When the student arrives on campus they simply go to the Pre-Pack area in the University Commons, show their FREDCard and pick up their books. The debit account may also be used for online purchases and book rentals through the Bookstore website. Please visit the site at http://www.fredoniabookstore.com/.

_FREDFunds_ is a prepaid, taxable declining balance account designed to offer you a convenient and flexible payment option that is accepted at a wide range of locations both on and off campus. This account also offers the convenience of making purchases without carrying cash. More information may be found at http://www.MyFREDCard.com.
The FSA provides check-cashing services on campus. Students who possess a valid Fredonia I.D. (FREDCard) may cash checks in the bookstore. Fees for check cashing may apply and there is a $25.00 limit. In addition, electronic banking machines are available on campus.

The FSA’s vending program on campus includes snacks and beverages.

Cable television service is provided to all students living within the residence halls on campus. A diverse channel lineup offers students a wide variety of programming.

The Faculty Student Association and Residence life have teamed together to provide use of washers and dryers for all resident students on campus at no extra charge. The washers and dryers are located in a designated laundry room within each residence hall.

The Alumni House and Conference Center, located at 286 Central Avenue at the main entrance to the campus, is available by reservation for private parties and meetings.

The Herbert C. Mackie Memorial Camp (College Lodge) in Brocton, located 12 miles from the campus on Route 380, is a 203-acre refuge featuring a beautiful and rustic lodge and hiking trails. The facility is available by reservation for weddings, parties, cross-country ski outings, and other events. The camp also has a sleeping lodge that will accommodate up to 90 guests. More information may be found at http://www.collegelodge.com.

Student Employment - The FSA provides jobs ranging from 10 to 20 hours per week for approximately 200 students. A variety of student jobs are available, with the majority being in dining service locations. The jobs are not based on financial need.

GRADUATE STUDIES AND STUDENT SERVICES

Office of Graduate Studies
E230A Thompson Hall
(716) 673-3808
Email: graduate.studies@fredonia.edu
Website: http://home.fredonia.edu/gradstudies

The State University of New York at Fredonia offers programs of graduate study leading to the degrees of Master of Arts, Master of Science, Master of Music, Master of Science in Education, Master of Arts in Teaching, and Advanced Certificates in School Building Leadership and TESOL (Teaching English to Speakers of Other Languages). Professional certification to teach in the public schools of New York may be secured concurrently with the master's degree if the student follows a program designed for this purpose. Graduate instruction at Fredonia is offered during the academic year, and in several special sessions (i.e. J-Term, May Term, Summer). Many courses are scheduled to meet in the late afternoons and evenings to accommodate the employed student.

Each graduate student will be assigned a graduate advisor who consults with him/her regarding programmatic, professional, and scholarly development. Within the framework of all programs, the student pursues graduate study consistent with his/her previous preparation and directed toward his/her own academic and professional objectives.

Degree programs in Interdisciplinary Studies are individually designed by the student, submitted to individual departments for review, and approved by the Associate Provost for Graduate Studies, however, the degree program is on hiatus for 2017-2018. For more information, please contact Graduate Studies.

Graduate Mission Statement

Graduate Studies at Fredonia supports the overall mission of our campus by offering breadth and depth of learning to students at the post-baccalaureate level through disciplinary, interdisciplinary and professional programs that will benefit the students and enrich the communities in which they live and work. Graduate programs foster scholarly inquiry, professional research, ethical practice, artistic performance, and practical innovation, encouraging students and faculty to discover lifelong connections between their intellectual and creative aspirations and civic and global opportunities for engagement.

Vision Statement

Fredonia prepares graduate students to be engaged and informed citizens of the region and world, through discipline-specific coursework, interdisciplinary collaboration, experiential research and creative activity. The university establishes opportunities
for graduate students to connect their academic work and professional aspirations in meaningful ways by networking with faculty, professionals, alumni and peers. The faculty and professional staff help our graduate students strive to meet their highest goals by challenging them to research, write, publish, innovate and teach, becoming lifelong contributors to their communities.

**Governance and Policy**

**The Graduate Council**

The Graduate Council is a standing committee of the University Senate charged with oversight of the academic integrity of graduate studies at Fredonia. In this capacity, Graduate Council supports the development of master's degrees and advanced certificate programs that provide a sound education for graduate students, lead to advanced qualification in the professions and disciplines, and generate new knowledge through research and publications by its faculty and students. The committee's primary functions are: to monitor academic standards; to approve new graduate program and course creation and revisions; to develop standards for admission; to oversee matriculation and graduation standards; and to recommend new and/or revised graduate programs and policies to the Associate Provost for Graduate Studies, Sponsored Research, and Faculty Development. An annual report of all actions taken and policies recommended is sent to the Associate Provost for Graduate Studies and the Executive Committee of the University Senate.

For information on Council membership, terms, and other information, please refer to the Fredonia University Senate webpage and scroll to Graduate Council under "Standing Committees."

**The Faculty**

As a result of their research and scholarly attainments in their own fields of specialization, Fredonia faculty members have demonstrated their competence to offer graduate instruction. Since most classes are small, students are often able to work closely with their instructors and may join them in research projects. Information about the research interests of faculty members is available on department websites, and from department chairpersons, directors, and deans.

Fredonia's graduate policies develop from several levels of authority and responsibility: local, regional and national. Campus governance legislates academic policies through the University Senate and its committees under the guidance and leadership of the Provost and Vice President for Academic Affairs. Fredonia's master's programs are registered and certified by the State of New York. On a national level, accreditation bodies supervise the curriculum and quality of programs by setting standards and benchmarks. Accredited programs are listed at the beginning of the online University Catalog.

**Admission Requirements**

**General Admission Requirements**

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, in certain cases, international students can get certification. Students should contact Graduate Studies at (716) 673-3808 or email graduate.studies@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 is available 24 hours a day, seven (7) days a week. The application may be accessed from the Graduate Studies home page (home.fredonia.edu/gradstudies).

For additional information, please see Graduate Admissions (p. 560) in the Admissions and Financial Aid section (p. 545) of the catalog.

**International Graduate Application Requirements**

In addition to the general application requirements (p. 599), international applicants are required to submit additional materials in order to complete immigration paperwork necessary to study in the United States.

International applicants must submit the following additional materials, available on the Graduate Studies website (http://home.fredonia.edu/gradstudies):

- **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: 79
  - IELTS: 6.5
  Fredonia's school code for reporting the TOEFL, TOEIC, and IELTS scores electronically is 2539.

- **FSA-4 form: Financial Statement**: All international applicants must submit evidence of full financial support for all expenses at Fredonia as a condition of being issued immigration documents for F-1 or J-1 status (i.e., the Certificate of Eligibility, form I-20AB or IAP-66). The FSA-4 form must be signed by both the applicant and the applicant's financial sponsor. The submitted form must contain an original signature.

- **Proof of financial support**: Applicants must submit an original bank statement from the financial sponsor verifying the available funds. Only original financial documentation with original signatures and seals will be accepted.

While an admission decision can be made without the financial documentation, the I-20 or DS-2019 forms cannot be issued until all documents are received.

Applicants must send the FSA-4 form and supporting documentation to the Assistant Director of International Student Services, S226A Williams Center, Fredonia, NY 14063 (or email to iss@fredonia.edu).

Persons who have further questions about these requirements should contact the Assistant Director of International Student Services iss@fredonia.edu.

- **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, and/or departmental websites.**

**Non-degree Study**

Reasons for applying to become a non-matriculated (non-degree) student vary, but usually fall into the following categories:

- **Personal or professional development**: Those who have earned a master's degree or higher at Fredonia or elsewhere are welcome to apply for non-degree graduate study for the purpose of personal or professional development. A maximum of 9 credit hours is allowed, but may be waived.

- **Pre-graduate preparation**: Students who have earned a bachelor's degree and need to take graduate-level course work in order to bolster a weak undergraduate GPA or to prove capability for graduate-level work may apply for non-degree study and, if approved, take a maximum of 9 credit hours.

- **Visiting graduate students**: Graduate students who attend other schools and are interested in taking course work at Fredonia may apply for non-degree graduate study and, if approved, take a maximum of 9 credit hours.

To help maintain the quality of Fredonia's graduate programs and to ensure appropriate enrollment capacity, the university asks that applicants explain reasons for requesting non-matriculated admission and indicate from which department(s) desired classes are sought.

A maximum of 9 credit hours (6 credit hours of education course work) taken as a non-degree student is allowed. The credits may later be applied to a graduate degree program at Fredonia upon the student's request.
As a general rule, students taking graduate courses without pursuing a degree who decide to apply for a degree program must have a grade point average of at least 3.0 at the time they apply. Under unusual circumstances, chairpersons may accept students with a lower GPA into a degree program, but in that case, the students enter with conditional status, with one semester in which to improve their records.

Application Deadlines

All applications must be accompanied by a non-refundable application fee of $75. The application fee is assessed when an applicant submits her/his application online, and applicants may choose to pay online using a credit or debit card, or electronic check.

Completed applications must be submitted to the Graduate Studies Office as follows:

Summer/Fall Admission
The application deadline is April 1. Applications will be accepted after April 1 and will incur an additional $25 late fee ($100 total). Late applications for fall admission to degree study will be accepted until August 10. Applications for non-degree study will be accepted until August 20. Applicants are advised to keep in mind that many department reviewers are off campus during the summer months; early application submission will facilitate a shorter waiting period.

Fall Admission: Speech Language-Pathology
The Speech Language-Pathology degree program is restricted to fall admission. The application deadline is February 1. ALL application materials must be received by this date and no late applications will be accepted.

Spring Admission
The application deadline is November 1. 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.

At the discretion of the Graduate Studies Office and based on extenuating circumstances, a student whose application for degree study is incomplete may be offered non-matriculated admission until a final departmental admission decision has been reached. Non-degree students are permitted to take a maximum of 9 credit hours total and are not required to submit recommendation letters. Non-matriculated admission does not guarantee later acceptance into a degree program.

Application Requirements

In addition to completion of a baccalaureate or equivalent degree at an accredited institution, the following materials are required for an applicant to be considered for graduate study at Fredonia:

- The Graduate Application must be submitted online or hard copies of application materials must be mailed or delivered in person to the Graduate Studies Office.
- A non-refundable application fee of $75 must accompany applications submitted by published deadlines. Late applications incur a $25 late fee for a total fee of $100. The application fee may be paid by credit card or debit card, or electronic check.
- Applicants must submit a Statement of Intent, a one-page (minimum) essay explaining one’s academic/professional/personal goals and how Fredonia is expected to help meet these goals. A strong statement of intent will also showcase an applicant’s talents and experiences that make him/her an attractive candidate for graduate study at Fredonia. It is always a good idea for a trusted colleague, friend, or family member to proofread the statement of intent. A high-quality, grammatically correct statement is expected.
- A current résumé must accompany the graduate application.
- A minimum of two current letters of recommendation or three professional references are required (depending on degree program). 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. Each recommendation must include both a scholarly criteria rating and a narrative evaluation. 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 official transcripts covering prior graduate as well as all undergraduate preparation from all institutions attended (except Fredonia) is required. Applicants who completed undergraduate studies at Fredonia are not required to submit transcripts.

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.

Graduate Tuition and Fees
Please refer to the Admissions and Financial Aid (p. 545) section of the catalog for Graduate Tuition and Fees, etc.

Graduate Tuition and Fees
Graduate Tuition and Fees (p. 563)

College Fee
College Fee (p. 565)

Student Services and Program Charge
Student Services and Programs Charge (p. 567)

Miscellaneous Fees, Fines or Deposits
Miscellaneous Fees, Fines or Deposit (p. 566)

Refund/Payment of Financial Aid Due to Discontinuance of Study
Refund/Repayment of Financial Aid (p. 566)

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.

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 minorities that have been historically under-represented in higher education, or by having overcome a disadvantage or other impediment to success in higher education.

A maximum $5,000 per academic year may be awarded to a recipient enrolled in at least 6 credit hours per semester. Awards may be used for course work completed during summer or other special sessions at the discretion of the Graduate Studies Office.

Application instructions and further details may be found at http://home.fredonia.edu/gradstudies/funding-opportunities. 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 their studies, and the advisor should approve the student's overall program. Registration instructions will be available to students online and as a part of their acceptance information. Students must register during the time periods listed in the university calendar (https://home.fredonia.edu/registrar/calendar) to avoid a late registration fee.

Graduate students must maintain continuous enrollment status to be eligible for registration in subsequent semesters. Continuous enrollment status is defined as either currently registered for course work or on approved academic leave. Graduate students who fail to maintain continuous enrollment must apply for reinstatement to their degree program.
**Full and Part-Time Status**

Fredonia generally recommends a full-time academic course load of 9 graduate-level credit hours per semester. Course load varies by degree program. Graduate assistants may be categorized as full-time students with a course load of 6 credit hours per semester. Some state and federal financial aid programs require recipients to register for a minimum of 12 credit hours per semester (or a minimum of 6 credit hours per semester if recipient is a graduate assistant) to maintain funding. Students should contact the Financial Aid Office for details and personalized counseling.

**Academic Credit and Course Load**

**Unit of Academic Credit**

The State University of New York at Fredonia defines the credit hour in accordance with United States Department of Education regulations, *USDE Guidelines for Preparing/Reviewing Petitions and Compliance Reports*, January 2012, p. 74.

Credit hour: A credit hour is an amount of work represented in intended learning outcomes and verified by evidence of student achievement that is an institutionally established equivalency that reasonably approximates not less than-

1. One hour of classroom or direct faculty instruction and a minimum of two hours of out of class student work each week for approximately 15 weeks for one semester or trimester hour of credit, or 10 to 12 weeks for one-quarter hour of credit, or equivalent amount of work over a different amount of time; or

2. At least an equivalent amount of work as required in paragraph (1) of this definition for other academic activities as established by the institution including laboratory work, internships, practica, studio work, and other academic work leading to the award of credit hours.

**Course Load**

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. Graduate assistants normally carry a course load of 6 to 9 semester hours during the fall and spring. These limits may be waived; please contact the Graduate Studies Office for more information at graduate.studies@fredonia.edu.

**Graduate Course Numbers**

Graduate courses at Fredonia are numbered 500-599 and 600-699. Under exceptional circumstances, a maximum of 6 credit hours of advanced undergraduate-level courses may be allowed. Prior permission is required prior to the student's enrollment in the course. Undergraduate courses previously taken in the major area of specialization will not receive graduate credit.

With prior approval, qualified undergraduates may enroll in a limited number of graduate-level courses, either for credit to be applied to their undergraduate programs or toward a Fredonia graduate program they enter at a later time. In the latter case, a student will be charged the difference between undergraduate and graduate tuition when the credit is applied to the graduate transcript.

**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 (https://home.fredonia.edu/registrar/calendar). 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 (https://home.fredonia.edu/registrar/calendar).

**Academic Leave of Absence**

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. Student who do not obtain permission from the department for an academic leave will be deemed inactive at the end of one non-enrolled semester and will be required to apply for reinstatement. Students approved for an academic leave will not be required to apply for reinstatement.

Withdrawal from Program

The university reserves the right to require any student who does not maintain minimum academic standards, or who is not in good academic standing, to withdraw. Graduate students who find it necessary to leave the university before the end of a semester must officially withdraw from Fredonia through the Graduate Studies Office using the form available in the forms section of the Graduate Studies website.

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 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. Reinstatement applications are available in the forms section of the Graduate Studies website.

Graduate Degree Requirements

1. Curricular requirements: Completion of published curricular requirements for the degree with a minimum cumulative quality point average of 3.0 for graduate work completed at Fredonia.

2. Time limit requirement: Completion of all degree requirements within a five-year period beginning in the admission semester unless an extension has been approved by the department. Graduate students are expected to make reasonable progress, as determined by the department in which they are enrolled, toward the completion of their degree requirements. The Academic Standings process will identify students who are not making reasonable 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 students' advanced mastery of their fields. 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 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. In general, signature-ready thesis work is due in the student's department three weeks before the desired graduation date (approximately April 20 for May graduation). Department deadlines may vary.

4. Thesis: A copy of each thesis must be reviewed in advance and approved by the Associate Provost for Graduate Studies before the graduate student is approved for graduation. If changes are required, a student will need to make them before degree conferral. Graduate students beginning work on thesis research or thesis writing should obtain the university-wide thesis guidelines well in advance.

5. Fulfillment of Residence requirement: A candidate for the master's degree must have completed at least 21 semester hours of graduate work in residence, i.e. in courses offered by Fredonia rather than credits transferred from other institutions.
6. **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.

7. **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).

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. Students who complete their degree work in December may participate in the previous or subsequent May graduation ceremony.

**Transfer Credit**

A student may transfer a maximum of 9 credit hours of graduate course work completed at another institution. Credit will be accepted for course work that forms a related part of the student's total Fredonia graduate program. Students must 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 in the forms section of the Graduate Studies website. 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.

**Graduate Academic Policies**

These policy statements differ somewhat from the general academic policies of the university. Students with policy questions should set up an appointment to visit with the Associate Provost for Graduate Studies.

**Grading System**

All courses taken for graduate credit are evaluated by the letter grades A, A-, B+, B, B-, C+, C, C-, D, F (failure), S (satisfactory), U (unsatisfactory), I (incomplete), IP (in progress - for capstone work only), 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. Students must fill out the "work completion contract" in the forms section of the Graduate Studies website.

**Graduate Deferral of Acceptance**

Accepted students may defer acceptance for up to one academic year. An approved deferral carries the stipulation that any new admission and/or program requirements, as deemed necessary by the program coordinator, chair, and dean that may be implemented during the period of deferral, will be communicated in a timely manner to the student. Students must meet these admission changes prior to course registration.
Graduate Academic Standing

The purpose of the Graduate Academic Standing policy is to address both academic and non-academic graduate student deficiencies in a consistent, fair, and timely manner. **Academic deficiencies** comprise poor course performance, a course grade below 3.0 GPA, a cumulative GPA below 3.0, or other academic deficiencies as identified by the student's department and program. **Non-academic deficiencies** comprise poor professional disposition, ethical violations, or other personal issues that interfere with program performance.

Departments are charged with identifying students with deficiencies by midterm of each semester and at the conclusion of each semester. As well, program coordinators should ensure that remediation plans for each probationary student are in place and submitted in accordance with department, college and university policy.

Graduate students pursuing a degree are required to maintain a minimum grade point average of 3.0. At the end of each semester as part of a graduate Academic Standings process, the records of all degree students are reviewed. Each student with a cumulative average below 3.0 will be placed on academic probation for one semester. The purpose of the probationary semester is to give the student sufficient warning of academic danger. A student is considered to be in good academic standing even while on probation. If, at the end of their next semester, students have not re-established the required average, they may be required to withdraw from the university.

There may be exceptional circumstances that would affect a student's ability to regain the required academic average at the end of one semester. Students under such circumstances may seek the support of his/her advisor and the chairperson of the major department in appealing the required withdrawal.

**Graduate Assistants** will maintain an overall minimum 3.0 GPA per semester of funding. Students whose semester GPA falls below that or who carry grades of Incomplete beyond the mid-point of the following semester will potentially incur tuition repayment charges. GAs may not use a tuition waiver to repeat courses for which they did not earn a passing grade.

Students who fail to establish minimum expectations for good standing within 5 years, including reinstatement, may be subject to academic dismissal. Exceptional circumstances will be reviewed by the program coordinator, chair, dean and the Associate Provost for Graduate Studies.

Graduate Grade Appeals

A graduate student holds the rights to be treated in a nondiscriminatory manner and to file a grade appeal. If the graduate student claims that an earned grade is based on discrimination, the student must file the discrimination claim first with the office of Diversity, Equity, and Inclusion. Upon resolution of the discrimination claim, the student may file the grade appeal.

Students who believe that a course grade or other grade reported is incorrect has the right of appeal by the following procedure within one semester after final grades are posted.

- They must first discuss the grade with the instructor.
- If the student is still unsatisfied after the discussion with the instructor, they 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 decides that the student's case has merit, 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 will be appointed. 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 who will notify the student and the instructor of the decision.
- If the department chairperson decides that the student's case does not merit further investigation or if the student disagrees with ad hoc committee's judgment, the student may appeal this decision to the Associate Provost for Graduate Studies and the college Dean. The student must supply the same supporting materials as those given to the department chairperson. If, after discussion with appropriate faculty and/or administrators, the Associate Provost for Graduate Studies and the college Dean decide that the student has a case that merits investigation, the Associate Provost for Graduate Studies, in consultation with the college Dean, may appoint an ad hoc committee of the same composition as that described above for the purpose of investigating the student's case.
- The investigative committee will review the case, interview the student and the instructor separately, and reach a judgment by majority vote. This judgment will be communicated to the Associate Provost for Graduate Studies who will notify the student, instructor, and department chairperson and dean.
• If a change of grade is recommended by the committee, the instructor may initiate the change, or the committee's recommendation will be forwarded to the Associate Provost for Graduate Studies and the Provost and Vice President for Academic Affairs for their consideration. The Provost and Vice President for Academic Affairs may modify the grade if the committee so recommends.

• At any time during this process prior to the time a final decision is made, the graduate student may withdraw their 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 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 forms section of the Graduate Studies website. 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 years after the completion of the original course. Tuition waivers may not be used to pay for a repeated course. Exceptional circumstances will be reviewed by the coordinator, chair, dean and the Associate Provost for Graduate Studies. However, students who cannot complete courses in a timely manner as determined by the program may be subject to academic dismissal.

It is important to note that although the initial grade will remain on the student's academic transcript, the overall quality point average will be re-calculated based on the new grade earned for the repeated course.

**Policy on Continuous Enrollment**

**Purpose**
The purpose of the Continuous Enrollment policy is to provide a mechanism for allowing continuous usage of university resources (library, advising, network privileges, etc.) during periods of sustained research and scholarship and to account for student enrollments and faculty involvement in capstone and 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 for which a graduate student is required to register during semesters 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 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 extension course for which the student enrolls.

**Student Responsibilities**
The student and capstone/thesis advisor must complete the Graduate Work Completion Contract, indicating the specific work that remains to be done and an agreed-upon date for completion. The form must be sent to the Graduate Studies office; a copy will be sent to the Registrar, to the student's department chair, and the appropriate Dean's office.

**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, students must formally withdraw from the graduate degree program and apply for reinstatement when they are prepared to complete the thesis/capstone project. Withdrawing from a graduate degree program curtails student usage of university resources, including the faculty advisors involvement in the research project. Reinstatement to a graduate program following a leave of absence requires Department, Dean and Associate Provost for Graduate Studies approval.

**Statute of Limitations Policy**
No course taken more than 7 years prior to application for a current master’s degree program will be considered for credit toward the new degree.

Departments are responsible for scrutinizing past graduate credit earned at Fredonia to determine the appropriateness of transferring such credit toward a current graduate degree. Any coursework for which the student earned a grade lower than ‘B’ will not be accepted. Other credit will be accepted at the discretion of the student’s department.
The department may consult with the Associate Provost for Graduate Studies if they wish to include credit older than 7 years.

**General Information for Graduate Students**

Graduate students are welcome to attend all campus activities including special lectures and concerts. The Student Services and Programs Charge often defrays completely the admission charge to many functions. Interested persons should see the student activities section for links to facilities and their operating hours.
Teacher Education Certification

Certification Information

The Dean of the College of Education serves as Fredonia's Chief Certification Officer and is responsible for reviewing all applications for certification to ensure compliance with local and New York State requirements. Any questions or concerns related to the process of acquiring certification should be directed to Dean of the College of Education Christine Givner, 704 Maytum Hall, (716) 673-3311. Additional information can be obtained by contacting the College of Education Office of Student Services at (716) 673-4768 (http://www.fredonia.edu/coe/studentservices.asp).
GENERAL EDUCATION

It all matters. In the world today, what you know, how you know it, and what you can do with that knowledge matters. It matters in your education. It matters in your profession. It matters in your communities. It matters in the perspectives you form, the decisions you make, and the actions you take in your life.

On our campus, Fredonia’s general education curriculum constructs important and useful foundations to what you know and how you can use that knowledge. That’s why we call our general education program Fredonia Foundations.

In your theme-based Fredonia Foundations courses, you will build knowledge in key areas with experts in those fields. They will share their passion for their content and support you to find your own. Through the themes, you will develop skills and ways of thinking you can use throughout your education and your life.

Mission Statement of General Education Program

The Fredonia General Education Program facilitates students’ acquisition of the knowledge and skills required to be creative, responsible, and engaged global citizens. At Fredonia, general education emphasizes integrated, interdisciplinary skills, competencies, experiences, and perspectives that foster critical thought and form the foundation for lifelong learnin
STUDENT AWARDS AND RECOGNITION

The State University of New York at Fredonia has many ways in which high achieving students can be honored for their academic success. Some of these include Dean’s List, Graduation with Honors, Lanford Prize and Honor Societies. Each is outlined below.

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 3.70 or higher.
2. *Magna Cum Laude* - Quality Point Average between 3.50 and 3.69.
3. *Cum Laude* - Quality Point Average between 3.30 and 3.49.

Students may graduate with honors only when they have completed at least 45 hours of graded work at Fredonia. Graded work includes all courses that carry quality points and excludes courses that are graded “satisfactory-unsatisfactory” or “pass-fail.” Only those credits earned at Fredonia will be computed in the final average.

Lanford Prize
The Lanford Presidential Prize from the Oscar and Esther Lanford Endowment of the Fredonia College Foundation is presented at Commencement to a member of the graduating class who has demonstrated balanced achievement. The recipient is selected by nomination from among those students whose accomplishments exemplify the university’s ideals. Criteria for selection include a high degree of personal honesty and integrity, substantial intellectual growth and achievement during university years, a minimum grade point average of 3.25, and exemplary service to Fredonia, including active participation in more than one area of university life. The award is named for President Emeritus Oscar Lanford.

Dean's List
About one month after the end of each semester, the university announces the names of students who are recorded on the Dean’s List. The list includes all students who have earned a quality point average of 3.30 or higher for that semester with a course load of at least 12 credit hours. Courses with P or S grades are not included in the 12 hours.

Societies
*Alma Mater Society.* An honorary organization of students selected annually by the student body at Fredonia. The society was established in 1966 by the Student Association for the purpose of recognizing those students, faculty and staff who have exhibited outstanding qualities of character and leadership in support of the student body and the campus community as a whole during their university years.

*Alpha Epsilon Rho* (AERho). The National Broadcasting Society. An honors organization comprised of student and professional broadcasters whose primary goal is to bridge the gap between the academic and professional worlds of broadcasting in order to better prepare students to enter the broadcasting industry. Student national members must have a GPA of 3.0 in communication courses. Local membership requires a 2.5 GPA in communication courses.

*Alpha Kappa Delta.* Sociology majors and minors who maintain a minimum 3.0 grade point average in their major or minor and overall are eligible for induction into *Alpha Kappa Delta,* the International Sociology Honorary Society.

*Alpha Lambda Delta.* A national honor society recognizing first year students who have maintained a 3.5 or higher GPA and are in the top 20 percent of their class during their first year of higher education. *Alpha Lambda Delta* was re-chartered at Fredonia in 2006.

*Alpha Psi Omega.* A national dramatic society for students in theatre arts at the junior or senior level who have attained an overall grade point average of 3.25 in their major and who contribute significantly to the theatre program.
Beta Beta Beta. A national honor society recognizing superior scholarship and research in the biological sciences. The Upsilon Chi chapter of Beta Beta Beta was installed at Fredonia in 1966.

Chi Alpha Epsilon. A national honor society recognizing continued academic achievement of students admitted to colleges and universities through non-traditional criteria, developmental or Higher Education Opportunity-type programs. Students must be full-time and have a 3.0 GPA for two consecutive semesters. The Alpha Mu chapter was established at Fredonia in September 1999.

Delta Mu Delta. A national honor society in business administration.

Financial Management Association National Honor Society. Established in 1976, the membership is composed of outstanding students in the field of business finance.

Golden Key International Honour Society. A national honor society recognizing superior academic achievement and excellence among students from all academic disciplines. Open to juniors and seniors in the top 15 percent of their class. Golden Key has nearly 350 chapters at colleges and universities in six countries and the U.S.

Kappa Delta Pi. A national honor society in education. The local chapter is Zeta Upsilon. Membership is by invitation.

Omicron Delta Epsilon. A national academic honor society granting recognition in the field of economics. Tau chapter was installed at Fredonia in 1971.

Phi Alpha Theta. An international honor society in history whose membership is composed of students and professors and whose purpose is to recognize, through its membership, excellence in the study of history. Membership is open to any student who has completed 12 or more credit hours of history and who has achieved prescribed standards of academic proficiency.

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 Mu Epsilon. A national honor 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 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. No student inductees for years, but maintains a chapter for faulty as a research society.

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.
STUDENT LIFE ON CAMPUS

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 its constituents 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. Awards are annually given to those UAC members who are in good academic standing and have shown an interest in improving the quality of campus life by their extra-curricular involvement.

The Office of Alumni Affairs also sponsors the College Ambassador program (undergraduate students who assist at official university functions and at the President's home) and coordinates the Senior Challenge fundraising campaign to assist members of the graduating class with the class gift.

Fredonia Ticket Office
http://www.fredonia.edu/tickets
The Fredonia Campus Ticket Office is located in the Williams Center, Room G-140. It provides a variety of services for the campus and surrounding community. 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 and Greyhound bus companies. The Ticket Office also sells tickets for a shuttle service to the Buffalo airport and Depew Amtrak station, and for downstate motor coach charters. These shuttles and charter busses run for the Thanksgiving, Winter, and Spring breaks. Hours of operation during the academic year are Monday through Friday from 9:00 a.m. until 6:00 p.m., and Saturday from 1:00 p.m. until 5:00 p.m. The office is closed on Sundays and most major holidays.

Leadership Program
http://www.fredonia.edu/campuslife/leadership
The Leadership Program through Enrollment and Student Services offers workshops for freshmen and sophomores who are nominated by Fredonia faculty and staff. The workshops are designed to introduce students to leadership theories. The junior and senior program introduces students to tasks, strategies and skills of effective leadership. Course activities move students from theory to practice of leadership skills through the use of experiential learning, oral expression, and teamwork activities.

For additional information about the Leadership Program, please call (716) 673-3898 or email susan.mcnamara@fredonia.edu.

NOTE: The Leadership Studies minor is an interdisciplinary program offered through Academic Affairs that requires 21 credit hours of course work, offering classes from the following disciplines: global, communication, groups and organizations and presentation skills, as well as internship credit. The Leadership Studies minor is selective. Applications must be submitted via the program requirements (see Leadership Studies program information). The Leadership Program and the Leadership Studies program work together to provide unique experiences for Fredonia students. For additional information about the Interdisciplinary Studies - Leadership Studies minor, please call (716) 673-3898 or email susan.mcnamara@fredonia.edu.

Michael C. Rockefeller Arts Center and Visiting Artists, Ensembles and Speakers
The Michael C. Rockefeller Arts Center, a magnificent performing and visual arts facility, includes the 1,200-seat King Concert Hall, the 400-seat Marvel Theatre, the 200-seat Bartlett Theatre, and the 2,000 square foot Marion Art Gallery.

Over 150 public events are presented each season for the benefit of campus and community audiences.

Fredonia has a rich cultural life, not only because of the many artistic events produced on campus, but also because of a full schedule of visiting artists and speakers, many brought to campus by the arts center.
Each season, the center presents the DFT Communications Pops Series, three evenings of musical relaxation and enjoyment. Guest ensembles on the series have included The Hit Men, Roger Williams, the Three Phantoms in Concert, the Moscow Boys Choir, and the Canadian Brass. Rockefeller Arts Center also produces the traditional Commencement-Eve Pops Concert, providing additional performance opportunities for students from the Department of Theatre and Dance and the School of Music. Other noted artists and speakers who have visited campus in recent years include Yo-Yo Ma, Arturo Sandoval, Neil DeGrasse Tyson, Maya Angelou and Rita Moreno.

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.

Residence Life

Office: Gregory Hall, First Floor
(716) 673-3341
Kathy Forster, Director
Email: residence.life@fredonia.edu
Website: http://students.fredonia.edu/reslife/

The Residence Life Office is located on the first floor of Gregory hall. There are 14 residence halls for students to choose from, including 3 single gender buildings and 11 co-educational buildings; 2 of which are considered independent style halls. Students also have a choice of corridor, suite or kitchen suite living. All residence halls are smoke free and tobacco free.

University Village Townhouses opened in Fall 2014. This newer living option provides students with an off-campus feel but provides all the benefits of being on campus. Each townhouse has 4 single bedrooms with full-sized beds, a full kitchen with dishwasher, and furnished living and dining area. Each unit also includes a washer and dryer. The townhouses share a common building, the Village Center. Located in this center is the central office, resident mailboxes, lounge areas, a full kitchen, fireplaces, and group meeting areas. Residence hall living is all about convenience and belonging. Living right on campus in the middle of everything is the best and fastest way to become part of Fredonia. Reed Library is a short walk from anywhere on campus as are Blue Devil sporting events and regular activities in the Williams Center. It is our goal to make the residence halls feel like home away from home, a place where you belong. From Hall Council to Meetups to Resident Assistant programs to employment opportunities as a Night Desk Attendant, opportunities to connect and engage with other students in the residence halls are vast. We hope that you feel at home here.

Residence Halls

Fredonia is composed of a variety of residence halls in corridor and suite configurations, all of which have a 24-hour visitation policy. Each hall is home to a staff that will provide programming and offer a warm, caring atmosphere conducive to educational and social growth. The single gender hall for men: Chautauqua (corridor); and for women: Alumni (corridor) and Kasling (suite). The co-educational halls include: Disney (suite), Eisenhower (suite), Grissom (suite), Hemingway (suite), Hendrix (suite), Igoe (suite) McGinnies (corridor), Nixon (corridor) and Schulz (suite). Kitchen Suites: a limited number of three-bedroom suites including a full kitchen are available to upper level students in Disney and Eisenhower halls. Gregory Hall (corridor) and University Commons (suite) are co-ed, independent living halls (i.e., guests do not sign in) and restricted to upper level students.

University Commons consists of 124 premium spaces, featuring single and double rooms. Every two rooms share a bathroom and each room is equipped with heat and air conditioning which can be controlled in the room, and a micro-fridge unit.

University Village Townhouses are new to Fredonia as of Fall 2014. These townhouse units offer an independent living experience for upper level students. Each unit contains 4 single rooms, laundry facilities, kitchen area and living room area. Every 2 rooms share a bathroom and each room is equipped with a full-size bed. All residence halls are locked on a 24-hour basis. Residents are provided with electronic door access, and their guests must be escorted at all times.

Freshmen and sophomores (two years post high school, regardless of credit hours) who do not live with parent(s) or spouse within 50 miles of the campus are required, as a matter of policy, to live in university housing for the full academic year. Any exemption to the regulation must be granted, in writing, by the Director of Residence Life. The housing license is for the entire
academic year and cannot be canceled during this period as long as the student is registered, regardless of class standing. There is a $350 fee for approved termination of the housing license.

Assignment to a residence hall is first-come, first-served, based on the date of submission of a completed housing application and license.

Detailed information about university housing facilities for students will be provided upon request by the Office of Residence Life, Gregory Hall, State University of New York at Fredonia, Fredonia, NY 14063, at the website listed above, or residence.life@fredonia.edu.

Regulations governing occupancy of residence hall rooms will be provided by the Office of Residence Life at the time the housing packet is forwarded to students. All occupants within the halls are expected to comply with the appropriate regulations.

For the cost of housing, see the Admissions and Financial Aid (p. 551) section of the catalog on University Expenses.

**Residence Life Staff**
The Residence Life staff is dedicated to providing essential services for resident students and fostering an environment that promotes personal and community development. We look forward to your participation and good citizenship.

**Residence Directors**
Each residence hall is supervised by a Residence Director (RD) who either has achieved or is working towards a Master’s degree. The RD is responsible for establishing an environment that fosters the academic and personal growth of resident students. The RD promotes educational programs, provides personal counseling and referrals, maintains consistent behavioral expectations for residents, and supervises the Resident Assistants (RAs).

**Resident Assistants**
Resident Assistants carry out a wide range of functions that benefit resident students and the overall residential community.

RAs provide peer counseling, sponsor educational and social programs, enforce rules and regulations, serve as a referral resource and generally assist in the operation of the residence hall.

**Administrative Staff**
The Administrative Staff includes the Director, Associate Director, Assistant Director, Agency Program Aide and Office Assistant. Collectively they are responsible for housing administration, staff hiring and supervision, purchasing furnishings and supplies for the residence halls, information systems, inventory control, and budget management. The Office of Residence Life is located on the first floor in Gregory Hall.

**ResNet Staff**
The ResNet Office of the ITS Service Center provides residential technology support and campus access control services for students, staff and guests living in the residence halls. The primary services provided include Internet connectivity support and campus access control services to students living in the residence halls. The administrative staff includes the Residential Technology Coordinator and student ResNet Technicians. The staff works closely as a team to facilitate computer, access control and network support calls as well as other projects throughout the year. The ResNet office is located on the first floor of McGinnies Hall.

ResNet provides the following services for students, staff and guests living in the residence halls:

- Campus Access Control Services
- Internet Service Connectivity Support
- University Owned Printer Support
- University Owned Computing Software Support
- Personal Computing Device Repair
- Residence Life Multi-media Equipment Reservation & Checkout
- Residence Life Smart Classrooms
- Residence Life Event Management Digital Signage
- University Owned Computing Hardware Support
- Student Printing Service
Students living on-campus may bring their computers into the ResNet Office for repair or they may schedule an in-room appointment to have a ResNet Technician assist them with their computer-related problems. For more information, students should contact the office at (716) 673-3668 or by emailing resnet@fredonia.edu.

**Off Campus**

Off-campus housing information is maintained in the Student Association Office located in the Williams Center. An online search for available office-campus housing is available at http://www.fredonia.edu/sa.

**University Police Department**

Office: Gregory Hall, 2nd Floor  
(716) 673-3333  
**Ann Burns, Chief of University Police**  
Email: burns@fredonia.edu  
Website: http://students.fredonia.edu/upd

The University Police Department, located on the second floor of Gregory Hall, is responsible for all law enforcement related issues on campus.

Members of the department are trained in a community policing environment where students and the campus community share in keeping the university a safe place to study and work. University Police Officers are responsible for the security of all buildings and the protection of students, employees, and visitors. Duties include community policing, parking enforcement and all investigations.

The Chief of University Police is assisted by four lieutenants and ten officers. The office maintains a close working relationship with the Fredonia Police Department and other law enforcement agencies in Chautauqua County.

For additional information about University Police, please visit their website at http://students.fredonia.edu/upd or call (716) 673-3333.

**Veteran Affairs, Office of**

Office: 158 Nixon Hall  
(716) 673-3423  
**Mark Mackey, Veterans Affairs Administrator**  
Email: veteransaffairs@fredonia.edu  
Website: https://students.fredonia.edu/veteransaffairs/

Fredonia takes pride in serving the men and women in uniform and assisting them in their educational goals. Located on the main floor of Nixon Hall, the Office of Veterans Affairs provides information, advice and processes the paperwork for the certification of veterans educational benefits. The office is staffed by part-time student veteran employees under the supervision of the Office of Veterans Affairs Coordinator and is open for business Monday through Friday; however, hours of operation will vary and be posted on the office door.

Please note that Fredonia provides special services to students receiving VA educational entitlements:

- **Late Fee Waivers** - Please visit the Student Accounts office web page for further details at http://www.fredonia.edu/admin/studentaccounts/payments.asp.
- **Tutoring** - The Fredonia Veterans Affairs Office participates in the GI Bill Tutorial Assistance Program.
- **VA Work-Study Program** - The Fredonia Veterans Office participates in the federal VA Work-Study Program.
- **Counseling Services** - Trained staff with in the Counseling Center provide confidential counseling services.
- **On-Campus Housing Residency** - While Fredonia requires all freshmen and sophomores to reside on-campus unless they live within 50 miles of the University, this residency requirement is waived for all students who have served on active duty and are receiving VA educational entitlements.
- **Deployments Without Penalty** - Students serving in the military that are placed on active duty during a semester may withdraw and return to the university normally without academic penalty. However, it is left to the discretion of the course instructor to determine the appropriate course of action depending on the course of study. Students will need to provide the university a copy of official orders and follow the normal Leave of Absence Policy and Continuing Enrollment.
Military Credit Evaluation - Fredonia will evaluate all military transcripts (AARTS, SMARTS, ACE etc.) and provide as much transfer credit as possible in accordance with the program of study and university policies.

Fredonia has created the Veterans Affairs Support Team which includes specific staff members across campus from key departments who specialize in assisting students with veterans related issues. The departments include the following: Financial Aid Office, Admissions Office, Counseling Center, Academic Advising, Student Accounts, and Career Development.

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.
Family Educational Rights and Privacy Act of 1974

The Family Educational Rights and Privacy Act of 1974 (FERPA), as amended, sets forth requirements designed to protect the privacy of parents and students. The statute governs the access to records maintained by educational institutions, and the release of such records.

The Family Educational Rights and Privacy Act permits current or former students to inspect and review their education records. Students are also accorded a right to a hearing in order to question the contents of their education records. Written consent from students may be required before personally identifiable information about them will be released from their education records, as provided by law.

Specifically, institutions are permitted to release directory information on students unless the students have notified the institution to withhold this information. Directory information is "public" information, which may be released without the student's consent to persons making inquiry. Personally identifiable information designated as directory information includes: the student's name; local address and local telephone number; cell phone number; University-assigned e-mail address; student's home address and home telephone number; parent's name, address and telephone number; class schedule; date and place of birth; major field of study; class standing; participation in officially recognized sports and activities; weight and height (athletes); electronic images (photographs); dates of attendance at University; degrees and awards received; and the most recent previous educational institution attended.

Inquiries or complaints may be filed with the Family Policy Compliance Office, U.S. Department of Education, 400 Maryland Ave. SW, Washington, D.C. 20202-5901.

Copies of the State University of New York at Fredonia compliance policy and the Family Educational Rights and Privacy Act are available at the Office of Enrollment and Student Services.

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 May 2015. They were approved by the College Council and the University President in May 2015.

Attendance at Fredonia is a privilege afforded the student by the State of New York and not a legal right. The determination of a student's fitness to be admitted to the University and to continue as a student has been entrusted by the Board of Trustees of the State University to the President and their staff. The term "student" or "students" include all persons taking or auditing classes at Fredonia, both full-time and part-time, pursuing undergraduate, graduate, or professional studies; matriculated in any University program. Persons who are not officially enrolled for a particular term, but who have a continuing student relationship with the University are considered "students."

General Policy

Students seeking knowledge and understanding also need freedom to inquire, to exchange ideas through discussion, publication and public presentations. These opportunities are basic to education in and for a democratic society. To ensure these freedoms, the University requires a community free from violence, threats, and intimidation; protective of free inquiry; respectful of the rights of others; open to change; supportive of democratic and lawful procedures; and dedicated to the rational and orderly approach to the resolution of human problems. In exercising freedoms and in discharging the rights and obligations of citizenship, students must also recognize their responsibilities to other individuals, to the University, to the state and the nation, and to society in general. Orderly and dignified expression and conduct are encouraged.

In protection of these freedoms the University must establish certain standards of personal and group conduct. The University may apply sanctions or take other appropriate action when the conduct of individuals or groups on or off campus directly or significantly interferes with the freedom to teach and learn, the safety and health of persons in the community, the maintenance or protection of property, the provision of living accommodations and other services, and the sponsoring of non-classroom activities such as lectures, concerts, athletic events, and social functions.
Counseling, guidance, and rehabilitation are the preferred means for resolving behavior problems. Although disciplinary proceedings play a secondary role in resolving such problems, violation of the Standards of Behavior listed below may result in privilege restriction, suspension, or expulsion/dismissal.

In the legitimate interest of the University in protecting property and the safety and welfare of specific individuals or the general public, the University President or their designee may temporarily suspend an individual, change a student's residence hall location, or remove a student from the residence halls pending a decision by the Director of Student Conduct, the judicial board, or the administrative board.

**Statement of Jurisdiction**

The Standards of Behavior and University Policies apply to all undergraduate students, graduate students, and student organizations of Fredonia. The Standards of Behavior primarily prohibits misconduct on Fredonia property, but may address off-campus conduct when the behavior or the continued presence of the individual, in the University's sole judgment, impairs, obstructs, or interferes with the mission, processes, or functions of Fredonia. Students should be aware that Fredonia reserves the right to review and take disciplinary actions based on conduct occurring off-campus and/or between academic periods.

A student's actions may violate civil or criminal laws as well as being deemed a violation of the University Standards of Behavior or University Policies. In such situations, that student may be held accountable by both civil authorities and face University sanction. The University may at its sole discretion, elect to pursue disciplinary action against a student even if criminal charges involving the same incident are pending, have been dismissed, or were reduced.

Students that elect to Study Abroad through the International Education Center will assume dual status as a Fredonia student and as a student of the host institution. Fredonia's Rights and Responsibilities are applicable while the student is studying abroad.

Students who witness serious violations of Fredonia policy, procedures, or Rights and Responsibilities that are potentially harmful to the safety and well-being of others may be charged with a violation or violations if they fail to remove themselves from such situations and/or report the incident to proper authorities.

**Specific Standards of Behavior (Code of Conduct)**

Listed below are the Specific Standards of Behavior (Code of Conduct). The Code of Conduct is broken into four sections: Personal Identification and Representation; Interference with the Health, Safety, or Rights of Other Persons; Care of University or Personal Property; and Demonstrations by Groups or Individuals. Alleged violation of any of the following may result in charges being filed against a student or organization.

1. **Personal Identification and Representation**

   Failure to act in accordance with these standards must be treated as a major failure to accept responsibility as a student and make one subject to separation from the community. Prohibited are:

   a. Furnishing false or incomplete information to University offices, officials, or judicial boards.
   b. Failing to appear before a University official or judicial board when directed to appear.
   c. Making, forging, printing, reproducing, copying, or altering any record, document, writing, or identification used or maintained by the University that results in injury, defrauding, or misrepresentation.
   d. Refusing to identify one's self when directed by an authorized University official. Students are expected to carry their FREDCard at all times.
   e. Transferring one's own FREDCard to another person for the purpose of that other individual obtaining University services or privileges.
   f. Attempting to obtain or obtaining a University privilege or service to which the student is not entitled.
   g. Providing erroneous information concerning a change in status concerning financial refunds or financial independence from parents or legal guardian.
   h. Failing to provide accurate information regarding one's local address, residency, or contact information.

2. **Interference with the Health, Safety, or Rights of Other Persons**
All members of the University community share the responsibility for protecting and maintaining community health, safety, and the rights of other persons. Students are required to obey the statutes and laws of the Nation and the State, as well as the ordinances and laws of the village of Fredonia, city of Dunkirk, and the towns of Pomfret and Dunkirk. Conviction of a violation of such laws, statutes, or ordinances may be grounds for suspension or expulsion/dismissal. The following conduct is prohibited:

a. Failing to comply with reasonable directions of University or town officials (this includes, but is not limited to, faculty, staff, Residence Director, Resident Assistant, security, safety, fire officials, or police officers carrying out properly assigned responsibilities).

b. Failing to comply with the final decision of a judicial board or administrative action.

c. Misusing safety equipment including but not limited to tampering with fire equipment, fire alarms, exit lights, refusal to obey a fire alarm, initiating a false fire alarm, submitting a bomb threat, activating emergency phones, sprinkler systems, or propping doors open.

d. 
   i. Fighting and threats to, physical abuse of, harassment, assault, or any other action which threatens to or does endanger the health, safety, or welfare of a fellow student, a member of the University community, a campus guest, or community member.
   
   ii. Engages in or threatens to engage in behavior which poses imminent danger of causing substantial harm to a fellow student, a member of the University Community, a campus guest, or community member.
   
   iii. Obstructing or disrupting the teaching, administrative, or public service functions of the University.
   
   iv. Obstructing or disrupting disciplinary proceedings or authorized University activities.

e. 
   i. Engaging in any action or situation which endangers or causes substantial harm to the mental or physical health of a fellow student, a member of the University community, a campus guest, or community member.
   
   ii. Creating a situation that results in severe or pervasive harassment of a fellow student, a member of the University community, a campus guest, or local community. This includes bullying and cyber-bullying.
   
   iii. Engaging in any form of hazing, which endangers the mental or physical health or involves the forced consumption of alcohol or drugs for the purpose of initiation or affiliation with any club, team, or organization. This is more particularly described in the University Policy on Hazing.

f. Participation in any form of non-consensual sexual intimacy and unwanted physical sexual conduct. This includes sexual violence, sexual harassment, and sexual discrimination and is more particularly described in the University Policy on Sexual Violence Prevention and Response.

g. Possessing firearms, explosives (including firecrackers), weapons, BB guns, paintball guns, potato guns, blow guns, knives (4 inches or longer or switchblade), bayonets, nunchucks, brass knuckles, and toy guns that look like real guns.

h. Illegally using, possessing, selling, or distributing narcotics, stimulants, depressants, hallucinogens, marijuana or its derivatives, or drug paraphernalia. This is more particularly described in the University Policy on Drugs and Alcohol and the Residence Life Policy and Procedures.

i. Illegally using alcohol, possessing alcohol, selling or distributing alcohol; distributing alcohol to minors. This is more particularly described in the University Policy on Drugs and Alcohol.

j. Sponsoring or hosting a house party that violates state or local laws, ordinances, or jeopardizes the health and safety of students or others.

k. Use of speakers or other sound amplifying equipment without approval as to the time and place from the Office of Enrollment and Student Services, Campus Life, and/or Residence Life.

l. 
   i. Posting of posters, handbills, or notices without permission of the appropriate University official. The Office of Campus Life must approve all postings.
ii. Solicitation or vending of any kind is not permitted on campus or in residence halls, unless permission is given by the Office of Residence Life and/or the Office of Campus Life.

m. Fredonia is a tobacco-free campus. Smoking is not permitted. This includes, but is not limited to; cigarettes, cigars, pipes, hookahs, e-cigarettes, etc.

n. Ignoring reasonable standards of appropriate behavior, including disorderly conduct.

o. Engaging in fraud, cheating, plagiarism, or collusion on any examination or on assigned work. This is more particularly described in the University Policy on Academic Integrity.

p. Refusing to accept financial obligations incurred as a student enrolled at the University. The University is empowered to refuse to register, graduate, or release records of any student who is delinquent in their obligations to the University.

q. Viewing, possessing, or distributing child pornography.

r. Counterfeiting or violating copyright laws.

s. Illegal or inappropriate use of Fredonia's network or computers. This is more particularly described in the Computer and Network Usage Policy.

t. Engaging in unlawful gambling activities under conditions that are contrary to the provisions of state law or any applicable University policy.

u. Violating a local, state, federal law, or local ordinance.

v. Violating the University’s Policy on Bias Crimes/Incidents. This is more particularly described in the University’s Policy on Bias Crime Prevention.

w. Violating the University’s Policy on Non-Discrimination. This is more particularly described in the University’s Policy on Non-Discrimination.

3. **Care of University and Personal Property**

   Maintaining and preserving University grounds, academic buildings, resident and dining facilities, and other associated structures is an obligation of all members of the University community. Similarly, maintaining and preserving personal property is also an obligation. Prohibited are:

   a.  
      i. Theft, unauthorized possession of, property belonging to the University, a member of the University community, a campus guest, or community member.
      
      ii. Vandalism, destruction of, damage to, or inappropriate use of property belonging to the University, a member of the University community, a campus guest, or community member.

   b. Destruction, mutilation, and defacement of or tampering with books, magazines, library materials or equipment, or computer services or equipment.

   c. Unauthorized occupancy of or trespassing on University property or facilities, or that of a community member.

4. **Demonstrations by Groups or Individuals**

   The campus must be open to a free exchange of ideas and individuals and groups have protected Constitutional rights; therefore, all members of the community are encouraged to conduct dialogues with mutual respect and courtesy.

   Prohibited are:

   a. Denying to other students, officials, employees, or invited guests of the University lawful freedom of movement on the campus, lawful use of the property or facilities of the University, or the right of lawful entrance to and exit from any of the University's facilities.

   b. Impeding the staff or faculty of the University in the performance of their duties, or impeding any student of the University in the pursuit of their legitimate educational or social activities, through the use of restraint, coercion, or intimidation, or when force and violence are presented or threatened.

   c. Engaging in any intentional overt activity resulting in the obstruction to, disruption of, or interference with any of the legitimate missions, processes, procedures, or functions of the University.
d. Refusing to vacate a building, street, sidewalk, driveway, or other facility of the University when directed to do so by an authorized official.

e. Making unnecessary noise or causing noise to be made with objects and instruments, which disturb University functions or community living.

Rules and Regulations for Maintenance of Public Order on Campus

The materials below consist of regulations of the State University of New York Board of Trustees. However, it is not the Official Compilation of the Codes, Rules, and Regulations of the State of New York. Readers are advised to refer to the Official Compilation (8 NYCRR Part 535 et seq) in case of questions.

Part 535

1. Statement of Purpose. The following rules are adopted in compliance with Section 6450 of the Education Law and shall be filed with the Commissioner of Education and the Board of Regents on or before July 20, 1969, as required by that section. Said rules shall be subject to amendment or revision and any amendments or revisions thereof shall be filed with the Commissioner of Education and Board of Regents within 10 days after adoption. Nothing herein is intended, nor shall it be construed, to limit or restrict the freedom of speech or peaceful assembly. Free inquiry and free expression are indispensable to the objectives of a higher educational institution. Similarly, experience has demonstrated that the traditional autonomy of the educational institution (and the accompanying institutional responsibility for the maintenance of order) is best suited to achieve these objectives. These rules shall not be construed to prevent or limit communication between and among faculty, students, and administration, or to relieve the institution of its special responsibility for self-regulation in the preservation of public order. Their purpose is not to prevent or restrain controversy and dissent but to prevent abuse of the rights of others and to maintain that public order appropriate to a college or university campus without which there can be no intellectual freedom and they shall be interpreted and applied to that end.

2. Application of Rules. These rules shall apply to all state-operated institutions of the State University except as provided in Part 550 as applicable to the State University Maritime College. These rules may be supplemented by additional rules for the maintenance of public order heretofore or hereafter adopted for any individual institution, approved and adopted by the State University trustees and filed with the Commissioner of Education and Board of Regents, but only to the extent that such additional rules are not inconsistent herewith. The rules hereby adopted shall govern the conduct of students, faculty, and other staff, licensees, invitees, and all other persons, whether or not their presence is authorized, upon the campus of any institution to which such rules are applicable and also upon or with respect to any other premises or property, under the control of such institution, used in its teaching, research, administrative, service, cultural, recreational, athletic, and other programs and activities; provided however, that charges against any student for violation of these rules upon the premises of any such institution other than the one at which they are in attendance shall be heard and determined at the institution in which they are enrolled as a student.

3. Prohibited conduct. No person, either singly or in concert with others, shall:

a. willfully cause physical injury to any other person, nor threaten to do so for the purpose of compelling or inducing such other person to refrain from any act which they have a lawful right to do or to do any act which they have a lawful right not to do;

b. physically restrain or detain any other person, nor remove such person from any place where they are authorized to remain;

c. willfully damage or destroy property of the institution or under its jurisdiction, nor remove or use such property without authorization;

d. without permission, expressed or implied, enter into any private office of an administrative officer, member of the faculty or staff member;

e. enter upon and remain in any building or facility for any purpose other than its authorized uses or in such manner as to obstruct its authorized use by others;

f. without authorization, remain in any building or facility after it is normally closed;

g. refuse to leave any building or facility after being required to do so by an authorized administrative officer;

h. obstruct the free movement of persons and vehicles in any place to which these rules apply;
i. deliberately disrupt or prevent the peaceful and orderly conduct of classes, lectures, and meetings or deliberately interfere with the freedom of any person to express their views, including invited speakers;

j. knowingly have in their possession upon any premises to which these rules apply, any rifle, shotgun, pistol, revolver, or other firearm or weapon without the written authorization of the chief administrative officer; whether or not a license to possess the same has been issued to such person;

k. willfully incite others to commit any of the acts herein prohibited with specific intent to procure them to do so; or

l. take any action, create, or participate in the creation of, any situation which recklessly or intentionally endangers mental or physical health or which involves the forced consumption of liquor or drugs for the purpose of initiation into or affiliation with any organization.

4. Freedom of Speech and Assembly: Picketing and Demonstrations.

a. No student, faculty, or other staff member or authorized visitor shall be subject to any limitation or penalty solely for the expression of their views nor for having assembled with others for such purpose. Peaceful picketing and other orderly demonstrations in public areas of ground and building will not be interfered with. Those involved in picketing and demonstrations may not, however, engage in specific conduct in violation of the provisions of the preceding section.

b. In order to afford maximum protection to the participants and to the institutional community, each state-operated institution of the State University shall promptly adopt and promulgate, and thereafter continue in effect as revised from time to time, procedures appropriate to such institution for the giving of reasonable advance notice to such institution of any planned assembly, picketing, or demonstration upon the grounds of such institution, its proposed locale and intended purpose; provided, however, that the giving of such notice shall not be made a condition precedent to any such assembly, picketing, or demonstration and provided, further, that this provision shall not supersede nor preclude the procedures in effect at such institution for obtaining permission to use the facilities thereof.

5. Penalties. A person who shall violate any of the provisions of these rules (or of the rules of any individual institution) shall:

a. If they are a licensee or invitee, have authorization to remain upon the campus or other property withdrawn and shall be directed to leave the premises. In the event of their failure to do so they shall be subject to ejection.

b. If they are a trespasser or visitor without specific license or invitation, be subject to ejection.

c. If they are a student, be subject to expulsion or such lesser disciplinary action as the facts of the case may warrant, including suspension, probation, loss of privileges, reprimand, or warning.

d. If they are a faculty member having a term or continuing appointment, be guilty of misconduct and be subject to dismissal or termination of their employment or such lesser disciplinary action as the facts may warrant including suspension without pay or censure.

e. If they are a staff member in the classified service of the civil service, described in Section 75 of the Civil Service Law, be guilty of misconduct, and be subject to the penalties prescribed in said section.

f. If they are a staff member other than one described in subdivisions (d) and (e) of this section, be subject to dismissal, suspension without pay, or censure.


a. The chief administrative officer or their designee shall inform any licensee or invitee who shall violate any provisions of these rules (or of the rules of any individual institution supplementing or implementing these rules) that their license or invitation is withdrawn and shall direct them to leave the campus or other property of the institution. In the event of their failure or refusal to do so such officer shall cause their ejection from such campus or property.

b. In the case of any other violator, who is neither a student nor faculty or other staff member, the chief administrative officer or their designee shall inform them that they are not authorized to remain on the campus or other property of the institution and direct them to leave such premises. In the event of their failure or refusal to do so such officer shall cause their ejection from such campus or property. Nothing in this subdivision shall be construed to authorize the presence of any such person at any time prior to such violation nor to affect their liability to prosecution for trespass or loitering as prescribed in the Penal Law.

c. In the case of a student, charges for violation of any of these rules (or of the rules of any individual institution supplementing or implementing these rules) shall be presented and shall be heard and determined in the manner hereinafter provided in Section 535.9 of this Part.
d. In the case of a faculty member having a continuing or term appointment, charges of misconduct in violation of these rules (or of the rules of any individual institution supplementing or implementing these rules) shall be made, heard and determined in accordance with Title D of Part 338 of the policies of the Board of Trustees.

e. In the case of any staff member who holds a position in the classified civil service, described in Section 75 of the Civil Service Law, charges of misconduct in violation of these rules (or of the rules of any individual institution supplementing or implementing these rules) shall be made, heard and determined as prescribed in that section.

f. Any other faculty or staff member who shall violate any provision of these rules (or of the rules of any individual institution supplementing or implementing these rules) shall be dismissed, suspended, or censured by the appointing authority prescribed in the policies of the Board of Trustees.

7. Enforcement Program.

a. The chief administrative officer shall be responsible for the enforcement of these rules (or of the rules of any individual institution supplementing or implementing these rules) and shall designate the other administrative officers who are authorized to take action in accordance with such rules when required or appropriate to carry them into effect.

b. It is not intended by any provision herein to curtail the right of students, faculty, or staff to be heard upon any matter affecting them in their relations with the institution. In the case of any apparent violation of these rules (or of the rules of any individual institution supplementing or implementing these rules) by such persons, which, in the judgment of the chief administrative officer or their designee, does not pose any immediate threat of injury to person or property, such officer may make reasonable effort to learn the cause of the conduct in question and to persuade those engaged therein to desist and to resort to permissible methods for the resolution of any issues which may be presented. In doing so such officer shall warn such persons of the consequences of persistence in the prohibited conduct, including their ejection from any premises of the institution where their continued presence and conduct is in violation of these rules (or of the rules of any individual institution supplementing or implementing these rules).

c. In any case where violation of these rules (or of the rules of any individual institution supplementing or implementing these rules) does not cease after such warning and in other cases of willful violation of such rules, the chief administrative officer or their designee shall cause the ejection of the violator from any premises which they occupy in such violation and shall initiate disciplinary action as hereinbefore provided.

d. The chief administrative officer or their designee may apply to the public authorities for any aid which they deem necessary in causing the ejection of any violator of these rules (or of the rules of any individual institution supplementing or implementing these rules) and they may request the State University counsel to apply to any court of appropriate jurisdiction for an injunction to restrain the violation or threatened violation of such rules.

8. Communication. In matters of the sort to which these rules are addressed, full and prompt communication among all components of the institutional community, faculty, students, and administration, is highly desirable. To the extent that time and circumstances permit, such communication should precede the exercise of the authority, discretion, and responsibilities granted and imposed in these rules. To these ends each state-operated institution of the State University shall employ such procedures and means, formal and informal, as will promote such communication.

9. Notice, Hearing and Determination of Charges Against Students.*

a. The term chief administrative officer, as used in these rules, shall be deemed to mean and include any person authorized to exercise the powers of that office during a vacancy therein or during the absence or disability of the incumbent and for purposes of this section shall also include any designee appointed by said officer.

b. Whenever a complaint is made to the chief administrative officer of any state-operated institution of the university of a violation by a student or students of the rules prescribed in this Part (or of any rules adopted by an individual institution supplementing or implementing such rules) or whenever they have knowledge that such a violation may have occurred, they shall cause an investigation to be made and the statements of the complainants, if any, and of other persons having knowledge of the facts reduced to writing. If they are satisfied from such investigation and statements that there is reasonable ground to believe that there has been such a violation, they shall prepare or cause to be prepared charges against the student or students alleged to have committed such violation which shall state the provision prescribing the offense and shall specify the ultimate facts alleged to constitute such offense.

c. Such charges shall be in writing and shall be served on the student or students named therein by delivering the same to theirs or them personally, if possible, or, if not, by mailing a copy of such charges by registered mail to such student or students at their or their usual place or places of abode while attending college and also to the students or their home address or addresses, if different.
d. The notice of charges so served shall fix a date for hearing thereon not less than 10 nor more than 15 days from the date of service which shall be the date of mailing where necessary to effect service by mail. Failure to appear in response to the charges on the date fixed for hearing, unless there has been a continuance for good cause shown, shall be deemed to be an admission of the facts stated in such charges and shall warrant such action as may then be appropriate thereon. Before taking such action the hearing committee, hereinafter referred to, shall give notice to any student, who has failed to appear, in the manner prescribed in subdivision (c), of its proposed findings and recommendations to be submitted to the chief administrative officer and shall so submit such findings and recommendations 10 days thereafter unless the student has meanwhile shown good cause for his/her failure to appear, in which case a date for hearing shall be fixed.

e. Upon demand at any time before or at the hearing, the student charged or their representative, duly designated, shall be furnished a copy of the statements taken by the chief administrative officer in relation to such charges and with the names of any other witnesses who will be produced at the hearing in support of the charges; provided, however, that this shall not preclude the testimony of witnesses who were unknown at the time of such demand.

f. The chief administrative officer may, upon the service of charges, suspend the student named therein, from all or any part of the institution's premises or facilities, pending the hearing and determination thereof, whenever, in their judgment, the continued presence of such student would constitute a clear danger to themselves or to the safety of persons or property on the premises of the institution or would pose an immediate threat of disruptive interference with the normal conduct of the institution's activities and functions; provided, however, that the chief administrative officer shall grant an immediate hearing on request of any student so suspended with respect to the basis for such suspension.

g. There shall be constituted at each state-operated institution a hearing committee to hear charges against students of violation of the rules for maintenance of public order prescribed by or referred to in this Part. Such committee shall consist of three members of the administrative staff and three members of the faculty, designated by the chief administrative officer, and three students who shall be designated by the members named by the chief administrative officer. Each such member shall serve until a successor or replacement has been designated. No member of the committee shall serve in any case where they are a witness or have been directly involved in the events upon which the charges are based. In order to provide for cases where there may be such a disqualification and for cases of absence or disability, the chief administrative officer shall designate an alternate member of the administrative staff and an alternate member of the faculty, and their principal designees shall designate an alternate student member, to serve in such cases. Any five members of the committee may conduct hearings and make findings and recommendations as hereinafter provided. At any institution where the chief administrative officer determines that the number of hearings which will be required to be held is, or may be, so great that they cannot otherwise be disposed of with reasonable speed, the individual may determine that the hearing committee shall consist of six members of the administrative staff and six members of the faculty to be designated by the chief administrative officer and of six students who shall be designated by the members so designated by the chief administrative officer. In such event the chief administrative officer shall designate one of such members as chairperson who may divide the membership of the committee into three divisions each to consist of two members of the administrative staff, two faculty members, and two students and may assign charges among such divisions for hearing. Any four members of each such division may conduct hearings and make recommendations as hereinafter provided.

h. The hearing committee shall not be bound by the technical rules of evidence but may hear or receive any testimony or evidence which is relevant and material to the issues presented by the charges and which will contribute to a full and fair consideration thereof and determination thereon. A student against whom the charges are made may appear by and with representatives of their choice. The student may confront and examine witnesses against them and may produce witnesses and documentary evidence on their own behalf. They may be present at the hearing; the student charged and their representatives and witnesses; other witnesses; representatives of the institutional administration; and, unless the student shall request a closed hearing, such other members of the institutional community or other persons, or both, as may be admitted by the hearing committee. A transcript of the proceedings shall be made.

i. Within 20 days after the close of a hearing the hearing committee shall submit a report of its findings of fact and recommendations for disposition of the charges to the chief administrative officer, together with a transcript of the proceedings, and shall at the same time transmit a copy of its report to the student concerned or their representative. Within 10 days thereafter the chief administrative officer shall make their determination thereon. Final authority to dismiss the charges or to determine the guilt of those against whom they are made and to expel, suspend, or otherwise discipline them shall be vested in the chief administrative officer. If the student shall reject the findings of the hearing committee in whole or in part, the student shall make new findings which must be based on substantial evidence in the record and shall include them in the notice of their final determination which shall be served upon the student or students with respect to whom it is made.
*Applies to charges for violation of the rules prescribed by or referred to in this Part heretofore served which have not been finally determined within 60 days after the adoption hereof, which charges shall be referred to the committee constituted pursuant to said Section 535.9 for determination in accordance therewith, and said section shall apply to all charges for violation of such rules hereafter made, whether for violations heretofore or hereafter committed.

10. Rules for Organizations.

a. **Organizations.** Organizations which operate upon the campus of any state-operated institution or upon the property of any state-operated institution used for educational purposes shall be prohibited from authorizing the conduct described in subdivision (l) of section 535.3 of this Part.

b. **Procedure.** The chief administrative officer at each state-operated institution shall be responsible for the enforcement of this section, and, as used herein, the term chief administrative officer shall include any designee appointed by said officer.

i. 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.

ii. 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.

iii. 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

i. 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.

ii. **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.

**University Policies**

Listed below are policies the university has adopted to ensure the health, safety and well-being of the University community.
Acceptable Use Policy—Information Technology

I. Reason for Policy

Access to information technology is essential to the mission of the State University of New York at Fredonia (“Fredonia”) in providing Fredonia students, faculty and staff 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 the use of computing systems and software, internal and external data networks, as well as access to the Internet, be made available to all those of the Fredonia community. The preservation of that privilege for the full community requires that each faculty member, staff member, student, and other authorized user comply with institutional and external standards for appropriate use, whether on campus or from remote locations.

II. Policy Statement

To assist and ensure compliance with internal and external acceptable usage standards, Fredonia establishes the following policy which supplements all applicable Federal and State policies, including harassment, patent and copyright, student and employee disciplinary policies, and FERPA, as well as applicable federal and state laws.

A. Scope

The following document outlines Fredonia's policy on Fredonia-provided access to electronic information, services, computing facilities, and networks.

All creation, processing, communication, distribution, storage, and disposal of information by any combination of Fredonia resources and non-Fredonia resources are covered by this policy.

Technology resources covered by this policy include, without limitation:

• All Fredonia owned, operated, leased or contracted computing, networking, information resources, whether they are individually controlled, shared, standalone or networked,

• All information maintained in any form and in any medium within the Fredonia's computer resources, and Fredonia data networks,

• All physical facilities, including all hardware, software, applications, databases, and storage media.

B. Definitions

Authentication Credentials

• Assigned UserID/Username and PIN/Password (changed by users) that, used in conjunction, authenticates users to privileged computing facilities and resources.

Computing Facilities

• All software applications, desktop and mobile computers, networks, and computer peripherals licensed, owned or operated by Fredonia.

e-Services

• Fredonia's terminology relating to electronic services such as e-mail, Learning Management System, and electronic library resources.

Internet

• All networks external to Fredonia.

Intranet

• All networks internal to Fredonia.

Managed

• Software and antivirus upgrades being controlled by a server and "pushed" to the desktop or laptop.

Un-managed

• A computing device that does not have anti-virus definitions or upgrades implemented automatically. The computer user installs all upgrades manually.
Users

- Individuals who make use of Fredonia technology resources. This includes students, faculty and staff, authorized guests, and all persons authorized for access or use privileges by Fredonia including volunteers for local non-profit agencies, scholars visiting from other State University of New York institutions, and the like.

C. Policy Statement

Users of Fredonia’s computing resources must comply with federal and state laws, Fredonia rules and policies, and the terms of applicable contracts including software licenses while using Fredonia computing resources.

Users who engage in electronic communications with persons in other states or countries or on other systems or networks may also be subject to the laws of those jurisdictions and the rules and policies of those other systems and networks. Users with questions as to how the various laws, rules and resolutions may apply to a particular use of Fredonia’s computing resources should contact the Chief Information Officer’s office for more information.

Users are responsible for ascertaining what authorizations are necessary and such authorizations prior to using Fredonia computing resources. Users are responsible for any activity originating from their accounts which they can reasonably be expected to control.

Accounts and passwords may not, under any circumstances, be used by persons other than those to whom they have been assigned by the account administrator.

In cases when unauthorized use of accounts or resources is detected or suspected, the account owner should change the password and report the incident.

Although there is no set bandwidth, CPU time, or other limit applicable to all uses of Fredonia’s computing resources, Fredonia may require users of those resources to limit or refrain from specific uses if, in the opinion of the system administrator, such use interferes with the efficient operations of the system.

Users are also expected to refrain from deliberately wasteful practices such as printing unnecessary large documents, performing endless unnecessary computations, or unnecessarily holding public computers for long periods of time when others are waiting for the same resources.

Users must not use computing resources to gain unauthorized access to remote computers or to impair or damage the operations of computers or networks, terminals or peripherals. This includes blocking communication lines, intercepting or sniffing communications, and running, installing or sharing virus programs. Deliberate attempts to circumvent data protection or other security measures are not allowed.

Network services and wiring may not be tampered with or extended beyond the area of their intended use. This applies to all network wiring, hardware and in-room jacks. Users shall not use the residential network to provide Internet access to anyone outside of the Fredonia community for any purpose other than those that are in direct support of the academic mission of Fredonia.

D. User Accounts

Use of Fredonia’s computer systems and network requires that a user account be issued by Fredonia. Every computer user account issued by Fredonia is the responsibility of the person in whose name it is issued. Continued use of a previously assigned and previously enabled “@fredonia.edu” email account by an inactive or a transferred student is at the discretion of the Chief Information Office. Such accounts, if re-enabled will not be considered “theft-of-service”. Fredonia recognized clubs and student organizations may be issued a user account.

Faculty advisors shall designate a particular person(s) 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 Fredonia’s disciplinary procedures for misuse.

The following will be considered theft of services, and subject to penalties described below:

- Using a username without the explicit permission of the owner and of Information Technology Services;
- Allowing one's username to be used by another person;
- Using former system and access privileges after association with Fredonia has ended.

E. Resources
Fredonia’s information technology resources are, by nature, finite. All members of the Fredonia community must recognize that certain uses of Fredonia’s information technology resources may be limited for reasons related to the capacity or security of Fredonia’s information technology systems, or as required for fulfilling Fredonia’s mission.

Users shall not use information technology resources to excess. Excessive use of information technology resources by a particular user, or for a particular activity, reduces the amount of resource available to satisfy the needs of other users. Excessive use may degrade or jeopardize system functionality, and can result in significant costs to Fredonia. Some examples of excess use may include writing a program or script or using an Internet bot to perform a repetitive task such as attempting to register for a class or purchasing concert tickets online.

Users shall limit incidental personal use. Incidental personal use is an accepted and appropriate benefit of being associated with Fredonia. Appropriate incidental personal use of technology resources does not result in any measurable cost to Fredonia, and benefits Fredonia by allowing personnel to avoid needless inconvenience.

Incidental personal use must adhere to all applicable Fredonia policies. Under no circumstances may incidental personal use involve violations of the law, interfere with the fulfillment of an employee's professional responsibilities, or adversely impact or conflict with activities supporting the mission of Fredonia. Examples of incidental personal use may include, sending a personal email or visiting a non-work-related website.

F. Security & Privacy

Fredonia employs various measures to protect the security of its computing resources and its user’s accounts. Users should be aware, however, that Fredonia cannot guarantee security and confidentiality. Users should therefore engage in "safe computing" practices by establishing appropriate access restrictions for their accounts, guarding their passwords and changing them regularly.

Users shall not intentionally view information of other users, modify or obtain copies of other users' files, access or attempt to access other users' email, or modify other users' passwords without their permission.

Fredonia computers and networks are designed to protect user personal privacy and as such, users shall not attempt to circumvent these protections. 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, mail, or print files that do not show the correct username of the user performing the operation. Users shall not circumvent or attempt to circumvent security mechanisms or the intent of a system.

Computers are Fredonia owned state assets, as such Fredonia retains the inherent right to access these resources either directly or indirectly through remote access tools and techniques at any time.

While Fredonia does not routinely monitor individual usage of its computing resources, the normal operation and maintenance of the Fredonia's computing resources may require the backup and caching of data and communications, the logging of activity, the monitoring of general usage patterns and other such activities that are necessary for the provision of service. Fredonia may also specifically monitor or inspect the activity and accounts of individual users of Fredonia's computing resources, including individual login sessions and the content of individual communications, without notice, when:

• The user has voluntarily made them accessible to the public, as by posting to a web page;
• It reasonably appears necessary to do so to protect the integrity, security, or functionality of Fredonia or other computing resources or to protect Fredonia from liability;
• There is reasonable cause to believe that the user has violated or is violating this policy or any other law or policy;
• An account appears to be engaged in unusual or unusually excessive activity;
• Accessing the account is otherwise required or permitted by law, including but not limited to freedom of information laws, laws governing the conduct of parties engaged in or anticipating litigation, and laws governing criminal investigations.

G. Laws and Fredonia Policies

Users must employ technology resources consistent with local, state and federal laws and Fredonia policies. Examples include but are not limited to:

• Users shall comply with all federal copyright law.
• Users shall not download, use or distribute illegally obtained media (e.g. software, music, movies).
• Users shall not upload, download, distribute or possess pornography unless written approval has been granted by the Vice President of Academic Affairs / Provost office to accommodate academic research. Research of this nature shall be conducted in an isolated environment approved by the Associate Vice President of Information Technology/Chief Information Officer.

H. Commercial Use
Computing resources are not to be used for personal commercial purposes or for personal financial or other gain.

Occasional personal use of Fredonia's computing resources for other purposes is permitted when it does not consume a significant amount of those resources, does not interfere with the performance of the user's job or other Fredonia assigned responsibilities, and is otherwise in compliance with this policy.

Further limits may be imposed upon personal use in accordance with normal supervisory procedures concerning the use of Fredonia's equipment.

I. Enforcement
Users who violate this policy may be denied access to Fredonia's computing resources and may be subject to other penalties and disciplinary action, including possible expulsion or dismissal. Alleged violations will be handled through Fredonia's disciplinary procedures consistent with the terms and conditions of the governing labor agreements (if applicable).

Fredonia may suspend, block or restrict access to an account, independent of such procedures, when it reasonably appears necessary to do so in order to protect the integrity, security, or functionality of Fredonia's or other computing resources or to protect Fredonia from liability.

Fredonia may also refer suspected violations of applicable law to appropriate law enforcement agencies.

When Information Technology Services becomes aware of a possible violation, Information Technology Services will initiate an investigation in conjunction with relevant campus offices including the President's Cabinet members, Human Resources, and University Police in accordance with collective bargaining rights for applicable unions. 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.

XI. Related Documents, Forms, and Tools

Campus Policies
- Information Security Program (PDF)
- Information Management and Cyber Security Policy (PDF)

Federal Policies
- Gramm-Leach-Bliley Act
- FERPA (Family Educational Rights and Privacy Act)
- HIPAA (Health Insurance Portability and Accountability Act)
- FISMA (Federal Information Security Management Act)

XII. Website Address for this Policy
http://home/fredonia.edu/its/acceptable-usage-policy

V. Authority for Policy
Authority for policies is the President's Cabinet.

Alcohol and Drug Policy

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, regardless of one's
age. Conduct related to the use of alcohol where the individual becomes a disruption to the community is prohibited, regardless of one’s age. Being intoxicated due to the level of consumption of alcohol or other drugs, where students have placed themselves or others in harm’s way, or are experiencing significant difficulty functioning physically, is not permitted, regardless of one’s age.

The Alcohol Policy states that no one under 21 years of age may consume or possess alcoholic beverages. Hosts are responsible for all of their guests, including those who are under 21 years of age. Students who are over 21 may not consume alcohol in the presence of anyone under 21 other than their roommate. Individuals who are under the age of 21 may not be present where alcohol is being served or consumed other than as set forth by the aforementioned regulation. In such cases, all underage students present will be charged with an alcohol or drug policy violation. Fredonia prohibits the possession of alcohol related paraphernalia, regardless of age, including, but not limited to, empty alcohol containers used for decoration, the presence of “high-risk drinking paraphernalia,” which includes beer pong tables, beer bongs or funnels, and all drinking games with or without alcohol, like water pong.

The Drug Policy states that all students should be aware that “Pursuant to the order of the Chancellor of SUNY, the illegal use of narcotics and/or dangerous drugs on campus is expressly forbidden.” The State University of New York at Fredonia prohibits the possession of illegal drugs, drug paraphernalia including, but not limited to, pipes, hookahs, bongs, rollers, spoofs, water pipes, smokeless cigarettes/e-cigarettes, etc. Any student known or suspected to be in possession of, using or distributing drugs or drug related paraphernalia, or in the presence of any of the above, is subject to disciplinary action and criminal action under campus regulations, as well as state and federal law.

**Drugs**

The following are prohibited:
1. Using or possessing illegal drugs, controlled substances, or drug paraphernalia.
2. The sale or distribution of illegal drugs, controlled substances, or drug paraphernalia.
3. Being in the presence of any of the aforementioned.

**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.
5. Conduct related to the use of alcohol where the individual becomes a disruption to the community is prohibited, regardless of one’s age.
6. Being in the presence of any of the aforementioned.

Students 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.

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. Using or possessing illegal drugs, controlled substances, or drug paraphernalia.
2. The sale or distribution of illegal drugs, controlled substances, or drug paraphernalia.
3. Being in the presence of any of the aforementioned.

**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.
5. Conduct related to the use of alcohol where the individual becomes a disruption to the community is prohibited, regardless of one’s age.
6. Being in the presence of any of the aforementioned.

Students 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)**

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.

Listed below are possible sanction(s) for those who violate the drug and alcohol policy. The sanctions listed may be used alone, or in combination, and additional sanctions not listed here may also be applied.

- **First Offense:** The first alcohol- or drug-related violation would typically result in a Disciplinary Warning and a requirement to complete either the online Alcohol or Drug Education Course. The student will be charged a fee to cover the cost of these programs.

- **Second Offense:** The second alcohol- or drug-related violation would typically result in Disciplinary Probation and a referral to the Fredonia Cares program, an in-depth alcohol and drug prevention counseling program. The student will be charged a fee to offset some of the cost of this counseling program.

- **Third Offense:** The third offense would typically result in some sort of Disciplinary Suspension. The duration of the suspension would depend on the student's educational and disciplinary record.

If any of the above mentioned offenses are very minor, the Residence Hall Director or Director of Student Conduct would have the option to issue a lesser sanction. If any of these offenses are major violations of campus policy, the sanctions may be more severe. Major violations would typically stem from police involvement, criminal charges, hospitalization of participants, or involve the illegal sale or distribution of drugs or provision of alcohol to students who are underage.

**Alcohol Education Course**

Students are required to complete this online program as a sanction for a first time violation of University alcohol policies. This course is a science-based course and provides detailed information about alcohol and its effects on the body and mind. A fee will be charged to cover the cost of the program.

**Drug Education Course**

Students are required to complete this online program as a sanction for a first time violation of University drug policies. The course is a science-based course that provides detailed information about marijuana and its effect on the body and mind. A fee will be charged to cover the cost of the program.

**Fredonia C.A.R.E.S.**

Fredonia CARES [Choice|Acceptance|Responsibility|Experience|Success] is a campus initiative designed to address alcohol and other drug concerns on our campus. The program responds to the individual needs of students who have been charged with a violation of the Fredonia Alcohol and Drug Policy. Additionally, students who believe they might benefit from examining their substance use may take part in an appropriate workshop. Students will have a private and confidential consultation, participate in a researched-based workshop focusing on self-assessment to help better understand the risks and impacts substance use plays in one's life. The program respects individuals' values and personal choices regarding substance use. It also supports the idea that with new information, time to process it, and support for change, many people will benefit from considering behavior changes and exploring new beliefs. A fee is charged to cover the cost of this program.

**Bias Crimes Prevention**

**Bias Crimes Prevention** *(see website for entire policy and procedures)*

The State University of New York at Fredonia Police shall protect all members of the Fredonia community by preventing and prosecuting bias or hate crimes that occur within the campus’s jurisdiction.
Hate crimes, also called bias crimes or bias-related crimes, are criminal activity motivated by the perpetrator’s bias or attitude against an individual victim or group based on perceived or actual personal characteristics, such as their age, religion, ethnicity, gender, sexual orientation, or disability. Penalties for bias-related crimes are very serious and range from fines to imprisonment for lengthy periods, depending on the nature of the underlying criminal offense, the use of violence or previous convictions of the offender. Perpetrators who are students will also be subject to campus disciplinary procedures where sanctions including expulsion/dismissal are possible.

In addition to preventing and prosecuting hate/bias crimes, University Police also assist in addressing bias-related activities that do not rise to the level of a crime. These activities, referred to as bias incidents and defined by the University as objectively perceptible acts of bigotry, harassment, or intimidation directed at a member or group within the Fredonia community based on national origin, ethnicity, race, age, religion, gender, sexual orientation, disability, veteran status, color, creed, or marital status, may be addressed through the State University’s Discrimination Complaint Procedure or the campus Code of Conduct. Bias incidents can be reported to University Police, the Office of Enrollment & Student Services, or the Office of Diversity, Equity, and Inclusion.

Students are encouraged to contact the Chief Diversity Officer to request consultation and counseling regarding a crime or incident, to report a crime or incident, to file a Charge of Discrimination form, or to share concerns about issues regarding the University. Other offices students may wish to contact are: Enrollment & Student Services, the Intercultural Center, University Police, the Counseling Center, Residence Life, and Student Conduct.

If you are a victim of, or witness to, a hate/bias crime on campus, report it to University Police by calling (716) 673-3333 in an emergency, using a Blue Light or other campus emergency telephones, or stopping by the University Police Office located on the 2nd floor in Gregory Hall. University Police will investigate and follow the appropriate adjudication procedures.

Victims of bias crime or bias incidents are urged to contact the following offices for assistance:
University Police (716) 673-3333
Office of Enrollment & Student Services (716) 673-3271
Office of Student Conduct (716) 673-3271
Office of Diversity, Equity, and Inclusion/Affirmative Action/Title IX (716) 673-3358
Counseling Center (716) 673-3424
Intercultural Center (716) 673-3398

For general information on Fredonia security procedures, see the University Police Website at: https://students.fredonia.edu/upd or call (716) 673-3333. 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.

Crime Statistics
A copy of the State University of New York at Fredonia campus crime statistics as reported annually to the U.S. Department of Education will be provided upon request by the Personal Safety and Campus Security Committee. Persons should direct all such requests to the Office of University Police at (716) 673-3333. Information can also be obtained from the U.S. Department of Education website at http://ope.ed.gov/security/ and the State University of New York at Fredonia University Police website at http://students.fredonia.edu/upd.

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 Conduct normally informs parents or legal guardians of any alcohol or drug violation involving students under 21.

Universal Judicial System

The University Standards of Behavior and University Policies are intended to promote student development and ensure an atmosphere of learning necessary to the well being of all university community members on and off campus. Violation of University policy off campus may be subject to disciplinary action by the University judicial process. The Office of Enrollment and Student Services implements the standards and procedures of the Judicial Board.

Any member of the University community may bring a complaint (see Complaints section above) directly to the Office of Student Conduct. The complaint must be written and signed and dated. A review by the Office of Enrollment and Student Services will be initiated and if appropriate charges will be filed. Specific procedures will be followed if a case is referred to the Judicial Board.

If a student is charged with a violation of the rules and regulations, the following options exist: a student may choose an administrative hearing, a University judicial board hearing, or an administrative sanction hearing in which a student chooses to plead responsible to the charges and waives the right to a hearing. In such a case, the Office of Enrollment and Student Services will impose a sanction.

If a student, club, or organization fails to respond to the letter of charge(s) by the deadline by either pleading responsible or not responsible, Fredonia will assume a plea of not responsible. The case will be sent to an Administrative Hearing and the student, club, or organization will be notified of the hearing date and time at least one week in advance of the hearing. A hold will be placed on the student’s record pending the outcome of the hearing. A student hold restricts a student from registering for classes, dropping or adding classes, and obtaining an official transcript. The club or organization in question will have all privileges suspended pending the outcome of the hearing.

Administration Sanction Hearing

In an administrative sanction hearing, the Director of Student Conduct meets with the accused student to hear the case. This option is usually chosen if a student pleads responsible to the charges and accepts the appropriate sanction. This option requires that the student waive their right to another hearing and to the right to appeal.

Administrative Hearing

The Administrative Hearing body consists of three University faculty/staff. The administrative hearing board hears the case, weighs the evidence and testimony of witnesses, determines responsibility or non-responsibility of the accused, and makes a sanction recommendation. The accused student will be determined responsible or non-responsible by the preponderance of the evidence. Preponderance of evidence means evidence that would lead a reasonable person to conclude that it is more likely than not that the act in question did occur or that the fact or proposition is true.

Judicial Board Hearing

The University Judicial Board is comprised of a pool of at least 12 members. Approximately six students and six faculty/staff members are appointed for a term of one year. Members are appointed by the University President. From the pool of members, the Judicial Board that would hear a case is typically comprised of at least five members. The Judicial Board hears the case, weighs the evidence and testimony of witnesses, determines responsibility or non-responsibility of the accused and makes a sanction recommendation. The accused student will be determined responsible or not responsible by the preponderance of the evidence. Preponderance of evidence means evidence that would lead a reasonable person to conclude that it is more likely than not that the act in question did occur and/or that the accusations are true. To proceed with a hearing, a minimum of five Judicial
Board members must be present. If less than five Judicial Board members are present, the accused student must agree in writing in order to proceed with the hearing.

Procedures for the University Judicial Board

Step 1: A charge for a violation may be placed against any student by any other student or by a member of the University community by giving written notice of the charge signed by the complainant to the Office of Student Conduct.

Step 2: The Office of Student Conduct shall give notice of the specific charge(s) against the student, in writing. The notice shall clearly indicate the offense with specific reference to the violated regulation and shall indicate the time and place of the initial meeting with the Director of Student Conduct. 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.

A student may waive their right to a hearing in writing. In such cases, the Director of Student Conduct will consider the evidence and make a sanction decision (See Administrative Sanction Hearing (p. 633)). If the student does not waive their right to a hearing and does not appear for such a hearing, their case will be considered by the hearing body and a decision will be rendered in their absence.

Step 3: The Office of Student Conduct shall ensure that any student charged with violating University rules or regulations has, prior to appearing before the Judicial Board, been presented with a statement defining the composition and authority of the Judicial Board.

Step 4: The Judicial Board shall examine all relevant facts and circumstances presented at the hearing. A record of the hearing shall be kept to enable review and every reasonable attempt shall be made to keep the matter appropriately confidential. All hearings are tape recorded, however in the event of equipment failure a board member(s) will take notes to ensure accurate recording of the hearing. Fredonia will not be responsible for turning tape recorded records into written transcript form. Grounds for appeal will also not be considered due to equipment failure.

Step 5: At the hearing, the student shall have a full opportunity to explain the circumstances surrounding the incident and shall be able to present pertinent evidence and testimony of witnesses. In addition, the student shall have the opportunity to ask questions of any witnesses, respond to written statements submitted against them and to respond to questions. The Judicial Board shall also have the right to call witnesses and to review materials. The student shall have the right to be assisted by an advisor and or attorney of their choice. The advisor or attorney may not participate in the hearing.

Step 6: The student’s judicial history will be withheld from the board members until a finding of responsibility has been made. If a student is found responsible for violating University policy, judicial history will be shared with the board members prior to sanction deliberation.

Step 7: The student shall be notified in writing of the Judicial Board’s final decision approximately 3-5 days following the hearing. The student shall have the right to appeal. An appeal will be considered if there is significant new information or material relevant to the case that was not presented during the hearing, or for a claimed violation of the student’s due process rights. An appeal must be filed in writing within five (5) days of the hearing decision letter date.

Policies of the Judicial Board

1. 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.

2. No member of the Judicial Board shall be either a witness before the board or a person previously engaged in formulating the charge or in presenting materials relating to the case.

3. Judicial Board records shall be filed with the Office of Student Conduct and released only with the permission of the Judicial Board, the Director of Student Conduct or the alleged violator. Records shall be kept for seven years.

4. The Judicial Board may adopt bylaws not inconsistent with these rules and regulation upon the affirmative vote of not less than five members.

5. The Judicial Board pool shall be composed of at least twelve members. Approximately six students and six faculty/staff members are appointed for term of one year. Members are appointed by the University President.
In order to be eligible, a student must have attained sophomore status. 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 they are on disciplinary probation at the time of the appointment. No member of the Judicial Board may be an executive (including class presidents) of the Student Association or a voting member of the University Senate.

Consensual Relationships (Faculty/Staff and Students)

MODEL SUNY Consensual Relationship Policy

I. Policy Statement: The State University of New York is committed to ensuring that our students, faculty, and staff can learn and work in an environment that is free from nepotism, harassment, exploitation, and conflicts of interest. SUNY is also committed to promoting fairness in grading, evaluation, and career opportunities. In order to achieve this, it is vital that all college personnel maintain professional boundaries with students, and with employees over whom there is or will be a supervisory relationship.

SUNY professional staff and other college personnel exercise power and authority over SUNY students and employees for whom they have current supervisory, instructional, or other professional responsibility, which creates a power imbalance. This makes consent within any romantic relationship between a supervisor and employee or between a professional staff or other college personnel and a student problematic and may impede the real or perceived freedom of the student or employee to terminate or alter the relationship. Further, it may cause individuals outside of that relationship to believe that they are treated in an unequal manner during such a relationship or after it terminates, or it may cause individuals to feel that entering such a relationship is necessary or assistive in attaining their academic or career goals. Such a relationship may damage the credibility or reputation of the student, employee, the department or unit, the campus and University as a whole and may expose individuals or the institution to legal action and liability.

In the academic context, romantic relationships that might be appropriate in other circumstances have inherent dangers when they occur between professional staff or other college personnel and students. Implicit in the idea of professionalism is the recognition by those in positions of authority that in their relationships with students and employees there is an element of power.

Because inherent power differentials exist, professional staff or other college personnel are prohibited from entering romantic relationships with students for whom such staff or personnel have current supervisory, instructional or other professional responsibility.

Consensual romantic relationships between professional staff or other college personnel and any students for whom such staff or personnel have no current supervisory, instructional or other professional responsibility are strongly discouraged. It is understood that any intimate activity between SUNY professional staff/other college personnel and another employee or a student/graduate student shall never take place while the SUNY professional staff/other college personnel is on duty or on campus. In regard to SUNY Police, such relations shall also never occur while the officer is in uniform.

In the case of pre-existing relationships, professional staff or other college personnel shall be required to recuse themselves from any evaluation of the student and from any activity or decision which may appear to reward, penalize, or otherwise affect the student or student employee and to otherwise take appropriate action to minimize any potential preferential or adverse consequences to the student or other members of the College community.

In the employment context, there is a presumption against romantic relationships between employees where there is a current supervisory or authority imbalance. In cases where there is or has been a consensual romantic relationship between two individuals employed by the college, it is important that any sphere of influence or authority by one such employee over another be removed. Where one person is in the direct line of supervision over the other, the supervisor must notify college administration so that alternative arrangements for supervision can be made.

Where neither individual is in the direct line of supervision over the other, but authority exists wherein one individual could impact any employment related decision regarding the other, such as participating in decisions regarding hiring, termination, appointment, reappointment, promotion, assignment of duties, evaluation or changes in compensation or benefits for the other individual, such person must either recuse themselves from the decision-making process or, in the alternative, notify college administration so that they can be removed from the decision-making process.

Non-consensual relationships are always prohibited and may implicate other policies or laws.

II. Definitions:
**Department or Unit:** an academic department or unit or a professional department or unit.

- **Academic Department or Unit:** Department or unit devoted to a particular academic discipline or operational area.
- **Professional Department or Unit:** Department or unit devoted to providing professional services to students. This includes, but is not limited to, dining services, facilities services, student life/activities, financial aid, registrar, bursar, career services, library services, residential life, athletics, academic advisement, disability services, counseling services, health center, information technology, and safety, security and Police.

**Other College Personnel:** Any person with an employment relationship with the college that is not covered by the definition of professional staff. This would include all employees in the classified service pursuant to New York State Civil Service laws, rules and regulations as well as student and graduate student employees on the state payroll.

**Professional Responsibility:** For the purposes of this policy only, professional staff and other college personnel shall be deemed to have professional responsibility to an undergraduate student or graduate student when that person has a job related duty that can impact the student’s educational or professional career; specifically, where they have decision-making authority that may impact student learning, student life or student welfare, they have professional responsibility.

In addition, a University Police Officer shall be deemed to have a professional responsibility at any time that they are on duty, or when the member is directly involved in an ongoing investigation in which the student is a target, witness, person of interest or subject of an investigation, criminal matter, inquiry, or campus administrative action, or when the member is involved in an open case or action in which the student or other staff is either the plaintiff/complainant/defendant or potential plaintiff/complainant/defendant.

A health care professional working in a campus student health services/wellness center shall not commence a romantic relationship with a student for whom they are providing direct patient medical care. In addition, such health care provider shall not provide direct patient medical care to a student with whom they have had or are having a consensual romantic relationship (unless it is an emergency and no other health care provider is available on campus).

**Professional Staff:** All persons occupying positions designated by the Chancellor as being in the unclassified service. This includes academic employees, professional employees, and management/confidential employees. See Policies of the Board of Trustees, Article II, Definitions.

**Romantic Relationship:** An intimate, sexual and/or any other type of amorous encounter or relationship, whether casual or serious, short-term or long-term. Such a relationship exists in a marriage, a domestic partnership, or outside of marriage or domestic partnership between two persons who have a sexual union or who engage in a romantic partnering or courtship that may or may not have been consummated sexually.

**Student:** An individual who is either an undergraduate or graduate student.

- **Undergraduate Student:** An individual whose primary relationship to the campus is in their role as a matriculated or non-matriculated student in an Associate or Bachelor level program, including certificates and other traditional and non-traditional academic programs. This definition does not include employees who are taking a non-matriculated course that is not part of an academic program. Status begins at payment of deposit to enroll or equivalent and continues through completion of all academic requirements and graduation. This applies regardless of the age of the Undergraduate Student and age of the faculty or staff member.

- **Graduate or Professional Student:** An individual whose primary relationship to the campus is in their role as an enrolled or non-matriculated student in a Masters, Doctoral, post Bachelor Certificate or Professional level program. It also includes such individuals in the status of academically-required employment, such as residency, internship, practicum, fellowship and equivalent. Depending on employment status, this group of students may also be covered employees as professional staff or other college personnel.

**Supervisory Relationship:** A relationship in which an employee has the authority to make, recommend, or impact decisions regarding hiring, termination, appointment, reappointment, promotion, assignment of duties, evaluation, or changes in compensation or benefits for another individual.

**III. Employee Applicability:** This policy governs professional staff or other college personnel, whether employed fulltime, part-time, or in volunteer status, whether or not they receive monetary compensation. This policy does not apply to undergraduate or graduate student employees on the student assistant or college work study payroll; it does apply to graduate students with appointments as graduate assistants or teaching assistants. Conflicts of interest and limitations on supervisory relationships by student employees may be covered separately by the Code of Conduct or other policy.

**IV. Policy:**
A. Undergraduate Students: SUNY professional staff or other college personnel, are prohibited from entering romantic relationships with any undergraduate students for whom such staff or personnel have current supervisory, instructional, or other professional responsibility.

B. Graduate or Professional Students: SUNY professional staff or other college personnel are prohibited from entering romantic relationships with any graduate or professional student in their academic department or unit or over whom they have current supervisory, instructional or other professional responsibility.

C. Employees in a Supervisory Role: SUNY professional staff or other college personnel are prohibited from supervising any employee with whom they are currently engaged or in the past have been engaged in a romantic relationship. Professional staff or other college personnel who enter a romantic relationship with any employee for whom they provide direct line supervision must notify their direct supervisor or department/unit head, and Director of Human Resources or Employee Relations or designee. The employee’s supervisor or department/unit head, in concert with the Director of Human Resources or Employee Relations or designee, shall determine whether an alternative supervisory structure is possible and, if so, shall direct the employees to the alternative supervisory structure. The conclusion of the relationship (whether amicably or not), does not change the prohibition stated herein.

There is no prohibition or reporting requirement for SUNY professional staff or other college personnel who enter, are currently engaged in, or in the past have been engaged in romantic relationships with other faculty and staff where there is no direct line supervisory relationship. However, where a romantic relationship exists or has existed, professional staff or other college personnel shall recuse themselves from any personnel decisions regarding the other individual including hiring, termination, appointment, reappointment, promotion, assignment of duties, evaluation or changes in compensation or benefits for the other individual or, in the alternative, notify college administration so that they can removed from the decision-making process.

There are no prohibitions or reporting requirements for consensual social interactions between SUNY professional staff or other college personnel, regardless of supervisory relationships, that are not romantic in nature.

D. Pre-Existing Relationships: Relationships between professional staff or other college personnel and an undergraduate, graduate/professional student, or employee for whom the employee will have supervisory, instructional, or other professional responsibility that pre-date enrollment as a student, the existence of a supervisory, instructional or professional responsibility, or hire as staff are permissible provided that employee notifies their direct supervisor or department/unit head and the Director of Human Resources or Employee Relations or designee. The supervisor or department/unit head and the Director of Human Resources or Employee Relations or designee will work with the covered individuals to ensure that they are not in a direct supervisory or instructional relationship (and, if so, will develop a management plan for the employee), but there is no prohibition on maintaining the relationship. Individuals with hiring or admission authority may not be directly responsible for hiring or admitting an employee or student of any level, with whom they are currently engaged or have in the past been engaged in a romantic, intimate, and/or sexual relationship.

V. Reports and Investigation: While the primary reporting office for violations of this policy is the Office of Human Resources or Employee Relations, reports of violations of this policy may be brought to the campus Title IX Coordinator, the Director of Human Resources or Employee Relations or their designee, or the Office of the Provost.

Monitoring the status of alternative supervision is the responsibility of the Director of Human Resources or Employee Relations or designee. All documentation under this policy shall be maintained in the Office of Human Resources or Employee Relations.

Retaliation for making a report or participating in a process under this policy is prohibited. The University prohibits an individual from knowingly filing a false complaint or making misrepresentations of sexual misconduct. A complaint made in good faith is not considered false merely because the evidence does not ultimately support the allegation of sexual misconduct. If an investigation results in a finding that a person who has accused another of sexual misconduct has acted maliciously or has recklessly made false accusations, the reporting party will be subject to appropriate sanctions. It is important to note that due process considerations may limit the ability to investigate or resolve anonymous complaints.

VI. Discipline: Violations of this policy may result in disciplinary charges up to and including termination. Any disciplinary action shall be taken pursuant to the applicable collective bargaining agreement.

Students with concerns in this matter are encouraged to contact the Office of Enrollment and Student Services, Sixth Floor, Maytum Hall, (716) 673-3271 or the Office of Academic Affairs, Eighth Floor, Maytum Hall, (716) 673-3335.
Hazing and Initiation or Affiliation with any Organization

The purpose of this policy is to specifically clarify those behaviors and activities which constitute violations of University regulations and New York State laws pertaining to hazing, and to provide guidance to student organizations in designing new member programs and activities, which serve to protect the human dignity and safety of all persons which will be permitted. This policy applies to all members of a student organization including alumni members. No organization may engage in any form of hazing. A student found responsible for hazing may receive a permanent transcript notation on his or her transcript. This is more particularly described in the Permanent Transcript Notation Policy.

Hazing is defined as engaging in any action or creating a situation intentionally or unintentionally designed to produce mental or physical discomfort, harassment, fatigue, intoxication or excessive ridicule in the course of another person's initiation into or affiliation with any organization. Such activities and situations may constitute hazing but are not limited to the following:

1. Disfiguration to include branding or self-mutilation
2. Paddling in any form
3. Creation of excessive fatigue
4. Physical and psychological shocks
5. Activities such as quests, treasure hunts, drinking games, scavenger hunts, road trips, etc. which are conducted in an illegal, demeaning, or dangerous manner
6. Public wearing of apparel which is conspicuous and not normally in good taste
7. Engaging in public stunts and buffoonery
8. Morally degrading or humiliating games and activities
9. Any activities which interfere with class attendance, class preparation or scholastic activities or activities which are disruptive to any university department or office or classroom
10. Verbal abuse which leads to public embarrassment or humiliation
11. Implication that an act of hazing could be pre-initiatory
12. Engaging in or encouraging excessive or illegal drinking or drug use
13. Any other activities that are not consistent with fraternal law, ritual or policy, or the policies and regulations of Fredonia

Fredonia reserves the right to revoke recognition of any student organization or club that is found to have violated these rules. Appropriate review of alleged violations may include review by the Vice President for Enrollment and Student Services and the Director of Student Conduct. Member organizations of Inter-Greek Council and Panhellenic Council may also be reviewed by their respective Judicial Boards. Revocation of recognition may not preclude the imposition of the University Judicial Board; but when considered by the Vice President for Student Affairs to be serious in nature, could result in immediate suspension of organizational recognition until such time as the allegations have been appropriately adjudicated.

Students are prohibited from pledging, joining, or accepting membership with a fraternity, sorority, or student organization which has been dismissed or expelled.

Given the University’s concern regarding the physical and/or mental health risk that expelled student organizations pose, individual students who join expelled student organizations can be charged with this regulation and receive a sanction that would expel/dismiss them from the University. Students who choose to rush, pledge, and/or join an expelled organization can be charged through the Code of Conduct and be expelled/dismissed from the University.

Investigation of Violent Felony Offenses/Missing Students

Chapter 22 of the Laws of 1999 of the State of New York establishes certain requirements for investigation of violent felonies and reporting of missing students on college/university campuses in New York State.

1. "Missing Student" means any student of the university subject to the provisions of Section 355(17) of the New York State Education Law, who resides in a facility owned or operated by the university and who is reported to the university as missing from his or her residence.

2. "Violent Felony Offense" means a violent felony offense as defined in Section 70.02(1) of the Penal Law of the State of New York.
Response and Investigation

1. **Missing Student:** When a report of a missing student is received by the university or the municipal police department, the receiving department will conduct a preliminary investigation in order to verify the complaint and to determine the circumstances which exist relating to the reported missing student. If the student's absence is verified, the incident will be reported and shared between departments. Both departments will continue the investigation to locate the missing student. If, after further investigation, the missing student is not located, both departments will determine the most efficient manner of continuing the investigation. In any event, information relating to any report of a missing student shall be shared by both parties no later than twelve (12) hours from the time of the initial report. If the missing student is located or returns to the university at any time after the matter has been reported, each party shall notify the other immediately.

2. **Violent Felony Offenses:** When any report of an on-campus violent felony offense is received by the university or when a report of a violent offense involving a university student is received by the municipal police department, the recipient shall notify the other police department as soon as possible. The police departments will carry out appropriate investigative procedures, will determine the most efficient manner of continuing the investigation and shall provide mutual assistance when requested.

Motor Vehicles Policies

All members of the University community (students, faculty, and staff) who park cars or other motor vehicles on campus between the hours of 7 a.m. and 5 p.m. must register their vehicle each semester within seven days after classes begin.

When a new or borrowed vehicle is brought on campus, University Police (716-673-3333) must be notified immediately in order to avoid unnecessary ticketing. Any vehicle obtained during the semester must be registered within 48 hours at the Office of Student Accounts.

Regulations Governing Motor Vehicle Use and Campus Parking Facilities is available online at http://students.fredonia.edu/upd/parkingregulations. Students, faculty, and staff shall comply with all traffic and parking regulations in all campus areas and shall comply with all published regulations or be subject to fines. Failure to comply can result in the loss of campus driving, parking and vehicle registration privileges.

Fredonia Non-Discrimination Statement

Pursuant to University policy, the University is committed to fostering a diverse community of outstanding faculty, staff, and students, as well as ensuring equal educational opportunity, employment, and access to services, programs, and activities, without regard to an individual’s race, color, national origin, religion, creed, age, disability, sex, gender identity, sexual orientation, familial status, pregnancy, predisposing genetic characteristics, military status, domestic violence victim status, or criminal conviction. Employees, students, applicants or other members of the University community (including but not limited to vendors, visitors, and guests) may not be subjected to harassment that is prohibited by law, or treated adversely or retaliated against based upon a protected characteristic.

The University’s policy is in accordance with federal and state laws and regulations prohibiting unlawful discrimination and harassment. These laws include the Americans with Disabilities Act (ADA), Section 504 of the Rehabilitation Act of 1973, Title IX of the Education Amendments of 1972, Title VII of the Civil Rights Act of 1964 as Amended by the Equal Employment Opportunity Act of 1972, and the New York State Human Rights Law. These laws prohibit discrimination and harassment, including sexual harassment and sexual violence.

Inquiries regarding the application of Title IX and other laws, regulations and policies prohibiting discrimination may be directed to Dr. Bill Boerner, Chief Diversity Officer at william.boerner@fredonia.edu. Inquiries may also be directed to the United States Department of Education’s Office for Civil Rights, 32 Old Slip 26th Floor, New York, NY 10005-2500; Tel. (646) 428-3800; Email OCR.NewYork@ed.gov.

Other Types of Sanctions

If a student is found responsible for misconduct on or off-campus, the following sanctions may be imposed singly or in combination. The sanction(s) imposed will be commensurate with the offending conduct, and may take into account the student's educational record and any previous conduct record.

**Verbal Warning** – A verbal reprimand which expresses University dissatisfaction with the student's conduct and which clarifies expected behavior in the future. Such a warning is noted in the student's conduct file.

**Disciplinary Warning** - A written reprimand which expresses University dissatisfaction with the student's conduct and which clarifies expected behavior in the future.
Disciplinary Probation - Written notification that any further violations within the probationary period shall result in more severe disciplinary action. The probationary period will be for a specific period of time and/or until the completion of any specified requirements or conditions that are part of the probation.

Disciplinary Suspension in Abeyance - The student remains enrolled. However, any violation of conduct regulations during the period of suspension in abeyance will, after determination of guilt, result in a minimum sanction of automatic suspension.

Disciplinary Suspension - A decision that removes the student from the University for a specific period of time, usually no more than two years. The suspension might be immediate or begin after the end of the semester. In either case, the student is eligible for consideration for readmission at the end of the specified period. Students that are suspended will not be eligible for a refund. This includes tuition and the cost of on-campus housing. Typically, the sanction also includes the student being barred from the campus for the period of suspension.

Disciplinary Expulsion/Dismissal - A decision that removes the student permanently from the University. Normally, the penalty shall also include the student being barred from the premises of the University.

Other Sanctions - Other sanctions may include a variety of restrictions and educational related activities. These include but are not limited to:

- academic or residential network access suspension or restriction
- prohibition from engaging in any extra-curricular activity
- prohibition from running or holding an office in any student group or organization
- prohibition from participation in sports-related activities
- restricting students from serving on any university committees
- limiting student employment
- removal from on-campus housing
- restriction from specific buildings or residence halls
- changing student room or residence hall assignment
- restriction from campus
- placing holds on records
- service charges or restitution
- required counseling
- required chemical use evaluation
- required community service
- required class attendance
- required Internet research
- writing a paper
- required apology

Permanent Transcript Notation (Hazing or Other Serious Violations)

Students that are found responsible and suspended or expelled/dismissed for serious violations of the Students Rights and Responsibilities may receive a permanent notation on their academic transcript. This includes but is not restricted to sexual assault, hazing, and conduct which lead to the death or serious physical injury to another person. Students found responsible for such violations may not receive credit for the semester in which they are suspended or expelled/dismissed. Also, the student will remain liable for all tuition and fees for that semester.
Personal Safety and Campus Security Committee

Pursuant to the N.Y.S. Education Law Article 129-A, section 6431, the Personal Safety and Campus Security Committee reviews current campus security policies and procedures and makes recommendations for their improvement. The committee specifically reviews current policies for:

1. Educating the campus community, including security personnel and those persons who advise or supervise students, about sexual assault.
2. Educating the campus community about personal safety and crime prevention.
3. Reporting sexual assaults and dealing with victims during investigations.
4. Referring complaints to appropriate authorities.
5. Counseling victims.
6. Responding to inquiries from persons concerned about campus safety.

The committee consists of a minimum of six members, at least half of whom shall be female. The committee consists of two students appointed by the Student Association, two faculty members appointed by the University Senate, and two individuals appointed by the University President.

The committee reports, in writing, to the University President or chief administrative officer on its findings and recommendations at least once each academic year, and such reports shall be available upon request.

For more information regarding the Personal Safety and Campus Security Committee, persons should contact the Chief of University Police at (716) 673-3333 or email university.police@fredonia.edu or the Office of Enrollment and Student Services at (716) 673-3271 or email student.affairs@fredonia.edu.

Policy Statement on Religious Absences

The Education Law of New York says, in part:

1. No person shall be expelled from or be refused admission as a student to an institution of higher education for the reason that they are unable, because of their religious beliefs, to attend classes or to participate in any examination, study, or work requirement on a particular day or days.

2. Any student in an institution of higher education who is unable, because of their religious beliefs, to attend classes on a particular day or days shall, because of such absence on the particular day or days, be excused from any examination or any study or work requirements.

3. It shall be the responsibility of the faculty and of the administrative officials of each institution of higher education to make available to each student who is absent from school, because of their religious beliefs, an equivalent opportunity to make up any examination, study, or work requirements which they may have missed because of such absence on any day or days. No fees of any kind shall be charged by the institution for making available to the said student such equivalent opportunity.

4. If registration, classes, examinations, study or work requirements are held on Friday after four o'clock post meridian or on Saturday, similar or makeup classes, examinations, study, or work requirements shall be made available on other days, where it is possible and practicable to do so. No special fees shall be charged to the student for these classes, registration, examinations, study, or work requirements held on other days.

5. In effectuating the provisions of this section, it shall be the duty of the faculty and of the administrative officials of each institution of higher education to exercise the fullest measure of good faith. No adverse or prejudicial effects shall result to any student because of their availing themselves of the provisions of this section.

6. Any student, who is aggrieved by the alleged failure of any faculty or administrative officials to comply in good faith with the provisions of this section, shall be entitled to maintain an action or proceeding in the Supreme Court of the county in which such institution of higher education is located for the enforcement of their rights under this section. It shall be the responsibility of the administrative officials of each institution of higher education to give written notice to students of their rights under this section, informing them that each student who is absent from school, because of their religious beliefs, must be given an equivalent opportunity to register for classes or make up any examination, study or work requirements for which they may have missed because of such absence on any particular day or days. No fees of any kind shall be charged by the institution for making available to such student such equivalent opportunity.
7. As used in this section the term "institution of higher education" shall mean any institution of higher education, recognized and approved by the Regents of the University of the State of New York, which provides a course of study leading to the granting of a post-secondary degree or diploma. Such term shall not include any institution which is operated, supervised or controlled by a church or by a religious or denominational organization whose educational programs are principally designed for the purpose of training ministers or other religious functionaries or for the purpose of propagating religious doctrines. As used in this section, the term "religious belief" shall mean beliefs associated with any corporation organized and operated exclusively for religious purposes, which is not disqualified for tax exemption under Section 501 of the United States Code.

Policy on Sexual Assault

The Fredonia campus will not tolerate sexual assault in any form, including acquaintance rape. Where there is reasonable cause to believe that the University regulations prohibiting sexual assault have been violated, the campus will pursue strong disciplinary action through its own channels. This discipline includes the possibility of suspension or expulsion/dismissal from the University.

A student charged with an act of sexual violence can be prosecuted under New York State criminal statutes and disciplined under the campus code of student conduct. Even if the criminal justice authorities choose not to prosecute, the campus can pursue disciplinary action. A student may be charged under Section 2(f) of the Standards of Behavior.

In addressing cases of sexual assault, the State University of New York at Fredonia works to ensure fairness and to provide support for all persons involved. Students who have questions about the procedures and protections provided in these cases are encouraged to contact the Office of Enrollment and Student Services and/or University Police. Students are also encouraged to take advantage of the Student Counseling Center and Student Health Center for further assistance.

Definition of Consent

Fredonia recognizes the following definition of consent: Affirmative consent is a clear, unambiguous, knowing, informed, and voluntary agreement between all participants to engage in sexual activity. Consent is active, not passive. Silence or lack of resistance cannot be interpreted as consent. Seeking and having consent accepted is the responsibility of the person(s) initiating each specific sexual act regardless of whether the person initiating the act is under the influence of drugs and/or alcohol. Consent to any sexual act or prior consensual sexual activity between or with any party does not constitute consent to any other sexual act. The definition of consent does not vary based upon a participant’s sex, sexual orientation, gender identity or gender expression. Consent may be initially given but withdrawn at any time. When consent is withdrawn or cannot be given, sexual activity must stop. Consent cannot be given when a person is incapacitated. Incapacitation occurs when an individual lacks the ability to fully, knowingly choose to participate in sexual activity. Incapacitation includes impairment due to drugs or alcohol (whether such use is voluntary or involuntary), the lack of consciousness or being asleep, being involuntarily restrained, if any of the parties are under the age of 17, or if an individual otherwise cannot consent. Consent cannot be given when it is the result of any coercion, intimidation, force, or threat of harm.

Policy for Alcohol and/or Drug Use Amnesty in Sexual Violence Cases

The health and safety of every student at the State University of New York and its State-operated and community colleges is of utmost importance. Fredonia recognizes that students who have been drinking and/or using drugs (whether such use is voluntary or involuntary) at the time a sexual violence incident occurs may be hesitant to report such incidents due to fear of potential consequences for their own conduct. Fredonia strongly encourages students to report incidents of sexual violence to campus officials. A bystander reporting in good faith or a victim/survivor reporting sexual violence to Fredonia officials or law enforcement will not be subject to campus conduct action for violations of alcohol and/or drug use policies occurring at or near the time of the sexual violence.

Campus Climate Assessment Policy

Climate assessments afford institutions the opportunity to better understand their campus and to make informed decisions when it comes to providing a safe educational environment. Beginning in the 2015-2016 academic year, each State University of New York State-operated and community college will conduct a uniform climate survey that analyzes prevalence and attitudes regarding sexual harassment, including sexual violence, and other related crimes. The survey will address at least the following:

- Student and employee knowledge about:
  - The Title IX Coordinator’s role;
  - Campus policies and procedures addressing sexual assault;
  - How and where to report sexual violence as a victim/survivor or witness;
• The availability of resources on and off-campus, such as counseling, health, academic assistance;
• The prevalence of victimization and perpetration of sexual assault, domestic violence, dating violence, and stalking on and off-campus during a set time period (for example, the last two years);
• Bystander attitudes and behavior; and
• Whether victims/survivors reported to the University and/or police, and reasons why they did or did not report.

Beginning in the spring semester of 2015, the Chancellor or designee convened a group of scholars and practitioners to review methods of assessing campus climate, specific questions asked in past surveys, relevant data on responses and response rates, issues and problems encountered in survey implementation, and lessons learned from past surveys. The Chancellor or designee will gather this data and seek to develop a standardized survey, with the advice of relevant members of the SUNY community and knowledgeable outside entities, that uses established measurement tools, to be implemented every two years by all SUNY State-operated and community colleges beginning in the 2015-2016 academic year. This policy may be changed by the Chancellor or designee should federal and/or State legislation require a different process or duplicate efforts to assess campus climate via survey.

Sexual Violence Victim/Survivor Bill of Rights

The State University of New York and Fredonia are committed to providing options, support and assistance to victims/survivors of sexual assault, domestic violence, dating violence, and/or stalking to ensure that they can continue to participate in University-wide and campus programs, activities, and employment. All victims/survivors of these crimes and violations, regardless of race, color, national origin, religion, creed, age, disability, sex, gender identity or expression, sexual orientation, familial status, pregnancy, predisposing genetic characteristics, military status, domestic violence victim status, or criminal conviction, have the following rights, regardless of whether the crime or violation occurs on campus, off-campus, or while studying abroad:

The right to:

• Have disclosures of sexual violence treated seriously.
• Make a decision about whether or not to disclose a crime or incident and participate in the conduct or criminal justice process free from outside pressures from University officials.
• Be treated with dignity and to receive from University officials courteous, fair, and respectful health care and counseling services.
• Be free from any suggestion that the victim/survivor is at fault when these crimes and violations are committed, or should have acted in a different manner to avoid such a crime.
• Describe the incident to as few individuals as practicable and not to be required to unnecessarily repeat a description of the incident.
• Be free from retaliation by the University, the accused, and/or their friends, family and acquaintances.
• Exercise civil rights and practice of religion without interference by the investigative, criminal justice, or conduct process of the University.

Options in Brief:

Victims/survivors have many options that can be pursued simultaneously, including one or more of the following:

• Advocacy and Counseling
• CEASE, Counseling Center, LoGrasso Hall, (716) 673-3424
  • Campus, Education, Awareness, Support, and Effect (CEASE) is the violence prevention – victim services program at Fredonia. CEASE provides advocacy and referrals for Fredonia students that are survivors of sexual and interpersonal violence. We can answer questions, offer emotional support, and provide referrals for legal, medical, judicial, and counseling options.
• Counseling Center, LoGrasso Hall, (716) 673-3424
  • The Counseling Center can provide mental health services for survivors of sexual violence; services are free and confidential. For after-hours assistance from the Counseling Center, please contact University Police and ask for the counselor on-call.
• The Anew Center of Jamestown (The Salvation Army), 1-800-252-8748
• Provides a 24/7 helpline for survivors of sexual assault and relationship violence. The helpline can answer questions, provide referrals or send a victim advocate to meet with you.

• Medical Treatment and Evidence Collection

• Brooks Memorial Hospital can provide medical treatment to survivors of sexual assault. They can offer treatment for injuries, STD/STI testing and treatment, the morning after pill, and basic evidence collection (also known as 'rape kits'). Advocates from The Anew Center can be contacted to provide advocacy services. Survivors who have a sexual assault kit completed do not have to file a police report or press criminal charges.
  
  • Contact Information: 529 Central Avenue – Dunkirk, (716) 366-1111

• The Health Center can provide treatment for injuries, the morning after pill, and referrals to outside providers for additional services. The Health Center does not provide evidence collection services (also known as "rape kits"). They can provide you with transportation to Brooks Hospital to have evidence collected.
  
  • Contact Information: LoGrasso Hall, (716) 673-3131

• Chautauqua County Health Department - Reproductive Health Services Clinic can provide free and confidential STD/HIV testing and treatment and the morning after pill.
  
  • Contact Information: 319 Central Avenue – Dunkirk, (716) 363-3660

• FRED ASSIST - Sexual health clinic that offers services to all Fredonia students. Services include: pap smears, testing for chlamydia and gonorrhea (urine test for males & females), emergency contraception (at clinics only), and hormonal contraception. Please see FRED ASSIST for a complete price list for services. Clinical services are provided by a medical staff and student volunteers staff office hours to answer questions regarding sexual health and make appointments for the clinic. Services are confidential.
  
  • Contact Information: LoGrasso Hall (rear of building), (716) 673-3396

• To confidentially or anonymously disclose a crime or violation, who by law can maintain confidentiality and can assist in obtaining services (more information on confidential report is available in the Options for Confidentially Disclosing Sexual Violence Policy http://students.fredonia.edu/sexualassault/)

• Anonymously online: http://students.fredonia.edu/upd/updsilent

• Confidential: Counseling Center, LoGrasso Hall, (716) 673-3424;

• Make a report to:
  
  • An employee with the authority to address complaints, including the Title IX Coordinator, Director of Student Conduct, or a Human Resources employee;
  
  • University Police;
  
  • Local law enforcement; and/or
  
  • Family Court or Civil Court.

Copies of this Bill of Rights shall be distributed annually to students, made available on every University’s website, and posted in each campus residence hall, dining hall, and student union or campus center and shall include links or information to access the Sexual Violence Response Policy below and the Options for Confidentially Disclosing Sexual Violence.

**Sexual Violence Response Policy**

In accordance with the Victim/Survivor Bill of Rights, victims/survivors shall have the right to pursue more than one of the options below at the same time, or to choose not to participate in any of the options below:

I- Reporting:

• To report confidentially the incident to one of the following University officials, who by law may maintain confidentiality, and can assist in obtaining services (more information on confidential report is available in the Options for Confidentially Disclosing Sexual Violence Policy www.fredonia.edu/sexualassault)
  
  • Anonymously online: http://students.fredonia.edu/upd/updsilent

• Counseling Center, LoGrasso Hall, (716) 673-3424;
To disclose confidentially the incident and obtain services from the New York State, New York City or county hotlines: http://www.opdv.ny.gov/help/dvhotlines.html. Additional disclosure and assistance options are catalogued by the Office for the Prevention of Domestic Violence and presented in several languages: http://www.opdv.ny.gov/help/index.html (or by calling 1-800-942-6906), and assistance can also be obtained through:

- SurvJustice: http://survjustice.org/our-services/civil-rights-complaints/
- Legal Momentum: https://www.legalmomentum.org/
- NYSCASA: http://nyscasa.org/
- NYSCADV: http://www.nyscadv.org/
- Pandora’s Project: http://www.pandys.org/lgbtsurvivors.html
- GLBTQ Domestic Violence Project: http://www.glbtqdvp.org/; and
- Safe Horizons: http://www.safehorizon.org/. (note that these hotlines are for crisis intervention, resources, and referrals, and are not reporting mechanisms, meaning that disclosure on a call to a hotline does not provide any information to the campus. Victims/survivors are encouraged to additionally contact a campus confidential or private resource so that the campus can take appropriate action in these cases).

To report the incident to one of the following University officials who can offer privacy and can assist in obtaining resources (note that an official who can offer privacy may still be required by law and University policy to inform one or more University officials about the incident, including but not limited to the Title IX Coordinator):

- Title IX Coordinator;
- University Police;
- Enrollment and Student Services;
- Student Conduct;
- Residence Life

To file a criminal complaint with University Police and/or with local law enforcement:

- University Police, 2nd Floor of Gregory Hall, (716) 673-3333
- Fredonia Police Department, 9 Church St., Fredonia, NY, (716) 679-1531

To file a report of sexual assault, domestic violence, dating violence, and/or stalking, and/or talk to the Title IX Coordinator for information and assistance. Reports will be investigated in accordance with University policy. If a victim/survivor wishes to keep their identity private, they may call the Title IX Coordinator anonymously to discuss the situation and available options:

- Title IX Coordinator, 143 Fenton Hall, (716) 673-3358

When the accused is an employee, a victim/survivor may also report the incident to the Office of Human Resources or may request that one of the above referenced confidential or private employees assist in reporting to Human Resources. Disciplinary proceedings will be conducted in accordance with applicable collective bargaining agreements. When the accused is an employee of an affiliated entity or vendor of the University, University officials will, at the request of the victim/survivor, assist in reporting to the appropriate office of the vendor or affiliated entity and, if the response of the vendor or affiliated entity is not sufficient, assist in obtaining a persona non grata letter, subject to legal requirements and University policy.

- Human Resources Office, 511 Maytum Hall, (716) 673-3434

You may withdraw your complaint or involvement from the University process at any time.

II- Resources:

- To obtain effective intervention services
  - Counseling Center, LoGrasso Hall, (716) 673-3424
Within 96 hours of an assault, you can get a Sexual Assault Forensic Examination (commonly referred to as a rape kit) at a hospital. While there should be no charge for a rape kit, there may be a charge for medical or counseling services off-campus and, in some cases, insurance may be billed for services. You are encouraged to let hospital personnel know if you do not want your insurance policyholder to be notified about your access to these services. The New York State Office of Victim Services may be able to assist in compensating victims/survivors for medical or counseling services, including emergency funds. More information may be found here: https://ovs.ny.gov/sites/default/files/brochure/ovs-rights-cv-booklet-5-17.doc, or by calling 1-800-247-8035. Options are explained here: https://www.ovs.ny.gov/help-crime-victims.

III- Protection and Accommodations:

• When the accused is a student, to have the University issue a “No Contact Order,” meaning that continuing to contact the protected individual is a violation of University policy subject to additional conduct charges; if the accused and a protected person observe each other in a public place, it is the responsibility of the accused to leave the area immediately and without directly contacting the protected person.

• To have assistance from University Police or other University officials in obtaining an Order of Protection or, if outside of New York State, an equivalent protective or restraining order.

• To receive a copy of the Order of Protection or equivalent and have an opportunity to meet or speak with a University official who can explain the order and answer questions about it, including information from the Order about the accused’s responsibility to stay away from the protected person(s); that burden does not rest on the protected person(s).

• To an explanation of the consequences for violating these orders, including but not limited to arrest, additional conduct charges, and interim suspension.

• To have assistance from University Police in effecting an arrest when an individual violates an Order of Protection or, if outside of New York State, an equivalent protective or restraining order within the jurisdiction of University Police or, if outside of the jurisdiction or to call on and assist local law enforcement in effecting an arrest for violating such an order.

• When the accused is a student and presents a continuing threat to the health and safety of the community, to have the accused subject to interim suspension pending the outcome of a conduct process.

• When the accused is not a member of the University community, to have assistance from University Police or other University officials in obtaining a persona non grata letter, subject to legal requirements and University policy.

• To obtain reasonable and available interim measures and accommodations that effect a change in academic, housing, employment, transportation, or other applicable arrangements in order to ensure safety, prevent retaliation, and avoid an ongoing hostile environment. While victims/survivors may request accommodations through any of the offices referenced in this policy, the following office can serve as a point to assist with these measures:

  • Title IX Office, 143 Fenton Hall, (716) 673-3358

IV- Student Conduct Process:

• To file student conduct charges against the accused. Conduct proceedings are governed by the procedures set forth in the University Student Handbook as well as federal and New York State law, including the due process provisions of the United States and New York State Constitutions.

• Throughout conduct proceedings, the accused and the victim/survivor will have:

  • The same opportunity to have access to an advisor of their choice. Participation of the advisor in any proceeding is governed by federal law and the Student Code of Conduct;

  • The right to a prompt response to any complaint and to have their complaint investigated and adjudicated in an impartial and thorough manner by individuals who receive annual training in conducting investigations of sexual violence, the effects of trauma, and other issues related to sexual assault, domestic violence, dating violence, and stalking.

  • The right to an investigation and process conducted in a manner that recognizes the legal and policy requirements of due process and is not conducted by individuals with a conflict of interest.
• The right to receive written or electronic notice of any meeting or hearing they are required to or are eligible to attend.

• The right to have a conduct process run concurrently with a criminal justice investigation and proceeding, except for temporary delays as requested by external municipal entities while law enforcement gathers evidence. Temporary delays should not last more than 10 days except when law enforcement specifically requests and justifies a longer delay.

• The right to review available evidence in the case file.

• The right to a range of options for providing testimony via alternative arrangements, including telephone/videoconferencing or testifying with a room partition.

• The right to exclude prior sexual history or past mental health history from admittance in University disciplinary stage that determines responsibility. Past sexual violence findings may be admissible in the disciplinary stage that determines sanction.

• The right to ask questions of the decision maker and via the decision maker indirectly request responses from other parties and any other witnesses present.

• The right to make an impact statement during the point of the proceeding where the decision maker is deliberating on appropriate sanctions.

• The right to simultaneous (among the parties) written or electronic notification of the outcome of a conduct proceeding, including the sanction(s).

• The right to know the sanction(s) that may be imposed on the accused based upon the outcome of the conduct proceeding and the reason for the actual sanction imposed. For students found responsible for sexual assault, the available sanctions are suspension with additional requirements and expulsion/dismissal.

  • Office of Student Conduct, Williams Center S212

• The right to choose whether to disclose or discuss the outcome of a conduct hearing.

Options for Confidentially Disclosing Sexual Violence
The State University of New York and Fredonia want you to get the information and support you need regardless of whether you would like to move forward with a report of sexual violence to campus officials or to police. You may want to talk with someone about something you observed or experienced, even if you are not sure that the behavior constitutes sexual violence. A conversation where questions can be answered is far superior to keeping something to yourself. Confidentiality varies, and this document is aimed at helping you understand how confidentiality applies to different resources that may be available to you.

Privileged and Confidential Resources:
Individuals who are confidential resources will not report crimes to law enforcement or University officials without your permission, except for extreme circumstances, such as a health and/or safety emergency. At Fredonia, this includes:

• Fredonia’s Counseling Center: LoGrasso Hall, (716) 673-3424

• Fredonia’s Health Center: LoGrasso Hall, (716) 673-3131

• Substance Abuse and Violence Prevention Coordinator: LoGrasso Hall, (716) 673-3424

Off-campus options to disclose sexual violence confidentially include (note that these outside options do not provide any information to the campus):

• Off-campus counselors and advocates. Crisis services offices will generally maintain confidentiality unless you request disclosure and sign a consent or waiver form. More information on an agency’s policies on confidentiality may be obtained directly from the agency.

• Stacey Tanner, Director of Human Services: The Salvation Army Rape Crisis Services P.O. Box 368, Jamestown, NY 14702, (716) 664-6567 Office, 800-252-8748 Toll-Free Hot Line (stacey.tanner@use.salvationarmy.org)

• The Anew Center: 1-800-252-8748

• WCA Hospital: Center for Excellence, SAFE (Sexual Assault Forensic Examiner) Nurse, Emergency Department (716) 487-0141, http://www.sthcs.org/safe.html

• Off-campus healthcare providers
Note that medical office and insurance billing practices may reveal information to the insurance policyholder, including medication and/or examinations paid for or administered. The New York State Office of Victim Services may be able to assist in compensating victims/survivors for health care and counseling services, including emergency compensation. More information may be found here: http://www.ovs.ny.gov/files/ovs_rights_of_cv_booklet.pdf, or by calling 1-800-247-8035. Options are explained here: http://www.ovs.ny.gov/helpforcrimevictims.html.

Note that even individuals who can typically maintain confidentiality are subject to exceptions under the law, including when an individual is a threat to themselves or others and the mandatory reporting of child abuse.

Non-Professional Counselors and Advocates:
Non-professional counselors and advocates can also assist you without sharing information that could identify you. At Fredonia, this includes the CEASE program of the Counseling Center, LoGrasso Hall, (716) 673-3424. The CEASE Coordinator will report the nature, date, time, and general location of an incident to Fredonia's Title IX Coordinator, but will consult with you to ensure no personally identifying details are shared without your consent. These individuals are not considered confidential resources as discussed above.

Privacy versus Confidentiality:
Even Fredonia offices and employees who cannot guarantee confidentiality will maintain your privacy to the greatest extent possible. The information you provide to a non-confidential resource will be relayed only as necessary to investigate and/or seek a resolution and to notify the Title IX Coordinator or designee, who is responsible under the law for tracking patterns and spotting systemic issues. Fredonia will limit the disclosure as much as possible, even if the Title IX Coordinator determines that the request for confidentiality cannot be honored.

Requesting Confidentiality: How Fredonia Will Weigh the Request and Respond:
If you disclose an incident to a Fredonia employee who is responsible for responding to or reporting sexual violence or sexual harassment, but wish to maintain confidentiality or do not consent to the institution’s request to initiate an investigation, the Title IX Coordinator must weigh your request against our obligation to provide a safe, non-discriminatory environment for all members of our community, including you.

We will assist you with academic, housing, transportation, employment, and other reasonable and available accommodations regardless of your reporting choices. While victims/survivors may request accommodations through several University offices, the following office can serve as a primary point of contact to assist with these measures: The Office of Enrollment and Student Services, 6th floor of Maytum Hall (716) 673-3271. We also may take proactive steps, such as training or awareness efforts, to combat sexual violence in a general way that does not identify you or the situation you disclosed. We may seek consent from you prior to conducting an investigation. You may decline to consent to an investigation, and that determination will be honored unless the Fredonia’s failure to act may result in harm to you or other members of the Fredonia community. Honoring your request may limit our ability to meaningfully investigate and pursue conduct action against an accused individual. If we determine that an investigation is required, we will notify you and take immediate action as necessary to protect and assist you.

When you disclose an incident to someone who is responsible for responding to or reporting sexual violence or sexual harassment, but wish to maintain confidentiality, Fredonia will consider many factors to determine whether to proceed despite that request. These factors include, but are not limited to:
• Whether the accused has a history of violent behavior or is a repeat offender;
• Whether the incident represents escalation, such as a situation that previously involved sustained stalking, the increased risk that the accused will commit additional acts of violence;
• Whether the accused used a weapon or force;
• Whether the victim/survivor is a minor; and
• Whether we possess other means to obtain evidence such as security footage, and whether the report reveals a pattern of perpetration at a given location or by a particular group.

Public Awareness/Advocacy Events:
If you disclose a situation through a public awareness event such as “Take Back the Night,” candlelight vigils, protests, or other public event, the University is not obligated to begin an investigation. Fredonia may use the information you provide to inform the need for additional education and prevention efforts.

Anonymous Disclosure:
Incidents can be reported anonymously to University Police through the Silent Witness online form: http://students.fredonia.edu/upd/updsilent.
New York State Hotline for Sexual Assault and Domestic Violence: 1-800-942-6906

**Institutional Crime Reporting**

Reports of certain crimes occurring in certain geographic locations will be included in the University Clery Act Annual Security Report in an anonymized manner that neither identifies the specifics of the crime or the identity of the victim/survivor. Fredonia’s Title IX Coordinator can be reached at (716) 673-3358.

Fredonia is obligated to issue timely warnings of Clery Act crimes occurring within relevant geography that represent a serious or continuing threat to students and employees (subject to exceptions when potentially compromising law enforcement efforts and when the warning itself could potentially identify the victim/survivor). A victim/survivor will never be identified in a timely warning.

The Family Educational Rights and Privacy Act allows institutions to share information with parents when (1) there is a health or safety emergency, or (2) when the student is a dependent on either parents’ prior year federal income tax return. Generally, Fredonia will not share information about a report of sexual violence with parents without the permission of the victim/survivor.

**Sexual Discrimination and Sexual Harassment**

**Sexual Harassment Policy**

**SUNY Sexual Harassment Response and Prevention Policy Statement**

Sexual harassment is a form of sex discrimination which is unlawful in the workplace under Title VII of the Civil Rights Act of 1964, as amended, and the New York State Human Rights Law. Under Title IX of the Educational Amendments of 1972, sexual harassment also is prohibited in the provision of educational services and protects students and employees from sexual harassment.

Sexual harassment is prohibited and will not be tolerated at SUNY. The University has implemented measures to address and prevent sexual harassment and is taking additional affirmative steps to increase awareness of, and sensitivity to, all forms of sexual harassment in order to maintain a workplace and learning environment free of its harmful effects.

Sexual harassment is a form of workplace discrimination and employee misconduct, as well as a form of discrimination in the academic setting, and all employees and students are entitled to work and learn in a campus environment that prevents sexual harassment. All employees and students have a legal right to a workplace and a campus free from sexual harassment, and employees and students can enforce this right by filing a complaint internally with the University, or with a government agency, or in court under federal or state anti-discrimination laws, as detailed in the University’s Discrimination and Sexual Harassment Complaint Procedure.

In accordance with applicable law, sexual harassment is generally described as unwelcome sexual advances, requests for sexual favors or other verbal or physical conduct of a sexual nature when:

- Submission to such conduct is made either explicitly or implicitly a term or condition of employment or academic benefit; or
- Submission to or rejection of the conduct is used as the basis for an employment or academic decision affecting the person rejecting or submitting to the conduct; or
- The conduct has the purpose or effect of unreasonably interfering with an affected person’s work or academic performance, or creating an intimidating, hostile or offensive work or learning environment.
- Sexual harassment can include physical touching, verbal comments, non-verbal conduct such as leering or inappropriate written or electronic communications, or a combination of these things. Examples of sexual harassment may include, but are not limited to:
- Seeking sexual favors or a sexual relationship in return for the promise of a favorable grade or academic opportunity;
• Conditioning an employment-related action (such as hiring, promotion, salary increase, or performance appraisal) on a sexual favor or relationship; or

Intentional and undesired physical contact, sexually explicit language or writing, lewd pictures or notes, and other forms of sexually offensive conduct by individuals in positions of authority, co-workers or student peers, that unreasonably interferes with the ability of a person to perform their employment or academic responsibilities.

• Physical acts of a sexual nature, such as:

  • Touching, pinching, patting, kissing, hugging, grabbing, brushing against, or poking another person’s body;
    • Rape, sexual battery, molestation or attempts to commit these assaults.
    • Unwanted sexual advances or propositions, such as:

• Requests for sexual favors accompanied by implied or overt threats concerning a target’s job performance evaluation, a promotion or other job benefits or detriments, or an educational benefit or detriment;

  • Subtle or obvious pressure for unwelcome sexual activities.

• Sexually oriented gestures, noises, remarks, jokes or comments about a person’s sexuality or sexual experience, which create a hostile environment.

• Sex stereotyping occurs when conduct or personality traits are considered inappropriate simply because they may not conform to other people’s ideas or perceptions about how individuals of a particular sex should act or look.

  • Sexual or discriminatory displays or publications, such as:

• Displaying pictures, posters, calendars, graffiti, objects, promotional material, reading materials or other materials that are sexually demeaning or pornographic. This includes such sexual displays on computers or cell phones and sharing such displays while in the workplace or classroom.

• Hostile actions taken against an individual because of that individual’s sex, sexual orientation, self-identified or perceived sex, gender expression, gender identity, and the status of being transgender, such as:

• Interfering with, destroying or damaging a person’s workstation, tools or equipment, or otherwise interfering with the individual’s ability to perform his or her employment or academic duties;

  • Sabotaging an individual’s work;
  • Bullying, yelling, name-calling.

Such behavior can constitute sexual harassment regardless of the sex, gender, sexual orientation, self-identified or perceived sex, gender expression, status of being transgender, or gender identity of any of the persons involved. Sexual harassment is considered a form of employee and student misconduct which may lead to disciplinary action. Further, supervisors and managers will be subject to discipline for failing to report suspected sexual harassment or otherwise knowingly allowing sexual harassment to continue. Employees and students who believe they have been subjected to sexual harassment may use the University’s Discrimination and Sexual Harassment Complaint Procedure for more details on how to have their allegations reviewed, including a link to a complaint form.

Retaliation against a person who files a complaint, serves as a witness, or assists or participates in any manner in this procedure, is unlawful, is strictly prohibited and may result in disciplinary action. Retaliation is an adverse action taken against an individual as a result of complaining about or provides information regarding unlawful discrimination or harassment, exercising a legal right, and/or participating in a complaint investigation as a third-party witness. Adverse action includes being discharged, disciplined, discriminated against, or otherwise subject to adverse action because the individual reports an incident of sexual harassment, provides information, or otherwise assists in any investigation of a sexual harassment complaint. Participants who experience retaliation should contact the campus AAO, and may file a complaint pursuant to these procedures.

SUNY campuses and System Administration shall take the necessary steps to ensure that this Sexual Harassment Response and Prevention Policy Statement is distributed, implemented, and enforced in accordance with their respective policies.

**Reporting and Addressing Complaints:**
Sexual discrimination, including sexual harassment should be promptly reported to the Title IX Coordinator at the Office of Diversity, Equity, and Inclusion, 143 Fenton Hall, (716) 673-3358. Any such information provided shall, to the extent possible, be handled in a manner to maintain the privacy of the reporting party(ies). Fredonia students and employees can choose to participate in a SUNY-wide grievance procedure to initiate investigation and potential resolution of a complaint. Detailed information regarding the process, including the complaint form is available on the discrimination complaint procedure website. Use of the internal grievance procedure does not deprive a complainant of the right to file with outside enforcement agencies, such as the New York State Division of Human Rights, the Equal Employment Opportunity Commission, the Office for Civil Rights of the United State Department of Education, and/or the Office of Federal Contract Compliance of the United States Department of Labor.

Harassment shall be found where, in aggregate, the incidents are sufficiently pervasive, or persistent, or severe that a reasonable person, of similar background would be adversely affected to a degree that interferes with their ability to participate in or to realize the intended benefits of an institutional activity, employment, or resource. Should disciplinary action be implemented, or campus judiciary proceedings invoked, it shall be done consistent with the terms and conditions of the governing collective bargaining agreement or campus judicial policy.

An employee or student who participates in the discrimination complaint process, or reports an incident of discrimination due to harassment, has the right to do so without fear of retaliation. If retaliation were to occur, appropriate sanctions or disciplinary action consistent with the terms and conditions of the governing collective bargaining agreement or campus judicial policy shall be followed.

Support Services:
Office of Diversity, Equity, and Inclusion – (716) 673-3358 (includes Title IX Coordinator)
https://www.fredonia.edu/about/offices/diversity-equity-inclusion/title-ix
University Police – (716) 673-3333
Enrollment and Student Services – (716) 673-3271
Student Conduct – (716) 673-3271
Counseling Center – (716) 673-3424
Human Resources – (716) 673-3434

Statement Regarding 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 any person’s race, religion, ethnicity, gender, affection orientation, physical/mental challenge, or any other characteristic not germane to a person’s rights or human worth. The University specifically discourages fighting, threats, physical abuse, harassment, assault, or any other action which threatens to or does endanger the health, safety, or welfare of a fellow student and/or member of the University community.

The University also discourages 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 a situation through severe and persuasive acts that results in the discomfort of, or harassment or excessive ridicule of a member of the University community. The University will also act to prohibit such conduct to the extent that it violates the Student Code of Conduct.

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 expected to support this policy through personal interactions with students, classroom discussion, and careful selection of curricular materials and content.
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EILEEN GROTH LYON, Professor
University of Cambridge, Ph.D.

JEFFRY IOVANNONE, Lecturer
University at Buffalo, State University of New York, Ph.D.

PETER McCORD, Senior Lecturer
University of California, Riverside, Ph.D.

MARY BETH SIEVENS, Professor
Boston University, Ph.D.

JOHN STAPLES, Professor
University of Toronto, 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

Library Services Faculty
CHRISTINA R. HILBURGER, Research and Information Literacy Services Librarian Senior Assistant Librarian
McGill University, M.I.St.

KEVIN MICHKI, Music and Systems Librarian
Senior Assistant Librarian
University at Buffalo, State University of New York, M.L.S.

SCOTT S. RICHMOND, Interim Associate Director, Coordinator of Instructional Initiatives
Associate Librarian
University at Buffalo, State University of New York, M.L.S.
The State University Chancellor's Award for Excellence in Librarianship

AMANDA M. SHEPP, Coordinator of Special Collections and Archives
Senior Assistant Librarian
University at Buffalo, State University of New York, M.L.S.

KERRIE FERGEN WILKES, Interim Director
Associate Librarian
University at Buffalo, State University of New York, M.L.S.
The State University Chancellor’s Award for Excellence in Librarianship

CYNTHIA YOCHYM, Reference Librarian
University at Albany, State University of New York, M.L.S.

Mathematical Sciences Faculty
MERAL ARNAVUT, Associate Professor
University of Nebraska, Ph.D.

LAN CHENG, Associate Professor
University of Pittsburgh, Ph.D.

KIMBERLY CONTI, Senior Lecturer
State University of New York at Fredonia, M.S.
President’s Award for Excellence, 2018

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
President’s Award for Excellence, 2013

Y.H. HARRIS KWONG, Professor
University of Pennsylvania, Ph.D.
Kasling Lecturer

AMBER POWELL, Lecturer
State University of New York at Buffalo, Ph.D.
ROBERT R. ROGERS, *Distinguished Teaching Professor*
University at Buffalo, State University of New York, 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.

Music Faculty

ELIRAN AVNI, *Assistant Professor*
The Juilliard School, D.M.A.

NATHAN S. BALDWIN, *Assistant Piano Technician*
Bob Jones University, B.S.

JESSICA BARNETT-MOSELEY, *Lecturer*
College-Conservatory of Music, University of Cincinnati, Ph.D.

CHRISTIAN BERNHARD, *Professor*
University of North Carolina, Greensboro, Ph.D.
William T. Hagan Young Scholar/Artist Award

JOHN CARUSO, *Instructional Support Assistant*
State University of New York at Fredonia, B.S.

I-FEI CHEN, *Staff Accompanist*
West Virginia University, M.M.

HEEYOUN CHO, *Assistant Professor*
Temple University, Ph.D.

PAUL COLEMAN, *Lecturer*
University of Northern Colorado, M.M.

PATRICIA J. CORRON, *Associate Professor*
College-Conservatory of Music, University of Cincinnati, D.M.A.

BARRY CRAWFORD, *Assistant Professor*
Mannes College of Music, M.M.

JENNIFER DARRELL-STERBAK, *Community Relations Associate*
University at Buffalo, State University of New York, M.A.

JAMES A. DAVIS, *Professor*
Boston University, Ph.D.

ROBERT DEEMER, *Professor*
University of Texas at Austin, Ph.D.
President’s Award for Excellence, 2017

DONNA DOLSON, *Lecturer*
Manhattan School of Music, M.M.

SEAN DUGGAN, *Professor*
Carnegie Mellon University, M.F.A.

NATASHA FARNY, *Professor*
The Juilliard School, D.M.A.

RODNEY GARRISON, *Lecturer*
East Carolina University, M.M.
BERND GOTTINGER, Associate Professor
New York University, Ph.D.

MARC J. GUY, Associate Professor
Stony Brook University, State University of New York, D.M.A.

ANGELA HAAS, Associate Professor
Florida State University, D.M.A.

SARAH HAMILTON, Professor
The Ohio State University, D.M.A.

KIERAN HANLON, Assistant Professor
Eastman School of Music, M.M.

ANNE KISSEL HARPER, Lecturer
Eastman School of Music, D.M.A.

JOE DAN HARPER, Professor
New England Conservatory, M.M.

PAULA HOLCOMB, Professor
Northwestern University, D.M.A.

GRAHAM HOWES, Head Piano Technician

VERNON HUFF, Associate Professor
Arizona State, Ph.D.

DANIEL IHASZ, Professor
Eastman School of Music, M.M.

BARRY M. KILPATRICK, Professor
University of Wisconsin, M.M.
President's Award for Excellence, 2010

CATHERINE KILPATRICK, Auditions Coordinator

LAURA KOEPKE, Professor
Yale University, M.M.

LEONIDAS LAGRIMAS, Assistant Professor
Florida State University, Ph.D.

KATHERINE M. LEVY, Professor
University of Iowa, Ph.D.

ADAM LUEBKE, Assistant Professor
Florida State University, Ph.D.

J. RODERICK MACDONALD, Associate Professor
New England Conservatory, M.M.

KIMBERLY S. MANCINO, Senior Lecturer
State University of New York at Fredonia, M.M.
The State University Chancellor’s Award for Excellence in Teaching

MICHAEL MARKHAM, Professor
University of California, Berkeley, Ph.D.

MARGARET MCMURTRY, Senior Lecturer
Royal Scottish Academy, M.M.

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
JAMES PIORKOWSKI, *Distinguished Professor*
State University of New York at Fredonia, M.M.
*President’s Award for Excellence, 2006*
*William T. Hagan Young Scholar/Artist Award*
*Kasling Lecturer*

JILL REESE, *Associate Professor*
Temple University, Ph.D.
*President's Award for Excellence, 2017*

GORDON ROOT, *Associate Professor*
University of California, Santa Barbara, Ph.D.

DAVID ROSE, *Associate Professor*
Indiana University, M.M.

DAVID RUDGE, *Associate Professor*
University of South Carolina, D.M.A.

ANDREW SEIGEL, *Associate Professor*
Michigan State University, D.M.A.

RAYMOND STEWART, *Associate Professor*
The Manhattan School of Music, M.M.

KAY STONEFELT, *Distinguished Professor*
Indiana University, D.M.A.
*The State University Chancellor's Award for Excellence in Teaching*

ROBERT STRAUSS, *Senior Lecturer*
West Virginia University, D.M.A.

SHINOBU TAKAGI, *Lecturer*
Boston University, M.M.

JESSICA TONG, *Assistant Professor*
Peabody Institute of Music
Johns Hopkins University, M.M.

RICHARD WEBB, *Assistant Professor*
Northwestern University, Ph.D.

NICK WEISER, *Assistant Professor*
Eastman School of Music, D.M.A.

JIHYUN WOO, *Senior Lecturer*
University at Buffalo, State University of New York, Ph.D.

WILDY ZUMWALT, *Associate Professor*
Florida State University, D.M.A.
Philosophy Faculty

NEIL FEIT, *Distinguished Teaching 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, *Distinguished Teaching 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

Physics Faculty

JUSTIN CONROY, *Associate Professor*
The College of William and Mary, Ph.D.

MICHAEL DUNHAM, *Assistant Professor*
The University of Texas at Austin, Ph.D.

ILMAR FILHABER, *Lecturer*
Roger Williams University, B.S.

PETER MATTOCKS, *Associate Professor*
University of Southampton (England), Ph.D.

ERICA SIMOSON, *Associate Professor*
Colorado State University, Ph.D.

Politics & International Affairs Faculty

JONATHAN CHAUSOVSKY, *Associate Professor*
University of Texas-Austin, Ph.D.

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

RAYMOND RUSHBOLDT, *Lecturer*
State University of New York at Buffalo, M.A.

IVANI VASSOLER-FROELICH, *Professor*
University of Maryland, Ph.D.
President’s Award for Excellence, 2016
Psychology Faculty

CATHARINE E. CREELEY, Associate Professor
University of Missouri - St. Louis, Ph.D.

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

LISA DENTON, Associate Professor
Indiana University, Ph.D.

CHERYL E. DROUT, Distinguished Service Professor
University of Delaware, Ph.D.
President's Award for Excellence, 2012
The State University Chancellor's Award for Excellence in Faculty Service

JUDY HOROWITZ, Professor
State University of New York at Buffalo, Ph.D.

J. ANDY KARAF, Professor
Kansas State University, Ph.D.

BRUCE G. KLONSKY, Professor
Fordham University, Ph.D.

LAWRENCE MASTROMATTEO, Lecturer
Lakehead University, M.A.

THUY KARAF, Lecturer
Kansas State University, M.S.
University of Kansas, M.A.

JOSEPH P. McFALL, Associate Professor
West Virginia University, Ph.D.

DANI M. McMAY, Associate Professor
University of South Florida, Ph.D.

DARRIN L. ROGERS, Associate Professor
Ohio State University, Ph.D.

ANDREA A. ZEVENBERGEN, Distinguished Teaching Professor
Stony Brook University, The State University of New York, Ph.D.
President's Award for Excellence, 2014

Sociocultural and Justice Sciences Faculty

MICHAEL AIELLO, Assistant Professor (Criminal Justice)
John Jay College of Criminal Justice, M.A.

MARY B. CARNEY, Associate Professor (Social Work)
University of Illinois, Ph.D.

MICHAEL CLARKSON-HENDRIX, Assistant Professor (Social Work)
University at Albany, State University of New York, M.S.W.

JESSICA FINKELDEY, Assistant Professor (Criminal Justice)
Bowling Green State University, Ph.D.

ANNETTE FRANKLIN, Lecturer (Social Work)
State University of New York at Buffalo, Ph.D.
RANDOLPH HOHLE, Associate Professor (Sociology)
University at Albany, State University of New York, Ph.D.

PATRICK JOHNSON, Lecturer (Criminal Justice)
SUNY Empire State College, M.A.

ALAN LaFLAMME, Professor (Anthropology-Sociology)
University at Buffalo, State University of New York, Ph.D.

BERNADETTE MARSONE, Assistant Professor (Social Work)
Walden University, Ph.D.

BRIAN MASCIADELLEI, Associate Professor (Social Work)
University of Illinois, Ph.D.

JESSE NORRIS, Assistant Professor (Criminal Justice)
University of Wisconsin Law School, J.D.

REBHA SABHARWAL, Assistant Professor (Sociology)
Arizona State University, Ph.D.

ALLYN SKINNER, Lecturer (Sociology)
University at Buffalo, M.A.

Theatre and Dance Faculty and Staff

ANTHONY ALTERIO, Assistant Professor
University of Michigan, M.F.A.

JACKSON BOEVER, Scene Shop Supervisor
Hamline University, B.A.

ELIZABETH GALBA, Costume Shop Supervisor
Northern Illinois University, M.F.A.

NESTOR BRAVO GOLDSMITH, Assistant Professor/Theatre Arts Coordinator
Arizona State University, Ph.D.

JESSICA HILLMAN-McCORD, Professor/Performance Area Coordinator
University of Colorado at Boulder, Ph.D.

SAM KENNEY, Associate Professor/Chair/Interim Associate Dean
Smith College, M.F.A.

DANIEL LENDZIAN, Lecturer
The University of Texas at Austin, M.F.A.

CZERTON LIM, Assistant Professor/Theatrical Production & Design Area Coordinator
University of Washington, M.F.A.

JESSICA LUSTIG, Costume Shop Assistant
University of Washington, M.F.A.

PAUL W. MOCKOVAK II, Professor
University of Miami, M.F.A.

TAYLOR MORSE, Lighting and Sound Supervisor
State University of New York at Fredonia, B.F.A.

PAULA PETERS, Assistant Professor/Dance Area Coordinator
University of Washington, M.F.A.

TODD PROFFITT, Professor/Managing Producer
Texas Tech University, M.F.A.
DIXON REYNOLDS, Associate Professor
Indiana University, M.F.A.

EDWARD SHARON, Professor
Boston University, M.F.A.

DAVID STELLHORN, Associate Professor
University of Illinois Urbana-Champaign, M.F.A.

ANGELIKA SUMMERTON, Senior Lecturer
Academy of Music and Theatre (Hanover, Germany), M.A.
Hilbert College M.P.A.

Visual Arts and New Media Faculty

MICHELE BERNATZ, Associate Professor
University of Texas at Austin, Ph.D.

JASON DILWORTH, Associate Professor
Virginia Commonwealth University, M.F.A.
2014-15 Recipient of the Marion Fellowship for the Visual and Performing Arts

TIMOTHY FRERICHS, Professor
University of Iowa, M.F.A.
William T. Hagan Young Scholar/Artist Award
President's Award for Excellence, 2015
Kasling Lecturer

PHIL HASTINGS, Associate Professor
Southern Illinois University Carbondale, M.F.A.

JILL JOHNSTON, Associate 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.
Inaugural Recipient of the Marion Fellowship for the Visual and Performing Arts
The State University Chancellor’s Award for Excellence in Faculty Service

ALBERTO REY, Distinguished Professor
University at Buffalo, State University of New York, 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 RITTELLENN, Associate Professor
University of Pittsburgh, Ph.D.

HIDE SADOHARA, Associate Professor
Kent State University, M.F.A.

PETER TUCKER, Associate Professor
University of Texas at Austin, M.F.A.

MEGAN URBAN, Associate Professor
Virginia Commonwealth University, M.F.A.

Elizabeth Van Verth, Lecturer
Pratt Institute, M.F.A.
World Languages and Cultures

OLIVIA BARONE, Lecturer
State University of New York at Fredonia, M.A.

JUAN A. DE URDA ANGUITA, Associate Professor (Spanish)
University of Missouri, Ph.D.

CARMEN S. RIVERA, Professor (Spanish)
University of South Carolina, Ph.D.

IGNACIO SAMIENTO-PANEZ, Assistant Professor
Tulane University of Louisiana, Ph.D.
SUNY HISTORY AND GENERAL STATEMENT

The nation’s largest comprehensive public university system, the State University of New York (SUNY) was officially established in February 1948. 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 schools, a mix of 29 state-operated campuses and five statutory colleges — including research universities, liberal arts colleges, specialized and technical colleges, health science centers, land-grant colleges — and 30 community colleges and an online learning network.

Today, the State University of New York’s geographically dispersed campuses bring educational opportunity within commuting distance of virtually all New Yorkers. These institutions offer programs as varied as ceramics engineering, philosophy, fashion design, optometry, maritime studies, law, medical education, and everything in between. The university also operates hospitals and numerous research institutes. 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. One out of three New York State high school graduates choose SUNY, and the total enrollment of nearly 445,000 full-time and part-time students represents 37 percent of New York State’s higher education student population.

SUNY attracts the best and brightest scholars, scientists, artists and professionals, and boasts nationally and internationally recognized faculty in all major disciplines. Faculty are regular recipients of prestigious awards and honors. The highly-regarded doctoral degree granting universities are home to top research programs and attract experts in a variety of fields. SUNY employs 88,000 faculty and staff and counts more than three million living alumni, residing in New York State and throughout the world.

The State University of New York is committed to serving as the state’s strongest economic and quality-of-life driver and providing quality education at an affordable price to New Yorkers and students from across the country and the world.
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
College of Environmental Science and Forestry
Downstate Health Sciences University
Upstate Medical University
SUNY Polytechnic Institute

University Colleges
Brockport
Buffalo State
Cortland
Empire State College
Fredonia
Geneseo
New Paltz
Old Westbury
Oneonta
Oswego
Plattsburgh
Potsdam
Purchase

Technology Colleges
Alfred State
Canton
Cobleskill
Delhi
Farmingdale State
Maritime College
Morrisville State College

Community Colleges
Adirondack
Broome
Cayuga
Clinton
Columbia-Greene
Corning
Dutchess
Erie
Fashion Institute of Technology
Finger Lakes
Fulton-Montgomery
Genesee
Herkimer
Hudson Valley
Jamestown
Jefferson
Mohawk Valley
Monroe
Nassau
Niagara County
North Country
Onondaga
Orange
Rockland
Schenectady County
Suffolk County
Sullivan
Tompkins Cortland
Ulster County
Westchester
NEW YORK STATE EDUCATION DEPARTMENT COMPLAINT NOTICE

SUNY Fredonia makes every effort to provide the best possible experience for students and to resolve student concerns and complaints in a timely and effective manner. Students should feel free to raise matters of concern without risk of disadvantage. In the event that something is less than satisfactory, students should initially attempt to resolve concerns and complaints with the appropriate campus department or office.

Specific procedures and guidance are available for the following student complaints:

- **Discrimination/Harassment** — for the prompt and equitable investigation and resolution of allegations of unlawful discrimination on the basis of race, color, national origin, religion, creed, age, sex, sexual orientation, disability, gender identity, familial status, pregnancy, predisposing genetic characteristics, military status, domestic violence victim status, or criminal conviction.
  
  - Visit: [https://www.fredonia.edu/about/offices/diversity-equity-inclusion/discrimination-procedure-for-students](https://www.fredonia.edu/about/offices/diversity-equity-inclusion/discrimination-procedure-for-students)

- **Grade Appeal** — dealing with grade concerns in the most direct fashion should always be the first step toward resolution. Students are strongly encouraged to discuss the issue with the faculty member prior to filing a formal complaint. To request action when a student feels that an assigned grade is not consistent with the grading policy in the syllabus, or that the evaluation has been unjust.
  
  - Visit: [https://policy.fredonia.edu/display/POL/Grade+Appeals](https://policy.fredonia.edu/display/POL/Grade+Appeals)

- **Interpersonal Violence** — for support and assistance when a reporting individual has experienced a situation when one person uses power and control over another through physical, sexual, or emotional threats or actions, economic control, isolation, or other kinds of coercive behavior. This includes: domestic violence, dating violence, relationship violence, spousal abuse, or battering, stalking.
  
  - Visit: [https://www.fredonia.edu/about/offices/diversity-equity-inclusion/title-ix](https://www.fredonia.edu/about/offices/diversity-equity-inclusion/title-ix)
  
  - Visit: [https://www.fredonia.edu/student-life/prevention-advocacy-wellness](https://www.fredonia.edu/student-life/prevention-advocacy-wellness)

- **Law Enforcement** — to file a criminal complaint with University Police and/or with local law enforcement and/or state police.
  
  - Contact: SUNY Fredonia University Police (716) 673-3333
  
  - Contact: Village of Fredonia Police Department (716) 679-1531
  
  - Contact: Chautauqua County Sheriff’s Office (716) 753-2131
  
  - Contact: NYS State police 24-hour hotline to report sexual assault on a NY college campus: 1-844-845-7269

- **Misconduct** — for complaints of misconduct. This includes: assault and/or harassment and other behavior, not based on a person's protected status, that poses an imminent danger of causing substantial harm to a fellow student.
  
  - Visit: [https://www.fredonia.edu/student-life/student-conduct/policies#complaints](https://www.fredonia.edu/student-life/student-conduct/policies#complaints)

- **Sexual Violence** — for support and assistance when an individual has experienced sexual violence, defined as a physical sexual act perpetrated against a person’s will or where a person is incapable of giving consent due to the victim/survivor’s use of drugs or alcohol or due to intellectual or other disability.
  
  - Visit: [https://www.fredonia.edu/student-life/sexual-assault](https://www.fredonia.edu/student-life/sexual-assault)
  
  - Visit: [https://www.fredonia.edu/about/offices/diversity-equity-inclusion/title-ix](https://www.fredonia.edu/about/offices/diversity-equity-inclusion/title-ix)
Other institutional complaints:
For assistance with other complaints related to the institution that have not been resolved through other means, a student may contact the following:

For complaints about student life and the campus experience:

**Dr. Cedric Howard, Vice President for Enrollment and Student Services**
Office: 2121 Fenton Hall
Phone: 716-673-3271
Email: ESS@fredonia.edu

For complaints related to the academic mission of the campus:

**Dr. Kevin P. Kearns, Interim Provost and Vice President for Academic Affairs**
Office: 801 Maytum
Phone: 716-673-3335
Email: Provost@fredonia.edu

For complaints related to the finance and administration mission of the campus:

**Mr. Michael Metzger, Vice President for Finance and Administration**
Office: 501 Maytum
Phone: 716-673-3109
Email: Finance.Administration@fredonia.edu

For complaints related to the university advancement mission of the campus:

**Mrs. Betty Gossett, Interim Vice President for University Advancement, Engagement, and Economic Development**
Office: Foundation House
Phone: 716-673-3321
Email: Foundation@fredonia.edu

If a student is unable to resolve a complaint at the campus level or believes that the campus has not properly addressed the concern, one of the following agencies may be contacted:

**Middle States Commission on Higher Education**
3624 Market Street, 2nd Floor
West Philadelphia, PA 19104
Phone: 267-284-5000
Email: info@msche.org
Spanish: espanolinfo@msche.org
Website: https://www.msche.org/

New York State residents who are unable to resolve the concern or complaint at the campus level or believe that the campus has not properly addressed the concern may contact:

**The State University of New York System Administration**
Provost’s Office
State University Plaza
335 Broadway
Albany, NY 12246

**Postsecondary Complaint Registry**
New York State Education Department Office of College and University Evaluation
Mezzanine 5
North Albany, New York 12230

Non-New York State residents who are unable to resolve a complaint at the campus level or believe that the campus has not properly addressed the concern may work with an agency in their home state to have their complaint addressed. The State Higher Education Executive Officers (SHEEO) provides state contact information and additional resources related to state authorization of distance education at http://www.sheeo.org/sheeo_surveys/. Students should contact the agency listed in their home state if they seek further assistance.
If a complaint does not fall into one of the exceptions noted above, persons should contact the Office of College and University Evaluation at http://www.highered.nysed.gov/ocue/home.html.
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