



College Catalog
2001 - 2003



State University of New York at Fredonia

State University of New York at Fredonia

2001-2003 College Catalog

CollegeSource

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Where Success is a Tradition

***“The road to
success lies in two
simple principles:
find what it is that
interests you and
that you can do
well, and when you
find it, put your
whole soul into it -
every bit of energy,
ambition and
natural ability
you have.”***

- John D. Rockefeller

For more information,
visit us on the web at
www.fredonia.edu

SUNY FREDONIA

Welcome to the State University of New York at Fredonia and to the exciting opportunities you will encounter as you pursue your educational goals. You have the enviable task of choosing from a number of different academic paths. Each prepares you to become a leader in an increasingly complex and global world.

Our faculty will introduce you to new ideas, new technologies, and new ways of approaching problems. The courses and programs, both academic and extracurricular, described in this catalog have been designed to assist you in your intellectual and personal development. This catalog is your guidebook to Fredonia - browse through it and use it as a special tool to assist you in getting the most out of your time on campus.

Fredonia's campus motto, "Where Success is a Tradition," reflects the positive attitude that faculty and professional staff have towards ensuring student success. This campus-wide commitment accounts for our having one of the highest student graduation rates in the nation, while maintaining a high level of rigor throughout the curriculum.

We are proud of SUNY Fredonia and what it has to offer. Welcome to this remarkable campus.

Dennis L. Hefner, Ph.D.
President

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SUNY Fredonia is a leading university college offering you a variety of 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.

Our faculty and professional staff are committed to providing you with a high quality educational experience through classroom teaching, and performance and research opportunities. Faculty members are readily available in their offices to meet with you to discuss your academic options, and small class sizes reflect our dedication to a personal approach in helping you to achieve your goals.

In the most recent Student Opinion Survey administered throughout the State University of New York by American College Testing, current Fredonia students indicated that they selected us for our academic programs and excellent reputation. Students also rated Fredonia highly for our cultural arts programs, study areas, campus tutoring services, recreational and intramural programs, and the condition of our buildings and grounds.

Fredonia's 266-acre campus is striking in its beauty and design. A traditional brick perimeter encloses a modern sculptured core of buildings including designs by the internationally-known architectural firm of I.M. Pei and Partners.

Our history dates back to 1826, when the citizens of Fredonia recognized the importance of higher education and established the Fredonia Academy.



SUNY Fredonia is consistently ranked highly by national periodicals.

We are located within the village of Fredonia in the heart of northern Chautauqua County at Exit 59 of the New York State Thruway. Our students have the advantages of a small campus but are just a short drive away from the major metropolitan areas of Buffalo, N.Y. and Erie, Pa. Just a few hours away are Toronto, Canada, and Cleveland, Ohio.

The village of Fredonia is distinguished by beautiful tree-lined avenues, Victorian-era architecture, and the warmth of its citizens.

Our neighboring city of Dunkirk is located on the shores of Lake Erie, which along with Chautauqua Lake, offer opportunities for swimming and boating during the summer, and ideal locations for faculty/student research projects in the natural sciences. Nearby ski centers beckon during the winter months and miles of hiking trails at our college camp attract outdoor enthusiasts.

Nationally-known Chautauqua Institution provides a wealth of cultural and educational activities

during the summer months which, along with events at SUNY Fredonia, sustain a wonderful atmosphere of creativity throughout the seasons.

Western New York, and specifically, Chautauqua County, with its many vineyards, lush forests, and rolling hills reflecting the seasons, is a wonderful setting for SUNY Fredonia, and the perfect place for you to pursue your dreams.

Everyone at Fredonia is concerned with your development as an individual, including personal and educational growth. We provide opportunities in and outside of the classroom which reflect an educational philosophy based on the evolution of the total student.

Our curriculum is strengthened by the College Core Curriculum, a series of liberal education studies you'll complete regardless of your major. Our students receive support and guidance through our Academic Advising Center, and our Honors Program provides unique educational opportunities to highly motivated students.

At Fredonia, internships are available and encouraged in several academic areas, and you are able in many cases to be active in faculty research, often culminating in presentations at academic conferences. You also can participate in international education programs conducted by Fredonia and other cooperating colleges and universities.

Fredonia graduates are success stories. They include recipients of the Emmy and Academy Award, teachers of the future leaders of America, and stars at the Metropolitan Opera and in opera houses throughout the world. They also are judges and lawyers, doctors and nurses, clergy and missionaries, and scientists recognized around the world for groundbreaking research.

Many of our outstanding graduates attribute their success to the foundation they built at SUNY Fredonia.

At Fredonia, we believe that for students to achieve success, academic programs require the support of the entire college community. Our academic and student services are exceptional, and reflect our dedication to your growth and development.

Reed Library has vast resources, including a music library. Electronic technology on campus includes several computer labs and our Media Center, which provides tools and hands-on instruction you'll use to complete academic projects. Our Learning Center's philosophy envisions peer tutoring as a symbiotic relationship in which tutors benefit right along with the students they serve. Fredonia's Counseling Center staff helps to empower students to resolve the complex issues they face during their college years, and our Student Health Center emphasizes wellness and health awareness. In addition, our Career Development Office provides a link between the campus and the world of work.

Our scholarship and aid programs assisted more than 600 students this year. Over \$480,000 was awarded to deserving Fredonians. In addition, our Financial Aid Office works diligently to help you to obtain maximum aid through federal and state programs.

The strength of a college is often measured solely on the quality of its academic programs. At Fredonia, we believe a combination of great educational options and a high quality of student life is the right formula for success.

Fredonia's residence halls provide you with a comfortable and secure atmosphere for living and learning. Residence life has the added advantage of activities planned by residents, and a popular program brings alumni back to the college to share their experiences "after Fredonia." Your options abound in food services, whether you're a resident or commuter student. You can eat traditional meals in a dining center or choose from the great variety of foods served in the relaxed atmosphere of the Williams Center or at our popular cafes in McEwen and Fenton halls.

Participation in student activities, campus governance, and sports can contribute to a heightened sense of self-awareness and self-assurance. At SUNY Fredonia, we have many clubs and activities related to academic majors, including our student newspaper and radio and television stations. Music, dance and theatre activities are open to all students, regardless of major. There are Greek organizations and a Leadership development program. In addition, we have many intramural and intercollegiate sports teams, and several of our students are recognized by the State University of New York Athletic Conference as superb scholar-athletes.

Strong academic programs and a high quality of student life make Fredonia a great place for you to pursue your personal goals for the future.

Celebrating our long history
of educational excellence
and community support



Come to Fredonia

**Where Success
is a Tradition**

How to Use This Catalog

The 2001-2003 SUNY Fredonia Catalog represents a new look. In this volume, both Undergraduate and Graduate offerings are combined.

Undergraduate department and major/minor listings, including degree requirements, begin the volume. There is a separate Graduate section, describing information specific to SUNY Fredonia's Graduate programs, policies, tuition, and degree requirements. Undergraduate and Graduate course descriptions follow in a separate section. Information about academic and student services, Undergraduate tuition, fees and financial aid, college policies, and faculty and staff listings complete the volume.

There are two department name changes; Art is now Visual Arts and follows Theatre and Dance. Foreign Languages and Literatures is now Modern Languages and Literatures. Included in Modern Languages are studies of French, German, Italian and Spanish. The college's new interdisciplinary Undergraduate minors, Film Studies, Journalism, and Sport and Exercise Studies, are included in this volume. The interdisciplinary Undergraduate African American and Latino Studies minors are listed under Multiethnic Studies. The requirements for the Undergraduate Dance minor are listed in the Department of Theatre and Dance listing, as is the Acting major.

In the course description listings, prefixes preceding course numbers have changed to:

AADM	Arts Administration	ITAL	Italian
ACCT	Accounting	JAPN	Japanese
AFRA	African American Studies	JOUR	Journalism
AMST	American Studies	LANG	Foreign Languages
ANTH	Anthropology	MATH	Mathematics
ARAB	Arabic	MAED	Mathematics Graduate Education
ART	Art	MEDA	Media Arts
BIOL	Biology	MEDT	Medical Technology
BUAD	Business Administration	MUED	Music Education
BULG	Bulgarian	MUS	Music
CHEM	Chemistry	MUTY	Music Therapy
CHIN	Chinese	PBAD	Public Administration
CSIT	Computer and Information Sciences	PHED	Physical Education
COMM	Communication	PHIL	Philosophy
CRMJ	Law and Justice	PHYS	Physics
DANC	Dance	POLI	Political Science
DIST	Distance Learning	PSY	Psychology
ECON	Economics	RUSS	Russian
EDU	Education	SCCM	Scientific Computation
ENGL	English	SDEG	Time Shortened Degree
ESCI	Environmental Sciences	SOC	Sociology
FILM	Film Studies	SOCW	Social Work
FREN	French	SPA	Speech Pathology and Audiology
GEO	Geosciences	SPAN	Spanish
GERM	German	SPST	Special Studies
GIS	Geographic Information Systems	SRT	Sound Recording Technology
HIST	History	STAT	Statistics
HLTH	Health Education	THEA	Theatre Arts
HONR	Honors	WOST	Women's Studies
HSA	Health Services Administration		
INDS	Interdisciplinary Studies		
INED	International Education		

Also in the course listings, below each course name is a capital letter indicating how often the particular course is offered. The key to course frequency codes is as follows:

- A** – Course offered every semester
- B** – Course offered every year
- C** – Course offered every other year
- D** – Course offered on occasion

Information in this catalog is accurate as of January 1, 2001. However, all information is subject to change. Updated information may be obtained from the Office of Admissions, State University of New York at Fredonia, Fredonia, NY 14063.

The college reserves the right to cancel any course for which the enrollment is deemed insufficient or for other administrative reasons. The college also reserves the right to change faculty assignments and therefore cannot guarantee students the faculty of their choice.

The State University of New York at Fredonia Catalog is published by the Office of College Publication Services.

SUNY Fredonia fully subscribes to the Non-discrimination Policy of the State University of New York.

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

Additionally, discrimination on the basis of sexual orientation in the provision of any services or benefits by state agencies and in any matter relating to employment is prohibited by the Governor's Executive Order No. 28. The policy of the State University of New York Board of

Trustees also requires that personal preferences of individuals which are unrelated to performance such as sexual orientation shall provide no basis for judgment of such individuals.

Any violations of the university's non-discrimination policy should be reported to the Director of Affirmative Action, 143 Fenton Hall, (716) 673-3358.

A SUNY-wide grievance procedure is available to all students and employees in cases of discrimination. A person who feels he/she has been a victim of discrimination for any of the above reasons, should feel free to contact the Director. Persons who wish to initiate such a grievance or complaint should also feel free to bring a friend or advisor with them.

SUNY Fredonia Mission Statement

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

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

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

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

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

To develop and support service to individuals and organizations beyond the campus by opening the college's extensive educational, recreational, and cultural facilities to the community; by providing opportunities to attend lectures, athletic, and cultural events, by operating programs and clinics in association with specialized instructional programs, and by encouraging faculty and staff to contribute their expertise to the variety of community-based endeavors for which it may be of value.

To commit the college to education that provides an awareness of global interdependence and cultural diversity

through its curricular and co-curricular activities. Through active recruitment of students, faculty, and staff from underrepresented populations and the inclusion of this diversity in its programs, the college seeks to provide its students with the academic and personal richness afforded by exposure to such pluralistic perspectives.

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

Accreditation

The State University of New York at Fredonia is fully accredited by:

The Board of Regents of the State University of New York

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

The college's Accounting and Business Administration programs are accredited by the International Assembly for Collegiate Business Education, P.O. Box 25217, Overland Park, KS 66225, Tel. (913) 631-3009.

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

SUNY Fredonia's graduate programs in Speech-Pathology and Audiology are accredited by the Council on Academic Accreditation of the American Speech-Language-Hearing Association, 10801 Rockville Pike, Rockville, Md., 20852, Tel. (301) 897-5700. They are also licensure qualified by the New York State Education Department.



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

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

UNDERGRADUATE
ACADEMIC PROGRAMS
AND AREA SPECIALIZATIONS

Curriculum	Page No.		
		*Computer Information Systems	French 52
		*Computer Systems Software	Adolescent/Secondary Education 52
		*Computing in General Sciences	Geographic Info. Systems 33
		*Computing with Mathematical Modeling	Geosciences 33
		Geographic Information Systems 33	Earth Sciences 33
		*Management Information Systems	Environmental Sciences 31
		*Theoretical Computer Science	Geochemistry 34
Accounting	6		Geographic Information Systems 33
Acting	75	Criminal Justice 18	Geology 34
Agriculture (cooperative)	7	Dance 76	Geophysics 34
Programs with:		Earth Sciences 33	Adolescent/Secondary Education 34
Cornell Agr. & Life Sciences		Adolescent/Secondary Education 35	Gerontology 35
American Studies	8	Economics 19	Health Services Admin. 36
Art	76	*Business and Financial Economics	History 39
*Ceramics		*Data Analysis and Computer Applications	*American Culture
*Drawing		*International Political Economy	*Global Studies
*Graphic Design		*Public Policy and Economics	*Middle East-Asian History
*Art History		*Adolescent/Secondary Education	*Native American Cultures
*Illustration		Education 21	*North American Cultures
Media Arts	49	Childhood Education 22	Adolescent/Secondary Education 40
*Painting		Early Childhood Education 22	Industrial Management 42
*Photography		Elementary Education 21	Interdisciplinary Studies 42
*Printmaking (support courses)		Middle School Extension 24	African American Studies 53
*Sculpture		Adolescent/Secondary Education 25	American Studies 8
Arts Administration	8	Biology	Arts Administration 8
Biology	10	Chemistry	Criminal Justice 18
Biochemistry	9	Earth Sciences	Dance 76
Environmental Sciences	31	English	Environmental Sciences 31
Medical Technology	50	French	Film Studies 32
Pre-Dental	65	Mathematics	Geographic Information Systems 33
Pre-Medicine	65	Music	Gerontology 35
Pre-Veterinary	65	Physics	International Studies 44
Recombinant Gene Technology	67	Social Studies 40	Journalism 46
Adolescent/Secondary Education	11	Spanish	Latino Studies 53
Business Administration	11	Engineering (cooperative)	Legal Studies 47
Accounting	6	Programs with:	Multiethnic Studies 53
*Finance		Alfred Ceramics	Music Business 60
*Management		Binghamton University	Sport and Exercise Studies 72
*Management Info. Systems		University at Buffalo	Women's Studies 78
*Marketing		Case West. Reserve University	International Studies 44
Music Business	60	Clarkson University	*Advanced Industrial Societies
Chemistry	13	Columbia University	*International Political Economy
Biochemistry	9	Cornell University	*Peace and Conflict
Environmental Sciences	31	Louisiana Technological University	*European Cultural Studies
Geochemistry	34	Ohio State	*Cultural Studies of the Americas
Pre-Medicine	65	Rensselaer Polytechnic University	*The Developing World
Adolescent/Secondary Education	14	Rochester Institute of Technology	Legal Studies 47
Communication	14	Syracuse University	Mathematics 47
*Audio/Radio Production		Tri-State University	*Applied Mathematics
*Communication Studies		English 29	*Computing with Mathematical Modeling
Media Arts	49	Adolescent/Secondary Education 30	Mathematics-Physics 62
*Media Management		Environmental Sciences 31	Adolescent/Secondary Education 49
*Public Relations			
*Video/Television/Digital Film Design and Production			
Computer and Information Sciences	16		

Media Arts	49	Pre-Law	47	Minors A "minor" is a specified minimum number of hours recorded on official transcripts, but involving fewer hours than a major. Accounting African American Studies American Studies Anthropology Applied Mathematics Art History Art Studio Arts Administration Biology Business Administration Chemistry Communication Computer/Info. Science Criminal Justice Dance Earth Sciences Economics English Film Studies French Geographic Information Systems Geosciences Gerontology Health Services Administration History Industrial-Organizational Psychology Journalism Latino Studies Legal Studies Management Info. Systems Mathematics Music Philosophy Physics Political Science Psychology Sociology Spanish Speech Pathology and Audiology Sport and Exercise Studies Theatre Arts Women's Studies
Media Arts B.A.	50	Pre-Medicine	65	
Media Arts B.F.A.	50	Psychology	66	
Medical Technology	50	Recombinant Gene Tech.	67	
Modern Languages	52	Social Studies	40	
French	52	Adolescent/Secondary Education		
Spanish	52	Social Work	67	
Multiethnic Studies	53	Sociology	69	
African American Studies	53	Anthropology	70	
Latino Studies	53	Criminal Justice	18	
Music	54	Gerontology	35	
Applied Music	55	Health Services Admin.	36	
*Composition	56	Social Work	67	
*Jazz	58	Sound Recording Technology	71	
*Performance	57	Spanish	52	
Musical Theatre	59	Adolescent/Secondary Education	52	
Music Business	60	Special Education Program	24	
Music Education/Music	55	cooperative with:		
*General Choral		SUNY College at Buffalo		
*Instrumental		Speech Pathology/Audiology	71	
Music History and Literature		Communication Disorders and Sciences	72	
Music Theory	55	Speech and Hearing Handicapped	72	
Music Therapy	57	Speech and Language Disabilities	72	
Sound Recording Technology	71	Theatre	74	
Philosophy	61	Acting	75	
Physics	61	Dance	76	
Engineering	28	Musical Theatre	59	
Geophysics	62	Production Design	75	
Mathematics-Physics	62	Visual Arts	76	
Adolescent/Secondary Education	62	Women's Studies	78	
Political Science	63	* indicates area specialization		
*American Politics				
*Comparative Politics				
Criminal Justice	18			
Geographic Information Systems	33			
*Government and Politics				
*International Political Economy				
*International Politics				
Legal Studies	47			
*Public Law & Policy				
*Political Economy				
*Political Theory				

Undergraduate Studies

The next section lists the Undergraduate departments, majors and minors. Students should check the *Course Offerings Bulletin* available during the pre-registration period each semester for an accurate list of proposed course offerings.

Course outlines, including general requirements, format of courses, and grading procedures, are available in department offices.

While the college guarantees each accepted student a full schedule of courses each semester pertinent to his/her academic objectives and in partial fulfillment of degree requirements, it cannot assure a desired time schedule, a preferred instructor, or a given course.

ACCOUNTING

Office: W301 Thompson Hall
(716) 673-3505
E-mail: Account@fredonia.edu
Thomas Rywick, Chairperson

Through its Accounting program, the Department of Business Administration provides the opportunity for students to obtain a quality education and to gain an awareness of their individual strengths and interests in order to make appropriate career decisions. The department offers students a rigorous, up-to-date curriculum that prepares them for imaginative and responsible leadership roles in accounting - domestic and worldwide. While the program is career-oriented, the department realizes that contemporary accounting professionals must bring a broad and varied perspective to their practice. Accordingly, the program requires that prospective graduates take half of the 120 hours needed for a degree outside the department, with particular emphasis given to the development of written and oral communicative skills and the acquisition of the ability to think creatively and critically.

Students are urged to declare a major in Accounting as early as possible in their college careers. Students who wish to declare this major after they have earned 90 credit hours will need the permission of the department chairperson and the Dean.

The Accounting program offers the degree, B.S. in Accounting, which qualifies graduates to take the Certified Public Accounting (CPA) Examination. Additionally, graduates are qualified to sit for the Certified Management Accounting examination. The program is administered by the Department of Business Administration, and Accounting majors are eligible for all awards, honors and programs sponsored by the department (see page 12 for more information).

The Accounting and Business Administration programs at SUNY Fredonia have been accredited by the International Assembly for Collegiate Business Education. The Department of Business Administration presently has formal agreements for the fifth year of accounting that leads to a master's degree in Accounting at SUNY Oswego and SUNY at Buffalo as well as other arrangements for an

MBA. (See page 12 under Business Administration for details.) These arrangements will provide a means for students to meet the 150 hour requirement to sit for the CPA exam in many states. (New York State's 150 hour requirement goes into effect in 2008.)

Career Options

There are three major sources of employment for graduate accountants: public accounting, management accounting, and governmental accounting. Public accounting firms provide clients with a wide variety of services, including auditing, tax consulting, and management advisory services. Management accountants are employed by companies in various areas, such as cost accounting, budgeting, general ledger accounting, and internal auditing. Governmental accountants, employed by the federal, state, and local governments, have the responsibility to monitor the use of the taxpayer's money. In the federal government, the major sources of employment for accountants include the Internal Revenue Service, General Accounting Office, and Defense Contract Audit Agency.

Student Clubs and Activities

Students majoring in Accounting can participate in a number of clubs or activities that are designed to supplement classroom work. The student clubs include the Business Club, the Financial Management Association, a collegiate chapter of the American Marketing Association, and the Accounting Society. The Accounting Society engages in many activities, including meetings with accountants from industry, government, and public practice. The society also conducts the Volunteer Income Tax Assistance program, a service provided under the auspices of the IRS, by which student volunteers help to prepare individual personal income tax returns for low-income and elderly persons. The Accounting program also has a number of standing internships with various local firms and organizations.

Requirements for the Bachelor of Science Degree in Accounting

1. To earn a B.S. degree in Accounting, a student must complete 60 semester hours in accounting and business administration courses, plus 60 semester hours in liberal arts and

science courses, as directed by the State Board for Public Accountancy. As a N.Y. State registered program, these 120 semester hours (excluding any health/physical education courses) will qualify students to sit for the CPA Examination and satisfy the education requirement for licensure as a CPA in the State of New York.

2. Accounting majors must complete the following 60 semester hours in accounting and business administration courses.

	Hrs.
ACCT 201 Financial Accounting	3
ACCT 202 Managerial Accounting	3
ACCT 301 Intermediate Accounting I	3
ACCT 302 Intermediate Accounting II	3
ACCT 303 Cost Management	3
ACCT 304 Taxation of Individuals	3
ACCT 305 Taxation of Corporations and Partnerships	3
ACCT 311 Business Law I	3
ACCT 312 Business Law II	3
ACCT 321 Accounting Processes	1
ACCT 322 Accounting Practice	1
ACCT 401 Advanced Accounting	3
ACCT 405 Auditing	3
ACCT 421 Accounting Cycles	1
BUAD 161 Information Technology Literacy	3
BUAD 261 Management Information Systems	3
BUAD 315 Principles of Finance	3
BUAD 317 Corporate Finance or	
BUAD 416 Investment Analysis	3
BUAD 321 Management and Org. Behavior	3
BUAD 325 Principles of Marketing	3
BUAD 423 Strategic Management	3

and one of the following:
BUAD 327 (if not taken for managerial track), BUAD 266, BUAD 427 or ACCT/BUAD 480

Students may select the managerial track by taking BUAD 327 rather than ACCT 304, and BUAD 427 as the alternate. ECON 300 is recommended.

Total accounting and business administration 60

3. Students majoring in Accounting must complete the following 60 semester hours in liberal arts and science courses:

BUAD/ ECON 200	Fundamentals of Statistics for Business and Economics	3
ECON 201	Principles of Macroeconomics	3

ECON 202 Principles of Microeconomics	3
MATH 120 Survey of Calculus I	3
Electives in liberal arts and sciences (see Section 4 below)	48
Total liberal arts and sciences	60

4. Accounting majors must obtain a minimum cumulative quality point average of 2.00 in all accounting (ACCT prefix) courses. This requirement is in addition to the college requirements of 2.00 overall and 2.00 in courses required for the major.

5. Accounting majors must complete a minimum of 30 credit hours of upper-level business administration and/or accounting courses taken at SUNY Fredonia.

Requirements for the Minor in Accounting

The Department of Business Administration offers a minor in Accounting which requires 18 credit hours in accounting. Included within the 18 hours must be ACCT 301 plus two upper level courses in accounting plus the necessary prerequisites. An example would be: ACCT 304, ACCT 305, ACCT 311 plus ACCT 201, ACCT 202, and ACCT 301 (the required prerequisites). The approval of the entire minor program requires the advisement of the chairperson. Business Administration majors wishing to minor in Accounting must take at least 9 hours of accounting credit beyond those used toward their Business Administration major.

(Acting, see Theatre and Dance, page 74).

(African American Studies, see Multiethnic Studies, page 53).

AGRICULTURE (COOPERATIVE)

Office: 116 Houghton Hall
(716) 673-3302
E-mail: Agri@fredonia.edu
Peter G. Mattocks, Director

This cooperative program developed jointly by SUNY Fredonia and the College of Agriculture and Life Sciences at Cornell is an innovative endeavor which provides employment opportunities in agriculture or in biological, life, or environmental sciences following graduation, by combining liberal arts and sciences with agriculture and life sciences. The following specializations or career options are available under nine program areas:

1. AGRICULTURAL AND BIOLOGICAL ENGINEERING
Engineering
Technology
Areas of study
General Machinery
Material Processing & Handling
Power: Electric & Internal Combustion Engines
Soil & Water Management Structures & Environment
2. ANIMAL SCIENCES
Animal Breeding and Genetics
Animal Nutrition
Animal Physiology
Dairy Cattle Production
Horse Production
Livestock Production
Meat Science
Poultry Production
3. APPLIED ECONOMICS AND BUSINESS MANAGEMENT
Agricultural Economics
Business Management and Marketing
Farm Business Management and Finance
Food Industry Management
Public Affairs Management
Resource Economics
4. BEHAVIORAL AND SOCIAL SCIENCES
Agricultural Education
Communication Arts
Education
Environmental Education
Human Services
Rural Sociology
5. BIOLOGICAL SCIENCES
Animal Physiology and Anatomy
Biochemistry

Botany
Ecology and Evolution
Genetics and Development
Neurobiology and Behavior

6. ENVIRONMENTAL STUDIES
Aquatic Science
Atmospheric Science
Entomology
Environmental Horticulture
Environmental Technology
Natural Resources (environmental conservation, fishery, forest, and wildlife sciences)
Soil Science
7. FOOD SCIENCE
General
Food Analysis
Food Technology and Management
8. PLANT SCIENCES
General
Field Crops
Floriculture and Ornamental Horticulture
Plant Breeding
Plant Pathology
Plant Protection
Pomology
Vegetable Crops
9. GENERAL AND SPECIAL PROGRAMS
General Studies
International Agriculture
Microbiology
Statistics and Biometry

Under this cooperative arrangement, the most popular curriculum choice is the Three-Two (3-2) option by which a student majors in a modified curriculum in biology, business administration, chemistry, economics, English, foreign languages and literatures, geology, history, mathematics, philosophy, physics, political science, psychology, or sociology for the first three years and then transfers to the College of Agriculture and Life Sciences at Cornell University for the next two years. When the student completes the five-year curriculum, he/she obtains a baccalaureate from the College of Agriculture and Life Sciences as well as a baccalaureate from SUNY Fredonia, providing the student has satisfied Fredonia's remaining requirements at the College of Agriculture and Life Sciences. The only other viable curricular choice is the 2-2 option by which a student transfers to the College of Agriculture and Life Sciences after remaining at

SUNY Fredonia for two years. Under the 2-2 option, the student receives a bachelor's degree only from Cornell after completing the four-year program.

It is possible for students who do not wish to major in one of the above departments to enter SUNY Fredonia's Interdisciplinary Studies program which allows the student to design his/her own Cooperative Agriculture program. The curriculum the student takes at SUNY Fredonia will include the prerequisite course work for the specialization at the College of Agriculture and Life Sciences.

An attractive feature of the 3-2 option is that the final decision regarding the area of specialization usually is not made until the third year, thus providing the student with sufficient experience to make a proper choice. To transfer, the student first consults with the director and then applies to the College of Agriculture and Life Sciences. Usually a letter of recommendation from the director is forwarded for highly motivated students with satisfactory academic records (3.0 or higher). At Cornell an application from a SUNY Fredonia student in this program is given special consideration.

Since there are more than 50 specializations at the College of Agriculture and Life Sciences and since these curricula are frequently updated, it is mandatory that all students registered in Cooperative Agriculture meet with the coordinator or authorized designee for advisement each semester.

AMERICAN STUDIES

Office: 274 Fenton Hall
(716) 673-3587
E-mail: jarvisc@fredonia.edu or
smithcs@fredonia.edu
Christina S. Jarvis and **Claudia Sadowski-Smith**, *Co-Directors*

American Studies is an interdisciplinary examination of the historical development and contemporary status of American cultures. This broad liberal arts major is designed to provide students with an in-depth understanding of American cultures and to serve as a useful preparation for careers in such fields as the media, business, government, and education. This is an

interdisciplinary model major program; for specific degree requirements unique to Interdisciplinary Studies, refer to page 42.

Requirements for the Major in American Studies

1. AMST 202 Introduction to American Studies
2. Twelve hours in exploratory and preparatory courses selected from:

AMST 210	American Popular and Mass Cultures
HIST 215	Holidays and American Culture
ENGL 296	American Identities
HIST 338, 339	19th & 20th Century American Culture
HIST 351	Defining America
HIST 353	Creating American Consumer Culture

 or other courses as advised.
3. Thirty-six credit hours from courses in the following areas: art and architecture; communications and mass media; economics; English; environmental sciences; history; legal studies; philosophy; political science; psychology; and sociology/anthropology, or other areas, distributed as follows:

18 credit hours in each of two areas or 12 hours in each of three areas.
4. Three hours in capstone project or seminar. Students may choose either AMST 400, AMST 401, or AMST 402 to fulfill this option.

Total hours required: 54

Those desiring certification for secondary teaching should see the program co-directors.

Requirements for the Minor in American Studies

1. AMST 202 Introduction to American Studies
2. Students will take an additional 15 hours from the following or other offerings listed in the course catalog under American Studies each semester, as advised:

AMST 210	American Popular and Mass Cultures
HIST 215	Holidays and American Culture

ENGL 296	American Identities
HIST 338-339	19th and 20th Century American Culture
HIST 351	Defining America
HIST 353	Creating American Consumer Culture
HIST 376	Film and American Culture
AMST 400	Concepts and Methods of American Studies

(Art, see Visual Arts, page 76).

ARTS ADMINISTRATION

Office: G-15 Rockefeller Arts Center
(716) 673-3217
E-mail: Artadmin@fredonia.edu
Jefferson Westwood, *Coordinator*

The world of the performing and visual arts needs not only talented, creative artists; it also needs skilled and perceptive administrators and managers. Seeking to fill this need, the major in Arts Administration prepares students for entry level work with organizations such as symphony orchestras, arts centers and museums as well as opera, theater and dance companies. The major in Arts Administration combines courses from a variety of departments and includes practica and internship experience which may range from 6 to 15 credit hours. In addition, to ensure an in-depth understanding of at least one arts discipline, each Arts Administration major is required to complete a minor in music, theater, art or dance.

The Arts Administration major is closely allied with the college's Michael C. Rockefeller Arts Center, a three-theater, two-gallery complex which offers extensive internship and employment opportunities for qualified students. Through a combination of the academic course work, internships and the extracurricular opportunities available on campus, students become qualified to work in such areas as marketing, fund raising, operations, and general arts management. A number of students have also gone on to successfully pursue graduate study in the field.

This is an interdisciplinary model major program; for specific degree requirements unique to interdisciplinary studies, refer to page 42.

Courses in the Major:

Business and Accounting

BUAD 161*	Information Technology Literacy	3
ACCT 201	Financial Accounting	3
ACCT 311	Business Law (or BUAD 310 Legal Environment of Business)	3
*May substitute		
CSIT 104	Introduction to Microcomputer Software	3

Statistics - any one course in statistics from the following list:

ECON 200	Fundamentals of Statistics for Business and Economics	3
SOC 200	Statistics for Sociologists	3
PSY 200	Statistics	3

Communication/Psychology

BUAD 235	Business Communication (or COMM 235 Business Communication)	3
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One of the following nine-credit, three course sequences:

COMM 101	Fundamentals of Communication	3
COMM 221	Interpersonal Communication	3
COMM 301	Group Communication or	3
PSY 129	Introduction to Psychology	3
PSY 245	Social Psychology	3
PSY 355	Group Dynamics or	3
SOC 116	Introductory Sociology	3
SOC 204	Social Psychology	3
PSY 355	Group Dynamics	3

English

JOUR 270	Intro. to Print Media	3
JOUR 370	Reporting and Newspaper Writing I (or ENGL 368 Introduction to Public Relations)	3

Philosophy

PHIL 310	Business Ethics	3
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Arts Administration (3 credit hours minimum/15 maximum)

AADM 400	Arts Administration Practicum (or ART 472 Gallery Practicum)	3-6
AADM 490	Arts Administration Internship	0-15
Total Credits in Major:		36-48

Requirements for the Minor in Arts Administration

The minor combines courses from business, accounting, communication, English, philosophy and arts administration to equip students with some of the basic knowledge and skills

they will need for entry-level work with orchestras, theaters, dance companies and similar organizations. See also the description of the major in Arts Administration. The minor is recommended for students majoring in music, theater or art who wish to gain a better understanding of the business aspects of their discipline.

Courses in the Minor

Business and Accounting		Hrs.
BUAD 161	Information Technology Literacy	3
*May substitute		
CSIT 104	Introduction to Microcomputer Software	3
ACCT 201	Financial Accounting	3

Communication/Psychology

BUAD 235	Business Communication (or COMM 235 Business Communication)	3
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English

JOUR 270	Intro. to Print Media	3
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Philosophy

PHIL 310	Business Ethics	3
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Arts Administration

AADM 400	Arts Administration Practicum (or ART 472 Gallery Practicum)	3
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Total Credits in the Minor: 18

BIOCHEMISTRY

Office: 204 Houghton Hall (716) 673-3248
E-mail: Biochem@fredonia.edu
Matthew A. Fountain, Coordinator

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 today, 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 departments of Biology and Chemistry. 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. For course descriptions, see the listings under the appropriate departments; biology, page 101, and chemistry, page 108.

Requirements for the Bachelor of Science Degree in Biochemistry

Core Program:

BIOL 141-142	Plant Diversity and Ecology & Lab or	4
BIOL 144-145	Animal Diversity and Evolution & Lab	4
BIOL 241-242	Introductory Cell Biology & Lab	4
BIOL 333-334	Biochemistry & Lab	4
BIOL 370	Advanced Biochemistry	3
BIOL 335	Genetics	3
BIOL 340	Cell and Subcellular Biology	3
CHEM 115-116	General Chemistry I and II & CHEM 125-126 (Labs)	8
CHEM 215-216	Organic Chemistry I and II & CHEM 225-226 (Labs)	8
CHEM 317/327	Analytical Chemistry & Lab	4
CHEM/BIOL 465	Advanced Experimental Biochemistry	2
CHEM/BIOL 397	Biochemistry Seminar I	1
CHEM/BIOL 497	Biochemistry Seminar II	1
CSIT 100-Level Course		3
Total: 48 hours		

Track I (Chemical Emphasis)

CHEM 315-316	Physical Chemistry I and II & CHEM 325-326 (Labs)	8
MATH 122-123	University Calculus I and II	8
PHYS 230-231	General Physics I and II & PHYS 232-233 (Labs)	8
BIOL and/or CHEM	Approved Upper-level Electives (listed below)	6
Total: 30 hours		

Track II (Biological Emphasis)

BIOL 443	Plant Physiology or	3
BIOL 336-337	Mammalian Physiology & Lab	4

CHEM 314	Principles of Physical Chemistry	3	<p>BIOLOGY</p> <p>(see also Medical Technology, Recombinant Gene Technology and Pre-Medicine)</p> <p>Office: 203 Jewett Hall (716) 673-3282 E-mail: Biology@fredonia.edu Roger A. Byrne, Chairperson</p> <p>The Department of Biology offers a strong and flexible program designed to meet the career goals of students with widely varied interests. Graduates of our programs are well prepared to enter graduate school or professional programs (such as medical, dental, veterinary, physician's assistant, etc.), become research technicians, clinical medical technologists, 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 Biomedical Professions Council for individual advising about specific types of professional schools (see pages 65, 179).</p> <p>The biology department offers Bachelor of Science degrees in Biology, Recombinant Gene Technology (see page 67), Medical Technology (see page 50) and Biology-Secondary Education (see page 11), as well as a Master of Science degree program to students who have already obtained a B.S. in Biology. The department also participates in the Cooperative Agriculture (see page 7), Engineering (see page 28), and the Environmental Sciences (see page 31) programs.</p> <p>Students who wish to teach biology may obtain initial certification by completing the Biology Secondary Education program and the required courses in Professional Education (page 25). New York State mandates that Secondary Education majors demonstrate competence in a foreign language. This requirement may be satisfied in any one of the following four ways: (1) completion of three years of high school language with a passing Regents score (passing = 65), or, (2) completion of course work at the 116 level at Fredonia, or, (3) transfer two successful college</p>
CHEM 315	Physical Chemistry I	6	
MATH 120-121	Survey of Calculus I and II	8	
MATH 122-123	University Calculus I and II	8	
PHYS 121-122	College Physics I and II & PHYS 123-124 (Labs)	8	
PHYS 230-231	General Physics I and II & PHYS 232-233 (Labs)	9	
BIOL and/or CHEM	Approved Upper-Level Electives (listed below)	9	
Total: 29 or 30 hours			
Approved Chemistry Electives			
CHEM 230	Advanced Organic Lab	1	
CHEM 318/328	Analytical Chemistry II	5	
CHEM 395	Introduction to Research	1	
CHEM 391/491	Independent Lab Research	3	
CHEM 407	Organometallics	3	
CHEM 412	Advanced Organic Chemistry	3	
CHEM 417/418	Polymer Chemistry I & II	3	
CHEM 472	Inorganic Chemistry	3	
CHEM 473	Environmental Chemistry	3	
CHEM 481	Special Topics in Chemistry*	1-3	

*Must be approved by coordinator

Approved Biology Electives

BIOL 336	Mammalian Physiology	3
BIOL 338	Microbiology	3
BIOL 435	Developmental Biology	3
BIOL 440	Undergraduate Research	3
BIOL 443	Plant Physiology	3
BIOL 451	Biomembranes	3
BIOL 451	Eukaryotic Gene Expression	3
BIOL 451	Hormone Mechanisms	3
BIOL 451	Microbial Genetics	3
BIOL 451	Radiation Biology	3
BIOL 460	Recombinant Gene Technology	3

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

semesters, or, (4) scoring at the 50th percentile or higher on the CLEP exam.

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 meetings of the Eastern Colleges Science Conference, the regional meeting of Tri-Beta, a biology honors society, as well as other 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 and ecology.

Summer Research Fellowships are sponsored in biology each summer. Each sophomore or junior awarded one of these prestigious fellowships will work on a specific project designed in collaboration with a faculty sponsor. These fellowships have been previously supported by the Constantine Barker Memorial Endowment, the Biology Endowment, the American Society for Microbiology, the Holmberg Foundation, Merck/A.A.A.S. and Pfizer Pharmaceuticals. Each award provides a generous stipend (approximately \$2,500), a supplies budget (\$500-1,000). For more information, interested students should contact a faculty sponsor in the department.

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

Members of the biology department faculty are among the Fredonia faculty that are honored recipients of the Chancellor's Award for Excellence in Teaching. Two of our faculty have been named Distinguished Teaching Professors and one faculty member has received the President's Award for Excellence in Teaching.

Requirements for the Bachelor of Science Degree in Biology

Core Program:

BIOL 141-142	Plant Diversity and Ecosystem Biology & Lab	4
BIOL 144-145	Animal Biology and Evolution & Lab	4
BIOL 241-242	Introductory Cell Biology & Lab	4
BIOL 330-331	General Ecology & Lab	4
BIOL 333-334	Biochemistry & Lab	4
BIOL 335	Genetics	3
BIOL 340	Cell and Subcellular Biology	3
BIOL 431	Senior Seminar	1
Plus 9 additional hours of biology electives at the 300 to 400 level		9

PHYS 121-122 College Physics I and II & PHYS 123-124 (Labs) or
 8
 PHYS 230-231 University Physics I and II & PHYS 232-233 (Labs)
 27 or 28
 Additional education courses are listed on page 25. Students must also maintain a minimum 2.75 GPA overall and in the major to be admitted into the senior EDUC 419 Secondary School Methods and EDUC 430 Student Teaching in the Secondary School. Upon completion of this program the student will be recommended for the initial certificate to teach in NY State public schools.

electives toward graduation. Students wishing to minor in Biology must complete at least 9 credits 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.

36		
CHEM 115-116	General Chemistry I and II & CHEM 125-126 (Labs)	8
CHEM 215-216	Organic Chemistry I and II & CHEM 225-226 (Labs)	8
MATH 120	Survey of Calculus I or	3
MATH 122	University Calculus I	4
PHYS 121-122	College Physics I and II & PHYS 123-124 (Labs) or	8
PHYS 230-231	University Physics I and II & PHYS 232-233 (Labs)	27 or 28

Bachelor of Science Degree in Medical Technology

For information on this program, see page 50.

Bachelor of Science Degree in Recombinant Gene Technology

For information on this program, see page 67.

Chemistry and mathematics courses should be completed by the end of the sophomore year, physics courses by the end of the junior year.

Requirements for the Minor in Biology

A total of 22 credit hours of biology including BIOL 141, 144, 241 and BIOL 330 or 333 with laboratories and 6 hours of biology courses at the 300 or 400 level (not including BIOL 440). Note: Students electing BIOL 330 must have completed a minimum of 4 credit hours of chemistry, students electing BIOL 333 will be expected to have completed 16 credit hours of prerequisite chemistry courses.

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

Requirements for Transfer Credit: The degrees offered by the biology department require students complete between 32 and 41 credit hours of biology core and elective courses (Biology and Secondary Education, 36 credits; Medical Technology, 32 credits; Recombinant Gene Technology, 41 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

BUSINESS ADMINISTRATION

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 (716) 673-3505
 E-mail: Business@fredonia.edu
Thomas Rywick, Chairperson

The mission of the Department of Business Administration is to provide students with the opportunity to obtain a quality education in Business Administration and Accounting and gain an awareness of their individual strengths and vocational interests in order to make appropriate career decisions. The Business Administration program has been accredited by the International Assembly for Collegiate Business Education. The department offers a rigorous, up-to-date curriculum that prepares students for imaginative and responsible citizenship and leadership roles in business and accounting - domestic and worldwide. The curriculum is geared to social, economic and technological developments and reflects the application of evolving knowledge in economics and the behavioral and quantitative sciences. While the programs offered are career-oriented, the department realizes that contemporary business and accounting professionals must bring a broad and varied perspective to their respective crafts. Accordingly, the department requires that prospective graduates take at least half of the 120 hours needed for a degree outside the department, with particular emphasis given to the development of written and oral communicative skills and the acquisition of the ability to think creatively and critically. International applications are integrated throughout the curriculum.

Due to the nature of the program, students in Business Administration find themselves prepared for a cross-section of opportunities. Recent graduates have embarked on careers in areas ranging from business and management consulting to financial planning for corporations and

Requirements for the Bachelor of Science Degree in Biology (Secondary Education)

Core Program:

BIOL 141-142	Plant Diversity and Ecosystem Biology & Lab	4
BIOL 144-145	Animal Biology and Evolution & Lab	4
BIOL 241-242	Introductory Cell Biology & Lab	4
BIOL 330-331	General Ecology & Lab	4
BIOL 333-334	Biochemistry & Lab	4
BIOL 335	Genetics	3
BIOL 340	Cell and Subcellular Biology	3
BIOL 421	Biological Conservation	3
BIOL 431	Senior Seminar	1
Plus 6 additional hours of biology electives at the 300 to 400 level		6
36		
CHEM 115-116	General Chemistry I and II & CHEM 125-126 (Labs)	8
CHEM 215-216	Organic Chemistry I and II & CHEM 225-226 (Labs)	8
MATH 120	Survey of Calculus I or	3
MATH 122	University Calculus I	4

government. The banking and investment fields have also interested many of our graduates. Other students have chosen sales management, insurance, or personnel administration as their field. Those wishing to pursue graduate studies have found that the skills acquired through their course work and field experiences have opened doors to major universities.

The department offers two separate degrees, a B.S. in Accounting (see page 6), which qualifies graduates to take the Certified Public Accounting (CPA) examination and/or the Certified Management Accountant examination; and a B.S. in Business Administration with concentrations in Finance, Management, Marketing, and Management Information Systems. An interested student can also develop, with the aid and consent of their advisor and the chairperson, an individually designed specialization. The department also participates in the Cooperative Agriculture and Cooperative Engineering programs (see pages 7, 28).

Students are urged to declare a major in Business Administration as early as possible in their college careers. Students who wish to declare this major after they have earned 90 credit hours will need the permission of the department chairperson and the Dean of Natural and Social Sciences and Professional Studies.

Opportunities for Experiential Learning

In addition to its regular course offerings, the department has an active internship program. Internships are work-experiences for which students receive academic credit. The department offers a number of internship opportunities with various local and regional firms and organizations such as Key Bank, Buffalo Bills, Fieldbrook Farms Ice Cream, Inc., National Fuel, and Red Wing Co. Ltd.

Student Clubs and Activities

As a Business Administration or Accounting major, students can participate in a number of student clubs or activities that are designed to supplement classroom work with extracurricular experiences of a professional nature. These include but are not limited to the Business Club; a collegiate chapter of the American Marketing Association; the Accounting

Society, and the Financial Management Association. Students of any major may also participate in the Volunteer Income Tax Assistance Program, a service provided under the auspices of the Internal Revenue Service, through which students help to prepare individual personal income tax returns for low-income and elderly persons living in Chautauqua County, as well as the Students In Free Enterprise (SIFE) program.

Honors and Awards

Students who excel in their studies are eligible for recognition through membership in the campus chapter of *Delta Mu Delta*, a national honor society in business administration. Initiation is competitive and highly selective. Besides the honor society, individual students can be recognized for outstanding scholastic achievement. Each year the faculty presents four special awards, the M.R. Poummit Achievement Award to the graduating senior with the highest grade point average, the Wall Street Journal Achievement Award, given to the graduating senior whose overall scholarship and community service best exemplifies the mission of the department, the Financial Executive Institute Award to the outstanding senior in accounting, and the Financial Management Association National Honor Society Recognition of Honor Students in Finance. Each year the department also awards the Donald C. Brandt Memorial Scholarship to an outstanding junior or senior and, though the generosity of our alumni, the Alumni Scholarship award.

Accelerated Masters of Business Administration

The department has entered into a number of formal and informal agreements with several universities that allow our students to matriculate into accelerated B.S./M.B.A. programs. All such agreements usually reduce by one the number of years it takes a full-time student to complete a B.S. and M.B.A. The department has a 3 plus 2 agreement with the State University at Buffalo which requires three years of study at Fredonia and two years at Buffalo to finish the program. A similar 3 plus 2 agreement exists with Binghamton University. The department also has 4 plus 1 arrangements with Clarkson University, Rochester Institute of Technology, and the University of

Pittsburgh. Students who are interested in any of these accelerated M.B.A. programs should see the chairperson of the Department of Business Administration early in their freshman year, as completion of these programs usually involves careful course selection.

Requirements for the Bachelor of Science Degree in Business Administration

1. Students who plan to major in Business Administration must complete a minimum of 45 semester hours of core requirements as indicated below:

BUAD 161	Information Technology Literacy	3
MATH 120	Survey of Calculus I or	3
MATH 122	University Calculus I and	4
BUAD/ ECON 200	Fund. of Stats. for Business and Econ.	3
ACCT 201	Financial Accounting	3
ACCT 202	Managerial Accounting	3
ECON 201	Principles of Macroeconomics	3
ECON 202	Principles of Microeconomics	3
BUAD 261	Management Information Systems	3
BUAD 300	Statistical Analysis	3
BUAD 310	Legal Environ. of Business	3
BUAD 315	Principles of Business Finance	3
BUAD 321	Management and Org. Behavior	3
BUAD 325	Principles of Marketing	3
BUAD 327	Production and Operations Management I	3
BUAD 423	Strategic Management	3

2. Students majoring in Business Administration must complete additional requirements within a selected concentration as indicated below:

A. Finance – 15 additional credit hours		
ECON 315	Money, Banking, and Monetary Economics	3
BUAD 317	Corporate Finance I	3
BUAD 416	Investment Analysis	3
ACCT 304	Taxation of Individuals or	3
ACCT 305	Taxation of Corporations and Partnerships	3
Plus one of the following:		
BUAD 418	Corporate Finance II	3
BUAD 480	Internship	3
ACCT 303	Cost Management	3
ECON 350	Managerial Economics	3

B. Management – 15 additional credit hours

BUAD 317	Corporate Finance I	3
BUAD 330	Human Resource Management	3
BUAD 427	Production and Operations Management II	3
ECON 350	Managerial Economics	3
Plus one of the following:		
ACCT 303	Cost Management	3
BUAD 440	Advanced Human Resource Management	3
POLI 363	Game Theory	3
BUAD 480	Internship	3

C. Management Information Systems – 24 additional credit hours

BUAD 235	Introduction to Business Communication	3
BUAD 266	Business Application Development	3
BUAD 361	Networks, Distributed Systems and Telecommunications	3
BUAD 363	Systems Analysis and Design	3
BUAD 366	Database Management Systems	3
BUAD 463	Information Technology Project Management	3
BUAD 466	Business Object-Oriented Modeling	3
Plus one of the following:		
BUAD 362	Electronic Commerce	3
BUAD 427	Production and Operations Management II	3
BUAD 480	Internship	3
ACCT 303	Cost Management	3
ACCT 407	Accounting Information Systems	3
CSIT 121	Computer Science I	3

Note: Students wishing more of an emphasis on computer science should use CSIT 121 for their MIS elective and may substitute CSIT 205 for BUAD 266 and CSIT 351 for BUAD 363

D. Marketing – 15 additional credit hours

BUAD 340	Marketing Research	3
BUAD 342	Consumer Behavior	3
BUAD 445	Integrated Marketing Communications	3
BUAD 446	Sales Management	3
Plus one of the following:		
ACCT 303	Cost Management	3
BUAD 411	Marketing Management	3
BUAD 427	Production and Operations Management II	3
BUAD 480	Internship	3

E. Individualized Specializations

With the approval of his or her advisor and the chairperson of the department, a student may develop his or her own specialization in lieu of the above concentrations. Such specializations

must consist of at least five upper-level courses in a cohesive subject area germane to business. Currently popular individualized specializations include but are not limited to Management Accounting, Human Resource Management, Business Law, Management and Government, and International Business. Other specializations are possible and encouraged as long as they satisfy the department's conditions for rigor and substance.

3. Business Administration majors must complete a minimum of 27 credit hours of upper-level business administration and/or accounting courses at SUNY Fredonia.

Requirements for the Minor in Business Administration

The department offers a minor in Business Administration which requires 18 credit hours from Business and Accounting. Included within the 18 hours must be three courses from within the concentrations noted above plus the necessary prerequisites. An example would be: BUAD 342, BUAD 445, and BUAD 446 from the Marketing specialization, plus core courses BUAD 161, BUAD 310 and BUAD 325. The chairperson must approve a student's minor program. Accounting students wishing to minor in Business Administration must take at least 9 hours of Business Administration credit beyond those required for the Accounting major.

CHEMISTRY

Office: 207 Houghton Hall
(716) 673-3281
E-mail: Chem@fredonia.edu
Thomas S. Janik, Chairperson

The goals of the chemistry department are to prepare its majors for advanced study in chemistry, chemical engineering, related disciplines or professional programs; or careers in industrial, environmental, and governmental laboratories; or for careers in teaching. The department strongly believes in the value of rigorous course work combined with practical experience. Thus, students spend much of their time in the department participating in undergraduate research; this has led to an informal atmosphere with considerable student-faculty

interaction. Often the results of such research are presented at conferences or published in chemistry journals. Paid internships with local industries are also available.

The Chemistry Club is very active and includes in its activities an outreach program to local schools. Departmental honors and scholarships include the Moos, Keller, Thumm, Marletta and Dingley Awards.

The department offers three 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. Track III has its emphasis in environmental chemistry. Each track requires the completion of a Core Program plus additional course work. The departments of Chemistry and Biology jointly administer a major in Biochemistry, see page 9. The department maintains a graduate program leading to a M.S. degree. A five-year program is available to outstanding students which is a combined B.S./M.S. program.

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

Prerequisites/Corequisites 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 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 corequisite; (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 and Agriculture: The chemistry department participates in the Cooperative Agriculture and Cooperative Engineering programs. Refer to descriptions of these programs on pages 7 and 28 respectively.

For the B.S. degree in Geochemistry, an interdisciplinary program with the geosciences department: The course requirements for this curriculum are given on page 34.

Teacher Certification: Students wishing to teach chemistry in the secondary schools can obtain provisional certification by completing either of the tracks described below and the required courses in Professional Education. The procedure to be followed for admission to the professional sequence of courses is described on page 25. 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 four ways: (1) completion of course work at the 116 level at Fredonia, or (2) transferring of two successful college semesters, or (3) scoring at the 50th percentile or higher on the CLEP exam, or (4) completion of three years of high school language with a passing Regents score passing = 65 percent).

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 Natural and Social Sciences and Professional Studies, and the Vice President for Academic Affairs. Such revisions would be in effect for students who had completed less than 60 credit hours at the time of the revision.

Requirements for the Bachelor of Science Degree in Chemistry Core Program (36 credit hours in chemistry; 15 credit hours in related disciplines)

CHEM 115-116	General Chemistry I & II	6
CHEM 125	General Chemistry I Lab	1
CHEM 126 or 130	General Chemistry II Lab	1
CHEM 215-216	Organic Chemistry I & II	6
CHEM 225	Organic Chemistry I Lab	1
CHEM 226 or 230	Organic Chemistry II Lab	1
CHEM 315-316	Physical Chemistry I & II	6
CHEM 317-318	Analytical Chemistry I & II	6
CHEM 325-326	Physical Chemistry I & II Labs	2

CHEM 327	Analytical Chemistry I Lab	1
CHEM 328	Analytical Chemistry II Lab	2
CHEM 395	Introduction to Research	1
CHEM 495-496	Seminar	2

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PHYS 230-232	University Physics I & Lab	4
MATH 122-123	University Calculus I and II	8
CSIT 104	Introduction to Microcomputer Software	or
CSIT 105	Visual BASIC Programming	3
CSIT 106	C/C++ Programming	3

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Additional requirements - Track I (Standard Major)

Independent Laboratory Research (CHEM 391, 392, 491, 492) or Advanced Lecture Elective		3
Advanced Lecture Elective (400 level)		3
PHYS 231-233	University Physics II & Lab	4

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

BIOL 333	Biochemistry	3
CHEM 462-472	Inorganic Chemistry & Lab	4
Independent Laboratory Research (CHEM 391, 392, 491, 492) or Advanced Lecture Elective		3
Advanced Lecture Elective (400 level)		3
PHYS 231-233	University Physics II & Lab	4
Mathematics Elective - any mathematics course having MATH 122 or 123 as a prerequisite		3 or 4

Additional Requirements - Track III (Environmental Emphasis)

CHEM 371-372	Internship	3
CHEM 473	Environmental Chemistry	3
Area requirement - 6 credit hours in one of three areas: biology, geosciences, or social sciences. Approved sequences are: biology: BIOL 131-132, BIOL 330, and BIOL 333 or 343; geosciences: GEO 165, 440, and GEO 450; social sciences: any three courses from among ECON 201, ECON 202, ECON 380, PHIL 116, POLI 276 and POLI 277.		

Requirements for the Minor in Chemistry

A minimum of 24 credit hours in chemistry is required including CHEM 115-116, 125 and 126 or 130, and 16 additional hours at the 200 level or above. Of these additional hours: (1) at least 2 hours must be in laboratory courses; (2) at least 6 hours must be

from 300 or 400 level courses; and (3) CHEM 300, 302, 305, 371, and 372 cannot be counted.

COMMUNICATION

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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 specializations in Audio/Radio Production, Communication Studies, Media Management, Public Relations, and Television and Digital Film Design and 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.

Admission into the department and continuation in a chosen specialization is subject to review by the department. Criteria will include grade point average and average in the core courses, as well as performance in the specialization. Students are encouraged to supplement their academic work with participation in applied activities, including the Sheldon Multimedia Computer Lab, the campus radio stations (WCVF AM and WDV L Cable/FM), the campus television station (WNYF), the local chapter of *Alpha Epsilon Rho* (the National Broadcasting Society), the Applied Communication Association (ACA, providing communication services to the community) and off-campus internships.

The department offers several awards and scholarships for entering freshmen, continuing students and graduating seniors, including the Louis C. and S. David Adler Scholarship, the Anne Bernstein Memorial Award, the Edward S. Edelman Scholarship, the Arthur R. Maytum Scholarship, and the Arlie Muller Parks Scholarship.

Requirements for the Bachelor of Science Degree in Communication

Major Requirements: Students in the department may obtain a B.S. degree in one of the following:

- Audio/Radio Production
- Communication Studies
- Media Management
- Public Relations
- Television and Digital Film Design and Production

A major program in the Department of Communication requires 36 to 43 credit hours of study including 12 credits of core courses required by every student in the department and 24 to 31 credits of courses in the individual specialization. A minimum of 18 credits of the major, including 12 credits within the specialization, must be taken at Fredonia. In addition, the department requires all students to declare and complete a minor, which must be officially recognized by the offering department. The minor should be chosen in consultation with a communication advisor. Substitutions in requirements for specializations may be made only by approval of faculty members designated for the specific specialization.

Because the department is always trying to improve its academic offerings, course offerings and requirements for the major and each specialization may be changed. Students are urged to see the department for the latest requirements.

Communication Core: 12 credit hours

COMM 101	Fundamentals of Communication	3
COMM 102	Mass Media and Society	3
COMM 155	Rhetoric of Vision and Sound	3
COMM 199	Communication Orientation (required for new freshmen only)	0
COMM 201	Rhetoric and Criticism	3

A. Audio/Radio Production Specialization: 37 credit hours (including core requirements)

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

Requirements: Hrs.

Communication Core 12
Plus

SPECIALIZATION : 25 credit hours - at least 12 at Fredonia

Group A - Specialization Core - 16 credit hours

COMM 251 Audio Production 3

COMM 351 Intermediate Radio Production 3

COMM 420 Communication Law and Ethics 3

and one of the following:

COMM 200 Electronic Media Writing or 3

COMM 361 Script Writing for Video, Film and Radio 3

and one of the following

COMM 395 Radio News 4

COMM 451 Radio Documentaries 4

COMM 456 Radio Programming and Production 4

Group B - Specialization Electives - 9 credit hours – choose three of the following:

COMM 105 Public Speaking 3

COMM 110, COMM 112 and COMM 118 Desktop Presentation, Desktop Video and Desktop Audio - 1 credit each for a total of three

COMM 221 Interpersonal Communication 3

COMM 222 Principles of Public Relations 3

COMM 312 Multimedia Integrations 3

COMM 350 Telecommunication Technology 3

COMM 385 International Media 3

COMM 400 Broadcast Station Operations 3

B. Communication Studies Specialization: 36 credit hours (including core requirements)

Emphasizes the study of human interaction in both mediated and non-mediated communication. Students will study the communication process and its elements across a variety of communication contexts and

situations. 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 specialization is to develop the student's ability to understand and apply theories and skills in communication performance, message construction, and communication analysis and evaluation across social and professional settings.

Requirements: Hrs.

Communication Core 12

Plus

SPECIALIZATION : 24 credit hours - at least 12 at Fredonia

Group A - Specialization Core – 12 credit hours from among the following:

COMM 105 Public Speaking 3

COMM 221 Interpersonal Communication 3

COMM 295 Communication Research and Survey Methods 3

COMM 301 Group Communication 3

Group B - Specialization Electives - 12 credit hours - choose four from the following. *Note:* Group B courses must be taken after completing COMM 101, 201 and Group A.

COMM 222 Principles of Public Relations 3

COMM 310 Language and Communication 3

COMM 379 Persuasion 3

COMM 430 Communication Theory 3

COMM 458 Special Topics 3

COMM 460 Organizational Communication 3

COMM 465 Intercultural Communication 3

C. Media Management Specialization: 36 credit hours (including core requirements)

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

Requirements: Hrs.

Communication Core 12

Plus

SPECIALIZATION : 24 credit hours - at least 12 at Fredonia

Group A - Specialization Core - 15 credit hours - choose five from among the following:

COMM 110-118 - Any three of the one credit desktop computer courses		Electronic Darkroom (recommended)	1	COMM 462 Video Documentaries II or	4
COMM 222 Principles of Public Relations	3	COMM 116 Desktop Publishing (recommended)	1	COMM 366 Video Postproduction	4
COMM 295 Research and Survey Methods	3	COMM 221 Interpersonal Communication	3	COMM 454 Video Drama I	4
COMM 350 Telecommunication Technology	3	COMM 235 Introduction to Business Communication	3	COMM 464 Video Drama II	4
COMM 385 International Media	3	COMM 251 Audio Production I	3	Requirements for the Minor in Communication	
COMM 400 Broadcast Station Operations	3	COMM 255 Television Production I	3	A minor in Communication requires, including COMM 101, a minimum of 18 hours of courses with 9 being at 300 level or above. A minimum of 9 credit hours must be taken at Fredonia. Advising with the department is strongly recommended.	
COMM 420 Communication Law and Ethics	3	COMM 301 Group Communication	3		
COMM 460 Organizational Communication	3	COMM 350 Telecommunication Technology	3		
Group B - Specialization Electives - 9 credit hours - choose three from among the following, at least one at 300-400 level:		COMM 379 Persuasion	3		
COMM 105 Public Speaking	3	COMM 420 Communication Law & Ethics	3		
COMM 221 Interpersonal Communication	3	COMM 430 Communication Theory	3		
COMM 235 Business Communication	3	COMM 460 Organizational Communication	3		
COMM 301 Group Communication	3	COMM 465 Intercultural Communication	3		
COMM 312 Multimedia Integrations	3	E. Television and Digital Film Specialization: 42-43 credit hours (including core requirements)			
COMM 379 Persuasion	3	Allows students to learn background theory while developing conceptual and technological skills used in the production of programs both inside the studio and on location. Focus on information gathering, concept development, writing, production aesthetics, ethics, shooting methods, and editing decisions. Applications to documentary, art, drama, news, corporate sports, and other production types.			
COMM 422 Public Relations Management	3	Requirements: Hrs. 12			
COMM 430 Communication Theory	3	Communication Core			
COMM 465 Intercultural Communication	3	<i>Plus</i>			
D. Public Relations Specialization: 39 credit hours (including core requirements)		SPECIALIZATION : 30 or 31 credit hours - at least 12 at Fredonia			
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 the student to serve as communication advocates in a variety of professional and civic settings.		Group A - Specialization Core - 15 credit hours			
Requirements: Hrs. 12		COMM 251 Audio Production I	3		
Communication Core		COMM 255 Television Production I	3		
<i>Plus</i>		COMM 354 Video Field Production	3		
Group A - Specialization Core - 15 credits		and one of the following:			
COMM 105 Public Speaking	3	COMM 200 Electronic Media Writing	3		
COMM 295 Comm. Research & Survey Methods	3	or			
COMM 222 Principles of Public Relations	3	COMM 361 Script Writing for Video, Film and Radio	3		
COMM 322 Public Relations Writing	3	COMM 420 Communication Law and Ethics	3		
COMM 422 Public Relations Management	3	Group B - 3 or 4 credit hours - one of the following			
Group B - Specialization Electives - 12 credits – 9 credits at 300 or above level from the following:		COMM 312 Multimedia Integrations	3		
COMM 110 Desktop Presentation (recommended)	1	COMM 358 Television News	4		
COMM 114		Group C - 12 credit hours - one of the following three course sequences - must be taken at Fredonia			
		COMM 366 Video Postproduction	4		
		COMM 452 Video Documentaries I	4		

COMPUTER AND INFORMATION SCIENCES

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H. Joseph Straight, Chairperson
Khalid J. Siddiqui, Associate Chairperson

The Department of Mathematics and Computer Science offers a Bachelor of Science degree in Computer and Information Sciences with four study options: Computer Theory (CT), Information Systems (IS), Systems Software (SS), and Computer Applications (CA). These options prepare students for the future by providing a study of the current state of computer science embedded within a well-rounded liberal arts education. As a Computer and Information Sciences major at Fredonia, a student may select a program that suits his/her career objectives and academic goals.

The department participates in the SUNY Learning Network program. Over the past several semesters, a number of computer science courses have been offered on the Internet. For additional information, students should call 1-800-875-6269 or check the web site: www.sln.suny.edu/sln.

Scholarships available to students in Computer and Information Sciences include the John Beck Scholarship and the Arthur R. Maytum Scholarships. These scholarships are awarded annually on the recommendation of the computer science faculty.

Students who wish to declare a major in Computer and Information Sciences must consult with the chairperson.

Degree Programs in Computer and Information Sciences

The Computer and Information Sciences program offers a Bachelor of Science degree with four options (tracks):

- Computer Theory (CT)
- Information Systems (IS)
- Systems Software (SS)
- Computer Applications (CA)

All four options contain a common core of fundamental courses in the science of computing, with essential emphasis on theory and practice. Further, courses in the CT track prepare graduates for post-graduate education in computer science and careers in the scientific sectors. The IS track is geared to commercial computer information management and administrative applications. The SS track prepares graduates for systems level programming, design and networking. The CA track emphasizes computer applications with interdisciplinary opportunities in applied mathematics or geographic information systems. Currently, the primary languages of computer science instruction are C and C++ in the MS Windows and Unix environments.

In addition to the above tracks, the department also offers a minor in Computer and Information Sciences. The department participates in the Cooperative Engineering and Cooperative Agriculture programs; refer to pages 28 and 7.

For further details about the programs in computer and information sciences, contact Dr. H. Joseph Straight, chairperson of the Department of Mathematics and Computer Science. See page 47 for the programs offered in Mathematics.

Internships

Experiential learning is encouraged through internships. Internships are designed as a way to develop knowledge and gain experience with computer technology in a job setting. Recently, students have successfully completed internships at AL Tech Specialty Steel, Chemical Process Corporation, Ultrapak, Buffalo General Hospital, Cummins Engine, M & T Bank, the Dunkirk and Fredonia Telephone Company, Unisys, Radio Shack, and Brand Names. Several

internships pay honorariums or minimum wages. Many other opportunities exist on campus for students to earn money as tutors, laboratory proctors, or computer laboratory assistants.

Computer Laboratories and Equipment

The department has its own laboratory (CSIT Lab) and manages another laboratory in Fenton Hall. The CSIT Lab is maintained by a faculty director, a systems manager, and a staff of paid student assistants from the Computer and Information Sciences program. It has three kinds of computers: (1) a network of 10 Silicon Graphics workstations running Unix; (2) a cluster of 15 Pentium III workstations running Windows NT; and (3) a Linux-based cluster of servers connected to a high-speed network providing Internet access. Popular software development tools such as C++, Fortran, Java, Open GL and other utilities are available on the Silicon Graphics machines, while the Pentium III workstations run major state-of-the-art Microsoft software packages such as Office 2000 and Visual Studio. The computers in the laboratory are accessible from various locations across the campus, including the dormitories. The other laboratory that is managed by department is primarily an instructional laboratory and is open to students taking CSIT courses. This laboratory houses a network of Intel-based workstations that run under MS Windows. Both of these facilities are dedicated to supporting instruction in the Computer and Information Sciences program. There are also several other microcomputer laboratories on campus.

Faculty and Student Research and Scholarship

The Computer and Information Sciences faculty and majors are actively involved in various research activities such as participating in international, national, and regional conferences, workshops and seminars, and publishing their work in well-known journals and proceedings. The department regularly runs joint faculty and student colloquia. Several students have won research paper competitions. Current areas of faculty and student research are computer networking, image processing, pattern recognition, knowledge engineering,

data compression, theoretical computer science, remote sensing, combinatorics, natural languages, and interdisciplinary applications.

Requirements for the Bachelor of Science Degree in Computer and Information Sciences

The Bachelor of Science degree in Computer and Information Sciences is built on a required core of course work in computer science, plus a calculus sequence, to which is then added the requirements in the student's selected track.

Computer and Information Sciences (CSIT) Core (30 credit hours):

CSIT 121	Computer Science I	4
CSIT 221	Computer Science II	4
CSIT 231	Systems Programming	3
CSIT 241	Discrete Mathematics for Computer Science I	4
CSIT 311	Assembly Language and Computer Organization	3
CSIT 321	Paradigms of Programming Languages	3
CSIT 341	Data Structures	3
CSIT 431	Introduction to Operating Systems	3
CSIT 451	Introduction to Files and Databases	3

A. Computer Theory (CT) Track (57 credit hours):

This track is designed for students who intend to pursue graduate education in computer science or who seek careers in scientific computing. The majority of course work in this track is in the area of Theoretical Foundations. The CT track requires the CSIT Core, plus:

MATH 122	University Calculus I	4
MATH 123	University Calculus II	4
CSIT 242	Discrete Mathematics for Computer Science II	4
MATH 325	Numerical Analysis	3
CSIT 441	Analysis and Design of Algorithms	3
CSIT 433	Compiler Construction	3
CSIT 443	Theory of Computation	3
Two additional courses chosen from:		6
CSIT 425, 433, 435, 455, 461, 462, 463		

B. Information Systems (IS) Track (72 credit hours):

This track prepares graduates for careers in information and business systems development, maintenance and management. The majority of course work in this track is in the area

of Computer Information Systems, complemented by several required courses in the areas of accounting, economics, and business administration. Specifically, the IS track requires the CSIT Core, plus:

MATH 120	Survey of Calculus I	3
MATH 121	Survey of Calculus II	3
CSIT 205	Visual Basic II	3
CSIT 351	Business Systems Development	3
CSIT 425	Software Engineering	3
CSIT 455	Relational and Object Databases	3
or		
CSIT 456	Information and Decision Support Systems	3
Two additional courses chosen from:		
CSIT 433, 435, 441, 455, 456, 461, 462, 463		
ACCT 201	Financial Accounting	3
ACCT 202	Managerial Accounting	3
STAT 200	Fundamentals of Statistics	3
ECON 202	Principles of Microeconomics	3
Two courses chosen from: BUAD 300, BUAD 321, BUAD 327, BUAD 364		

C. Systems Software (SS) Track (57 credit hours):

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

MATH 122	University Calculus I	4
MATH 123	University Calculus II	4
CSIT 242	Discrete Mathematics for Computer Science II	4
CSIT 413	Computer Architecture	3
CSIT 433	Compiler Construction	3
CSIT 437	Advanced Operating Systems	3
Two additional courses chosen from:		
CSIT 425, 433, 435, 441, 455, 461, 462, 463		

D. Computer Applications (CA) Track:

The track is designed for students who have interdisciplinary interests and prepares graduates for research and computing applications in other sciences. Currently, GIS and applied mathematics are the two options available, and students in the CA Track complete a minor in one of these

areas. Specifically, the CA Track requires the CSIT Core, plus:

For the Applied Mathematics Option (67 or 68 credit hours):

CSIT 441	Analysis and Design of Algorithms	3
Three additional courses chosen from:		
CSIT 425, 433, 435, 455, 461, 462, 463		
Minor in Applied Mathematics, including MATH 325 and at least one MATH or STAT course numbered 311 or higher		

For the Geographic Information Systems Option (69 credit hours):

MATH 120	Survey of Calculus I	3
MATH 121	Survey of Calculus II	3
CSIT 462	Computer Graphics or	3
CSIT 463	Digital Image Processing and Computer Vision	3
Two additional courses chosen from:		
CSIT 425, 433, 435, 441, 461, 462, 463		
Minor in Geographic Information Systems (with CSIT 121 substituted for CSIT 106)		

Requirements for the Minor in Computer Science

MATH 120, 121	Survey of Calculus I and II	6
or		
MATH 122, 123	University Calculus I and II	8
CSIT 121	Computer Science I	4
CSIT 221	Computer Science II	4
CSIT 241	Discrete Mathematics for Computer Science I	4
or		
MATH 210	Discrete Mathematics	4
CSIT 311	Assembly Language and Compiler Organ.	3
CSIT 321	Paradigms of Programming Languages	3
CSIT 341	Data Structures	3
Two additional courses selected from:		
CSIT 205, 311, 351, 413, 425, 431, 433, 435, 441, 443, 451, 455, 456, 461, 462, 463		

Total Hours Required: 33 – 35

Note: A minimum 9 credit hours counted toward the minor must be taken at Fredonia.

Computer and Information Sciences faculty are listed under the Mathematics section.

CRIMINAL JUSTICE

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B. Joyce Stephens, Coordinator

The interdisciplinary curriculum in Criminal Justice offers a broad-based knowledge of the criminal justice system. The program comprises courses in the areas of law, crime and society, public administration and human behavior. Graduates will be prepared for careers in the field of juvenile justice, law enforcement, adult corrections, rehabilitation and security. Internships are highly recommended. An Internship Seminar complements the internship placement. Participating internship sponsors include local police and sheriff departments, the county district attorney, Department of Probation, New York State Department of Corrections, U.S. Customs, and the county Victim/Witness program. In addition to the core requirements listed below, students are strongly urged to include College Core Curriculum and elective courses which will help develop effectiveness in writing and speaking. Students are advised to take courses that will enable them to acquire a knowledge of some standard computer software including a wordprocessing, spreadsheet and database program. Also, familiarity with bibliographic and data search routines is strongly encouraged.

This is an interdisciplinary model major program; for specific degree requirements unique to Interdisciplinary Studies, refer to page 42.

I. Core Requirements (9 credit hours from)

SOC 360	Criminal Justice System*	3
SOC 362	Criminology*	3
SOC 364	Juvenile Delinquency*	3
SOC 366	Sociology of Corrections*	3

II. Human Behavior (15 credit hours from)

ENGL 296	American Identities	3
PSY 245	Social Psychology*	3
or		
SOC 204	Social Psychology*	3
PSY 246	Psychology of Personality*	3
PSY 355	Group Dynamics*	3
PSY 356	Abnormal Psychology*	3
SOC 303	Social Class & Inequality*	3
SOC 310	Sociology of Deviant Behavior*	3
SOC 316	Minorities*	3
SOC 363	Victimology*	3
SOC 3XX	Family Violence	3

* this course requires a prerequisite.

*IIIA. Administrative Studies
(6 credit hours from)*

BUAD 321	Management and Organizational Behavior	
	or	
POLI 311	Public Administration*	3
	or	
SOC 325	Complex Organizations*	
BUAD 330	Human Resource Management	3
PHIL 310	Business Ethics	3
PSY 347	Industrial/Organizational Psychology*	3
SOC 326	Human Relations in the Workplace*	

or

IIIB. The Legal System (6 credit hours from)

PHIL 362	Philosophy of Law	3
POLI 276	Law and Society	
	or	3
POLI 277	Introduction to Law	3
POLI 370	Constitutional Law*	3
POLI 371	Civil Rights and Liberties*	3
SOC 361	Law in the World*	3

IV. Skill Requirements (6 credit hours)

PSY	Statistics/Research	6
200-210	Methods*	
	or	
SOC	Statistics/Research	6
200-300	Methods*	

V. Internship (optional) (3 credit hours)

* this course requires a prerequisite.

Note: An internship is not required, but is recommended for students whose schedules permit one.

Requirements for the Minor in Criminal Justice

This group of courses is designed for students interested in a career in the police, corrections, probation, and other occupations within the criminal justice system.

A minimum of 24 credit hours is required in courses designated below as part of the Criminal Justice program. An internship will be added to, not substituted for, any of the regular 24 hours required for the Criminal Justice minor. No more than 15 of the required 24 hours may be taken in one discipline. At least 15 of the required 24 hours must be at the advanced (300 or above) level. Students are encouraged to take one or more "methods courses" (egs. statistics, computer science, research methods, etc.) in addition to the required 24 hours for the minor.

Course Requirements:

PHIL 362	Philosophy of Law	
	or	
POLI 276	Law and Society	
	or	3
SOC 360	Criminal Justice System	
	or	
SOC 362	Criminology	

Plus at least 9 credit hours of courses from each of two of the three groups described below. Within each of the two groups selected, courses must be in at least two different disciplines.

Group A: Law, Crime and Society

ENGL 296	American Identities	
PHIL 312	Current Moral Issues and Principles	
PHIL 362	Philosophy of Law	
POLI 276	Law and Society	
SOC 361	Law in the World	
SOC 362	Criminology	
POLI 371	Civil Rights and Liberties	

Group B: Administration

BUAD 321	Management and Organizational Behavior	
PHIL 310	Administrative Ethics	
POLI 311	Fundamentals of Public Administration	
PSY 347	Industrial/Organizational Psychology	
SOC 360	Criminal Justice System	
SOC 366	Sociology of Corrections	
SOC 3XX	Family Violence	

Group C: Human Behavior

PSY 245	Social Psychology	
	or	
SOC 204	Social Psychology	
PSY 246	Psychology of Personality	
PSY 356	Abnormal Psychology	
SOC 303	Social Class and Inequality	
SOC 310	Deviant Behavior	
SOC 316	Minorities	
SOC 363	Victimology	
SOC 364	Juvenile Delinquency	

(Dance, see Theatre and Dance, page 74).

(Earth Sciences, see Geosciences, page 33).

ECONOMICS

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Amin Sarkar, Chairperson

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 scholarship (amounted to \$10,000 for 2000-01) and Hart-Gorman Economic Awards go to the outstanding majors and double majors in Economics.

Economics As Preparation For Master of Business Administration (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. It is particularly helpful because it deals with human experience in a variety of fields of study; it develops the student's analytical skills in problem solving; and it provides the basis for analysis of many legal problems. A recent study found that among the 14 majors that had more than 2,000 students taking the Law School Admission Test (LSAT), Economics students received the highest average test scores in recent years.

Major, Minor in Economics and Certificate in International Economic Studies, and Specialization in Economic Studies for Social Studies Students in Secondary Education.

The department offers a major in Economics (B.A. degree) with 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. Forty-five to 46 credit hours of course work are required for a major in Economics. A minor, which requires 21 hours in Economics, is also available (see page 20).

As an option to students majoring in Economics, the department issues a letter certifying the completion of **International Economic Studies** to those who complete 15 hours of designated course work.

Additionally, the economics department offers a specialization in Economic Studies to Social Studies-Secondary Education students who wish to teach economics in high school.

Students who are contemplating graduate study in economics should consider taking the following courses as part of their specialization field:

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

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

Requirements for the Bachelor of Arts Degree in Economics

As an economics major, a student must complete 21 semester hours of core economics and 12 semester hours of optional economics courses.

The core economics courses include:

*ECON 200	Fundamentals of Statistics
*ECON 201	Principles of Microeconomics
*ECON 202	Principles of Macroeconomics
*ECON 300	Statistics for Economics and Business
ECON 305	Intermediate Microeconomic Theory
ECON 310	Intermediate Macroeconomic Theory
ECON 450	Senior Seminar

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

The optional economics courses include any four courses above ECON 300. Popular courses are in the following suggested areas of study:

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

The Department of Economics participates in the Cooperative Agriculture and Cooperative Engineering programs. Refer to descriptions of these programs on pages 7 and 28, respectively.

Requirements for the Minor in Economics

Twenty-one credit hours in economics are required for a minor. They include:

		Hrs.
ECON 201	Principles of Macroeconomics	3
ECON 202	Principles of Microeconomics	3
ECON 305	Intermediate Microeconomic Theory or	3
ECON 350	Managerial Economics	

ECON 310	Intermediate Macroeconomic Theory or	3
ECON 315	Money, Banking and Monetary Economics	

and 9 additional credit hours of economics above the 200 level.

Requirements for the Certificate in International Economic Studies

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

Two of the following courses:

ECON 320	International Trade and Finance	3
ECON 345	Comparative Economic Systems	3
ECON 335	Economic Development	3
ECON 395	Comparative Human Resources	3

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

Requirements for a Specialization in Economic Studies - Secondary Education

This option is recommended for Social Studies-Secondary Education students who are interested in teaching economics in high school. The following is a description of the program requirements:

Social Studies Courses: Introductory

HIST 105	U.S. History to 1877	3
HIST 106	U.S. History Since 1877	3
HIST 115-116	Early and Modern Western Civilization or	6
HIST 101-102	Global Survey I and II	6
POLI 120	Introduction to American Politics or	3
POLI 150	U.S. and World Affairs	
SOC 116	Introductory Sociology or	3
ANTH 115	Introductory Anthropology	3
ECON 201	Principles of Macroeconomics	3
ECON 202	Principles of Microeconomics	3

Social Studies Courses: Advanced (300-400 level)

One political science course in American Politics 3
 One political science course in non-American or International Studies 3
 One course in minority studies: ANTH 321, ANTH 322, HIST 336, HIST 347, HIST 356, HIST 358 or SOC 316 3
 and 9 credit hours in history (one course in U.S. history, and one course in non-western areas: Asia, Africa, Latin America or the Middle East). 9

Plus either a General Social Studies or Economics Studies option

General Social Studies Option

9 credit hours in history, economics, political science, sociology or anthropology (all courses must be 300 level or above with one course in U.S., one course in non-U.S. and one course in non-western areas: Asia, Africa, Latin America, Middle East)

Economic Studies Option

Recommended for students who have interest in teaching economics in high school in addition to other social studies subjects.

ECON 305 Intermediate Macroeconomic Theory 3
 ECON 310 Intermediate Microeconomic Theory 3
 and 3 credit hours of economics from ECON 315, ECON 320, ECON 345, ECON 370, or ECON 380

Professional Education:

EDU 105/106 Introduction to Contemporary Education 3
 EDU 224 Adolescent Development & CAW 3
 EDU 250/251 Introduction to the Exceptional Learner 3
 EDU 276 Foundations of Literacy and Technology 3
 EDU 305/313 Cultural & Linguistic Diversity in the Classroom 3
 EDU 349 Educational Psychology & CAW 3
 EDU 419 Secondary Methods 3
 EDU 430 Student Teaching in the Secondary School 15

36

Total: 87 hours

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 four ways: (1) completion of course work at the 116 level at Fredonia, or (2) transferring of two successful college semesters, or (3) scoring at the 50th percentile or

higher on the CLEP exam, or (4) completion of three years of high school language with a passing Regents score (passing = 65).

EDUCATION

Office: E268 Thompson Hall (716) 673-3311
 Email: Edu@fredonia.edu
Julius Gregg Adams, Director
Gregory F. Harper, Associate Director

Important Notification to Education Majors

9 The School of Education is in the process of reviewing and revising their entrance criteria. Therefore, students should check with their faculty advisor for explanation of program and entrance requirements.

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

- Childhood Education
- Early Childhood Education
- Adolescent Education
- Special Education in a cooperative program with the SUNY College at Buffalo.

Childhood Education: Preparation to teach Grades 1-6 (B.S. in Ed. degree-Certification 1 to 6).

Early Childhood Education: A program with special emphasis on preparing to teach very young children (B.S. in Ed. degree-Certification, Birth through Grade 2).

Adolescent Education: Preparation to teach biology, chemistry, earth science, English, French, mathematics, physics, social studies or Spanish (B.A. or B.S. degree-Certification, 7 to 12).

Special Education: Preparation to teach exceptional children (B.S. in Childhood Education from SUNY Fredonia. Certification in Special Education recommended by SUNY College at Buffalo).

The pre-service preparation program followed by the School of Education is referred to as the Reflective and Responsive Educator (RARE) model. The general philosophy underlying the RARE model is simple, yet highly consistent with current educational reform movements:

All children can learn; 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.

All RARE participants complete a series of four, field-based experiences. Each field-based experience is taught in conjunction with a required education course to better establish the link between theory and practice. Each of the field experiences is highly structured, well supervised, and carried out with at least one other class member. In addition, students enroll in course work related to child and adolescent development, psychology in the classroom, and educational technology.

The School of Education requires an overall 2.5 cumulative grade point average for admission into the program, (including both internal and external transfers into the program) and a 2.5 grade point average in education courses to be admitted into the Professional Year.

Within the School of Education a dynamic and active Teacher Education Club offers activities for the majors which enhance opportunities for academic, personal, and professional growth.

Numerous scholarships and awards are presented at the School of Education's Annual Convocation ceremony. The School of Education also houses a chapter of the national honors organization, *Kappa Delta Pi*.

Upon completion of degree requirements, students can experience a cultural and educational exchange either with Rolle College in Exmouth, England, or Swansea Institute in Wales.

Special Requirements

Identification of Child Abuse and Maltreatment

All persons applying for certification on or after January 1, 1991 are required to complete a minimum of two contact hours of course work or training in the identification and reporting of child abuse and maltreatment. This requirement can be met by satisfactory

completion of EDU 224, EDU 225 or EDU 349, or by completing a state approved training workshop.

School Violence Intervention and Prevention

All persons applying for certification on or after February 2, 2001 are required to complete a minimum of two contact hours of course work or training in the warning signs related to violence, policies related to safe climates and effective classroom management.

Foreign Language Requirement

Students in all education programs are required to demonstrate competence in a foreign language. This requirement must be satisfied in any one of the following four ways: (1) completion of course work at the 116 level at SUNY Fredonia, (2) transferring of two successful college semesters, (3) scoring at the 50th percentile or higher on the CLEP exam, or (4) completion of three years of high school language with a passing Regents score (65 or higher).

Sciences Requirement

Students in all education programs must successfully complete a minimum of 7 credit hours in science from two different departments.

New York State Certification Test

Candidates for Initial teacher certification must successfully complete the New York State Teacher Certification Examinations: Assessment of Teaching Skills-Written and Liberal Arts and Sciences Test.

Childhood Education

Childhood Education Course Requirements:

		Hrs.
EDU 105/106	Introduction to Contemporary Education	3
EDU 225	Developmental Psychology & CAW	3
EDU 250/251	Introduction to the Exceptional Learner	3
EDU 276	Foundations of Literacy & Integrated Technology	3
EDU 305/313	Cultural & Linguistic Diversity In the Classroom	3
EDU 349	Educational Psychology & CAW	3

HLTH 300	Education in Drugs, Alcohol, & Tobacco	1
MATH 201	Math for School Teachers I	3
MATH 202	Math. For School Teachers II	3
<i>Plus an area of concentration: 30-48 hours</i>		
<i>Plus the Professional Year</i>		

Early Childhood Education

Early Childhood Education Course Requirements:

EDU 105/106	Introduction to Contemporary Education	3
EDU 225	Developmental Psychology & CAW	3
EDU 250/251	Introduction to the Exceptional Learner	3
EDU 276	Foundations of Literacy & Integrated Technology	3
EDU 305/313	Cultural & Linguistic Diversity In the Classroom	3
EDU 312	Infant & Toddler Care and Education	3
EDU 314	Developmental Learning & CAW	3
MUED 315	Music, Play and Self	3
HLTH 300	Education in Drugs, Alcohol & Tobacco	1
MATH 201	Math for School Teachers I	3
MATH 202	Math. For School Teachers II	3
<i>Plus an area of concentration: 30-48 hours</i>		
<i>Plus the Professional Year</i>		

The Professional Year Methods and Student Teaching

EDU 432	Building Home/School Partnerships	1.5
Fall Semester:		
EDU 402	Teaching Mathematics in the Elementary School	1.5
EDU 403	Teaching Science in the Elementary School	1.5
EDU 404	Teaching Social Studies in the Elementary School	1.5
EDU 405	Teaching Reading in the Elementary School	1.5
EDU 406	Teaching Language Arts in the Elementary School	1.5
EDU 416	Classroom Organization, Management & Foundations	1.5
EDU 420 or EDU 422	Student Teaching- Childhood	6
EDU 421 or EDU 423	Student Teaching – Early Childhood	6

Spring Semester:

EDU 442	Integrating Mathematics in the Elementary Curriculum	1.5
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EDU 443	Integrating Science in the Elementary Curriculum	1.5
EDU 444	Integrating Social Studies in the Elem. Curriculum	1.5
EDU 445	Integrating Reading in the Elementary Curriculum	1.5
EDU 446	Integrating Language Arts in the Elem. Curriculum	1.5
EDU 416	Classroom Organization, Management & Foundations	1.5
EDU 420 or EDU 422	Student Teaching - Childhood	6
EDU 421 or EDU 423	Student Teaching – Early Childhood	6

Students 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 Professional Year to apply for a student teaching assignment. Applications for Student Teaching must be submitted by the deadline date in order to be placed.

Fredonia/Hamburg Teacher Education Center

The college and the Hamburg Central School District have cooperated in developing an innovative teacher education program for Childhood Education and Early Childhood Education which combines the Professional Methods Semester course work and the student teaching experience during a full year internship at the Fredonia/Hamburg Teacher Education Center. This program received the Distinguished Program Award in 1985 from the National Association of Teacher Educators. Further information concerning this program can be obtained from the Director of the School of Education and/or the Director of the Office of Field Experiences.

Entrance into the Professional Year:

The School of Education is in the process of reviewing and revising their entrance criteria. Therefore, students should check with their faculty advisor for explanation of program and entrance requirements.

Students will be admitted to the Professional Year based upon the following criteria:

1. Completion of declaration of major;
2. Completion of concentration;
3. Completion of required education courses;

4. A minimum cumulative grade point average of 2.50;
5. A minimum grade point average of 2.50 in all required education courses;
6. A minimum grade of C in ENGL 100 and MATH 201 or their equivalents; and
7. The recommendation of the School of Education faculty.

Prerequisite for entering student teaching and remaining in the Professional Year is the successful completion of all methods classes.

While in the Professional Year, students must maintain a minimum cumulative grade point average of 2.50.

Areas of Concentration

These concentrations are effective starting Fall 2000. However program requirements may be altered according to new state specifications. Please contact your faculty advisor if you have any questions.

Art Concentration (30 hrs.)

Studio Art (6 hours)

ART 150	Drawing I	3
ART 155	2-Dimensional Design	3

Foundations of Art History (6 hours)

ART 115	Masterpieces to 1400	3
ART 116	Masterpieces from 1400	3

Art History (18 hours)

Select from the following:

ART 251	Art and Reality-19th Cent. America	3
ART 325	Italian Renaissance Art	3
ART 327	Baroque Art	3
ART 345	Colonial American Architecture	3
ART 351	Special Topics: Art History	3
ART 441	Directed Study: Art History	3
ART 441	Directed Studio: Projects	3
ART 451	Modern Architecture	3
ART 494	Independent Study: Art History	3

* Minimum of 6 credit hours at the 400 level

English Concentration (30 hrs.)

ENGL 357	Literacy, Language & Reading	3
ENGL 358	Comp. for El. Ed Teachers	3

Plus *three* of the following:

ENGL 205	Epic & Romance	3
ENGL 207	Drama & Film	3
ENGL 209	Novels & Tales	3
ENGL 211	World Poetry	3

Plus 15 hours of upper level electives by advisement (May include no more than 6 hrs. at the 200 level)

French Concentration (30 hrs.)

FREN 215	Intermediate French I	3
FREN 216	Intermediate French II	3
FREN 317	French Conversation	3
FREN 318	French Composition	3
FREN 319	Survey of French Literature I	3
FREN 421	Advanced French Pronunciation	3

Plus *one* of the following:

FREN 315	French Masterpieces I	3
FREN 316	French Masterpieces II	3
Plus 9 elective hours in French at the 300 level or higher		
FREN 310	Lit. and Culture of Quebec	3
FREN 320	Survey of French Lit. II	3
FREN 323	France Today	3
FREN 341	Le Grand Siecle	3
FREN 351	The Enlightenment	3
FREN 361	Contemporary French Lit.	3
FREN 417	Romanticism and Realism	3
FREN 422	Adv. French Conversation	3
FREN 423	Senior Seminar	3
FREN 424	French Stylistics	3

Mathematics Concentration (31-33 hrs.)

MATH 201	Mathematics for School Teachers I	3
MATH 202	Mathematics for School Teachers II	3
MATH 210	Discrete Math	4
MATH 301	Mathematics for School Teachers III	3
MATH 310	Reading and Writing Mathematics	3

Plus *one* of the following:

CSIT 105	Visual Basic Programming	3
CSIT 107	Internet and Web Programming	3
MATH 125	Software for Mathematics	3

Plus *one* of the following sequences:

MATH 120/121	Survey of Calculus I and II	6
MATH 122/123	University Calculus I and II	8

Plus *one* of the following:

MATH 110	Math in Action	3
MATH 117	Why Mathematics	3

Plus *one* of the following:

EDU 200	Statistics	3
MATH 200	Fundamentals of Statistics	3
MATH 350	Probability and Statistics	3

Students will be reviewed for potential in math and capable students encouraged to select this as their concentration. These students will be screened and placed in appropriate entry level courses. They will

15 be monitored, assisted and advised by advisors in the Math Dept.

Music Concentration (32 hrs.)

MUS 121	Aural Theory I	2
MUS 122	Aural Theory III	2
MUS 123	Written Theory I	2
MUS 124	Written Theory II	2
MUED 315	Music, Play, & Self	3
MUS 450	Dir. Studies (Musicianship I/Obs.)	2
MUS 451	Dir. Studies (Musicianship II/Obs.)	2

Plus any *four* Music History courses:

MUS 263	Survey of Western Music	3
MUS 264	Topics in Music History	3
MUS 262	American Music	3
MUS 265	History of Jazz	3
MUS 267	African American Music	3
MUS 333	Musics of the World	3

Plus any *three* from the following:

MUS 118	Piano Class	1
MUS 217	Piano Class Inter.	1
MUS 218	Piano Class Inter.	1
MUS 317	Piano Class Adv.	1
MUS 318	Piano Class Adv.	1

Choose *either* both guitars or social instruments:

MUED 210	Guitar	1
MUED 211	Guitar	1
MUTY 270	Social Instruments	2

Science Concentrations

You must complete: the introductory courses, one of the following minor concentrations: *Biology, Chemistry, Geoscience or Physics.*

Students will successfully complete introductory labs in two or three sciences and a minor in one science.

Introductory Courses: (15 hr.)

BIOL 141	Plant Diversity & Ecology	3
BIOL 142	Lab	1
CHEM 115	General Chemistry I	3
CHEM 125	Lab	1
GEO 165	Geology I	3
GEO 169	General Geology Lab I	1

Plus *one* of the following:

PHYS 101	Topics in Contemporary Science	3
PHYS 111	Introduction to Physical Sciences	3

In addition, choose one of the following minors:

Biology Minor

TOTAL BIOLOGY CONCENTRATION = 33 HOURS

BIOL 144/145	Animal Bio and Evolution & Lab	4
BIOL 241/242	Concepts in Molecular and Cellular Biology & Lab	4

Plus *one* of the following: 4
 BIOL 330/ General Ecology & Lab 331
 BIOL 333/ Biochemistry & Lab 334
 (Prerequisite - 16 hrs. of Chemistry listed below:
 CHEM 115/116, CHEM 125/126, CHEM 215/216, CHEM 225/226)
 Plus additional six hrs. at the 300 or 400 level 6

Chemistry Minor
TOTAL CHEMISTRY CONCENTRATION = 35 HOURS

CHEM General Chemistry II and Lab 116/126 4
 Plus 16 additional hrs at 200 level and above, of these additional hours, at least 2 hrs. must be in lab courses, at least 6 hrs. must be from 300 or 400 level courses, CHEM 305, 371 and 372 cannot be counted. 16

Physics Minor
TOTAL PHYSICS CONCENTRATION = 48 HOURS
 (PHYS 101 / 111 Waived)

PHYS University Physics I and Lab 230/232 4
 PHYS University Physics II and Lab 231/233 4
 PHYS 234 Modern Physics 4
 Plus nine additional hrs. in Physics courses numbered 321 through 479, 490 as advised and approved by the Physics Dept. & School of Education 9
Plus:
 MATH 122 University Calculus I 4
 MATH 123 University Calculus II 4
 MATH 223 University Calculus III 4
 MATH 224 Differential Equations 3

Geoscience Minor
TOTAL GEOSCIENCE CONCENTRATION = 35 HOURS
 (GEO 100 is waived)

GEO 169 Geology Lab I 1
 GEO 150 Moons & Planets 3
 GEO 160 Oceanography 3
 GEO 165 Geology I 3
 GEO 180 Weather & Climate 3
 GEO 210 Geology II 3
 GEO 215 * Minerals & Rocks 4
 GEO 330 Geomorphology (or one 4 hr. course at the 200 level or higher) 4

* Prerequisite or corequisite - GEO 165

Social Studies Concentration (30 hrs.)

HIST 105 U.S. History 3
 HIST 106 U.S. History 3
 POLI 120 American Politics 3

plus *one* of the following sequences 6
 HIST 115 Western Civ. /
 HIST 102 World Hist II
 HIST 116 Western Civ. /
 HIST 101 World Hist I

Plus *one* of the following: 3
 ECON 101 Introduction to Economics
 SOC 116 Introduction to Sociology
 ANTH 115 Introduction to Anthropology

Plus *one* of the following: 3
 HIST 220 Introduction to Race and Ethnicity
 HIST 261 Islamic Civilization
 HIST 264 East Asian Civilizations
 HIST 285 Indigenous America: Aztecs & Their Neighbors
 Plus 9 additional hours at the 300 level or above in Non-Western Studies (3 hr.), American Studies (3 hr.), and European Studies (3 hr.) 9

Spanish Concentration (30 hrs.)

SPAN 215 Intermediate Spanish I 3
 SPAN 216 Intermediate Spanish II 3
 SPAN 315 Intro Hispanic Literature 3
 SPAN 317 Spanish Conversation 3
 SPAN 318 Spanish Composition 3

Plus 15 elective hours in Spanish from the following:

SPAN 319 Survey of Spanish Literature 3
 SPAN 320 Survey of Spanish Literature II 3
 SPAN 325 Survey of Spanish American Lit. 3
 SPAN 401 Imperial Spain 3
 SPAN 421 Adv. Spanish Phonetics & Diction 3
 SPAN 425 Spanish-American Fiction 3

Cooperative Special Education

E234 Thompson Hall
 (716) 673-4656
Barbara Mallette, Coordinator

Program Description

This cooperative program with the State University College at Buffalo, which will meet the requirements for certification in New York State for Special Education, is in the process of being revised. This program will accommodate a limited number of students, permitting them to enroll at SUNY Fredonia for four years, completing required Childhood, Early Childhood or Adolescent education courses, and additional course work in the arts and sciences. Students will then complete necessary course work and practica in Special Education at the State University of New York

College at Buffalo. Fredonia will recommend state certification only after the SUNY College at Buffalo indicates student completion of required special education courses and practica.

Middle School Extension

Childhood Education/Middle School Extension, Grades 7-9

In addition to completing Fredonia's registered Childhood Education program, Middle School Extension students must complete:

EDU 224 Adolescent Development & CAW
 EDU 321 Teaching in the Middle School

Plus one of the concentrations as listed below:

Areas of Concentration

English (36 hours)

ENGL 355 Adolescent Literature 3
 ENGL 357 Literacy, Language and Reading 3
 ENGL 358 Composition - for Elem. Education Teachers 3

Plus three of the following: 9

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

Additional upper level electives selected under advisement. (maximum of six hours at the 200 level)

French (36 hrs.)

FREN 215 Intermediate French I 3
 FREN 216 Intermediate French II 3
 FREN 317 French Conversation 3
 FREN 318 French Composition 3
 FREN 319 Survey of French Literature I 3

FREN 421 Advanced French Pronunciation & Diction 3

Plus one of the following: 3

FREN 315 Masterpieces I
 FREN 316 Masterpieces II

Additional hours at 300 level or above 15

Mathematics (38 - 41 hrs.)

MATH 201 Mathematics for School Teachers I 3
 MATH 202 Mathematics for School Teachers II 3
 MATH 210 Discrete Mathematics 4
 MATH 231 Linear Algebra 4
 MATH 301 Mathematics for School Teachers III 3

MATH 310	Reading and Writing Mathematics	3	<i>one</i> of the following minor concentrations	GEO 330	Geomorphology (or one 4 hr. course at the 200 level or higher)	4
MATH 341	Geometry	3	The total hours listed below each minor includes the Introductory Course hours, minor concentration hours and the 6 additional Science hours.		Corequisite - GEO 165	
MATH 381	History of Mathematics	3			Plus <i>six</i> additional hours in a science other than Geoscience	6
plus <i>one</i> of the following sequences:						
MATH120/	Survey of Calc. I & II	6	Introductory Courses:			
MATH 121			BIOL 141	Plant Diversity & Ecology	3	
MATH122/	University Calc. I & II	8	BIOL 142	Lab	1	
MATH 123			CHEM 115	General Chemistry I	3	
			CHEM 125	Lab	1	
Plus <i>one</i> of the following:			GEO 165	Geology I	3	
EDU 200	Statistics	3	GEO 169	General Geology Lab	1	
MATH 200	Fundamentals of Statistics	3	Plus <i>one</i> of the following:			
MATH 350	Probability and Statistics	3	PHYS 101	Topics in Contemporary Science	3	
Plus <i>one</i> additional course in Mathematics at the 300 level or higher as advised.			PHYS 111	Introduction to Physical Sciences		
Social Studies (36 hours)			In addition choose one of the following minors			
HIST 105	U.S. History	3	Biology Minor			
HIST 106	U.S. History	3	39 TOTAL HOURS			
POLI 120	American Politics	3	BIOL 144	Animal Bio. and Evolution	3	
Plus <i>one</i> of the following sequences:			BIOL 145	Lab	1	
	HIST 115 Western Civ /		BIOL 241	Concepts in Molecular & Cellular Bio.	3	
	HIST 102 World Hist II		BIOL 242	Lab	1	
	HIST 116 Western Civ /		Plus <i>one</i> of the following:			
	HIST 101 World Hist I		BIOL 330/	General Ecology & Lab.	4	
Plus <i>one</i> of the following :			BIOL 331			
ECON 101	Introduction to Economics	3	BIOL 333/	Biochemistry & Lab	3	
SOC 116	Introduction to Sociology	3	BIOL 334 *			
ANTH 115	Introduction to Anthropology	3	* (Prerequisite - 16 hrs. of Chemistry listed below:			
Plus <i>one</i> of the following:			CHEM115/116, CHEM125/126, CHEM 215/216, CHEM 225/226)			
HIST 220	Introduction to Race and Ethnicity	3	Plus an additional <i>six</i> hrs. at the 300 or 400 levels elected under advisement.			
HIST 261	Islamic Civilization		Plus <i>six</i> additional hours in a science other than Biology			
HIST 264	East Asian Civilizations		Chemistry Minor			
HIST 285	Indigenous America: Aztecs and Their Neighbors		41 TOTAL HOURS			
Plus 15 additional hours (12 of which must be at the 300 level or above) to include Non-Western Studies (3 hrs.), American Studies (3 hrs.), and European Studies (3 hrs.)			CHEM 116	General Chemistry II	3	
			CHEM 126	Lab	1	
Spanish (36 hrs.)			Plus 16 additional hrs. at 200 level and above selected under advisement. Of these additional hours: at least 2 hrs. must be in lab courses, at least 6 hrs. must be from 300 or 400 level courses			
SPAN 215	Intermediate Spanish I	3	CHEM 305, 371 and 372 cannot be counted.			
SPAN 216	Intermediate Spanish II	3	Plus <i>six</i> additional hours in a science other than Chemistry			
SPAN 315	Intro. to Hispanic Lit.	3	Geoscience Minor			
SPAN 317	Spanish Conversation	3	41 TOTAL HOURS			
SPAN 318	Spanish Composition	3	GEO 169 *	General Geology Lab	1	
SPAN 319	Survey of Spanish Literature	3	GEO 150	Moons and Planets	3	
SPAN 320	Survey of Spanish Literature II	3	GEO 160	Oceanography	3	
SPAN 325	Survey of Spanish American Lit. II	3	GEO 165	Geology I	3	
SPAN 421	Adv. Spanish Phonetics & Diction	3	GEO 180	Weather and Climate	3	
Plus <i>nine</i> elective hrs. in Spanish			GEO 210	Geology II	3	
			GEO 215	Minerals and Rocks	4	
Science						
Science Concentration—You must complete: the <i>Introductory Courses</i>						
			Physics Minor			
			54 TOTAL HOURS			
			PHYS 230	University Physics I	3	
			PHYS 232	Lab	1	
			PHY 231	University Physics I I	3	
			PHYS 233	Lab	1	
			PHYS 234	Modern Physics	4	
			Plus <i>nine</i> additional hrs. in Physics courses numbered 321 through 479, 490 as advised and approved by the Physics Dept. and School of Education.			9
			Plus <i>fifteen</i> additional hours in Mathematics			
	MATH 122	University Calculus I			4	
	MATH 123	University Calculus II			4	
	MATH 223	University Calculus III			4	
	MATH 224	Differential Equations			3	
			Plus <i>six</i> additional hours in a science other than Physics			6
			Secondary Education			
			Course Requirements			
			<i>English</i>			
	ENGL 101	Introduction to English Education				
	ENGL 103	Readings & Observations in English Education				
	EDU 224	Adolescent Development & CAW				
	EDU 250/251	Introduction to the Exceptional Child				
	ENGL 250	Literacy & Technology				
	ENGL 355	Literature for Adolescents				
	EDU 349	Educational Psychology & CAW				
	EDU 419	Secondary Methods				
	EDU 430	Student Teaching in the Secondary School				
			<i>French, Spanish, Mathematics, all Sciences, Social Studies</i>			
	EDU 105/106	Introduction to Contemporary Education				
	EDU 224	Adolescent Development & CAW				
	EDU 250/251	Introduction to the Exceptional Child				
	EDU 276	Foundations of Literacy & Technology				
	EDU 305/313	Cultural & Linguistic Diversity in the Classroom				
	EDU 349	Educational Psychology & CAW				
	EDU 419	Secondary Methods				
	EDU 430	Student Teaching in the Secondary School				

Students enroll in EDU 419 Secondary Methods during the fall semester and student teaching during the spring semester.

Program Structure and Requirements:

Entrance into the Secondary Education Certification Program:

Secondary education students are majors in the department of their certification area (with the exception of students enrolled in the B.A. in Social Studies). Students seeking certification in the areas of English, social studies, mathematics, French, Spanish, biology, chemistry, physics, or earth science are encouraged to declare their intent in a secondary education certification curriculum upon entering the college. However, this may be done later by requesting a certification curriculum code change from the chairperson of the major department. It is recommended that this curriculum code change be made no later than Nov. 1 of the year in which the student will have earned 60 credit hours. However, declaration of a secondary curriculum code does not guarantee admission to secondary methods and student teaching.

Entrance into Student Teaching:

Students are admitted to student teaching after the following requirements have been satisfied:

1. A minimum cumulative grade point average of 2.50;
2. A minimum grade point average of 2.50 in all required education courses;
3. In areas of specialization students must achieve:

Foreign Language – a minimum grade point average of B in their major courses and a C+ in Methods

English – a minimum grade point average of C+ in each English course counted in the major

Math – a minimum grade point average determined by the Math department

Science – a minimum grade point average determined by the major department

Social Studies – a minimum grade point average of C+ in all required courses in the Social Studies program (that includes History and Education courses).

4. Approval of the director of the School of Education based upon the recommendation of the Screening Committee in the major department;
5. Completion of application forms and assignment no later than March 6 of the year before student teaching. Students are responsible for contacting the Office of Field Experiences regarding these arrangements
6. A minimum grade of C in ENGL 100 or its equivalent.

Prerequisite for entering student teaching and remaining in the Professional Year is successful completion of all methods classes.

Candidates for Initial teacher certification must successfully complete the New York State Teacher Certifications Examinations: Assessment of Teaching Skills-Written and Liberal Arts and Sciences Test.

Foreign Language Requirement

Students in all education programs are required to demonstrate competence in a foreign language. This requirement must be satisfied in any one of the following four ways: (1) completion of course work at the 116 level at SUNY Fredonia, (2) transferring of two successful college semesters, (3) scoring at the 50th percentile or higher on the CLEP exam, or (4) completion of three years of high school language with a passing Regents score (65 or higher).

Bachelor of Arts in Social Studies

Responsibility for the Bachelor of Arts (B.A.) in Social Studies-Secondary Education is shared by the School of Education and the Department of History. The Department of History completes advisement and final approval of requirements. See page 40.

Honors and Awards

Academic Excellence in Childhood and Early Childhood Education

Eligibility: (1) acceptance to the Professional Year program, (2) an overall GPA of 3.2 or higher, (3) a minimum of a B+ in each education course taken during the freshman, sophomore and junior years, and (4) a minimum of 12 credits in education courses taken at SUNY Fredonia. *Selection process:* final decision as to the actual recipients rests with the School of Education Honors and Awards Committee. If needed, input may be requested from the faculty of the School of Education.

Honors in Childhood and Early Childhood Education Methods

Eligibility: the student must receive an A in each methods course taken during the Professional Year program. *Selection process:* final recipients will be decided by a vote of the Professional Year faculty based upon evidence of exceptional work done by the student during methods courses.

Excellence in Student Teaching

Eligibility: (1) the student must be nominated as showing “exceptional promise” during the fall (fall and winter in Hamburg) semester student teaching experience, and (2) the student must be nominated as being an “exceptional beginning teacher” during the spring semester student teaching experience. *Selection process:* (1) in the fall the college supervisors will submit nominations of student teachers whom they consider have shown “exceptional promise” of continued growth as future classroom teachers (this will take place in the fall and winter for students involved in the Fredonia-Hamburg Program), (2) in the spring, the college supervisor, using the nomination checklist supplied by the Office of Field Experiences, will submit nominations of student teachers whom they consider to be “exceptional beginning teachers, and (3) all nominees will be reviewed by the Professional Year faculty and listed under the categories “definite” or “marginal.” Their recommendations will be given to the Honors and Awards Committee who will make the decision as to the final recipients of the award.

Tuition Remission Awards in Childhood and Early Childhood Education

Eligibility: students who have received Academic Excellence in Childhood Education Award or Early Childhood Education Award and/or who are on the fall list for Honors in Childhood Education Methods or Early Childhood Education Methods.

Selection process: (1) the Professional Year faculty will submit the list of students under consideration for Honors in Childhood Education Methods or Early Childhood Education Methods to the Honors and Awards Committee, (2) notification of eligible students by mail will be made within the following week, (3) eligible students will be told for which award they are being considered and requested to write a one-page letter justifying their selection, and (4) on or before December 15, the Honors and Awards Committee will make its decision as to the award recipients and notify the Fredonia College Foundation. The following awards are included in this category:

- Anthony M. Deiulio Memorial Scholarship
- Helen Kelly Lillie Award
- Floyd and Mabel Melvin Scholarship Fund
- Byron and Carrie Record Scholarship
- Marjorie E. Woods Scholarship.

Scholarships in Childhood and Early Childhood Education

Eligibility: students who have received Academic Excellence in Childhood Education Award and/or who have received Honors in Childhood Education Methods.

Selection process: (1) at the end of the second semester methods classes of the Professional Year program, faculty will submit to the committee the names of those students who are under consideration for Honors in Childhood Education Methods, and (2) the Honors and Awards Committee, taking into consideration the specific requirements of the individual awards, will decide the recipients. The following awards are included in this category:

- Fanny Bartlett Award (Alumni Association)
- Louis E. Rath's Award (Early Childhood Education, even years)
- Helen Buderkin Award (Early Childhood Education, odd years)
- Carol Scrace Pierce Award (Exceptional Education).

School of Education Awards for Secondary Student Teaching

Eligibility: each academic department having a Secondary Education program is eligible to submit the name of one student for the award in their discipline (English, French, Spanish, Biology, Earth Science, Chemistry, Physics, Mathematics, Social Studies). *Selection process:* nominees will be judged on criteria established by their individual departments to include performance in content and methods classes, as well as student teaching. The winning name from each department will be given to the Honors

and Awards Committee for presentation.

Junior Year, Tuition Remission Special Education Awards

Eligibility: students must be part of the Special Education teaching program and be completing their junior year.

Selection process: based upon the criteria of the award, the Honors and Awards Committee, in conjunction with faculty teaching Special Education related courses, will decide the recipient of the tuition remission award. Included in this category is:

- Gustave and Geraldine Werner Foundation Scholarship.

Secondary Education in Social Studies Awards

Included in this category is:

- Terry L. Wolfenden Scholarship Fund.

For further information, interested students should contact the Honors and Awards Committee of the School of Education.

ENGINEERING (COOPERATIVE)

Office: 116 Houghton Hal
(716) 673-3302
E-mail: Engineer@fredonia.edu
Peter G. Mattocks, Director

The Cooperative Engineering program takes its name from the academic cooperative agreements between SUNY Fredonia and its affiliated engineering schools. The intent is to combine liberal arts and sciences at Fredonia with engineering at another school, thereby maximizing the student's potential as a member of society and as an employer or employee. The agreements facilitate student transfer and mutual recognition of general education requirements. SUNY Fredonia is currently affiliated in a Cooperative Engineering program with the following institutions:

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

The following is a list of the diverse program options available at the engineering colleges, under the Fredonia Cooperative Engineering program, identified by the institution code number given above. As institutions are continually revising and updating their offerings, students are advised to consult with the catalogs of affiliated schools for recent additions and changes.

- Aeronautical (9) (14)
- Aeronautical and Astronautical (7)
- Aerospace (12) (13)
- Agriculture (4) (5) (7)

- Applied and Engineering Physics (4)
- Applied Chemistry (3)
- Applied Geophysics (3)
- Applied Mathematics (3)
- Applied Physics (3)
- Bioengineering (3) (13)
- Bioengineering with Pre-Medical Emphasis (13)
- Biomedical (1) (5) (9)
- Ceramic (6) (7)
- Ceramic Science (6)
- Chemical (1) (2) (3) (4) (5) (7) (9) (12) (13) (14)
- Chemical Engineering with an Environmental Systems Option (13)
- Chemical Engineering with Materials Science Option (13)
- Civil (1) (3) (5) (7) (9) (12) (13) (14)
- Civil and Environmental (2) (4)
- Computer (1) (3) (8) (10) (13)
- Computer and Information Science (7)
- Computer and Systems (9)
- Electrical (1) (3) (4) (5) (7) (8) (9) (10) (11) (12) (13) (14)
- Electrical and Computer (2)
- Electrical Power (9)
- Engineering Administration (14)
- Engineering Mechanics (3)
- Engineering Physics (4) (7) (9) (12)
- Engineering Science (9)
- Environmental (3) (9) (13)
- Fluid and Thermal Sciences (1)
- Geological Sciences (4)
- Geoscience (5)
- Glass Science (6)
- Industrial (10) (12)
- Industrial and Computer (5)
- Industrial and Management (3) (9)
- Industrial and Systems (7)
- Materials (9)
- Materials Science (3)
- Materials Science and Engineering (4)
- Mechanical (1) (3) (5) (7) (8) (9) (10) (11) (12) (13) (14)
- Mechanical/Aerospace (2) (4) (13)
- Metallurgical (3) (7)
- Metallurgy and Materials Science (1)
- Microelectronics (10)
- Mineral and Chemical Metallurgy (3)
- Mining (3)

- Nuclear (3) (4) (9)
- Operations Research (3)
- Operations Research and Industrial (4)
- Petroleum (5)
- Polymer Science (1)
- Software (8)
- Systems and Control (1)
- Theoretical and Applied Mechanics (4)
- Welding (7)

These cooperative arrangements include but are not limited to the popular Three-Two (3-2) option. Briefly, a student in the 3-2 option takes a minimum of 90 credit hours (three years) at SUNY Fredonia in a curriculum, modified specifically for this program, in biology, business administration, chemistry, computer science, economics, English, geology, history, mathematics, mathematics-physics, philosophy, physics, political science, psychology, or sociology. The student then transfers to an affiliated school and completes at least 60 credit hours (two years) in an engineering discipline. When the student completes this five-year option, he/she obtains a baccalaureate from the engineering institution. Provided the student has satisfied Fredonia's remaining requirements at the engineering school, he/she obtains a second baccalaureate; this one from Fredonia according to the curriculum there followed.

It is possible for students who do not wish to major in any one of the specified departments to enter the Interdisciplinary studies program which allows the student to design his/her own Cooperative Engineering curriculum. This curriculum will include, but not be limited to, the engineering core and related courses for the engineering college of the student's choice.

Although the popular 3-2 option is considered the basic option for Cooperative Engineering, 2-2, 2-3, 3-3, and 4-2 options are available. The 2-2 and 2-3 options do not lead to SUNY Fredonia degrees; the 3-3 and 4-2 programs do.

Suggested Minimum Engineering Core:		
Core Program:		Hrs.
CHEM 115-116	General Chemistry I & II and CH 125-126 (Labs)	8
MATH 122- 123, 223	University Calculus I, II, and III	12
MA 224	Differential Equations	3
PHYS 230-231	University Physics I and II and PH 232-233 (Labs)	10
PHYS 321-322	Engineering Mechanics I and II	8
ENGL 100	English Composition	3

Strongly recommended are courses in computer programming such as C/C++ Programming (CSIT106), Modern Physics (PH 234), and 3 to 6 credit hours of economics. In addition, Circuit Analysis (PHYS 323-324) is required for students pursuing careers in Electrical Engineering and is also required by some engineering schools for other areas such as mechanical engineering. This core, coupled with the departmental and general college requirements, forms the basic curriculum for the three-year program at SUNY Fredonia.

For specialized curricula such as Aeronautical and Astronautical, and Welding Engineering, the 2-3 option is available. Students in the 2-3 option may or may not choose to take the engineering core.

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. To transfer, the student first consults with the Cooperative Engineering director and then applies to one of the affiliated engineering colleges or to any other engineering college of his/her choice. Usually, a favorable letter of recommendation from the director is forwarded for highly motivated students with satisfactory academic records. At the affiliated engineering institution, a SUNY Fredonia student application is given special consideration. However, it should be noted that for Case Western Reserve and Columbia, admission is guaranteed to students with an overall average of B+ (3.3).

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:

- 1) The student should have completed sufficient background courses to insure timely completion of the three-year Fredonia component.
- 2) The student should have a cumulative GPA of approximately 2.8 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 Society, provides a lecture series given by engineers invited from industry as well as from the affiliated institutions, who speak about their work and about engineering as a career. The society also provides other extracurricular activities.

A large number of engineering and engineering-related courses comprising most courses typically taught in the first two years at engineering schools are offered at Fredonia. These include Engineering Mechanics I & II (PHYS 321-322), Circuit Analysis I & II (PHYS 323-324), Thermodynamics (PHYS 330), Digital Logic w/lab (PHYS 326, 328), Electronics w/lab (PHYS 325, 327), and Optics w/lab (PHYS 340, 341).

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: 277 Fenton Hall
(716) 673-3125
E-mail: English@fredonia.edu or
joan.burke@fredonia.edu
Joan A. Burke, Chairperson

The Department of English offers a broad education in the literature of our own and other times and places, emphasizing critical reading and thoughtful writing. Traditional literary and historical analysis of fiction, poetry, and drama is basic to our discipline, but that study may be extended in many ways. Options include film, folklore, language study, journalism, media criticism, pedagogy, creative writing, and public relations.

Our graduates work for journals, publishers, business firms, arts organizations, and schools; some may also go on to graduate programs in English, American Studies, journalism, law, and social work. Others choose to pursue our Master of Arts degree in English or our Master of Science in (English) Education degree.

For the English major, the department offers:

First, a broad exposure to literature and criticism through a core of required courses.

Second, either a deeper investigation within a single concentration, or, with the assistance of a department faculty advisor, a broad sampling of subjects of study in the department. Internships in editing, public relations, and journalism are also available.

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

The department awards a number of scholarships and prizes recognizing superior achievement:

Fall Awards

- Laura Foster Writing Award

Spring Awards

- John and Eleanor Courts Memorial Scholarship
- Crescence Ehmke Graham Scholarship
- The Howard Herkimer & Hildegard Maytum Strong Scholarship
- Best Paper by a First Year Student Award

- Best Paper by an Upper-Class Student Award
- Outstanding English Graduate Student Award

Requirements for the Bachelor of Arts Degree in English

The major in English requires a minimum of 36 credit hours of courses selected according to the outline given below. It also requires the completion of a reflective portfolio. In special circumstances a particular course requirement may be waived and another course substituted with written approval of the Department of English. Students seeking a waiver of a particular course requirement should consult their advisors; approval for such waivers is granted by the English department chairperson or his/her designee.

No more than 6 credit hours earned in any combination of internships and independent studies may be counted toward the major.

Majors in English must complete at least 75 credit hours outside the major in order to graduate. Credit earned for ENGL 100 (The Craft of Writing) does not count as part of the major. Exemptions from this policy must be approved by the English chairperson.

Program Outline:

ENGLISH:

I. 15 hours from the following core courses:

A. Required Core

Three of the following four courses:

ENGL 205	Epic and Romance	3
ENGL 207	Drama and Film	3
ENGL 209	Novels and Tales	3
ENGL 211	World Poetry	3

Plus:

ENGL 345	Critical Reading	3
ENGL 400	Senior Seminar: Advanced Writing	3

B. Portfolio Completion

ENGL 401	Portfolio Completion	0
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II. *Electives*: 21 additional credit hours in English department courses which must include one course in a literary period and one course in a major author. Students are encouraged to take no more than 6 elective credit hours at the 200-level.

ENGLISH EDUCATION

Students in Secondary English Education are required to earn at least a C+ in each required English course and in EDU 419, and to maintain an overall GPA of 2.5. In addition to the English courses listed below, Secondary English Education Majors must also take the following education courses, achieving an average of 2.5: EDU 224, EDU 250, EDU 349, and EDU 430. Also, students in all secondary education programs are required to demonstrate competence in a foreign language. This requirement must be satisfied in one of the following four ways: (1) completion of course work at the 116 level at Fredonia; (2) transferring of two successful college semesters; (3) scoring at the 50th percentile or higher on the CLEP exam; (4) completion of three years of high school language with a passing Regents score (passing = 65).

Acceptance into student teaching is contingent upon 1) completion of all course work for the major before their student-teaching semester; 2) an overall minimum GPA of 2.5; and, 3) a satisfactory personal interview with English education faculty. In the event that a student will not be able to achieve an overall GPA of 2.5 by the end of the fall semester prior to student teaching, that student will not be permitted to enroll in ENGL 450 or EDU 419.

Program Outline

I. 24 credit hours from the following core courses:

A. Required Core:

Three of the following four courses (9 credit hours):

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

B. Five courses as follows (15 credit hours):
Literary Period Course
Major Author Course
3 English Electives

(Students are encouraged to take no more than 6 elective credit hours at the 200-level.)

II. The following English Pedagogy courses (17 credit hours): Students in the English-Education program (Curriculum 120) may count the following courses outside their major discipline: ENGL 250, ENGL 355, ENGL 356, ENGL 357, ENGL 450.

ENGL 101	Introduction to English Education (for first-year students)	1
ENGL 103	Readings and Observations in English Education (for second-year students)	1
ENGL 250	Literacy and Technology	3
ENGL 355	Literature for Adolescents	3
ENGL 356	Teaching Writing in Secondary School	3
ENGL 357	Literacy, Language, and Learning Theory	3
ENGL 401	Portfolio Completion	0
ENGL 450	Seminar for Teachers of English (Seniors only)	3

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

Requirements for Transfer Credit:

The Department of English at Fredonia requires majors in English to complete at Fredonia a minimum of 24 credit hours of courses applied to the major. Thus, students transferring to Fredonia should normally expect no more than 12 credit hours earned elsewhere to apply to the major in English. Additional hours earned in English may be used as general electives or may be applied, under prescribed conditions, to the College Core Curriculum.

As a rule, the department will not accept credits earned at two-year colleges as equivalents for upper-level courses.

Requirements for the Minor in English

The minor in English requires a minimum of 18 credit hours of courses, 6 credit hours at the 200-level and at least 12 credit hours in courses numbered 300 or above. ENGL 100 may not be counted as part of the minor. At least 9 credit hours counted toward the minor must be taken at Fredonia. No more than 3 credit hours earned in internships or independent studies may be counted toward the minor. Students considering a minor in English are assigned departmental advisors, who will aid in the preparation of their programs.

Advising:

An assigned faculty advisor will aid each student majoring in English or English Education in shaping his or her

portfolio and reflecting on its contents. Advisors also help both major and minor advisees in preparing course schedules, meeting requirements, making broad educational decisions, and solving other academic problems. As a further aid, the department regularly publishes a pre-registration *Course Description Booklet* that contains details not found in this catalog—required readings, papers, exams—about courses scheduled each semester.

The Department of English participates in the Cooperative Agriculture and Cooperative Engineering programs. Refer to descriptions of these programs on pages 7 and 28 respectively.

Course Numbering:

All courses are open to majors and non-majors alike (except for specialized prerequisites as indicated); however, allowing for correction through advisement and the *Course Description Booklet*, the student may generally assume the following:

- 100 level courses are introductory.
- 200 level courses are survey-introductory;
- 300 level courses focus on literary periods, themes, genres, and writers;
- 400 level courses are specialized studies of major figures and works;
- 500 level courses are open to undergraduate majors with senior standing (89 credit hours of academic course work) and with permission of the instructor.

ENVIRONMENTAL SCIENCES

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(716) 673-3817
E-mail:

Alicia.Perez-Duentetaja@fredonia.edu
Alicia Perez-Fuentetaja, *Coordinator*

As the population on our planet grows, greater amounts of resources are consumed - often resulting in a myriad of environmental problems. Opportunities for scientists, engineers, and policy makers with a background in the environmental sciences are growing. Possible careers include management of air and water resources, hazardous waste management, fishery and wildlife biology, and environmental and community planning.

The major in Environmental Sciences integrates the principles of natural sciences that form a foundation for understanding human interaction with the global environment. Environmental sciences are by definition interdisciplinary and broad in nature. In this major, a risk-assessment approach is taken in the study of current topics such as fate and transport of hazardous substances, non point-source pollution, toxicology, and non-native species - with the focus residing on risk assessment based environmental action. In the process, students study classical scientific phenomena, culminating with their subsequent applications in mathematical modeling, laboratory work, and field work to environmental topics. Students will draw on the strengths of the biology, chemistry, geosciences, physics, and mathematics programs at Fredonia to provide a true interdisciplinary major.

As seniors, students demonstrate their ability to conduct independent work in the environmental sciences through an internship with local industries and municipalities, or through research with a participating faculty advisor.

This is an interdisciplinary model major program; for specific degree requirements unique to interdisciplinary studies, refer to page 42.

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

A. Core Requirements.

1. Mathematics (6-8 credit hours)			
MATH 122/123	University Calculus I and II (recommended)	8	
	or		
MATH 120-121	Survey of Calculus I and II	6	
2. Biology (15 credit hours)			
BIOL 141-142	Plant Diversity and Eco-system Biology & Lab	4	
BIOL 144-145	Animal Biology and Evolution & Lab	4	
BIOL 330-331	General Ecology & Lab	4	
BIOL 457	Biostatistics	3	
3. Chemistry (18 credit hours)			
CHEM 115-125	General Chemistry I & Lab	4	
CHEM 116-126	General Chemistry II & Lab	4	
CHEM 215-225	Organic Chemistry I & Lab	4	
CHEM 317	Analytical Chemistry I	3	
CHEM 473	Environmental Chemistry	3	
4. Geosciences (16 credit hours)			
GEO 169	General Geology Laboratory	1	
GEO 165	Geology I	3	
GEO 330	Geomorphology	4	
GEO 370	Structural Geology	4	
GEO 450	Hydrogeology	4	
5. Environmental Sciences (13 credit hours)			
ESCI 115	Introduction to Environmental Sciences	3	
ESCI 310	Methods in Environmental Analysis	3	
ESCI 410	Environmental Risk Assessment	3	
ESCI 440	Environmental Sciences Seminar	1	
ESCI 490	Environmental Sciences Practicum	3	

B. Recommended Electives: To be chosen during consultation with faculty advisor based on future plans and interests of the student, such as graduate school, industry, government, etc. (26 credit hours).

BIOL 333	Biochemistry	3
BIOL 343	Conservation	3
BIOL 420	Population and Community Ecology	3
CHEM 216	Organic Chemistry II	3
CHEM 318	Analytical Chemistry II	3
CHEM 405	Industrial Chemistry	3
CSIT 104	Introduction to Microcomputing Software	3
CSIT 105	Visual BASIC Programming	3
ECON 201	Principles of Macroeconomics	3
ECON 202	Principles of Microeconomics	3
GIS 201	Geographic Information Systems	3
GEO 320	Geochemistry	3
GEO 335	Geophysics	4
MATH 223	University Calculus III	4
MATH 224	Differential Equations	3
PHYS 230	University Physics I	3
PHYS 231	University Physics II	3
POLI 276	Law and Society	3
POLI 277	Introduction to Law	3
POLI 387	Environmental Policy	3

(Foreign Languages, see Modern Languages and Literatures, page 52).

(French, see Modern Languages and Literatures, page 52).

FILM STUDIES

(Interdisciplinary minor only)

Office: E332 Thompson Hall
(716) 673-3277
E-mail: graebner@fredonia.edu
William Graebner, *Coordinator*

Film is more than a century old, and it is an increasingly popular form of entertainment in the world. It is also a medium capable of serious artistic expression and scholarly analysis. The departments of Communication, English, Modern Languages, History, and Political Science regularly offer courses that treat films as a communication medium, an artistic medium, a historical or political document, or a reflection of culture. In any given semester, as many as 200 students may be enrolled in a course in which film is the major topic of study. The goal of the Film Studies minor is to give students the opportunity to gain a comprehensive understanding of the history, practice, and aesthetics of film in a multi-disciplinary program. The minor will complement majors in English, History, Communication, and other fields, and can prepare students for graduate work in film if coordinated with a major in English or Communication.

Total Hours: 21

Core (6 hours)

COMM 155	Rhetoric of Vision and Sound	3
	or	
ENGL 280	Introduction to Film	3
ENGL 380	Film: Silence to Sound	3
	or	
ENGL 381	Narrative Film After 1940	3

Electives (12 hours from)

COMM 452	Video Documentaries I	
Prerequisites: COMM 155, COMM 354		
COMM 454	Video Drama I	
Prerequisites: COMM 155, COMM 354		
LANG 385	German Film	
HIST 203	History through Films (content varies)	
HIST 376	Film and American Culture	
Prerequisite: HIST 106 or sophomore standing		
POLI 345	Film and Politics	4
Prerequisite: Junior Standing		
ENGL 382	Women and Film	
or		
Any course from the core not taken as part of the core		

Capstone

FILM 470	Senior Film Seminar	3
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Notes:

No more than 4 courses may be taken in any one discipline.

To determine if a course not listed above will satisfy requirements for the Film Studies minor, please contact the Coordinator.

FRESHMAN SEMINAR

810 Maytum Hall
(716) 673-3336
E-mail: faulk@fredonia.edu
Leonard E. Faulk Jr., Associate Vice President for Academic Affairs and Graduate Dean

Freshman Seminar is a one-credit course that is intended to help incoming 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 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. It thus helps first year students adjust to the college, develop a better understanding of the learning process, and acquire basic academic survival skills.

GEOGRAPHIC INFORMATION SYSTEMS

(interdisciplinary minor only)

114 Houghton Hall
(716) 673-3884
E-mail: GIS@fredonia.edu
Ann K. Deakin, *Coordinator*

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, thorough policy analysis, cost-effective decision making, and GIS display and processing.

The curriculum in this minor is multidisciplinary in content and interdisciplinary in approach, drawing on a variety of disciplines and departments.

Students are required to take 24 credit hours (a minimum of 15 credit hours outside of their major) from among the following courses:

A. GIS Core Courses: 12 credit hours required		
CSIT 105	Visual BASIC I	3
CSIT 106	Scientific Programming Using C++	3
GIS 201	Geographic Information Systems I	3
GIS 301	Geographic Information Systems II	3

B. GIS Elective Courses: 6 credit hours required		
Two courses from the following:		
GIS 350	Remote Sensing and Image Processing	3
GIS 360	Mapping the Social World	3
GIS 370	Earth Systems Science	3
GIS 401	Special Topics in GIS	3
GEO 301	Cartography	3

C. Interdisciplinary Elective: 3 credit hours required		
One course required from the following:		
BIOL 330	Introduction to Ecology	3
BUAD 364	Management Information Systems I	3
CSIT 205	Visual BASIC II	3
ECON 330	Public Sector Economics	3
ESCI 410	Environmental Risk Assessment	3
GEO 359	Vanishing Earth Resources	3
GEO 330	Geomorphology	3
MATH 231	Linear Algebra	3
POLI 380	Policy Evaluation	3
PSY 373	Human Factors	3
SOC 343	Health Systems and Policies	3

D. Practicum: 3 credit hours required		
GIS 450	Directed Study	3
GIS 480	Independent Study	3
GIS 490	Internship	3-6

GEOSCIENCES

Office: 106 Houghton Hall
(716) 673-3303
E-mail: Geo@fredonia.edu
John L. Berkley, *Chairperson*

The Department of Geosciences offers five degree programs.

The B.S. degree program in Geology is intended primarily for students planning to undertake employment or graduate study in geology or who desire a liberal arts education with an emphasis in geology. Most geologists are employed by private industry - in petroleum, mining, cement, ceramic, sand and gravel, and in environmental and engineering firms. Many work for various federal agencies and the 50 state geological surveys, or are self-employed, often working as consultants. Colleges and universities offer teaching and/or research positions.

The B.S. degree program in Geochemistry, an interdisciplinary program with the Department of Chemistry, prepares the student to undertake employment or graduate

study in this field. Geochemists are employed in the mineral resource industries, earth and space sciences, environmental sciences, and several branches of chemical science and technology. In addition to careers in industry, geochemists are employed by consulting firms, academic institutions, and the federal government.

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

The B.A. degree program in Earth Sciences is intended primarily for students who want a liberal arts education with a broad emphasis in the several sub-disciplines that constitute the earth sciences. 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 Earth Sciences is intended for those students who plan to teach earth science in secondary schools. It includes the fundamental courses in geology, meteorology, astronomy, and oceanography, which constitute the "content" of earth science, and the necessary professional education courses.

Students planning to pursue a career in the earth sciences as professional scientists should earn one of the B.S. degrees in Geology, Geochemistry, and Geophysics rather than the B.A. or B.S. degrees in Earth Sciences, 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 Sciences with its required professional courses in education (EDU 105, 224, 250, 276, 305, 349, 419, 430). 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) completion of course work at the 116 level at Fredonia, or (2) transferring of two successful college semesters, or (3) scoring at the 50th percentile or higher on the CLEP exam, or (4) completion of three years of high school language with a passing Regents score (passing = 65). Students are screened by the department chairperson before entering EDU 419.

Cooperative Engineering and Agriculture: The Department of Geosciences participates in the Cooperative Agriculture and the Cooperative Engineering Programs described on pages 7 and 28, respectively.

Students are encouraged to participate in the activities of the Geology Club and Geophysics Society.

The department awards textbook scholarships for academic achievement each semester and annually presents the MacDiarmid Award to the department's outstanding graduating senior, the Paul D. Willette Scholarship to the outstanding junior, the Walther M. Barnard Geosciences Scholarship to the outstanding sophomore, and the Mark D. and April Hoefner Orgren Scholarship to the outstanding freshman. The Susan Mara Scholarship is awarded by the faculty to students deserving of special recognition.

Explanation of geosciences (GEO) course numbers: 100-level courses are introductory courses without prerequisites; 200-level courses are general service courses with prerequisites; 300-level courses are upper-level CCC courses, and electives and required courses for geosciences majors; and 400-level courses include required and elective courses for majors, generally with high-level or multiple prerequisites.

Laboratory credit: one credit of laboratory work includes three clock

hours in the laboratory per week. Four-credit hour courses in geosciences include one credit hour of laboratory work.

Requirements for the Bachelor of Science Degree in Geology

Core Program (39 credit hours in geosciences; 24 credit hours in related disciplines):

GEO 165	Geology I	3
GEO 169	General Geology Lab	1
GEO 210	Historical Geology	3
GEO 370	Structural Geology	4
GEO 411	Mineralogy	4
GEO 421	Petrology	4
GEO 459	Seminar in Geosciences	1
GEO 461	Field Geology	3
GEO 3XX/4XX	Elective courses (excludes Internship, Lab Supervision, and more than 2 hours of Directed Study; may include up to 4 credit hours in Geographic Information Systems courses)	16

MATH 122-123	University Calculus I & II	8
CHEM 115-116	General Chemistry I & II and CHEM 125-126 (Labs)	8
PHYS 230-231	University Physics I & II and PHYS 232-233 (Labs)	10

A course in computer science.

Geosciences Honors Track:

Includes B.S. Geology core program described above, but with the following stipulations for GEO 3XX/4XX electives: 16 credit hours to include GEO 471 Senior Thesis and MATH 250 Statistics for the Sciences. Recommended courses are GEO 445 Internship (up to 4 hours) and GIS courses (up to 6 hours).

Requirements for the Bachelor of Science Degree in Geochemistry

Core Program (24 to 25 credit hours in geosciences; 29 to 32 credit hours in chemistry; 16 credit hours in related disciplines):

GEO 165	Geology I	3
GEO 169	General Geology Laboratory	1
GEO 411	Mineralogy	4
GEO 421	Petrology	4
GEO 431	Geochemistry	4
GEO 459	Seminar in Geosciences	1
CHEM 495 and CHEM 496	Seminar: Recent Advances in Chemistry	2

GEO 3XX/4XX	Geology electives	8
CHEM 115-116	General Chemistry I & II and CHEM 125-126 (Labs)	8
CHEM 215-216	Organic Chemistry I & II and CHEM 225-226 (Labs)	8
CHEM 290	Introduction to Research (recommended)	1
CHEM 315-325	Physical Chemistry (Lecture and Lab)	4
CHEM 317-318	Analytical Chemistry I & II and CHEM 327-328 (Labs)	9
PHYS 230-231	University Physics I & II and PHYS 232-233 (Labs)	10
MATH 122-123	University Calculus I & II	8

A course in scientific writing, (completion of CHEM 225, 226, and 290 Introduction to Research fulfills requirement).
A course in computer science.

Requirements for the Bachelor of Science Degree in Geophysics

Core Program (23 to 24 credit hours in geosciences; 17 to 19 credit hours in physics; 26 credit hours in related disciplines):

GEO 165	Geology I	3
GEO 169	General Geology Laboratory	1
GEO 215	Minerals and Rocks	4
GEO 335	Geophysics	4
GEO 370	Structural Geology	4
GEO 459	Seminar in Geosciences	1
PHYS 400	Undergraduate Seminar	1
GEO 461	Field Geology	3
GEO XXX	Geology elective	4
PHYS 230-231	University Physics I & II and PHYS 232-233 (Labs)	10
PHYS 321	Engineering Mechanics I or	4
PHYS 330	Thermodynamics or	4
PHYS 331	Theoretical Mechanics or	3
PHYS 333	Electricity and Magnetism	3
PHYS XXX	Electives from PHYS 321 through PHYS 479	6
MATH 122-123-223	University Calculus I, II & III	12
MATH 224	Differential Equations	3
CSIT XXX	Any course in computer science (pref. CSIT 104)	3
CHEM 115-116	General Chemistry I & II and CHEM 125-126 (Labs)	8

GEO 330 Geomorphology is strongly recommended.

Requirements for the Bachelor of Arts Degree in Earth Sciences

Core Program (36 or 37 credit hours in geosciences; 22 to 24 credit hours in related disciplines):

GEO 160	Oceanography	3
GEO 165	Geology I	3
GEO 169	General Geology Laboratory	1
GEO 210	Geology II	3
GEO 215	Minerals and Rocks	4
GEO 370	Structural Geology	4
GEO 459	Seminar in Geosciences	1
GEO XXX	Any Geology elective	3 or 4
GEO 3XX/4XX	Two upper-level Geology electives	8
Plus, any two of the following:		
GEO 150	Moons and Planets	3
GEO 311	Global Climate	3
GEO 341	Stars and Galaxies	3
CHEM 115-116	General Chemistry I & II and CHEM 125-126 (Labs)	8
PHYS 230-231	University Physics I & II and PHYS 232-233 (Labs)	10
or		
PHYS 121-122	College Physics I & II and PHYS 123-124 (Labs)	8
	MATH elective	3 or 4
	MATH any course in calculus	3 or 4

A course in computer science.

Requirements for the Bachelor of Science Degree in Earth Sciences

Core Program (36 credit hours in geosciences; 36 credit hours in education; 25 to 28 credit hours in related disciplines):

GEO 150	Moons and Planets	3
GEO 160	Oceanography	3
GEO 165	Geology I	3
GEO 169	General Geology Laboratory	1
GEO 210	Geology II	3
*GEO 215	Minerals and Rocks	4
GEO 311	Global Climate	3
*GEO 330	Geomorphology	4
	Two GEO 3XX/4XX electives, as advised	8

*One course in scientific writing from the following:

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

EDU 105	Introduction to Contemporary Education	3
EDU 224	Adolescent Development and CAW	3
EDU 250	Introduction to the Exceptional Learner	3
EDU 276	Foundations of Literacy and technology	3
EDU 305	Cultural and Linguistic Diversity in the Classroom	3

EDU 349	Educational Psychology	3
EDU 419	Secondary School Methods	3
EDU 430	Student Teaching in Secondary School	15
CHEM 115-116	General Chemistry I & II and CHEM 125-126 (Labs)	8
PHYS 230-231	University Physics I & II and PHYS 232-233 (Labs)	10
or		
PHYS 121-122	College Physics I & II and PHYS 123-124 (Labs)	8
<i>Calculus sequence:</i>		
MATH 120/121	Survey of Calculus (6)	
or		
MATH 122/123	University Calculus (8)	

One computer course from the following, as advised:

CSIT 104	Introduction to Microcomputer Software (3)
CSIT 105	Visual Basic Programming (3)
CSIT 106	Scientific Program using C++ (3)
CSIT 120	Computer Science Overview (3)
CSIT 121	Computer Science I (4)

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) completion of course work at the 116 level at Fredonia, or (2) transferring of two successful college semesters, or (3) scoring at the 50 percentile or higher on the CLEP exam, or (4) completion of three years of high school language with a passing score on the Regents Exam (passing = 65).

*Scientific writing/literacy course; fulfills 1/3 of departmental writing requirement.

Requirements for the Minor in Geological Sciences

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

Requirements for the Minor in Earth Sciences

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

Geographic Information Systems

This program is sponsored jointly by the departments of Geosciences and Political Science. Interested persons should refer to page 33 for a description of the minor.

GERONTOLOGY

(interdisciplinary minor only)
W367 Thompson Hall
(716) 673-4609

Richard D. Reddy, Coordinator

Gerontology studies the impact of social and cultural factors in the aging process and examines the status of older people in society. The Gerontology minor will provide the basis for continued study in graduate school or for direct entry into one of the many current and emerging careers in research or services for the elderly. 24 credit hours are required. It is recommended that no more than 9 credit hours be used to fulfill major requirements. Introduction to Gerontology (SOC 210) should be taken before the other courses.

A. The Field of Gerontology:

Three credit hours required
SOC 210 Intro. to Gerontology

B. Perspectives on Aging:

Six credit hours required, courses must be taken from two disciplines

PHIL 258	Life and Death
PHIL 345	The Meaning of Life
PSY 289	Lifespan Human Dev.
PSY 366	Psychology of Adulthood
SOC 337	Sociology of Aging
SOC 338	Death and Dying

C. Health and Health Care:

Three credit hours required from

BIOL 110	Human Biology
HSC 386	Wellness
PSY 247	Health Psychology
SOC 240	Medical Sociology
SOC 346	Mental Health and Society
SPA 150	Introduction to Communicative Disorders

D. Working with the Elderly:

Three credit hours required from

PSY 355	Group Dynamics
PSY 447	Introduction to Counseling
SOC 218	Introduction to Social Work
SOC 479	Social Gerontology Intern

E. Administrative Skills:

Three credit hours required from

BUAD 321	Management and Organizational Behavior
PSY 347	Industrial/Organizational Psychology
POLI 311	Fundamentals of Public Administration
SOC 325	Complex Organizations

F. Policy Issues:

Three credit hours required from

POLI 121	American Public Policy
POLI 380	Policy Evaluation
POLI 382	Social Welfare Policy
SOC 343	Health Systems Policy
SOCW 249	Social Welfare Institutions

HEALTH SERVICES ADMINISTRATION

Office: W375 Thompson Hall
(716) 673-4612
E-mail: Hsa@fredonia.edu
Jere A. Wysong, Director

As the health care sector has expanded and changed over the last 10 years, the opportunities and challenges for health care administrators have also increased. Successful administrators must cope with new programs for special populations, new technologies, personnel, organizational forms, and financing methods, new regulations from state and federal agencies, and continuing pressures for cost containment. The Health Services Administration program strives to develop successful administrators by providing both a comprehensive and critical understanding of the changing health environment, and the specific administrative knowledge and skills that are needed to effectively cope with and manage change.

The major objectives of the Health Services Administration program are to provide a comprehensive, coherent, and integrated educational experience that prepares students to be effective and productive administrators in a wide variety of health care facilities. Majors are prepared for and encouraged to pursue graduate study in health administration, public health or other areas; recent graduates have, in fact, gone on to some of the country's best graduate programs. Graduates may, however, pursue immediate employment in a variety of entry or mid-level management positions, in hospitals, managed care organizations, or health insurance plans, or in skilled nursing facilities, hospices, home health agencies, rehabilitation programs, and other private and public programs.

The program curriculum integrates the perspective and the expertise of a number of academic disciplines. Required and elective courses are drawn primarily from business administration, economics, and sociology, but also include a wide variety of other disciplines. Advisement of student majors and administration of the program are provided by the Health Services Administration Council, which includes faculty who are currently involved in research,

consulting, and public service in the health services sector.

The program also includes a required internship for all majors of at least six weeks of administrative experience in an affiliated health institution. Internships are currently available in more than 50 facilities in Western New York, including hospitals, hospices, developmental centers, mental health programs, skilled and health related facilities, managed care organizations and other agencies. In some cases, new internships are established to meet the geographic preferences or needs of students. Academic supervision is provided by a member of the faculty, and by an on-site supervisor designated by the college. Students are required to develop a Learning Contract approved by both the college and the health institution which specifies educational objectives, job requirements, and work schedules. Academic credit is awarded based on formal evaluation by the on-site supervisor, and the faculty evaluation of daily logs, written products associated with the student's major projects, and a final paper. Internships are usually completed during the summer following the student's junior year.

With careful planning, majors in Health Services Administration can also complete a minor, and in some cases, even a major in another academic discipline. Other majors, especially those in the social sciences, may also choose to supplement their majors with a 21-credit hour minor in Health Services Administration.

The Health Administration Advisory Panel

The curriculum and internships are reviewed by an external advisory panel to insure that the program continues to provide the knowledge, skills, and experience necessary for graduates to function effectively in professional roles. The administrators who serve on the panel represent a variety of practice settings and career backgrounds, and are also actively involved in serving as internship supervisors. Members of the panel also provide advice to faculty and students on current issues and career opportunities.

The Health Services Administration Association

Many majors are also involved in a student-directed organization that supports and supplements the academic program. The Health Services Administration Association is actively engaged in a program of field trips, and forums on careers, internships, and current issues, as well as fund-raising and informal social activities. Majors and interested students are invited to join.

Requirements for the Bachelor of Science Degree

Major Requirements: Degree candidates in Health Services Administration will need to complete a minimum of 45 credit hours of course work, including 30 credit hours of required core courses. The remaining 15 credit hours should include 6 credit hours from courses in Health Services Policy, and 9 credit hours from one of the six remaining areas of concentration. Students may substitute a self-designed concentration for those listed with approval of their advisor.

In order to take the required upper level courses for the major, students must first complete 9 credit hours of course prerequisites including: Microeconomics, Visual BASIC Programming or Introduction to Microcomputer Software, and Introduction to Sociology. A 2.5 GPA in these courses or approval of the director is required for admittance into the Health Services Administration program.

Required Courses: 30 credit hours

ACCT 201	Accounting	3
BUAD 315	Principles of Business Finance	3
HSA 300	Health Services Management	3
HSA 319	Financial Issues in Health Services Management	3
HSA 360	Economic Issues in Health Care	3
HSA 377	Health Administration Internship	6
SOC 325	Complex Organizations	3
SOC 343	Health Systems and Policy	3
Statistics: BUAD 200, POLI 200, PSY 200, or SOC 200		3

Health Policy Electives: 6 credit hours from:

ANTH 301/	Plagues and Peoples	3
SOC 312		
BIOL 345	Emerging Diseases	3
BIOL 360	Aids and STDs	3
HSA 310	Health Law	3
HLTH 215	Personal and Community Health	3
PSY 247	Health Psychology	3
SOC 240	Health and Society	3
SOC 345	Women, Health, and Society	3

Area of Concentration: 9 credit hours from one of six areas

Financial Management

ACCT 301	Intermediate Accounting	3
ACCT 303	Cost Accounting	3
ACCT 402	Governmental Accounting	3
BUAD 364	Management Information Systems I	3
POLI 380	Policy Evaluation	3

Human Resource Management

BUAD 330	Human Resource Management	3
BUAD 440	Advanced Human Resource Management	3
ECON 355	Labor and Industrial Relations	3
PHIL 310	Administrative Ethics	3
PSY 317	Tests and Measurements	3
PSY 347	Industrial/Organizational Psychology	3
PSY 373	Human Factors	3

Marketing

BUAD 325	Principles of Marketing	3
BUAD 340	Marketing Research	3
BUAD 411	Marketing Management	3
BUAD 342	Consumer Behavior	3
BUAD 445	Integrated Marketing Communication	3
SOC 303	Social Stratification	3
SOC 323	Community	3

Long-Term Care

EDU 355	Learning and Behavior Disorders of Children	3
EDU 360	Developmental Disabilities	3
PSY 289	Life Span Development	3
PSY 356	Abnormal Psychology	3
PSY 366	Psychology of Adulthood and Aging	3
PSY 379	Child Psychopathology	3
SOC 210	Introduction to Gerontology	3
SOC 337	Sociology of Aging	3
SOC 338	Death and Dying	3
SOC 339	Policy for Aging	3
SOC 346	Mental Health and Society	3

Alcoholism and Drug Abuse

HLTH 343	Drugs and Behavior	3
PSY 247	Health Psychology	3
PSY 356	Abnormal Psychology	3

SOC 310	Sociology of Deviant Behavior	3
SOC 311	Sociology of Addiction	3
SOC 346	Mental Health and Society	3
Management Information Systems		
BUAD 364	Management Information Systems	3
BUAD 464	Management Information Systems II	3
BUAD 465	Management Information Systems III	3
CSIT 107	Internet and Web Programming	3
GIS 201	Geographic Information Systems I	3
GIS 301	Geographic Information Systems II	3
SOC 350	Seminar in Cybersociology/Anthropology	3

General Electives: 40 hours chosen from the College Core Curriculum.

Requirements for the Minor in Health Services Administration

The objective of this interdisciplinary minor is to permit students to prepare for graduate work in health services administration and planning and public health, or for entry level positions in a variety of health care institutions.

Students are required to take 21 credit hours from among the following courses:

Requirements:**A. Health Policy Electives:** 6 credit hours

Two courses required from the following:

ANTH 301/	Plagues and Peoples	
SOC 312		
BIOL 343	Emerging Diseases	
BIOL 360	Aids and STDs	
HSA 310	Health Care Law	
HLTH 215	Personal and Community Health	
PSY 247	Health Psychology	
SOC 240	Health and Society	
SOC 345	Women, Health and Society	

B. Administration of Services: 6 credit hours

Two courses required from the following:

ACCT 201	Principles of Accounting I	
BUAD 310	Legal Environment of Business	
BUAD 321	Management and Organizational Behavior	
PSY 347	Industrial/Organizational Psychology	
POLI 311	Fundamentals of Public Administration	
POLI 380	Policy Evaluation	

SOC 325	Complex Organizations	
SOC 343	Health Systems and Policy	

C. Health Services Planning and Administration

HSA 300	Health Services Management	
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D. Areas of Special Interest and Application:

Two courses required from the following:

EDU 355	Introduction to Learning and Behavioral Disorders	
EDU 360	Developmental Disabilities	
PSY 356	Abnormal Psychology	
PSY 447	Introduction to Counseling	
SOC 210	Introduction to Gerontology	
SOC 311	Sociology of Addiction	
SOC 337	Sociology of Aging	
SOC 338	Sociology of Death and Dying	
SOC 346	Mental Health and Society	
SOC 477	Health Services Internship	

Prerequisites: Students who expect to elect this minor should include the appropriate pre-requisites in their College Core Curriculum.

Preparation for Graduate Study: Students who expect to pursue graduate work should consult the program coordinator for advice on other relevant courses.

Faculty are listed under the Department of Sociology and Anthropology.

HEALTH, WELLNESS AND RECREATION

Office: 116 Dods Hall
(716) 673-3101
E-mail: Charles.Davis@fredonia.edu
Charles C. Davis, Chairperson

INTRAMURALS AND RECREATION

Office: 154 Dods Hall
Phone: (716) 673-3590
E-mail: Janette.Mulka@fredonia.edu
Janette Mulka, Coordinator

The Department of Health, Wellness and Recreation offers academic classes that enhance lifetime wellness, personal health and well-being, drug prevention courses for Elementary Education majors, and intramural and recreational programs for students. Wellness courses are offered to enhance the quality of life of students and to develop skills in physical activities that can be continued for a

lifetime. Health enhancement courses such as Stress Management, Fitness and Nutrition, and Wellness and Health Promotion encourage students to take an active responsibility in managing their health.

The department also operates a fitness center, gymnasium-fieldhouse complex, natatorium, outdoor tennis courts, basketball courts and playing fields for intramural, recreational and club sports. The department offers an Interdisciplinary minor in Sport and Exercise Studies.

Intramurals and Recreation offers many sports and recreational activities to meet the needs of its student, faculty and staff participants. Our goal is to provide a variety of quality programs in order to foster an interest in a healthy and interactive lifestyle. Intramurals provide a fun way to meet new people, get exercise, and have friendly competitions. We employ 30 students to serve as field supervisors as well as referees. We offer one- to two-day tournaments, and leagues that run four to seven weeks. Women's, men's, and co-ed leagues are available for each sport that is offered. In the fall semester we typically offer sand volleyball, flag football, outdoor soccer, broomball, a 3 on 3 basketball tournament, indoor volleyball, indoor soccer, euchre tournament, and ultimate frisbee. The spring semester brings about basketball, floor hockey, wallyball, roller hockey, volleyball, softball, racquetball, and broomball.

The recreation department offers: Blue Devils Fitness Center, two gymnasiums, four racquetball courts, indoor and outdoor track, natatorium (Fall 2001), four outdoor basketball courts, and eight tennis courts.

Blue Devils Fitness Center

The Blue Devils Fitness Center is located in Dods Hall and consists of 5,200 square feet of activity space. The fitness center is one of the largest and best-equipped centers in the SUNY educational system. The fitness center offers strength training equipment, power lifting equipment, progressive resistance equipment and cardiovascular training equipment which meets the exercise needs of a variety of recreational as well as highly trained students and athletes. Dods Hall gymnasium is adjacent to the fitness center and consists of over 9,000 square feet of space in which we

conduct aerobics and step aerobics classes and a variety of recreational, intramural and athletic activities. This space can accommodate large fitness classes of over 100 students per class. The department's facility schedule can be accessed through the Fredonia home page.

Steele Hall Fieldhouse

The fieldhouse measures 155 feet x 130 feet (19,500) and is capable of seating 3,500 people. The Steele Hall Fieldhouse houses one 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. This area is also used for special events, the college graduation, 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 our facilities will allow the department to offer beginning, and advanced tennis, recreational and intramural programs and intercollegiate tennis for men and women.

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.

Natatorium

The natatorium, to be officially opened in the fall of 2001, consists of an eight lane competitive swimming pool and separate diving area which houses two one meter and one three meter diving boards. The permanent bleacher area seats 650 people. 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 which will allow the college 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-robics, 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.

Interdisciplinary Minor In Sport And Exercise Studies

Please refer to the section of this catalog dealing with the interdisciplinary minor on page 72 to view a full listing of course requirements for the three tracks that are offered in the minor.

The Department of Health, Wellness and Recreation offers an Interdisciplinary minor in Sport and Exercise Studies. Wellness courses are offered to enhance the quality of life of students and to develop skills in physical activities that can be continued for a lifetime. Health enhancement courses such as Stress Management, Fitness and Nutrition, and Wellness and Health Promotion encourage students to take an active responsibility in managing their health.

The Sport and Exercise Studies interdisciplinary minor has three options. The Athletic Coaching Certification Track (18 credit hours), The Sports Administration and Communications Track (23 credit hours) and the Sport and Exercise Sciences Track (23-24 credit hours). Each track will include some required courses, and areas of concentration/specialization where there will be a choice of electives. For each track, the electing of an applied outside experience (i.e., practicum/internship or independent study) will be encouraged. Please refer to the section of this catalog that describes the interdisciplinary minor for a complete description of course requirements for each of the following curriculum tracks.

The Athletic Coaching Track prepares students to meet the New York State established criteria to qualify to coach in elementary and secondary schools and in youth recreation programs. Students can organize 18 credit hours needed for graduation to meet the state mandate for strenuous/contact activities and

non-strenuous/non-contact activities. Core courses relate to philosophy, principles and organization of athletics in education; health sciences applied to coaching (e.g. First Aid, Psychology of Coaching, and Adult CPR); and techniques of coaching.

The Sports Administration and Communication Track will expose students to (a) the behavioral dimensions of sport, (b) general management and organizational skills and issues, (c) sport-specific management principles, strategies, and issues (d) marketing, finance, and legal issues (e) communication and ethical issues.

The course categories included in this track was strongly influenced by the Sport Management Program Standards established by the National Association for Sport and Physical Education and the North American Society for Sport Management. This track will aid in the preparation and viability of students for jobs and graduate work in sports management, marketing, and public relations.

The Sport and Exercise Sciences Track will expose students to scientific principles and issues related to sport and exercise. The contributions of the behavioral, social and physical sciences (psychology, sociology and physiology) will be emphasized. The core courses for this track include Sport Psychology, the Sociology of Sport, and the Physiology of Exercise and Sport. Students will also be required to choose one course in each of the following concentration areas: (a) physiological bases, (b) group and organizational contexts, (c) developmental and educational issues and principles, and (d) personality, assessment, and counseling issues.

The course categories utilized in this track are strongly influenced by the criteria that the Association for the Advancement of Applied Sport Psychology requires for the certification of doctoral-level professional sport consultants. This track will aid in the preparation of students for graduate work dealing with sport and exercise behavior within their discipline (e.g. psychology, sociology, kinesiology, and exercise science). It will also provide important information about sport and exercise behavior for those planning to be coaches, fitness specialists, physical therapists, and athletic trainers.

A maximum of 12 credit hours may be taken in the Sport and Exercise Science track from any one department in fulfilling the requirements of this minor.

Wellness courses are offered to enhance the quality of life of students and to develop skills in physical activities that can be continued for a lifetime. Health enhancement courses such as stress management, Fitness and Nutrition, and Wellness and Health Promotion encourage students to take an active responsibility in managing their health. Basic, intermediate and advanced Wellness Activity courses:

Coed 100 level Wellness courses:

Basic: For individuals having little or no knowledge or skill in the activity. Emphasis is on the development of basic skills and knowledge of the activity.

Intermediate or Advanced: For students who have developed the basic skills and knowledge of the activity. Emphasis in advanced classes is placed on the development of advanced skills and strategies. A student may elect to enroll in 100-level Wellness courses with a maximum of 4 credit hours to be used as elective credit toward a degree. Some activity courses at the 100-level may be repeated for credit by students within the maximum 4 hours of elective credits. The following courses are not repeatable: PHED 102, 103, 104, 105, 106, 107, 109, 120, 128, 134, and 138. The following courses are repeatable one time: PHED 121, 129, and 135.

Students may participate in additional 100-level courses over the allowable maximum (4) elective credits. However, all 100-level courses beyond the first 4 credits will be in excess of the normal 120 hours required for a degree.

HISTORY

Office: E332 Thompson Hall
(716) 673-3277
E-mail: History@fredonia.edu
William Graebner, Chairperson

The Department of History offers a broad-based and worldwide curriculum, with an emphasis on 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 multicultural and international community. The History major also prepares the student for a variety of career opportunities, including law (law schools take a third of their candidates from history majors), government at all levels, editing and book publishing, journalism, communications and media, college and university teaching (with an advanced degree), and public history venues such as historical sites, museums and libraries. In addition, many jobs in business and industry are open to liberal arts graduates with training in history. The Social Studies major prepares students to teach in middle school and high school.

Internships: The history department facilitates internships at local museums and archives, in Washington, D.C., Albany, N.Y., and within the college. The department also encourages students to participate in international experiences.

Honors and Awards

The honors program of the Department of History is designed to honor graduates of the history or social studies programs who have consistently demonstrated ability and produced work of high quality in the discipline. The honors designation is given to students who achieve an all-college average of 3.0; an average in history courses of 3.25; and who earn appropriate grades in HIST 499 (Senior Honors Seminar) and HIST 201 (Doing History). For more information on the honors program, contact the Chairperson.

The department gives a variety of awards. The Chazanof Award recognizes student work in local history. The Gallagher Scholarship is awarded to a minority student pursuing a career in education. The MacPhee Award is given to a promising History

or Social Studies major who has attained junior rank. The department also annually recognizes an Outstanding History major, an Outstanding History student, and an Outstanding History paper. *Phi Alpha Theta*, the history honor society, recognizes academic excellence (see page 192).

Requirements for the Bachelor of Arts Degree in History

Thirty-nine credit hours in history, at least 18 hours of which must be at the 300 level or above, with the exception that follows. Of those 18 hours, 6 hours may be taken from among the following courses: HIST 285 (Aztecs, Incas, Mayas), HIST 261 (Islamic Civilizations), HIST 264 (East Asian Civilizations). Before taking 300-level courses, students should have completed HIST 201 (Doing History). Selected students will have the opportunity to participate in HIST 499 (Senior Honors Seminar), offered in the fall semester. The program must include the following:

- | | | |
|----|--|----|
| A. | HIST 105-106; 3 additional credit hours from American/U.S. history at the 300-level or above | 9 |
| B. | HIST 101 or 115 and HIST 102 or HIST 116); 3 additional credit hours from European history at the 300-level or above | 9 |
| C. | Three courses from the history of Africa, Asia, Middle East, American Indians, Latin America, and/or Global | 9 |
| D. | three additional history courses as advised | 9 |
| E. | HIST 201 Doing History (should be taken in the sophomore year) | 3 |
| | Total | 39 |

Requirements for Transfer Credit

Students transferring credit to Fredonia should normally expect no more than 21 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 201 and HIST 499 must be taken at Fredonia. HIST 499 also fulfills any 300-level or elective requirement.

Other Requirements: Majors must fulfill all testing and assessment requirements set by the department. These presently include pre- and post-testing.

Students whose objectives require a different program may, upon petition to the department chairperson, seek

approval for a program of their own design.

Requirements for the Bachelor of Arts Degree in Social Studies (leading to Initial Certificate)

Students who will graduate on February 1, 2004 or earlier come under the requirements listed in the 1999-2001 catalog. Students who will graduate after February 1, 2004 come under the requirements described below. Students who receive their Initial Certificate in 2004 or after will need to complete a master's degree within three years to receive their professional certificate.

Responsibility for the B.A. in Social Studies is shared by the School of Education and the Department of History. Advising and final approval of requirements is done by the Department of History. Students are encouraged to double major in history (or another field) in order to enhance their understanding of the discipline and their future employment opportunities.

Requirements beyond those of the College Core Curriculum include:

I. Professional Education Courses (37 credit hours required)

EDU 105	Introduction to Contemporary Education (recommended for freshmen)	3
EDU 106	(field experience required)	
EDU 224	Adolescent Development & Child Abuse Workshop (recommended for sophomores)	3
EDU 250	Exceptional Child (recommended for sophomores)	3
EDU 251	(field experience required)	
EDU 276	Foundations of Literacy and Technology	3
EDU 305	Cultural and Linguistic Diversity (recommended for juniors)	3
EDU 313	(field experience required)	
EDU 349	Educational Psychology & Child Abuse Workshop (recommended for juniors)	3
EDU 419	Social Studies Secondary School Methods (sr. year/offered fall semester only)	3
HLTH 300	Education in Drugs, Alcohol and Tobacco (recommended for soph., jrs. and srs.)	1
EDU 430	Student Teaching—Secondary School (senior year/offered spring semester only)	15

II. Social Studies Course Work (52 credit hours required)

Group I: Basic Knowledge (all courses required, 15 credit hours)

HIST 101	World History I	3
HIST 102	World History II	3
HIST 105	U.S. History to 1877	3
HIST 106	U.S. History Since 1877	3
POLI 120	American Politics	3

Group II: Methodologies (all courses required, 13 credits)

HIST 201	Doing History	3
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(This course is normally taken in the sophomore year)

HIST 202	History and Technology Workshop	1
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ECON 201	Principles of Macroeconomics	3
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(A special section of this course, designed for Social Studies majors, is offered in the fall semester only)

ECON 202	Principles of Microeconomics	3
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(A special section of this course, designed for Social Studies majors, is offered in the spring semester only)

POLI 352	World Political Geography	3
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Group III: Cultures and Civilizations (9 credits)

A. American Minorities

Any one of the following:

HIST/INDS 200	Introduction to Race and Ethnicity	3
HIST 333	African-American History to 1865	3
HIST 334	African-American History since 1865	3
SOC 316	Minority Groups (prerequisite: SO 116)	3

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

B. World Regional Civilizations

Required:

HIST 116	Modern Western Civilizations	3
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and any one of the following:

HIST 261	Islamic Civilization	3
HIST 264	East Asian Civilizations	3
HIST 285	Aztecs, Incas and Mayas (Pre-Columbian Civilizations)	3

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

A. 3 courses in History at the 300-level or above: one with focus on the American/U.S. experience; one on Europe; one on global or other world cultures.

B. 2 courses at the 300-level or above in History, Political Science, Sociology, Anthropology, Economics, English, Art, Foreign Languages and Literature, Psychology or Communications. The courses must be in different departments. A list of courses currently acceptable is available in the history department office. Students seeking to double major in Social Studies and History should take one history course in this category.

III. Foreign Language

(0-6 credit hours)

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 four ways: (1) completion of course work at the 116 level at Fredonia, or (2) transferring the equivalent of two successful college semesters (116 level), or (3) scoring at the 50th percentile or higher on the CLEP exam, or (4) completion of three years of high school language with a Regents score of 85.

Double Major

To achieve the double major in history with the addition of only one history course, the student must select a history course for the American minorities requirement and for one of the Part IV B courses in the Building Knowledge group.

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 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. All requirements for EDU 419 and EDU 430 must be completed under Fredonia supervision. To be applied to the requirements of the Social Studies program, transferred courses must have been completed with a grade of C+ or better.

Other Requirements: All majors must fulfill all testing and assessment requirements set by the Department of History. At present, these include pre- and post-testing. Grades must be C+ or better in all required courses in the Social Studies program. Writing-intensive requirements 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.

Enrolled students and transfer students wishing to declare the Social Studies major must have an overall GPA of 2.50. The grade point requirements for entering the student teaching semester are: overall GPA of 2.50, in Professional Education courses 2.50, and in the Social Studies component 2.50. Acceptance into the senior, professional year is also contingent upon a personal interview and review by the Social Studies screening committee composed of Department of History faculty and area social studies teachers. A copy of the criteria used by the screening committee may be obtained in the history department. Acceptance into student teaching also requires approval by the chairperson of the School of Education. For requirements for the Professional Education courses and entrance to student teaching, consult the School of Education listings starting on page 26.

EDU 419 can be taken only in the fall semester of the senior year. EDU 430 requires the entire spring semester as a full course load.

Students are strongly advised to pursue a second major in one of the social science disciplines (economics, history, political science, or sociology/anthropology) and may count appropriate courses taken for the Social Studies major and the College Core Curriculum requirements towards such a second major. A student wishing Social Studies certification with the history major should explore this option with his or

her academic advisor. Computer Science (CSIT 104) is also recommended.

Requirements for a Minor in History

Eighteen credit hours of course work in history, including 9 credit hours at the 300-level or above. The department recommends five concentrations:

Global Studies: HIST 101-102, HIST 116, HIST 386 and two additional upper level courses (from HIST 385, HIST 389, and HIST 390) or two regional courses focusing on problems in the contemporary era (i.e. Modern Middle East and Modern China, or Modern China and U.S. in the 20th century, or Europe in the 20th century);

American Culture: HIST 105-106, and four additional courses chosen from: HIST 332, 333, 334, 335, 338, 339, 347, 351, 353, 355, 375 and 376;

North American Studies: HIST 105-106, and four additional courses chosen from: HIST 356, 358, 378, 381, 383, 342;

Native American Cultures: HIST 105-106, and four additional courses chosen from HIST 356, 358, 285, 380, 382, 282.

Middle East-Asian History: HIST 101-102, 116, and three of the following courses: HIST 261, 264, 265, 266, 361, 366, 367, 368.

Other concentrations are also possible. The program must be prepared in consultation with a department faculty member and receive department approval. No more than 9 credit hours of history credit earned prior to the declaration of the minor may be credited toward the program.

INDUSTRIAL MANAGEMENT

Office: 116 Houghton Hall
(716) 673-3302
E-mail: Indlmgnt@fredonia.edu
Peter G. Mattocks, Director

There is a well recognized need for scientifically and technologically educated managers in the industrial and 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. This 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 (130/132 credit hours) is an integrated multidisciplinary curriculum combining courses from applied physics (27/29 credit hours), business/economics (24 credit hours), mathematics/computer science (24 credit hours), social sciences/humanities (24 credit hours), 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. In the process, the student is provided with a broad-based liberal education.

Required Core Program
(87-89 hours):

<i>Physics</i> (27-29 credit hours)		
PHYS 230-231	University Physics I & II and PHYS 232-233 (Labs)	10
PHYS 321-322	Engineering Mechanics I & II	8
PHYS 323	Circuit Analysis I or Electronics and PH 327 (Lab)	4
PHYS 324	Circuit Analysis II or Digital Electronics and PH 328 (Lab)	4
PHYS 330	Thermodynamics	3
		<u>27-29</u>

Mathematics/Computer Science
(24 credit hours)

MATH 122-123-223	University Calculus I, II & III	12
MATH 224	Differential Equations	3
MATH 325	Numerical Analysis	3
CSIT 106	C/C++ Programming	3
CSIT 105	Visual Basic I	3
		<u>24</u>

Business/Economics (24 credit hours)

ACCT 201-202	Principles of Accounting I & II	6
ECON 201-202	Principles of Microeconomics and Principles of Macroeconomics	6
BUAD 310	Legal Environment of Business	3
BUAD 315	Principles of Business Finance	3
BUAD 321	Management and Organizational Behavior	3
BUAD 325	Principles of Marketing	3
		<u>24</u>

Operations Research and Statistics
(6 credit hours)

BUAD 327	Production and Operations Management or Probability Models in Operations Research	3
MATH 359	Introduction to Operations Research	3
MATH 375	Fundamentals of Statistics for Economics & Business or Probability and Statistics	3
ECON 200	Statistics or Statistics for Sociologists	3
MATH 350		3
PSY 200		3
SOC 200		3
		<u>6</u>

Communications (6 credit hours)

COM 105	Public Speaking	3
ENGL 375	Writing for the Professions	3
		<u>6</u>

In addition, completion of an appropriate summer industrial work experience is required prior to entering the senior year.

Faculty are listed under the physics department.

INTERDISCIPLINARY STUDIES

The Interdisciplinary Studies degree program provides students with the greatest possible flexibility in meeting their educational goals by offering the opportunity to design creative and individualized interdisciplinary majors and minors.

Students in the Interdisciplinary Studies programs are committed to exploring innovative connections and emerging relationships drawn from the traditional disciplines and those developing areas of overlap and interface. These students are typically explorers and creative problem solvers, and many Interdisciplinary Studies students construct their own topics of study (for either major or minor) using analytical approaches and tools from several fields. Students may also choose to pursue one of the model major programs (to the chart). The degree program constitutes a student's major; the interdisciplinary minors may be taken by students majoring in any program in the college.

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 Vice President/Graduate Dean. The necessary form and guidelines for submitting a formal individualized major proposal are available in the Office of the Registrar. Either an individualized degree program or a model major program will lead to the degree of Bachelor of Arts or Bachelor of Science (B.A. or B.S.).

Students interested in declaring an interdisciplinary major or minor should consult with the coordinator from the appropriate area. Model major and model minor programs and coordinators are listed on the chart. Majors and minors must be formally declared through the Office of the Registrar.

Requirements for an Interdisciplinary Studies Degree Program

1. For students who choose a model major program (see list), each student is advised by the program coordinator or a member of the cadre of faculty from the lead department for each model major;

2. For students who pursue an individualized major, formal completion and submission of the degree plan proposal must be approved by the

Associate Vice President/Graduate Dean;

3. All students in this program must complete the college's requirements for the College Core Curriculum and

the number of credit hours required outside of the major;

4. A maximum of 45 credit hours in any one discipline may count toward the 120 credit hours total required for the baccalaureate;

5. The proposed major must constitute at least 36 hours of which no more than 15 hours may come from one discipline. At least 24 of those 36 credit hours must be at the 300-400 level.

6. A minimum of 36 hours of 300-400 level courses must be included in the 120 hours required for graduation.

Interdisciplinary Studies Model Majors

<p>Areas of Study American Studies see page 8</p> <p>Arts Administration see page 8</p> <p>Criminal Justice see page 18</p> <p>Environmental Sciences see page 31</p> <p>International Studies see page 44</p> <p>Legal Studies see page 47</p> <p>Music Business see page 60</p>	<p>Coordinators</p> <p>Dr. Christina S. Jarvis, English 235 Fenton Hall (716) 673-3430 Dr. Claudia Sadowski-Smith 274 Fenton Hall (716) 673-3587 (co-coordinators)</p> <p>Jefferson Westwood, Director G-15 Rockefeller Arts Center (716) 673-3217</p> <p>Dr. B. Joyce Stephens, Sociology/Anthro. W381 Thompson Hall (716) 673-4611</p> <p>Dr. Alicia Perez-Fuentetaja, Biology 130 Jewett Hall (716) 673-3817</p> <p>Dr. A. Jacqueline Swansinger, History E311 Thompson Hall (716) 673-3881</p> <p>Dr. James R. Hurtgen, Political Science E386 Thompson Hall (716) 673-3885</p> <p>Dr. Harry Jacobson, Music 1139 Mason Hall (716) 673-3248</p>
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Interdisciplinary Studies Model Minors

<p>African American Studies see page 53</p> <p>American Studies see page 8</p> <p>Arts Administration see page 8</p> <p>Criminal Justice see page 18</p> <p>Film Studies see page 32</p> <p>Geographic Information Systems see page 33</p> <p>Gerontology see page 35</p> <p>Journalism see page 46</p> <p>Latino Studies see page 95</p> <p>Sport and Exercise Studies</p> <p>Women's Studies see page 78</p>	<p>Dr. Najia Aarim, History E308 Thompson Hall (716) 673-3883</p> <p>Dr. Christina S. Jarvis, English 235 Fenton Hall (716) 673-3430 Dr. Claudia Sadowski-Smith 274 Fenton Hall (716) 673-3587 (co-coordinators)</p> <p>Jefferson Westwood, Director G-15 Rockefeller Arts Center (716) 673-3217</p> <p>Dr. B. Joyce Stephens, Sociology/Anthro. W381 Thompson Hall (716) 673-4611</p> <p>Dr. William Graebner, History E332 Thompson Hall (716)-673-3277</p> <p>Dr. Ann K. Deakin, Geosciences 114 Houghton Hall (716) 673-3884</p> <p>Dr. Richard D. Reddy, Sociology W367 Thompson Hall (716) 673-4609</p> <p>Dr. Joan A. Burke, English 278 Fenton Hall (716) 673-3125</p> <p>Dr. A. Jacqueline Swansinger, History E311 Thompson Hall (716) 673-3881</p> <p>Dr. Charles Davis, Health, Wellness & Recreation 123 Dods Hall (716) 673-3892 Dr. Bruce Klonsky, Psychology W339 Thompson Hall (716) 673-3892 (co-coordinators)</p> <p>Dr. Adrienne McCormick, English 258 Fenton Hall (716) 673-3851</p>
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Requirements for the 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. At present, model minors are available in African American Studies, American Studies, Arts Administration, Criminal Justice, Dance, Film Studies, Geographic Information Systems, Gerontology, Latino Studies, Social Work, Sport and Exercise Studies, and Women's Studies. Individualized minors may be created under the advisement of an appropriate area coordinator. Minors must be formally declared through the Office of the Registrar.

Interdisciplinary Studies Courses

In addition to the major programs and minors described on the previous page, the Interdisciplinary Studies program offers several courses developed for interdisciplinary or special interest purposes.

Independent study and internship options are available through Interdisciplinary Studies. 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 Coordinator of Internships. 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.

INTERNATIONAL STUDIES

E311 Thompson Hall

(716) 673-3881

E-mail: Internat@fredonia.edu

A. **Jacqueline Swansinger**, *Coordinator*

As we embrace the reality of global interdependence, the International Studies major has been designed to prepare students for international leadership roles in the twenty-first century. This program encourages its majors to think both globally and across disciplines as they seek to understand the dynamics of a global society. The International Studies major has been designed to prepare students for careers in the most dynamic sectors of global governance, society and economy. The vitality behind this program comes from faculty in several disciplinary fields who offer courses and act as a steering committee for the program.

Students take a core of interdisciplinary courses, select a specialization, and complete a minor. The core courses in International Studies provide all students with a basis on which to build their individualized programs through one of six thematic specializations. Core courses ensure students will be introduced to international relations, global history, cultural issues, and the concerns and challenges facing developing and developed countries. Students also select a minor that complements the thematic specializations. The specializations offer students the opportunity for more individualized training within the framework of international studies. The six specializations are International Political Economy, Peace and Conflict, European Cultural Studies, Cultural Studies of the Americas, Advanced Industrial Societies, and the Developing World. The International Political Economy specialization prepares students for careers or graduate study in the area of economic and political analysis and policy-making. The Peace and Conflict specialization would be of interest to students interested in pursuing careers in diplomacy or national security. With the proliferation of international governmental and non-governmental organizations dedicated to cultural exchange and dialogue and the globalization of the entertainment industry, the European Cultural Studies and the Cultural Studies of the Americas specializations prepare students to seek careers in fields such

as arts administration, global communication, and the championing of human rights. The two specializations - Advanced Industrial Societies and the Developing World - lay the foundation for those students who will pursue regional specializations in international job settings or in graduate-level training. Proficiency must be demonstrated in a foreign language equivalent to a two-year course of study. More advanced study of a foreign language is strongly encouraged. Students gain international experience through a study program abroad or an international internship.

This is an interdisciplinary model major program; for specific degree requirements unique to Interdisciplinary Studies, refer to page 42.

Requirements for the Bachelor of Science/Interdisciplinary Studies Major in International Studies

I. *Core Requirements* (23 credit hours)

INTL 101	International Studies Colloquium	1
ANTH 115	Introductory Anthropology	3
ECON 201	Macroeconomics	3
	Plus two of the next three courses listed below:	6
ENGL 211	World Poetry	
MUS 333	Music of the World	
ART 116	Masterpieces of Art from 1400 to Present	
HIST 102	Global Studies II	3
POLI 150	U.S. And World Affairs	3
POLI 352	World Political Geography	3
INTL 401	Senior Colloquium	1

II. *Foreign Language* (3 to 12 credit hours)

1. Completion of course work through the 216 level (second-semester intermediate). This requirement may be satisfied by a student attaining a satisfactory score on the Foreign Language Placement test or a score of 4 or 5 on the Advanced Placement Educational Testing Service Examination.

2. Students 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. Foreign language training at the 300- and 400-levels is strongly recommended.

III. *International Experience* (6 credit hours)

Students must take 6 credit hours of an international experience that has been approved by the International Studies Curriculum Committee. An experience in a foreign country is preferred, but not mandatory. This requirement can be fulfilled via enrollment in a short- or long-term study abroad program or completion of an internship with an international agency.

IV. *Specializations* (21 credit hours)

A. Students select one of the six specializations listed below:

- International Political Economy
- Peace and Conflict
- European Cultural Studies
- Cultural Studies of the Americas
- Advanced Industrial Societies
- The Developing World

B. No more than 9 credit hours may be taken in the same discipline. (Exception: International Political Economy Specialization.)

International Studies Specializations Guidelines:

1. Students select one specialization.
2. No more than 9 credit hours in the same discipline (Exception: International Political Economy Specialization)
3. A student must select a minor from the list provided for each of the specializations.

International Political Economy

Minor: Economics or Political Science, which may include some prerequisites below.

From courses below, students take seven courses, distributed as follows:

- a. One course from each area: economics, political science, history (total three courses).

b. Three courses from the field in which one does not minor (POL or ECON).

c. One course from ECON, POLI or HIST (excluding non-minor field).

ECON 202	Microeconomics
ECON 320	International Trade and Finance
ECON 321	Economics of Multinational Corporations
ECON 335	Economic Development
ECON 345	Comparative Economic Systems
ECON 380	Environmental Economics and Natural Resource Economics
ECON 395	Comparative Human Resources
HIST 266	Modern East Asia
HIST 311	Europe in the Modern World
HIST 361	Modern Middle East
HIST 367	20th Century China
HIST 368	Modern Japan
HIST 383	History of Latin America II
HIST 386	Global Studies
POLI 341	Political Economy of Development
POLI 344	Comparative Public Policy
POLI 346	East Asian Political Economy: Japan, China and Korea
POLI 348	European Union
POLI 354	Middle East Politics
POLI 355	International Political Economy
POLI 356	U.S. Foreign Policy

Peace and Conflict (21 credit hours)

Minors: History, Political Science.

CM 385/ HY 385	International Media/International Communication
COMM 465	Intercultural Communication
ECON 202	Microeconomics
ECON 345	Comparative Economic Systems
LANG 398	The Holocaust in Literature
HIST 212	History of the Holocaust
HIST 309	Modernization of Europe
HIST 311	Europe in the Modern World
HIST 312	Modern Germany
HIST 342	The American Century
HIST 349	U.S. Military History
HIST 350	Vietnam and the Growth of the National Security State
HIST 361	Modern Middle East
HIST 368	Modern Japan
POLI 354	Politics of the Middle East
POLI 356	U.S. Foreign Policy

POLI 361	Modern Political Theory
POLI 363	Game Theory

European Cultural Studies (21 credit hours)

Minors: Art, Communication, English, Modern (Foreign) Languages, History, Music, Philosophy

ART 340	History of Architecture
ART 451	Modern Architecture
ENGL 322	The Romantic Age
ENGL 326	Victorian and Early Modern Literature
ENGL 328	Modern English Literature
ENGL 396	Russian Literature
HIST 116	Modern Western Civilization
HIST 306	The Age of Reformation
HIST 309	Modernization of Europe
HIST 311	Europe in the Modern World
HIST 312	Modern Germany
HIST 322	French Revolution and Napoleon
FREN 315	French Masterpieces I
FREN 316	French Masterpieces II
FREN 319	Survey of French Literature I
FREN 320	Survey of French Literature II
SPAN 315	Introduction to Hispanic Literature
SPAN 319	Survey of Spanish Literature I
SPAN 320	Survey of Spanish Literature II
MUS 115	Music in Appreciation
MUS 263	Music History in Western Civilization
MUS 350	Special Topics
PHIL 338	Marxist Thought
POLI 345	Film and Politics

Any foreign language or culture course focusing on a European country.

Cultural Studies of the Americas (21 credit hours)

Minors: Art, Communication, English, Modern (Foreign) Languages, History, Music, Philosophy.

ANTH 324	Anthropology of the Caribbean
ANTH 345	Canada's Native People
ENGL 240	Introduction to African-American Literature and Culture
ENGL 241	Introduction to Latino Literature and Culture
ENGL 397	Contemporary Multicultural American Literature
ENGL 395	Third World Literature
LANG 371	Canadian Writers

LANG 378	Canada Today
FREN 310	Quebec Literature and Culture
LS 325	Survey of Spanish-American Literature
HIST 285	Indigenous America: Aztecs and Their Neighbors
HIST 347	U.S. Immigration
HIST 351	Defining America
HIST 380	History of Mexico I
HIST 381	History of Mexico II
HIST 382	History of Latin America I
HIST 383	History of Latin America II
POLI 331	Canadian Politics

Advanced Industrial Societies (21 credit hours)

Minors: Economics, History, Political Science

CM 385/ HY 385	International Media/International Communication
ECON 201	Microeconomics
ECON 320	International Trade and Finance
ECON 321	Economics of Multinational Corporations
ECON 345	Comparative Economic Systems
ECON 395	Comparative Human Resources
LANG 378	Canada Today
FREN 323	France Today
GERM 323	Germany Since 1918
HIST 212	History of the Holocaust
HIST 309	Modernization of Europe
HIST 311	Europe in the Modern World
HIST 312	Modern Germany
HIST 317	Modern France
HIST 342	The American Century
HIST 368	Modern Japan
HIST 386	Global Studies
PHIL 342	Values in a Technological Society
POLI 330	Western Europe
POLI 331	Canadian Politics
POLI 332	Russian Politics
POLI 346	East Asian Political Economy: Japan, China and Korea
POLI 355	International Political Economy
SOC 321	Population and Society
SOC 361	Law in the World

The Developing World (21 credit hours)

Minors: Anthropology, Economics, History, Political Science, Sociology

ANTH 321	Anthropology of Africa
ANTH 322	Anthropology of Indian America
ANTH 324	Anthropology of the Caribbean
ANTH 345	Canada's Native People
COMM 385/ HIST 385	International Media/International Communication
COMM 465	Intercultural Communication
ECON 201	Microeconomics
ECON 320	International Trade and Finance
ECON 321	Economics of Multinational Corporations
ECON 335	Economic Development
ECON 345	Comparative Economic Systems
ECON 380	Environmental Economics and Natural Resource Economics
ENGL 395	Third World Literature
HIST 261	Islamic Civilization
HIST 266	Modern East Asia
HIST 285	Indigenous America: Aztecs and Their Neighbors
HIST 342	The American Century
HIST 361	Modern Middle East

HIST 366	Late Imperial China
HIST 367	20th Century China
HIST 380	History of Mexico I
HIST 381	History of Mexico II
HIST 382	History of Latin America I
HIST 383	History of Latin America II
HIST 386	Global Studies (if not taken in core)
HIST 387	Comparative Slave Societies
POLI 334	African Politics
POLI 341	Political Economy of Development
POLI 346	East Asian Political Economy: Japan, China and Korea
POLI 354	Politics of the Middle East
SOC 314	Contemporary Africa
SOC 321	Population and Society

JOURNALISM

(interdisciplinary minor only)

278 Fenton Hall
(716) 673-3125
E-mail: Joan.Burke@fredonia.edu
Joan A. Burke, *Coordinator*

The Journalism minor has been designed to prepare students for careers in either print or broadcast journalism. The minor features a strong core in news gathering, research and writing, with a total of five core courses required. Students will

add a two-course emphasis in either print journalism, broadcast journalism or photojournalism, and will be expected to round out their studies with general knowledge courses in history, economics, and political science. Students are encouraged to do an off-campus internship or work for *The Leader*. *The Leader* is the college's award winning student newspaper whose staff members earn internship credit.

Students are required to take 30 credit hours from among the following courses:

Journalism Core (15 credit hours)

JOUR 270	Introduction to Print and Electronic Media
JOUR 370	Reporting and Newswriting I
JOUR 371	Reporting and Newswriting II
JOUR 372	Reporting and Newswriting III
COMM 420	Communication Law and Ethics

All students are *encouraged* to do an external internship or work for *The Leader*.

Emphasis (6 credit hours)

All students will take at least two courses from among the following:

ART 255 Photography I *and* ART 354 Photojournalism

JOUR 366 Opinion Writing *and* JOUR 465 Internship or JOUR 470/471 Journalism Seminar

COMM 358 Television News *and* COMM 395 Radio News

General Knowledge Core (9 credit hours)

All students will take the following courses to help them develop a basis of understanding of economic, political and historical issues:

ECON 101	Introductory Economics or
ECON 201	Principles of Macroeconomics
POLI 120	American Politics
HIST 106	United States History II

LEGAL STUDIES

E386 Thompson Hall
(716) 673-3885
E-mail: Legalstu@fredonia.edu
James Hurtgen, *Coordinator*

Legal Studies is designed to provide students with a broad background of interdisciplinary courses focusing on the development and structure of the law. It provides a blended, specialized curriculum that retains the strengths of a liberal arts and sciences education while providing an excellent preparation for advanced study in the field of law. Students will be provided with an interdisciplinary approach to the study of the American judiciary with integral layers of ethics, social sciences and analytical skills. An internship in a legal setting is one of the key components. The program is especially helpful for those seeking a more complete understanding of the legal system and the interaction of law in society, and those preparing for the Law School Admission Test. A pre-law advisory committee exists to provide students with career counseling.

This is an interdisciplinary model major program; for specific degree requirements unique to Interdisciplinary Studies, refer to page 42.

I. *Core Requirement* (6 credit hours)

POLI 276	Law and Society	3
POLI 277	Introduction to Law	3

II. *Legal Foundations*
(9 credit hours from)

PHIL 362	Philosophy of Law	3
POLI 370	Constitutional Law*	3
POLI 371	Civil Rights and Liberties*	3
POLI 383	Courts and Social Policy*	3
SOC 361	Law in the World*	3

III. *Law and the Legal System*
(3 credit hours from)

ACCT 311	Business Law	3
ACCT 312	Business Law II*	3
BUAD 310	Legal Environment of Business	3
COMM 353	Communication, Law and Ethics*	3
HSA 310	Health Law	3
PHIL 262	Crime and Punishment	3
SOC 360	Criminal Justice System*	3

IV. *Law and Philosophy* (6 credit hours from)

PHIL 218	Introduction to Ethics	3
PHIL 265	Social and Political Philosophy	3
PHIL 310	Administrative Ethics	3
PHIL 312	Current Moral Issues and Principles	3
PHIL 364	Justice, Law and Economics	3
HIST 375	History of Authority*	3
POLI 330	Western European Politics*	3
	or	
POLI 331	Canadian Politics*	3
	or	
POLI 332	Russian Politics*	3
POLI 360	Classical Political Theory*	3
POLI 361	Modern Political Theory*	3

V. *Law and Human Behavior*
(6 credit hours from)

PSY 245	Social Psychology*	3
	or	
SOC 204	Social Psychology*	3
PSY 356	Abnormal Psychology*	3
SOC 310	Sociology of Deviant Behavior*	3
	or	
SOC 362	Criminology*	3
SOC 363	Victimology*	3
SOC 364	Juvenile Delinquency*	3

VI. *Skill Requirements*
(9 credit hours from)

ECON 201	Principles of Macroeconomics	3
ECON 202	Principles of Microeconomics	3
PHIL 106	Critical Thinking	3
	or	
PHIL 116	Introduction to Deductive Logic	3
	or	
PHIL 216	Intermediate Deductive Logic*	3
	or	
PHIL 220	Introduction to Inductive Logic	3
POLI 200	Statistics	3
	or	
SOC 200	Statistics	3
POLI 210	Methods	3
	or	
SOC	Research Methods	3

VII. *Legal Internship* (Optional)

*prerequisite required

Most professions require effectiveness in writing and speaking. This is certainly true of the legal profession. Students are advised to choose courses which will help them develop these skills; e.g. COMM 105 and COMM 205 for speaking and upper division courses as electives for writing.

Students should also acquire a knowledge of standard computer software including word processing, spreadsheet and database programs. Familiarity with bibliographic and data search routines including the Internet and World Wide Web are strongly encouraged.

(Latino Studies, see Multiethnic Studies, page 53).

MATHEMATICS

Office: 223 Fenton Hall
(716) 673-3243
E-mail: Math@fredonia.edu
H. Joseph Straight, *Chairperson*
Khalid J. Siddiqui, *Associate Chairperson*

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 interrelation 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 Mathematics and Computer Science offers several undergraduate program options within mathematics. The Liberal Arts track is recommended for those who plan to pursue graduate study in mathematics or seek general employment following graduation. Those students who plan a mathematics-related career in business, industry, or science may wish to follow the Applied Mathematics track. For those students planning a career in teaching, we offer two program options: Adolescence Education – Mathematics, to prepare high school mathematics teachers, and Middle Childhood Education – Mathematics Specialist, to prepare

mathematics teachers for the middle school grades. Both of our teacher preparation programs lead to recommendation for Initial Certification in New York State.

The department offers a Master of Science in Education degree program to provide middle and high school mathematics teachers with the opportunity to work towards Professional Certification. The department also offers minors in Mathematics and Applied Mathematics and, in collaboration with the Physics Department, a degree program in Mathematics-Physics; see page 62. We also participate in the Cooperative Engineering and Cooperative Agriculture programs; see pages 28 and 7.

Many mathematics students participate in the activities of the Mathematics Club (*Chi Tau Omega*) and the Mathematics Teacher Education Club. The former is a Student Chapter of the Mathematical Association of America, and the latter a Student Affiliate of the National Council of Teachers of Mathematics. Both clubs hold academic and social activities, and help 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.

Two scholarships are awarded annually to mathematics majors based on academic performance and faculty recommendations: the Frank R. Olson Scholarship in Mathematics and the Earl G. Mathewson Scholarship in Mathematics Education.

For further details about the programs in mathematics contact Dr. H. Joseph Straight, chairperson of the Department of Mathematics and Computer Science. See page 16 for the programs offered in Computer and Information Sciences.

Requirements for the Bachelor of Science Degree in Mathematics

Liberal Arts Track (45 or 46 credit hours):

CSIT 106	Scientific Programming Using C++	3
	or	
CSIT 121	Computer Science I	4
	or	
MATH 125	Software for Mathematics	3
MATH 122	University Calculus I	4
MATH 123	University Calculus II	4
MATH 210	Discrete Mathematics	4
MATH 223	University Calculus III	4
MATH 224	Differential Equations	3
MATH 231	Linear Algebra	4
MATH 323	Intermediate Real Analysis	3
MATH 331	Abstract Algebra	3
MATH 405	Senior Seminar	1
MATH 420	Advanced Calculus	3
	Three additional MATH or STAT courses numbered 311 or higher, as advised	9
Total hours in Liberal Arts track:		45 or 46

Cooperative Engineering students following this track may substitute PHYS 425 for MATH 420.

Students in the Liberal Arts track are strongly advised to take additional courses in computer science consistent with their career and educational objectives.

Applied Mathematics Track:

This track contains two options, both of which require the following Applied Mathematics Core:

CSIT 106	Scientific Programming Using C++	3
	or	
CSIT 121	Computer Science I	4
MATH 122	University Calculus I	4
MATH 123	University Calculus II	4
MATH 210	Discrete Mathematics	4
MATH 223	University Calculus III	4
MATH 224	Differential Equations	3
MATH 231	Linear Algebra	4
MATH 329	Mathematical Modeling	3
STAT 350	Probability and Statistics	3
MATH 405	Senior Seminar	1
Total Hours in Applied Mathematics Core:		33 or 34

Applied Mathematics/Economics Option: This option requires the Applied Mathematics Core and the following courses:

ECON 201	Principles of Macroeconomics	3
ECON 202	Principles of Microeconomics	3
ECON 300	Statistics for Economics and Business	3
ECON 305	Intermediate Microeconomic Theory	3
ECON 310	Intermediate Macroeconomic Theory	3
ECON 400	Basic Econometrics	3
ECON 410	Mathematical Economics	3
MATH 365	Financial Mathematics	3
	One additional MATH or STAT course numbered 311 or higher	3
Total hours in Applied Mathematics/Economics Option:		60 or 61

Note: In satisfying the requirements of the above option, the student will earn a Minor in Economics; by completing three extra courses in economics, students in this track can have a double major in Mathematics and Economics.

Applied Mathematics/Statistics and Operations Research Option: This option requires the Applied Mathematics Core, a minor in a field to which statistics or operations research can be applied, and the following courses:

STAT 355	Mathematics Statistics	3
Two of the following three courses:		6
STAT 351	Applied Statistics	
MATH 359	Probability Models in Operations Research	
MATH 375	Deterministic Models in Operations Research	
One additional MATH or STAT course numbered 311 or higher		3
Total hours in Applied Mathematics/Statistics and Operations Research Option:		45 or 46
(plus a minor)		

Adolescence Education – Mathematics Track (79 credit hours):

MATH 122	University Calculus I	4
MATH 123	University Calculus II	4
MATH 210	Discrete Mathematics	4
MATH 223	University Calculus III	4
MATH 231	Linear Algebra	4
MATH 310	Reading and Writing Mathematics	3
MATH 323	Intermediate Real Analysis	3
MATH 331	Abstract Algebra	3

MATH 341	Geometry	3	EDU 321	Teaching in the Middle School	3
STAT 350	Probability and Statistics	3	EDU 349	Educational Psychology and CAW	3
MATH 381	History of Mathematics	3	EDU 419	Secondary School Methods	3
MATH 405	Senior Seminar	1	EDU 430	Student Teaching	15
One additional MATH or STAT course numbered 311 or higher		3	Total Hours in Middle Childhood Education – Mathematics Specialist Track		<u>81</u>
EDU 105/106	Introduction to Contemporary Education	3	Students in all education programs are required to demonstrate competence in a foreign language. This requirement may be satisfied in either of the following ways: (1) completion of course work at the 116 level at Fredonia, or equivalent; or completion of three years of high school language with a passing score on the Regents Examination.		
EDU 224	Adolescent Development and CAW	3	All mathematics majors must complete a science course and its laboratory selected from the following:		
EDU 250/251	Introduction to the Exceptional Learner	3	Chemistry: CHEM 115 and CHEM 125		
EDU 276	Foundations of Literacy and Technology	3	Physics: PHYS 230 and PHYS 232		
HLTH 300	Drugs and Alcohol Education	1	If approved for the College Core Curriculum, this course may be used as one of the two courses required in the science area.		
EDU 305/313	Cultural and Linguistic Diversity	3	Requirements for the Minor in Mathematics		
EDU 349	Educational Psychology and CAW	3	MATH 122 University Calculus I	4	
EDU 419	Secondary School Methods	3	MATH 123 University Calculus II	4	
EDU 430	Student Teaching	15	MATH 210 Discrete Mathematics	4	
Total Hours in Adolescence Education – Mathematics Track		<u>79</u>	MATH 223 University Calculus III	4	
<i>Middle Childhood Education – Mathematics Specialist Track</i> (81 credit hours):			Plus three additional MATH or STAT courses chosen from MATH 224, MATH 231, and courses numbered 311 or higher	9 or 10	
MATH 122	University Calculus I	4	Total hours required:	<u>25 or 26</u>	
MATH 123	University Calculus II	4	Requirements for the Minor in Applied Mathematics		
MATH 201	Mathematics for School Teachers I	3	MATH 122 University Calculus I	4	
MATH 202	Mathematics for School Teachers II	3	MATH 123 University Calculus II	4	
MATH 210	Discrete Mathematics	4	MATH 223 University Calculus III	4	
MATH 231	Linear Algebra	4	MATH 231 Linear Algebra	4	
MATH 301	Mathematics for School Teachers III	3	Plus three additional courses chosen 9 – 11 from MATH 224, 322, 325, 329, 337, 359, 365, 375, 440, STAT 350, 351, 355, PHYS 425, 426, CSIT 241, 242; at least one of these courses must be numbered 311 or higher		
MATH 310	Reading and Writing Mathematics	3	Total hours required:	<u>25 – 27</u>	
MATH 341	Geometry	3	A student may not minor in both Mathematics and Applied Mathematics.		
STAT 150	Statistical Ideas	3			
STAT 200	Fundamentals of Statistics	3			
STAT 350	Probability and Statistics	3			
MATH 381	History of Mathematics	3			
MATH 405	Senior Seminar	1			
One additional MATH or STAT course numbered 311 or higher		3			
EDU 105	Introduction to Contemporary Education	3			
EDU 224	Adolescent Development and CAW	3			
EDU 250	Introduction to the Exceptional Learner	3			
EDU 276	Foundations of Literacy and Technology	3			
HLTH 300	Drugs and Alcohol Education	1			
EDU 305/313	Cultural and Linguistic Diversity	3			

MEDIA ARTS

Office: 315 McEwen Hall
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E-mail: hughson@fredonia.edu
John Hughson, Director

The Media Arts program provides a comprehensive foundation of design skills with an emphasis on interactive design, knowledge built on a strong conceptual foundation, and the ability to create multimedia content using artistic sensibilities. To this end we have equipped our labs to meet industry standards and use a range of software programs that include Photoshop, Illustrator, Pagemaker, Acrobat, Final Cut Pro, Painter, After Effects, Premiere, Director, Go Live Cyberstudio, Flash, Dreamweaver and Fireworks. To stay current we update software applications and purchase additional software on a regular basis.

Our B.A. and B.F.A. degree options in Media Arts are designed to combine multimedia computer technology with traditional studies in communications and the fine and performing arts. Both options have an interdisciplinary curriculum that emphasize the design, concepts, theories, aesthetics and skills which underlie the domain of computer graphics and multimedia, digital/desktop audio, and video production and postproduction. Media Arts students learn how to create computer mediated art, theatre and music, as well as how to develop and create CD-ROM titles, World Wide Web pages, and other interactive media for fields as diverse as: multimedia advertising and marketing, public relations, arts administration, audio engineering, multimedia design and production, imaging technologies in the visual arts, digital photography, corporate communications, and motion graphics.

In an increasingly competitive and changing work environment, our graduates possess not only a unique set of hybrid skills, but a critical edge for leadership positions in the new digital marketplace.

Admission to the Media Arts program requires the submission of an acceptable portfolio from both freshmen and transfer applicants. Transfer students must have at least a 3.0 G.P.A. Prospective students may send 15 to 20 slides and/or CD-ROM of their work, or schedule an in-person review. B.F.A. Media Arts/Sound

Production applicants must submit an audio portfolio. Information on what should be included in the portfolios is available from the program Director.

The Bachelor of Arts (B.A.) 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. This degree option, more general than the B.F.A., provides excellent grounding for students interested in graduate studies or those seeking careers in areas such as advertising and marketing, consumer product companies, creative content production for multimedia, interactive marketing, corporate communication, public relations, and arts administration.

Students in the B.A. program are required to declare a minor officially recognized by the offering department. The minor should be chosen in consultation with a Media Arts faculty member.

Course Requirements for the B.A.

MEDA 101	Media Literacy	3
MEDA 102	Media Production I	3
MEDA 105	Computers and Society	3
MEDA 152	Media Production II	3
MEDA 200	Systems, Languages and Protocols	3
MEDA 215	Interactive Design I	3
MEDA 220	Sight, Sound and Motion	3
MEDA 265	Interactive Design II	3
MEDA 310	Media Criticism	3
MEDA 360	Film and Special Effects	3
MEDA 441	Media Arts Practicum	3
MEDA 480	New Media Writing	3
MEDA 495	Media Arts Capstone	6

Total 42 credit hours +
Minor program of study 18-24

Total: 60-66 credit hours

The B.F.A. in Media Arts emphasizes the range of software, tools and theories necessary for the development of the interactive designer and creative artist. The creative process, from inception to presentation, is emphasized. This degree option fosters intellectual and creative curiosity, critical aesthetic thinking, encourages fusion between different artistic disciplines, and extensive use and evaluation of current technologies. Visual design is of great importance, but equal consideration is given to the concept

and context. The historical relationship between an extensive range of media, and the impact of interaction on those media, are thoroughly explored. Critical awareness, and the ability for self-evaluation, are encouraged and developed. An understanding of visualization, human-computer interface design, user perception, and their relationships with interactive multimedia are all-important outcomes of the program.

Please note: To complete the B.F.A., students must complete a minor* in one of the following fine arts fields: Studio Art, Music, Computer Science, Communication or Theatre. Minors range from 18-24 credit hours. Students should be advised by both the minor department and the Media Arts program to determine appropriate courses.

*Students in B.F.A. Media Arts/Sound Production are not required to take a minor.

Please see B.F.A. Music/Sound course requirements.

Course Requirements for B.F.A. (Except B.F.A. in Media Arts Sound/Production)

MEDA 101	Media Literacy	3
MEDA 102	Media Production I	3
MEDA 105	Computers and Society	3
MEDA 152	Media Production II	3
MEDA 200	Systems, Languages and Protocols	3
MEDA 215	Interactive Design I	3
MEDA 265	Interactive Design II	3
MEDA 301	Media Performance I	3
MEDA 310	Media Criticism	3
MEDA 350	Media Performance II	3
MEDA 352	Media Production III A/V	3
MEDA 355	Interactive Design III	3
MEDA 360	Film and Special Effects	3
MEDA 410	Media Production IV A/V	3
MEDA 441	Media Arts Practicum	3
MEDA 480	New Media Writing	3
MEDA 495	Media Arts Capstone	6

54 credit hours +
Minor program of study 18-24

Total: 72-78 credit hours

Requirements for B.F.A., Media Arts Sound Production

Sound Production majors are not required to select a minor.

MEDA 102	Media Production I	3
MEDA 105	Computers and Society	3
MEDA 152	Media Production II	3
MEDA 200	Systems, Languages and Protocol	3

MEDA 215	Interactive Design I	3
MEDA 265	Interactive Design II	3
MEDA 301	Media Performance Studio I	3
MEDA 320	Audio and Desktop Multimedia	3
MEDA 352	Media Production III A/V	3
MEDA 355	Interactive Design III	3
MEDA 410	Media Production IV A/V	3
MEDA 441	Media Arts Practicum	3
MEDA 480	New Media Writing	3
MEDA 495	Media Arts Capstone	6
MUS 101	Music Theory Non-Majors I	3
MUS 102	Music Theory Non-Majors II	3
MUS 115	Music Appreciation	3
MUS 440	Elec. Music Composition I	3
MUS 441	Elec. Music Composition II	3
SRT 201	Sound Practicum	3
SRT 250	Recording Techniques I	3
SRT 251	Recording Techniques II	3
PHYS 311	Acoustics I	3
PHYS 312	Acoustics II	3

Total: 75 credit hours

Media Arts Sound Production majors are not required to select a minor.

B.F.A. students are required to maintain a 2.75 grade point average in Media Arts courses and pass a faculty review of portfolio work at the end of the sophomore year. If a B.F.A. candidate does not meet the required standards they may be encouraged to consider our Media Arts B.A. program or an alternate area of study.

**MEDICAL TECHNOLOGY/
BIOMEDICAL
RESEARCH
TECHNOLOGY**

(see also Biology)

Office: 112 Jewett Hall
(716) 673-3283
E-mail: Medtech/biomed@fredonia.edu
Biomed@fredonia.edu
Patricia Smith Astry, Director

The multi-faceted educational approach of this program prepares students for careers in several high demand areas of science. (There are currently five clinical positions in hospitals alone available for each medical technologist in the United States.) Recent program graduates are employed as clinical scientists in hospital laboratories, industrial and biotechnology laboratories, and

biomedical research facilities; and as sales representatives for pharmaceutical, medical instrumentation and computer corporations. Students interested in applying to medical school should refer to the Pre-Medicine section on page 65.

The innovative combination of a traditional program track in Medical Technology with a unique track in Biomedical Research Technology gives the graduate of the SUNY Fredonia program unique advantages in gaining employment in the aforementioned areas.

The first two years of the program include core courses in biology, chemistry, physics and mathematics that are required of all MT/BMRT majors. During the latter part of the sophomore year, students are encouraged to select one of the following program tracks:

Track I: This program is accredited by the National Accrediting Agency for Clinical Laboratory Sciences and the American Medical Association Council on Health Education. It is recommended for students wishing to prepare for careers in hospital laboratories, the biomedical industry, pharmaceutical and instrumental sales. The curriculum requires the student to study three years at SUNY Fredonia and one year in an accredited clinical hospital program. Contracted agreements with five hospitals ensure internship placement for qualified students who have successfully completed college requirements. Entrance to the clinical program is highly competitive and based on a minimum 3.0 GPA and letters of recommendation. The clinical year consists of study in a hospital laboratory where students are supervised and instructed by medical technologists and physicians. After successful completion of the internship, students receive clinical certification from the hospital, 30 college credits, and the Bachelor of Science degree in Medical Technology from SUNY Fredonia. Students are then eligible to take national certification examinations for medical technology, such as the National Registry Examination given by the American Society of Clinical Pathologists.

The percentage of Fredonia Medical Technology students passing this Registry Examination on the first attempt has been 99 percent over the past 10 years.

Under affiliation agreements entered into by the college, the training of students takes place under the direction of the persons at the following hospitals:

Michael F. Briselli, M.D., medical director, Medical Technology Program, Rochester General Hospital, Rochester, N.Y.

Kathryn Kutschke, M.S., MT (ASCP), program director, WCA Hospital, Jamestown, N.Y.

Stephen Johnson, M.S., MT (ASCP), program director, St. Vincent's Hospital, Erie, Pa.

Kenneth Jurgens, M.D., medical director, St. Vincent's Hospital, Erie, Pa.

Donald Furman, M.D., medical director, WCA Hospital, Jamestown, N.Y.

Jean Matta, M.S., MT (ASCP), program director, Albany Medical Center Hospital, Albany, N.Y.

P.A. Remegio, M.D., medical director, Catholic Medical Center, Woodhaven, N.Y.

Nancy Mitchell, M.S., MT (ASCP), program director, School of Medical Technology, Rochester General Hospital, Rochester, N.Y.

W.A. Thomas, M.D., medical director, Albany Medical Center Hospital, Albany, N.Y.

Ann-Paula Zero, M.S., MT (ASCP), program director, Catholic Medical Center, Woodhaven, N.Y.

Track II: This option is recommended for students interested in graduate school and for medical laboratory technicians (A.A.S.) wishing to complete a B.S. degree program. The student must complete the course work required in Track I, as well as a concentration of 22 credit hours. Required courses in the concentration include: CSIT 104 or CSIT 105, CHEM 317, 327, BIOL 340, and a statistics course. The remaining concentration courses are directed toward the career goal of the student.

Track III: This option combines the requirements of Tracks I and II, enabling the student to be well

qualified for all clinical, research, industrial, and sales opportunities mentioned earlier. After four years of study completing requirements and concentration courses at Fredonia, the qualified student may complete a clinical year of study at a hospital as described under Track I. Upon successful completion of Track III, the B.S. degree is awarded.

Requirements for the Bachelor of Science Degree in Medical Technology

Required Biology Courses:		
BIOL 144-145	Animal Biology and Evolution & Lab	4
BIOL 221	Human Anatomy	3
BIOL 241-242	Introductory Cell Biology & Lab	4
BIOL 256	Intro. to Clinical Sciences	1
BIOL 333-334	Biochemistry & Lab	4
BIOL 335	Genetics	3
BIOL 336-337	Mammalian Physiology & Lab	4
BIOL 338	Microbiology	3
BIOL 344	Parasitology	1
BIOL 431	Senior Seminar	1
BIOL 453	Basic Hematology	1
BIOL 461	Immunology and Serology	3
		<u>32</u>
	Clinical Internship or Biomedical Research Concentration	30 22
Required Supporting Courses:		
CHEM 115-116	General Chemistry I & II and CHEM 125-126 (Labs)	8
CHEM 215-216	Organic Chemistry I & II and CHEM 225-226 (Labs)	8
MATH 120	Survey of Calculus I or	3 or 4
MATH 122	University Calculus I	
PHYS 121-122	College Physics I & II and PHYS 123-124 (Labs) or	8
PHYS 230-231	University Physics I & II and PHYS 232-233 (Labs)	
CSIT 104 or CSIT 105, or BUAD 164 or BUAD 300, or COMM 221, or PSYC 347, or SOC 326		
		<u>30 or 31</u>

Chemistry and mathematics courses should be completed by the end of the sophomore year, physics courses by the end of the junior year.

CLINICAL HOSPITAL COURSES

Each hospital uses slightly different names in categorizing areas of study. The basic categories are as follows:

CLINICAL CHEMISTRY: Lecture and laboratory sequence involving the study and detection of biochemical components in body fluids.

Methodology, theory, disease states, and instrumentation are stressed.

CLINICAL MICROBIOLOGY: Lecture and laboratory rotation in which bacteria, fungi, parasites and viruses are studied, the emphasis being on bacteria. Biochemical, morphological and serological properties are emphasized.

HEMATOLOGY/COAGULATION: Lecture and laboratory sequence concerned with the study of blood. Theory and techniques dealing with cellular components and coagulation mechanisms of normal and abnormal blood are major topics.

IMMUNOHEMATOLOGY (Blood Bank): Lecture and laboratory rotation dealing with the immunological properties of the blood, especially concerning the various blood groups and transfusion therapy. (Other theories and techniques of basic immunology may be included here or in another category.)

URINALYSIS: Lecture and laboratory presentation of normal and abnormal physical, chemical, and cellular properties of urine.

MODERN LANGUAGES AND LITERATURES

Office: 2111 Fenton Hall
(716) 673-3380

E-mail: modlang@fredonia.edu

French@fredonia.edu

Spanish@fredonia.edu

Thomas H. Goetz, *Chairperson*

Students preparing for work in the modern language field should strive toward language competence and, in addition, should build a background in a variety of subjects, particularly those relating to the cultural heritage of the foreign country whose language they are studying. Language instruction is offered in French, German, Italian or Spanish. A major may be earned in French or Spanish, or a double major in these two languages. Other

individually designed programs of combination majors are encouraged. See the chairperson for assistance.

Majors, minors and modern language concentration students are encouraged to travel, if at all possible, to a foreign country (France, Spain, or a country in Latin America) for a semester or even two semesters of study abroad in their junior year. This foreign travel and study at such schools as the University of Salamanca in Spain, or the Institut de Touraine in France, has proven enormously enriching for students who have participated in these overseas programs. Equally enriching have been the international study programs in Mexico and in the French speaking province of Quebec. International Education programs are not restricted to language majors. They are available to any SUNY Fredonia student in virtually every department who wishes to pursue their studies at foreign institutions of distinction. The department sponsors the French Club and the Spanish Club, and has affiliation with two national honor societies: *Pi Delta Phi* in French and *Sigma Delta Pi* in Spanish.

The Robert Rie Foreign Language Scholarships are awarded each year to a number of upper level undergraduate modern language majors who demonstrate outstanding academic ability, commitment to the field of study, and are recommended by the language faculty to the chairperson of the department. Application information may be obtained from the department.

Requirements for the Bachelor of Arts Degree in French

36 credit hours in French

	Hrs.
FREN 315 French Masterpieces I	3
FREN 317 French Conversation	3
FREN 318 French Composition	3
FREN 319 Survey of French Literature I	3
FREN 320 Survey of French Literature II	3
FREN 421 Diction	3
FREN 423 Senior Seminar	3
FREN 424 Stylistics	3
Plus 12 additional credit hours of 300 or 400 level French courses.	12
	<u>36</u>

Requirements for the Bachelor of Arts Degree in Spanish

36 credit hours in Spanish

SPAN 315 Introduction to Hispanic Literature	3
SPAN 317 Spanish Conversation	3
SPAN 318 Spanish Composition	3
SPAN 319 Survey Spanish Literature I	3
SPAN 320 Survey Spanish Literature II	3
SPAN 325 Survey Span. - Amer. Literature	3
SPAN 423 Senior Seminar	3
SPAN 424 Spanish Creative Writing	3
Plus 12 additional credit hours of 300 or 400 level Spanish courses.	12
	<u>36</u>

Elementary and Early Childhood Education majors may earn a concentration in French or Spanish. Consult the School of Education's catalog description or the course requirements of these programs.

Students who desire to teach French or Spanish in the secondary schools may obtain provisional certification by completing the program described above and the required courses in Professional Education. The procedure to be followed for admission to the professional sequence of courses is as follows:

Students wishing to enter the program must inform the department chairperson by October 15 of the year before their participation in Secondary School Methods. The department will recommend those students who demonstrate superior competency (a minimum GPA of "B" in their major language courses), responsibility, dependability, maturity, and a clear grasp of the realities of the teaching profession. The coordinator will decide on a student teaching assignment for each student favorably recommended. The Secondary School Methods course will be taken in the fall semester immediately preceding student teaching. Admission is limited to those students planning to follow the course with a semester of student teaching. In order to proceed in this manner, students must earn a minimum grade of "C+" in Secondary School Methods. During the first weeks of student teaching, students will enter into an individually designed written agreement with the college supervisor and cooperating teacher, concerning their work in the assignment.

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 beyond the 116-level chosen under advisement and with departmental approval.

Cooperative Agriculture Program in Foreign Languages

Under this program a student majors either in French or Spanish at SUNY Fredonia for three years and then completes the remaining two years at the New York State College of Agriculture and Life Sciences at Cornell University in one of six specializations in the program area of Applied Economics and Business Management. Refer to descriptions of this program on page 7.

Requirements for Transfer Credit

For a major, a limit of 12 transfer credits may be counted towards those required, i.e., a minimum of 24 credit hours must be taken in the department at SUNY Fredonia.

For a minor, a limit of 9 transfer credits may be counted toward the 18 required, i.e.; a minimum of 9 credit hours must be taken in the department at SUNY Fredonia.

Notes:

1. Ordinarily one year of high school preparation in foreign language serves as the equivalent of one semester of college language. At the discretion of the language instructor, students may be placed in a more or less advanced section of a language course than their high school credits would indicate, dependent upon the intensity of their preparation.
2. Unless otherwise specified, all courses are conducted principally in the appropriate foreign language.
3. The department encourages students to participate in overseas programs in France, Germany, Spain, and other countries. Plans therefore should be initiated before the junior year, when students normally take advantage of this opportunity.

MULTIETHNIC STUDIES

(interdisciplinary minors only)

African American Studies
Office: E308 Thompson Hall
(716) 673-3883
E-mail: Ethnic@fredonia.edu
Najia Aarim, *Coordinator*

Latino Studies
Office: E311 Thompson Hall
(716) 673-3881
E-mail: Ethnic@fredonia.edu
A. Jacqueline Swansinger, *Coordinator*

The Multiethnic Studies program is designed to meet the college's commitment to multiculturalism, interdisciplinary teaching, and academic diversity. The program's emphasis on "a global perspective," "socio-ethical understanding," and "international and multicultural studies" exactly corresponds with the SUNY Fredonia Vision Statement and the college's mission to prepare students to be able to work with a diverse people in what has increasingly become a world economy. In addition, the program supports the college's commitment to diversity and Affirmative Action and the president's efforts to recruit and retain students of color. The program, undergoing constant growth and development, currently consists of African American Studies and Latino Studies.

Requirements for the Minor in African American Studies

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 diasporan experiences in the Americas. The program also seeks to promote new constructive ways of thinking about race, culture and social representation, from different perspectives—notably, historical, literary, sociological, anthropological, psychological and artistic.

Required: 21 credit hours from the following. Students declaring an African American Studies minor may use past courses retroactively after consultation with the coordinator.

Required Course (3 credit hours):
INDS/
HIST 220 Introduction to Ethnicity and Race 3

Core Courses (9 credit hours):
HIST 333 African American History: From African Origins to Reconstruction 3
HIST 334 African American History: From Reconstruction to the Present 3
ENGL 240 Introduction to African American Literature and Culture 3

Electives (6 credit hours - two courses; one in each of two disciplines; must not include a course that has been used for core course credit):

ENGL 296 American Identities
ENGL 299 Special Topics (with approval of coordinator)
ENGL 340 Black Women Writers
ENGL 341 Harlem Renaissance
EN 399 African-American Autobiography
HIST 337 African-American Social Thought
HIST 387 Comparative Slave Societies
HIST 299/399 Special Topics (with approval of coordinator)
MUS 267 African American Music
MUS 265 History of Jazz
ANTH 324 Anthropology of the Caribbean
DANC 231 Afro Caribbean Dance
LANG 400 Special Topics (with approval of coordinator) 3
MUS 265 History of Jazz
MUS 267 African American Music
PHIL 446-449 Selected Problems in Philosophy (with approval of coordinator)
POLI 371 Civil Rights and Liberties
SOC 316 Minority Groups (Prerequisite: SOC 116)
Capstone Course (3 credit hours):
INDS 400 Independent Study: African American Topics or 3
INDS 401 Internship: African American Organization

Requirements for the Minor in Latino Studies:

The Latino Studies minor provides interdisciplinary study of the historical, political, social, educational, economic, and cultural developments that affect Latinos of the Americas. "Latino" has been defined broadly to include not only Spanish-speaking minorities in the United States, but the Indigenous and Latin American (including Portuguese-speaking Brazilians)

background of Latinos and Latinas in the United States.

Required: 21 credit hours from the following. Students declaring Latino Studies minor may use past courses retroactively after consultation with the coordinator.

Required Course (3 credit hours):
INDS/ Introduction to Ethnicity 3
HIST 220 and Race

Core Courses (9 credit hours):

Note: Students are required to take one semester of language, unless otherwise advised by the program coordinator, and one course from each of the remaining groups listed below - Literature and History. All courses from the Department of Modern Languages and Literatures designated as LANG are taught in English with the exception of FL 400 Special Topics, which may be taught in Spanish or English, as determined by the instructor; all courses designated SPAN are taught in Spanish. Prerequisites are listed in parenthesis after each course.

Language:

SPAN 215 (SPAN 115-116)

Literature:

ENGL 241 Introduction to Latino Literature and Culture

History:

One course from the following choices:

- HIST 285 Indigenous America: Aztecs and Their Neighbors
- HIST 380 History of Mexico I (completion of CCC categories 1 through 10 or 6 credit hours of history)
- HIST 381 History of Mexico II (completion of CCC categories 1 through 10 or 6 credit hours of history)
- HIST 382 History of Latin America I (completion of CCC categories 1 through 10 or 6 credit hours of history)
- HIST 383 History of Latin America II (completion of CCC categories 1 through 10 or 6 credit hours of history)

Electives (6 credit hours; two courses, one in each of two disciplines):

- ENGL 299/399/499 Special Topics (with approval of coordinator)
- INDS 305/ENGL 304 Latina Literary and Cultural Studies
- WOST 203 Chicana Writers and Visual Artists
- ENGL 399 Special Topics (with approval of coordinator)
- LANG 327 Sex and Magic in Latin American Literature
- SPAN 315 Introduction to Hispanic Literature (SPAN 216 or equivalent)
- SPAN 325 Survey of Spanish-American Literature (SPAN 315 or equivalent)
- SPAN 425 Spanish-American Fiction (SPAN 324, 325 or equivalent)
- HIST 299/399 Special Topics (with approval of coordinator)
- HIST 480-484 Topics in Latin American History*
- ANTH 324 Anthropology of the Caribbean (ANTH 115)
- SPAN 425 Spanish-American Fiction (SPAN 324, 325 or equivalent)
- MUS 350 Special Topics: Latin American Music*
- POLI 371 Civil Rights and Liberties (POLI 120 or 276 or permission of the department)
- SOC 316 Minority Groups (SOC 116)
- SOC 350 Special Topics: The Puerto Rican Experience* (SOC 116)

Capstone Course (3 credit hours):

- INDS 400 Independent Study: Latino Topics 3
- or
- INDS 401 Internship: U.S. Latino Organizations (e.g. Hope Foundation in Dunkirk, N.Y.; Irma Lopez, director)

*All Special Topics courses will contain a pre-approved (by coordinator) percentage of Latino content material in order to contribute to the minor.

MUSIC

Office: 1004 Mason Hall
(716) 673-3151
E-mail: Music@fredonia.edu
Peter J. Schoenbach, Director
Wade Weast, Associate Director
Barry M. Kilpatrick, Assistant Director

Curricular Area Chairpersons:

Music History/Literature

James A. Davis

Music Theory

Wade Weast

Sound Recording Technology

Bernd Gottinger

Music Education

W. Stephen Mayo

Music Therapy

Joni Milgram-Luderman

Music Composition

Donald J. Bohlen

Applied Studies

Phyllis O. East, Keyboard
Kay H. Stonefelt, Percussion/Harp
Susan Royal, Woodwinds
Harry P. Jacobson, String
Marc J. Guy, Brass
Julie Newell and Robert Wells, Voice

The School of Music, SUNY Fredonia is a nationally recognized undergraduate and graduate professional program. Its mission is to prepare students for artistic and professional success in music education, music theatre, performance, therapy, sound recording, and composition.

An audition is required for admission to a Music program. Although accepted students are admitted directly into a Music major curriculum, many first-year students are uncertain about the specific major in Music they wish to pursue. Therefore, all first-year students have essentially the same course work. In the first semester, all freshmen meet once each week in Music Convocation, a one credit hour course that explores the music program, presents professional options after graduation, and introduces world music. Guests include faculty, alumni, and other professional musicians who talk about their lives and jobs. During the second semester, after they have had opportunities to attend general orientation sessions, speak privately about their musical aspirations with advisors, have their abilities assessed by their teachers, and experience the demands made of Music majors, freshman Music students must review the declaration of a major.

The next section describes a Core Curriculum of required studies common to every Music degree program, followed by lists of the specific requirements for each degree program as accredited by the National Association of Schools of Music.

Core Curriculum: 35 credit hours

MUS 001	Freshman Music Seminar	1
MUS 100	Recital Seminar	0
MUS 120	Concert Attendance	0
MUS 021-050	Ensembles	0
MUS 105-106	Applied Music	4

(125-126 for Mus.B. Music Education and Performance)

MUS 113	Voice Class	1
MUS 117-118	Piano Class – waive for piano majors	2
MUS 121-122	Aural Theory I & II	4
MUS 123-124	Written Theory I & II	4
MUS 131-132	Applied Musicianship I & II	2
MUS 221-222	Aural Theory III & IV	4
MUS 223-224	Written Theory III & IV	4
MUS 263	Music History in Western Civilization	3
MUS 264	Topics in Music History	3
MUS XXX	Music History Core Elective	3

Bachelor of Arts Degree Programs in Music

General Requirements

Core Curriculum		35
MUS 200	Recital Seminar	0
MUS 205-206	Applied Music	4
MUS 300	Recital Seminar	0
MUS 305-306	Applied Music	4
One ensemble for each semester of enrollment in applied music		0
		<u>43</u>

A. For a Major in Applied Music, Instrumental (47 credit hours):

General Requirements		43
MUS 400	Recital Seminar	0
MUS 405-406	Applied Music	4
Graduation Recital		0

B. For a Major in Applied Music, Voice (49 credit hours):

General Requirements		43
MUS 137-140	Diction for Singers	2
MUS 400	Recital Seminar	0
MUS 405-406	Applied Music	4
Graduation Recital		0

Note: Voice students in the Applied Music degree program are strongly encouraged to complete the same language requirement as performance majors (see page 57), thus utilizing foreign language offerings to partially complete the required 75 hours outside the major area.

C. For a Major in Theory of Music/Composition (52 hours):

General Requirements		43
Approved courses in music theory and composition		6
MUS 491	Senior Project in Theory	3

Note: As a graduation requirement, students majoring in Music Theory/Composition must present an acceptable project (essay, thesis, composition, or arrangement) written under the advisement of the Music Theory area chairperson or his/her designee. This project may involve a demonstration performance.

Bachelor of Fine Arts with a Major in Musical Theatre

For program description and requirements, see page 59.

Bachelor of Science Degree with an emphasis in Sound Recording Technology

For program description, requirements, and SRT course descriptions, see pages 71 and 172.

Bachelor of Music Programs in Music Education

For the Major in Music Education (Mus.B. degree, certification to teach music in the public schools):

The Music Education degree program provides the means for students to acquire and demonstrate the required competencies for certification to teach music in the elementary and secondary schools. The New York State Education Department also requires a standardized test of both general and professional knowledge (the Liberal Arts and Sciences Test-LAST, and the Assessment of Teaching Skills-Written

Test—ATS—W), for all students recommended for teaching certification in music.

General Requirements:

Core Curriculum		35
MUS 200	Recital Seminar	0
MUS 217-218	Piano Class	2
MUS 225-226	Applied Music	4
MUS 231-232	Conducting I & II	4
MUS 300	Recital Seminar	0
MUS 325-326	Applied Music	4
MUED 250-251	Foundations of Music Educ. I & II	4
MUED 255-256	Practicum	0
MUED 300	Foundations of Music Educ. III	3
MUED 355-356	Practicum	0
MUED 400	Professional Semester	14
Twelve ensemble participations		<u>0</u>
		<u>70</u>

Each student must declare a General/Choral or Instrumental concentration.

General/Choral Concentration requirements are:

For Non-Piano/Non-Voice Students: MUS 317-318, 417, MUED 203-204, 210-211, 301, 302, 391-392. Music Education electives by advisement. A minimum of six of the twelve ensemble participations must be in choral ensembles.

For Keyboard Students: MUS 415-416, MUED 203-204, 210-211, 301, 302, 391-392. Music Education electives by advisement. A minimum of six of the twelve ensemble participations must be in choral ensembles.

For Voice Students: MUS 137-138, 139-140, 317-318, 417, MUED 210-211, 301, 302, 391-392. Music Education electives by advisement. A minimum of six of the twelve ensemble participations must be in choral ensembles.

Instrumental Concentration requirements are:

For Instrumental Applied Students: MUED 161-164, 171-175, 185-187, 221-222, 260-262, 271-272, 285-286, 301 or 302, 304, 305, 321, 393-394. Successful completion of competency examinations on specified secondary

instruments. Music Education electives by advisement. A minimum of three of the twelve ensemble participations must be in choral ensembles.

For Keyboard or Voice Students (this option only by permission of the Area Chair for Music Education): MUS 315-316 (additional permission required), MUED 161-164, 171-175, 185-187, 221-222, 260-262, 271-272, 285-286, 301 or 302, 304, 305, 393-394, 321. Successful completion of competency examinations on specified secondary instruments. Music Education electives by advisement.

A minimum of four of the twelve ensemble participations must be in instrumental ensembles. A minimum of two semesters Secondary Applied (MUS 315/316) or other approved private study on an orchestral instrument (woodwind, brass, string, or percussion).

Students who can demonstrate the competencies and any additional requirements associated with any course will be excused from taking the course. However, since there is no upper limit in skill development, it is recommended that students use the time thus saved to complete a like amount of advanced course work from the area(s) in question. Students are encouraged to elect as much additional course work as possible in their concentration, in music education, or in performance, theory, history and literature in consultation with their academic advisor and/or the Area Chair for Music Education.

Students must complete at least 120 total credit hours of course work in order to meet the minimum college requirements for the awarding of a degree.

Professional Standing is the recognition that students have successfully completed all requirements to enter junior level Music Education course work. At the end of sophomore year, each student will submit a formal application for Professional Standing and must demonstrate the following:

1. 2.5 overall GPA (no MUED class lower than C)
2. MUED 250 and 251 completed
3. Two practica completed
4. Secondary Instrument Competencies: vocal (MUS 218,

MUED 204); instrumental (2 pedagogy and 4 playing classes, 1 proficiency, MUS 113)

Anyone not meeting all standards will be denied acceptance into Professional Standing and will not be admitted into junior level Music Education course work. Music Education courses may be retaken only once.

Student Teaching

(Student teaching and assorted special seminar classes held irregularly during student teaching.) The student must have:

1. an overall 2.5 GPA;
2. an average of 2.5 in all MUED required courses and no less than a 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; some will be determined during student teaching).
5. The recommendation of the Music Education professional staff, based on contact with the student in the Foundations in Music Education sequence of courses and the Methods Course sequence (viz., MUED 250, 251, 300, 301, 302, 304, 305, 391, 392, 393, 394). Criteria are (1) attitude toward teaching music including realism and accuracy in understanding the profession; (2) commitment, responsibility, and dedication to professional growth (i.e. "professionalism"); (3) ability to function under pressure, personal stability; (4) communication with professor(s) and peers, suitability of social adjustment and relations.
6. Completed and submitted student teaching application, personal data forms, and portfolio by the announced due dates.

Other Activities During the Professional Semester

Because of the time involved and the importance of student teaching in the preparation of a teacher:

1. Students may not participate in any college courses or formal (School of Music sponsored) extracurricular

activities during the professional semester;

2. Students may not perform recitals, opera roles, concerto 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.

Bachelor of Music Program in Composition

The major in Composition requires 95 credit hours in music, including the following:

Core Curriculum		35
MUS 100-400	Recital Seminar (Composition)	0
MUS 200-300	Recital Seminar (Performance)	0
MUS 127-128	Applied Music (Comp.)	2
MUS 225-226	Applied Music (Comp.)	4
MUS 325-326	Applied Music (Comp.)	4
MUS 425-426	Applied Music (Comp.)	4
MUS 217-218	Piano Class	2
MUS 205-206	Applied Music (Performance)	4
MUS 237-238	Comp. Seminar	6
MUS 337-338	Comp. Seminar	6
MUS 437-438	Comp. Seminar	6

One course by advisement to be selected from the following:

MUS 361	Jazz Improv. (2)	
MUS 404	Choral Arranging (2)	
MUED 291	Tech. In Music I (2)	
MUS 401	Orchestration	3
MUS 403	20th Century Counterpoint	3
MUS 440	Comp. in Electronic Media I	3
	or	
MUS 441	Comp. in Electronic Media II	3
	or equivalent electronic media courses	
MUS 491	Senior Project in Composition	3

Composition classes 12

One ensemble for each semester of enrollment, including at least two vocal ensembles.

Four participations in contemporary performance ensembles
Senior composition recital

Completion of 20th century repertoire examination
Plus 15 to 18 hours of elective course work, must be selected from a list maintained by the Chair of the Composition Area in the School of Music (at least 12 credit hours of which will fulfill GCP requirements).

Bachelor of Music Programs in Performance

General Requirements:

Core Curriculum	35
MUS 200 Recital Seminar	0
MUS 245-246 Applied Music	8
MUS 300 Recital Seminar	0
MUS 345-346 Applied Music	8
MUS 347-348 Applied Music Recitation	2
MUS 400 Recital Seminar	0
MUS 445-446 Applied Music	8
MUS 447-448 Applied Music Recitation	2
Junior and Senior Recitals	0
	<u>63</u>

For a Major in Performance, Percussion (71 credit hours)

General Requirements	63
MUS 217-218 Piano Class	2
MUS 355-356 Performance Practicum	0
Music theory elective	3
Music history elective	3
Fourteen participations in ensembles	

For a Major in Performance, Piano Pedagogy (73 credit hours)

General Requirements	63
Piano literature and pedagogy	5
MUED 250 Foundations of Music Education I	3
MUS 470 Suzuki and Pace Methods	4
Fourteen participations in ensembles, including four in chamber ensembles	
MUS 415-416 Piano Class	2

For a Major in Performance, Piano (70 credit hours)

General Requirements	63
Piano literature and pedagogy	5
Fourteen participations in ensembles, including four in chamber ensembles	
MUS 415-416 Piano Class	2

For a Major in Performance, Stringed Instruments (71 credit hours)

General Requirements	63
MUS 217-218 Piano Class	2

MUS 355-356 Performance Practicum	0
String literature and chamber music literature	
or	6
Music theory and literature/history elective	
Fourteen participations in ensembles, including four in chamber ensembles	

For a Major in Performance, Voice (80 credit hours)

General Requirements	63
MUS 137-140 Diction for Singers	2
MUS 217-218 Piano Class	2
MUS 317-318 Piano Class	2
MUS 344 Vocal Pedagogy	3
MUS 417-418 Piano Class	2
(or successful completion of one semester of accompanying work under the supervision of the MUS 418 Class Piano teacher)	
Music theory elective	3
Music history or literature elective	3
Fourteen participations in ensembles including four in Lyric Theatre-Practicum*	
A minimum of two semesters of German language and a minimum of two semesters of one of the Romance languages (French, Italian or Spanish).	

For a Major in Performance, Wind Instruments (71 credit hours)

General Requirements	63
MUS 217-218 Piano Class	2
MUS 355-356 Performance Practicum	0
Music theory elective	3
Music history elective	3
Fourteen participations in ensembles, including four in chamber ensembles	

* All voice performance majors are required to have earned a minimum of four semesters Practicum credit by the time they graduate. The required freshman year participation in Practicum may count as one of the required semesters.

The Lyric Theatre-Practicum may be earned in one of two ways:

1. By working on a set, costume, lighting, or running crew for one School of Music stage production during the semester that would require two to three evenings attendance a week for a period of approximately five weeks.

2. By performing a leading or secondary role or singing in the chorus of a college musical stage production during the semester.

Bachelor of Science Program in Music Therapy

The program is designed to provide academic, clinical and professional preparation necessary for entry level music therapists and registration with the American Music Therapy Association, Inc. A national certification exam is required to become Board Certified (BC). The program is interdisciplinary and requires a six-month clinical internship upon completion of all academic course work.

Music Therapy majors must achieve a minimum grade of B- in all courses designated with the prefix MUTY.

Core Curriculum	35
MUS 200 Recital Seminar	0
MUS 205-206 Applied Music	4
MUS 217-218 Piano Class	2
MUS 231-232 Conducting I & II	4
MUS 317-318 Piano Class	2
MUS 417-418 Piano Class	2
Successful Completion of Piano Proficiency Examination	0
One course in arranging/composition, selected from:	2-3
MUS 237-238 Composition Seminar	
MUS 361 Jazz Improvisation	
MUS 401 Orchestration	
MUED 291 Technology in Music	
MUS 404 Choral Arranging	
MUS 440 Composition in Electronic Media I	
Eight ensemble participations	0
MUED 210-211 Guitar Class	2
MUED 310-311 Guitar Class	2
MUTY 115 Intro. to Music Therapy	2
MUTY 270 Social Instruments	2
Elective Secondary Applied Classes	2
MUTY 300 Orientation to Clinical Practicum	1
MUTY 301 Seminar in Music Therapy	3-6
MUTY 302 Practicum in Music Therapy	0
MUTY 345 Foundations of Music Therapy	3
MUTY 401 Principles and Practice of Music Therapy	3
MUTY 414 Psychology of Music	3
MUTY 415 Methods and Materials in Music Therapy	3
MUTY 422 Psychological Research in Music	3

MUTY 450	Internship in Music Therapy	0	2 Hours in Jazz Theory 2 Hours in Jazz Pedagogy
BIOL 121	Human Anatomy	3	2 Hours in Jazz Improvisation
EDU 225	Developmental Psychology	3	2 semesters participation in Jazz Combo (0 Credit)
EDU 250	Intro. to the Exceptional Learner	3	2 semesters participation in Jazz Ensemble (0 Credit).
PSY 129	Intro. to Psychology	3	
PSY 246	Personality	3	
PSY 356	Abnormal Psychology	3	
PSY 447	Intro. to Counseling	3	

Requirements for the Minor in Music

Thirty (30) credit hours. Applicants for the Music minor must achieve an acceptable score on the School of Music Aural Skills Test prior to admission to the program: MUS 121-122, 123-124 (or 101-102), 263, 264; four semesters of MUS 104; four participations in ensembles; and 12 credit hours of music electives in theory, history, literature or music education, at least 6 of which must be from upper division courses (300-400 level).

Music Concentration of the B.S. in Elementary Education (32 hours)

MUS 121-122	Aural Theory	4
MUS 123-124	Written Theory	4
	choose any four Music History courses	12
MUED 315	Music, Play and Self	3
MUS 450-451	Directed Studies	4
	Choose any three Piano Class courses (beginning with MUS 118)	3
	Choose either Guitar Classes (MUED 210-211) or Social Instruments (MUTY 270)	2

COURSES FOR NON-MUSIC MAJORS

The following courses have been designed especially for students who are not music majors. The School of Music will admit non-major students to certain music courses for which they have the interest and ability and for which they have met the course prerequisites. Exceptions to this policy are in studio classes (private instruction), where non-major students must audition and are then assigned on a space-available basis, and in MUS 121-124, where permission must be obtained from the School of Music.

MUS 104	Applied Music Class for Non-Majors
MUS 115	Music in Appreciation
MUS 262	American Music
MUS 265	History of Jazz
MUS 267	African American Music
MUS 269	Music Criticism
MUS 333	Musics of the World

MUS 334 Latin American Music
 MUED 315 Music, Play, and Self
 Non-music majors are encouraged to perform in the All-College Band and/or the Festival Chorus (MUS 021-050), for which no audition is required. Non-major students may also audition to perform in all other School of Music ensembles.

Approved Music Theory Electives for Majors

MUS 237-238	Composition Seminar
MUS 403	s20th Century Counterpoint
MUS 337-338	Composition Seminar
MUS 354	Form and Analysis
MUS 361	Jazz Improvisation
MUS 372-379	Special Topics in Music
MUS 401	Orchestration
MUS 404	Choral Arranging
MUS 437, 438, 439	Composition Seminar
MUS 440-441	Composition in Electronic Media I and II

Approved Music History Electives for Majors

MUS 262	American Music
MUS 265	History of Jazz
MUS 267	African American Music
MUS 269	Music Criticism
MUS 333	Musics of the World
MUS 350	Special Topics in Music
MUS 351	Independent Study in Music History
MUS 383	French Song
MUS 387	German Song
MUS 408	History and Literature of the Wind Band
MUS 420	Piano Literature
MUS 424	History of Opera
MUS 433	Romanticism and Music
MUS 453	Baroque Period in Music
MUS 454	Classical Period in Music
MUS 455	Romantic Period in Music
MUS 456	Modern Period in Music

Music Business

Harry.Jacobson@fredonia.edu

For description of this interdisciplinary program, see page 60.

RELATED PROGRAMS

Concentration in Jazz Studies -

Total Credits: 16 hours

This program is designed for students to pursue jazz through performance, historical context, and theoretical background. Developing skills in instrumental or vocal performance as well as the knowledge base for understanding this important musical medium is reflected in the required course work. Course work and ensemble participation beyond the minimum requirements is possible and encouraged.

The concentration in Jazz Studies is available to all music majors as a concentration within their major (Performance, Music Education, Music Therapy, Sound Recording Technology, or B.A. Applied). It should be noted that the concentration in Jazz Studies is in addition to, and does not supercede nor replace, requirements for the student's declared major. Also, Music Education majors wishing to complete a concentration in Jazz Studies will do so in addition to their concentration in either Vocal/General or Instrumental music education.

Required Course Work for Concentration in Jazz Studies

6 Hours in Music History per advisement (i.e., African American Music, History of Jazz, American Music). 3 of the 6 credits can also serve as Music History credits within the student's major.

4 Hours in Music Theory per advisement (i.e., Aural Theory IV and Written Theory IV). These 4 hours can also serve as music theory credits within the student's major.

MUSICAL THEATRE

Department of Theatre and Dance

Office: 213 Rockefeller Arts Center
(716) 673-3596

James Ivey, *Chairperson*

E-mail: theatre@fredonia.edu

School of Music

Office: 1004 Mason Hall
(716) 673-3151

Peter J. Schoenbach, *Director*

E-mail: Musicalt@fredonia.edu

The Department of Theatre and Dance and School of Music jointly offer study leading to the Bachelor of Fine Arts in Musical Theatre degree. This program is limited to those students who demonstrate excellence in acting, dance and singing and who are firmly committed to professional careers in musical theatre performance.

The Musical Theatre degree is accredited by the National Associations of the Schools of Music and the National Association of Schools of Theatre.

Admission to the Bachelor of Fine Arts in Musical Theatre Program

Candidates must be accepted academically by the Office of Admissions prior to auditioning. Students must audition during the year prior to entering Fredonia at designated audition dates. The auditions consist of acting, dance and singing. Audition information and application forms are available from either the Department of Theatre and Dance or the School of Music.

Transfer students should audition for the Musical Theatre degree the semester before transferring. The B.F.A. requires four years in the degree program for completion.

Additional Requirements:

In addition to the specific and individual courses, periodic reviews of achievement will be conducted for all candidates with the purpose of determining advancement or retention. The Musical Theatre program requires a vocal jury at the conclusion of each semester. A screening Vocal/Acting/Dance jury is conducted at the conclusion of the fourth semester to determine continuance in the program. A public senior recital is presented in the fourth year. The recital must include performance in acting, dancing and singing, and must

be between 45 and 50 minutes in length.

Students on academic probation will not be permitted to perform in public performances.

Students must select a specific track (Theatre/Dance or Music) upon entering the program.

Musical Theatre majors are required to complete Theatre Practice obligations (Theatre Arts) every semester, which are practical extensions of the classroom. Theatre Practice credits will not count toward the total number of credits required in the B.F.A. major. Musical Theatre majors must successfully complete a minimum of 30 upper level credit hours.

For course descriptions, see Dance, page 116; Music, page 144; and Theatre, page 173.

Degree Requirements:**Theatre/Dance Track:**

THEA	Theatre Practice*	2
101-102		
THEA 110	Theatre Visiting Artists (required every semester, 0.5 credit hours)	4
THEA 121	Intro. to Technical Theatre	3
THEA 131	Acting Studio: Improvisation	3
THEA 132	Acting Studio: Character Study	3
THEA 201-202	Theatre Practice*	2
THEA 220	Makeup	3
THEA 231-232	Acting Studio: Scene Study I & II	6
THEA 242-243	Acting Studio: Introduction to Voice and Movement I and II	6
THEA 301-302	Theatre Practice*	2
THEA 333	Acting Studio: Audition Techniques	3
THEA 353	History of Musical Theatre	3
THEA 401-402	Theatre Practice*	2
THEA 432	Acting Studio: Musical Theatre Styles	3
DANC 111	Modern Technique I	2
DANC 121	Beginning Tap Dance	3
DANC 211	Modern Technique II	2
DANC 221	Beginning Ballet	2
DANC 311	Modern Technique III	2
DANC 321	Dance for Musical Theatre	3
DANC 363	Choreography	3
MUS 100	Recital Seminar	0
MUS 117-118	Piano Class	2
MUS 121-122	Aural Theory I & II	4

MUS 123-124	Written Theory I & II	4
MUS 125-126	Applied Voice	4
MUS 131-132	Applied Musicianship I & II	2
MUS 137-140	Diction for Singers	2
MUS 200	Recital Seminar	0
MUS 217-218	Piano Class	2
MUS 235-236	Musical Theatre Voice	6
MUS 300	Recital Seminar	0
MUS 335-336	Musical Theatre Voice	6
MUS 400	Recital Seminar	0
MUS 435-436	Musical Theatre Voice	6

Degree Requirements:**Music Track:**

MUS 001	Music Convocation	1
MUS 019-020	Choral Ensembles (four)	0
MUS 019-020	Lyric Theatre Workshop or Practicum (four, at least one must be in Practicum)	0
MUS 100	Recital Seminar (two semesters)	2
MUS 117-118	Piano Class	2
MUS 121-122	Aural Theory I & II	4
MUS 123-124	Written Theory I & II	4
MUS 125-126	Applied Music	4
MUS 131-132	Musicianship I & II	2
MUS 137-138	Diction for Singers (I.P.A./Italian)	1
MUS 139-140	Diction for Singers (German & French)	1
MUS 200	Recital Seminar (two semesters)	0
MUS 217-218	Piano Class	2
MUS 221-222	Aural Theory III & IV	4
MUS 223-224	Written Theory III & IV	4
MUS 235-236	Musical Theater Voice	6
MUS 263	Music History in Western Civilization	3
MUS 264	Topics in Music History	3
MUS 300	Recital Seminar (two semesters)	0
MUS 317-318	Piano Class	2
MUS 335-336	Musical Theatre Voice	6
MUS 400	Recital Seminar (two semesters)	0
MUS 417-418	Piano Class	2

MUS 435-436	Musical Theatre Voice	6	Students might consider majoring in programs such as Communication, Music, or Business Administration with carefully selected electives as alternatives to the Music Business curriculum.	ECON 200	Statistics (or any social science statistics course)	3																																												
THEA 101-102	Theatre Practice*	2		ECON 201-202	Principles of Macro-Microeconomics	6																																												
THEA 110	Theatre Visiting Artists (required four semesters, 0.5 credit hours)	2		ACCT 201	Financial Accounting	3																																												
THEA 121	Intro. to Technical Theatre	3		ACCT 202	Managerial Accounting	3																																												
THEA 131	Acting Studio: Improvisation	3		ACCT 311	Business Law I	3																																												
THEA 132	Acting Studio: Character Study	3		BUAD 164	Introduction to Management Information Systems	3																																												
THEA 201-202	Theatre Practice*	2		BUAD 315	Principles of Business Finance	3																																												
THEA 220	Makeup	3		BUAD 321	Management and Organizational Behavior	3																																												
THEA 231-232	Acting Studio: Scene Study I & II	6		BUAD 325	Principles of Marketing	3																																												
THEA 342-343	Acting Studio: Stage Voice I & II	6			Total: 55-57																																													
DANC 111	Modern Technique I	2	<i>Group II: Concentration</i>																																															
DANC 211	Modern Technique II	2	Students in Music Business must complete a minimum of 9 credit hours from one of the following concentrations:																																															
DANC 105	Folk Dance	1	Communications/Public Relations																																															
DANC XXX	Course to be determined by Advisement	2	<table border="0"> <thead> <tr> <th></th> <th></th> <th>Hrs.</th> </tr> </thead> <tbody> <tr> <td>MUS 019-020</td> <td>Ensemble (four semesters)</td> <td>0</td> </tr> <tr> <td>MUS 104</td> <td>Applied Music Class (two to four semesters)</td> <td>2-4</td> </tr> <tr> <td>MUS 253</td> <td>Music History in Western Civilization</td> <td>3</td> </tr> <tr> <td></td> <td>or</td> <td></td> </tr> <tr> <td>MUS 115</td> <td>Music Appreciation</td> <td>3</td> </tr> <tr> <td>MUS 117-118</td> <td>Piano Class, Elementary and Intermediate</td> <td></td> </tr> <tr> <td></td> <td>or</td> <td></td> </tr> <tr> <td>MUS 117-118</td> <td>Piano Class, Elementary and MU 237 Comp. Sem.</td> <td>4-5</td> </tr> <tr> <td>MUS 121-122</td> <td>Aural Theory I & II</td> <td>4</td> </tr> <tr> <td>MUS 123-124</td> <td>Written Theory I & II</td> <td>4</td> </tr> <tr> <td>MUS 131-132</td> <td>Applied Musicianship</td> <td></td> </tr> <tr> <td></td> <td>or</td> <td>2-3</td> </tr> <tr> <td></td> <td>electives in Jazz or Music History</td> <td></td> </tr> <tr> <td>MUS 380</td> <td>The Music Business</td> <td>3</td> </tr> </tbody> </table>					Hrs.	MUS 019-020	Ensemble (four semesters)	0	MUS 104	Applied Music Class (two to four semesters)	2-4	MUS 253	Music History in Western Civilization	3		or		MUS 115	Music Appreciation	3	MUS 117-118	Piano Class, Elementary and Intermediate			or		MUS 117-118	Piano Class, Elementary and MU 237 Comp. Sem.	4-5	MUS 121-122	Aural Theory I & II	4	MUS 123-124	Written Theory I & II	4	MUS 131-132	Applied Musicianship			or	2-3		electives in Jazz or Music History		MUS 380	The Music Business	3
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MUSIC BUSINESS			Merchandising/Promoting																																															
1139 Mason Hall			AADM 400 Arts Administration Practicum																																															
(716) 673-3248			BUAD 340 Marketing Research																																															
E-mail: Musicbus@fredonia.edu			BUAD 342 Consumer Behavior**																																															
Harry P. Jacobson, Coordinator			BUAD 445 Integrated Marketing Communications																																															
The Music Business curriculum serves students interested in a wide range of educational objectives and vocational fields through an interdisciplinary program emphasizing a balance of music, business, and relative elective subjects. Although no audition is required, students in Music Business should have a performance medium and background in music sufficient for success in the core curriculum.			BUAD 446 Sales Management																																															

* Prerequisite: ART 155 Two-dimensional Design or permission of instructor
 ** Prerequisite: BUAD 325 Principles of Marketing

PHILOSOPHY

Office: 2111 Fenton Hall
(716) 673-3495
E-mail: Phil@fredonia.edu

Raymond Angelo Belliotti, *Chairperson*

Philosophy is the study of the most basic questions one can ask about reality, human existence, knowledge, value, and meaning. It develops the skills of careful inquiry and logical thinking which are the hallmarks of successful people in all walks of life. The philosophy department offers a major, a minor, and a series of courses designed to complement student majors in other fields, *as well as courses of general interest* to all students.

Numerous philosophy courses are designed to complement student majors in other fields including business, economics, computer science, art, film, music, theatre, criminal justice, legal studies, and the natural and social sciences. The philosophy department has advisement material available for students who wish to pursue an interest in philosophy in conjunction with these majors and minors.

Graduates with a degree 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 extra-curricular discussions of a wide range of philosophical topics. The Fredonia Philosophical Society and the philosophy department co-sponsor external speakers of general interest. All meetings are open to the entire campus and the public.

Requirements for the Bachelor of Arts Degree in Philosophy

Thirty hours in philosophy, at least 18 hours of which are in courses numbered 300 or above.

1. Students are required to take a logic course:

PHIL 116	Intro. to Deductive Logic or	3
PHIL 301	Intermediate Deductive Logic	

2. *and* a history of philosophy course:

PHIL 222	The Greek Way or
----------	---------------------

PHIL 224	Medieval Thought or	3
PHIL 226	The Age of Reason and Its Legacy	

A Model Program would include:

PHIL 115	Philosophical Inquiry	3
PHIL 218	Intro. to Ethics or	
PHIL 265	Social and Political Thought	3
PHIL 345	The Meaning of Life or	3
PHIL 441	Philosophy of Language and Semantics	
PHIL 430	Philosophy of Mind or	3
PHIL 351	Metaphysics: Reality and Existence or	
PHIL 353	Theory of Knowledge	

Plus related philosophy courses 12
30

Seniors are strongly urged to take a seminar:

PHIL 446-449	Selected Problems in Philosophy or
PHIL 460-468	Major Philosophers

Students should consult the department for current offerings in the above areas. All waivers of requirements must be approved by the chairperson.

Requirements for the Minor in Philosophy

Eighteen hours in philosophy with at least 9 credit hours in courses numbered 300 or above, as advised.

The philosophy department participates in the Cooperative Agriculture, Cooperative Engineering, and Women's Studies programs. Refer to descriptions of these programs on pages 7, 28 and 78, respectively.

PHYSICS

Office: 118 Houghton Hall
(716) 673-3301
E-mail: Physics@fredonia.edu
Subra Pendyala, *Chairperson*

The discipline of physics is basic among the sciences and focuses on the study of natural phenomena. In the process, the student is provided with a broad-based liberal education. The Department of Physics offers a major, a minor, a major through the 3-2 Cooperative Engineering and Cooperative Agriculture programs, a provisional certification to teach physics in secondary school, interdisciplinary majors in Geophysics and Mathematics-Physics (with the Geosciences and Mathematics/Computer Science departments, respectively), a major in Industrial Management, and courses to complement majors in other areas.

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 page 29).

Requirements for the Bachelor of Science Degree in Physics

Required courses for the Physics major (38 credit hours):

PHYS 230-231	University Physics I & II and PHYS 232-233 (Labs)	10
PHYS 234	Modern Physics	4
PHYS 400	Undergraduate Seminar	1
PHYS 425-426	Mathematical Physics I & II	6
PHYS 431	Intro. to Quantum Mechanics	3

One course (3 credit hours) from:		3
PHYS 330	Thermodynamics	
PHYS 331	Theoretical Mechanics	
PHYS 333	Electricity and Magnetism	

Plus 11 additional hours as advised from PHYS 321 through 479, 490 11

38

MATH 122- 123 -223	University Calculus I, II & III	12
MATH 224	Differential Equations	3
		<u>15</u>

Note: Minimum cumulative GPA of 2.0 required in above courses for graduation.

Plus 15 additional hours in science, mathematics, computer science, engineering or education, including CSIT 116 or higher level programming course as advised.

Course Requirements for Cooperative Engineering/Physics

Students in the 3-2 Cooperative Engineering program pursuing a degree in Physics from SUNY Fredonia take:

PHYS 230-231	University Physics I & II and PHYS 232-233 (Labs)	10
PHYS 234	Modern Physics	4
PHYS 321	Engineering Mechanics I	4
PHYS 400	Undergraduate Seminar	1
PHYS 425-426	Mathematical Physics I & II	6
PHYS 431	Intro. to Quantum Mechanics	3

One course from:

PHYS 323	Circuit Analysis I or	3
PHYS 325	Electronics and PHYS 327 (Lab) or	4
PHYS 326	Digital Logic & PHYS 328 (Lab)	3

One course (3 hours) from:

PHYS 330	Thermodynamics or	3
PHYS 331	Theoretical Mechanics or	3
PHYS 333	Electricity and Magnetism	3

Plus one additional course as advised from PHYS 322 through 326 and supporting math courses:

		<u>37-39</u>
MATH 122- 123-223	University Calculus I, II & III	12
MATH 224	Differential Equations	3
		<u>15</u>

Note: Minimum cumulative GPA of 2.0 required in above courses for graduation.

Plus 15 additional hours in science, mathematics, computer science and engineering, including some courses from PHYS 322 through 328 and 340 as advised. Students interested in electrical engineering should take PHYS 323 and 324, while students interested in non-electrical engineering should take PHYS 322.

Note: affiliated engineering institutions (page 28) may have additional requirements for courses and/or grades.

Requirements for the Bachelor of Science Degree in Geophysics

Students interested in this joint major should contact the chairperson of the department of Physics or Geosciences.

Core Program (23 to 24 credit hours in geosciences; 17 to 19 credit hours in physics; 26 credit hours in related disciplines).

GEO 165	Geology I	3
GEO 169	General Geology Laboratory	1
GEO 215	Minerals and Rocks	4
GEO 335	Geophysics	4
GEO 370	Structural Geology	4
GEO 459	Seminar in Geosciences or	1

PHYS 400	Undergraduate Seminar	1
GEO 461	Field Geology	3
GEO XXX	Geology elective	4
PHYS 230-231	University Physics I & II and PHYS 232-233 (Labs)	10
PHYS 321	Engineering Mechanics I or	4

PHYS 330	Thermodynamics or	4
PHYS 331	Theoretical Mechanics or	3
PHYS 333	Electricity and Magnetism	3
PHYS XXX	Electives from PHYS 321 through PHYS 479	6

MATH 122- 123-223	University Calculus I, II & III	12
MATH 224	Differential Equations	3
CSIT XXX	Any course (preferably CSIT 104 Introduction to Microcomputer Software)	3
CHEM 115-116	General Chemistry I & II and CHEM 125-126 (Labs)	8

GEO 330 Geomorphology is strongly recommended.

Requirements for the Bachelor of Science Degree in Mathematics-Physics

Core Program (32 to 33 credit hours in mathematics/computer science; 29 credit hours in physics; 9 credit hours in supporting courses).

CSIT 106	C/C++ Programming or	3
CSIT 121	Computer Science I	4
	Plus 29 hours in mathematics including:	
MATH 122- 123 -223	University Calculus I, II & III	12
MATH 210	Discrete Mathematics	4
MATH 224	Differential Equations	3

MATH 231	Linear Algebra	4
	Plus two courses at the 300 level or higher: MATH 323 and MATH 420, or MATH 323 and PHYS 425, or PHYS 425 and PHYS 426.	6
		<u>32-33</u>

PHYS 230-231	University Physics I & II and PHYS 232-233 (Labs)	10
PHYS 234	Modern Physics	4
PHYS 431	Intro. to Quantum Mechanics	3

	One course (3 credit hours) from:	3
PHYS 330	Thermodynamics	
PHYS 331	Theoretical Mechanics	
PHYS 333	Electricity and Magnetism	
	Plus 9 additional credit hours from PHYS 321 through 479, 490	9
		<u>29</u>

Plus 9 credit hours of supporting courses as advised

Requirements for the Minor in Physics

A minimum of 23 credit hours in physics, including PHYS 230, 231, 232, 233, and 234 and 9 additional credit hours in physics courses numbered 321 through 479, 490 as advised by a physics department faculty member and approved by the department. Additionally, 15 credit hours in mathematics - MATH 122, 123, 223 and 224 are required.

Note: Minimum cumulative GPA of 2.0 required in above courses for graduation.

Students who desire to teach physics in the secondary schools may obtain provisional certification by completing the major in Physics described above and the required certification courses in professional education. The procedure to be followed for admission to the professional sequence of courses is described on page 26. 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 four ways: (1) completion of course work at the 116 level at Fredonia, or (2) transferring of two successful college semesters, or (3) scoring at the 50th percentile or higher on the CLEP exam, or (4) completion of three years of high school language with a passing Regents score (passing = 65).

The Department of Physics participates in the Cooperative Agriculture and the Cooperative Engineering programs: refer to descriptions of these programs on page 7 and page 28, respectively.

For information on the degree in Industrial Management, see page 42.

POLITICAL SCIENCE

Office: E366 Thompson Hall
(716) 673-3207

E-mail: Jon.Kraus@fredonia.edu
Jon Kraus, Chairperson

Political science is a liberal arts discipline designed to prepare students as informed citizens and leaders in contemporary society. As a major in Political Science students have a choice of three program options, selection to be made by the conclusion of the first semester, junior year:

Government and Politics
Public Law and Policy
Political Economy

The program in *Government and Politics (Bachelor of Arts degree)* provides a broad treatment of politics in the modern world. Students electing this option select courses from the six substantive fields of political science (American Political Institutions, Comparative Politics, International Politics, Political Economy, Political Theory and Public Policy/Law).

The program in *Public Law and Policy (Bachelor of Arts degree)* is a more specialized curriculum emphasizing the analysis of public policy and its implementation in administrative bodies and courts. The focus of the program in Public Law and Policy is twofold: first, the study of the principles and problems central to administration in the governmental sector; second, the study and evaluation of selected governmental policies. Students electing this program will take an internship under supervision of the Department of Political Science.

The program in *Political Economy (Bachelor of Arts degree)* is an interdisciplinary curriculum combining the study of politics and economics. Students electing this program explore the relationship between political

institutions and economics. Courses focusing upon domestic as well as international topics are available.

Students must see a faculty advisor or the department chairperson to discuss a choice of program and the careers open within the major. Regardless of the program chosen, the members of the department are dedicated to sharing with students the excitement and challenge of politics in today's world.

Fredonia graduates hold responsible positions in businesses and corporations as well as in federal, state, and local governments. Following completion of college, some of our students continue their studies in graduate or law school. The latter become attorneys in the public and private sectors. The department has regular advisory meetings on careers for its majors and sponsors a variety of internships. Each year the department selects students to spend a semester in Washington, D.C. Selectees may be either majors or non-majors, but must be juniors or seniors at the time they go to Washington. Fifteen credit hours are granted for participation in the program.

Similar in structure to the Washington Semester Program but with residence in Albany, the Albany Semester Program provides an internship with a state agency or the New York State Legislature. It earns 15 credits.

The Department of Political Science also offers a number of internships in local government and local law-related agencies.

Awards

The department is a member of *Pi Sigma Alpha*, the national Political Science Honor Society. Outstanding undergraduates majoring in Political Science are admitted to membership.

The Department of Political Science annually gives the Erna G. & J. Murdoch Dawley Award to the outstanding graduating senior in Political Science. This endowed award is given at the conclusion of the spring term.

Two J.R. Soukup Awards are given annually. One award is given to an excellent incoming freshman (one year). The second award is given to the outstanding junior who not only demonstrates scholarship but is

pursuing studies and/or a career in some form of private or public community service. This will be awarded in the spring term.

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 department provides advice to students interested in law school and law-related careers. It maintains an up-to-date collection of law school catalogs which are available in the Erna G. & J. Murdoch Dawley Reading Room (E369 Thompson Hall). The department's pre-law advisors provide assistance in evaluating the results of the Law School Admission Test (LSAT).

Students interested in majoring or minoring in Legal Studies (Pre-Law) should consult page 47. The Legal Studies program is administered through the Department of Political Science.

Political Science majors can belong to the student Political Science Association, which organizes a variety of activities. These include trips to Washington D.C., career days, election year debates, voter registration projects, parties, and others.

Political Science majors are encouraged to satisfy CCC distribution requirements with courses in history and economics where possible. They are also advised to consider these departments in their selection of electives.

Students wishing to teach political science in the secondary schools may obtain provisional certification by completing the Social Studies Secondary Education program (see page 40). 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 four ways: (1) completion of course work at the 116 level at Fredonia, or (2) transferring of two successful college semesters, or (3) scoring at the 50th percentile or higher on the CLEP exam, or (4) completion of three years of high school language with a passing Regents score (passing = 65). The procedure to be followed for admission

to the professional sequence of courses is described on page 40. For updated information on the department, its programs and faculty, consult the department web site at: <http://www.fredonia.edu/department/polisci/>

Requirements for the Bachelor of Arts Degree in Political Science

36-42 credit hours

1. Students majoring in Political Science must take the following courses (21 credit hours):

A. Introductory courses (9 credit hours):

POLI 120	American Politics	3
POLI 121	American Public Policy	3
POLI 150	U.S. and World Affairs	3

B. Methods courses (6 credit hours):

POLI 200	Statistics	3
POLI 210	Methods	3

All five introductory courses must be taken before enrollment in more than two 300 level courses.

C. Upper division American Institutions (6 credit hours): Students must take two courses from the three choices below:

POLI 321	Political Parties and Interest Groups	3
	or	
POLI 323	Elections in America	3
POLI 324	President and Congress	3
POLI 370	American Constitutional Law (students in the Public Law and Policy track should take this as one of the three)	3

2. In addition to the above courses, majors in Political Science select one of the following tracks in the major:

I. Government and Politics

A. Seven or more 300 level courses (21 hours) in at least four fields, divided accordingly:

- Three (3) courses in one field
- Two (2) courses in a second field
- One (1) course in a third field
- One (1) course in a fourth field

The following additional condition applies:

- The two required 300 level American Institution courses in C. above count toward the seven.
- at least two (2) 300 level courses must be taken in either Comparative or International Politics; or at least one (1) 300 level course from Comparative and one (1) 300 level course from International Politics.

B. Courses are offered in six fields as listed below:

American Political Institutions:

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 329	Topics in American Politics	3
POLI 370	American Constitutional Law	3

Public Policy and Law:

POLI 371	Civil Rights and Liberties	3
POLI 379	Topics in Public Law	3
POLI 380	Policy Evaluation	3
POLI 381	Urban Politics and Planning	3
POLI 382	Social Welfare Systems	3
POLI 383	Courts and Social Policy	3
POLI 387	Environmental Policy	3
POLI 389	Topics in Public Policy	3

Comparative Politics:

POLI 330	Western European Politics	3
POLI 331	Canadian Politics	3
POLI 332	Russian Politics	3
POLI 334	African Politics	3
POLI 341	Political Economy of Development	3
POLI 344	Comparative Public Policy	3
POLI 345	Film and Politics	3
POLI 346	East Asian Political Economy: Japan, China and Korea	3
POLI 349	Topics in Comparative Politics	3

International Politics:

POLI 348	The European Union	3
POLI 352	World Political Geography	3
POLI 354	Middle East in World Affairs	3
POLI 355	International Political Economy	3
POLI 356	U.S. Foreign Policy	3
POLI 359	Topics in International Politics	3

Political Economy:

POLI 334	African Politics	3
POLI 341	Political Economy of Development	3
POLI 344	Comparative Public Policy	3
POLI 346	East Asian Political Economy	3
POLI 354	Middle East in World Affairs	3
POLI 355	International Political Economy	3
POLI 382	Social Welfare Policy	3

Political Theory:

POLI 360	Classical Political Theory	3
POLI 361	Modern Political Theory	3
POLI 363	Game Theory	3

POLI 365	American Political Thought	3
POLI 369	Topics in Political Theory	3

II. Public Law and Policy

A. Introductory Law Course (3 credit hours)

Either POLI 276 Law and Society or POLI 277 Introduction to Law

B. Advanced Law Course (at least one course from the following for a total of 3 credit hours; it is assumed you took POLI 370 as part of the basic major requirement):

POLI 370	American Constitutional Law	3
POLI 371	Civil Rights and Liberties	3
POLI 383	Courts and Social Policy	3
POLI 389	Topics in Public Law	3

C. Advanced American Public Policy Courses (at least two courses from the following for a total of 6 credit hours):

POLI 363	Game Theory	3
POLI 380	Policy Evaluation	3
POLI 381	Urban Politics and Planning	3
POLI 382	Social Welfare Policy	3
POLI 387	Environmental Policy	3
POLI 389	Topics in American Public Policy	3

D. Advanced International/Comparative Public Policy Courses (at least one course from the following for a total of 3 credit hours):

POLI 341	Political Economy of Development	3
POLI 344	Comparative Public Policy	3
POLI 348	The European Union	3
POLI 352	World Political Geography	3
POLI 355	International Political Economy	3
POLI 356	U.S. Foreign Policy	3
POLI 359	Topics in Foreign and/or International Policy	3

E. Approved Public Service Internship is required except in unusual circumstances (3 credit hours).

Note: The Public Law and Policy program requires 39 credit hours, 3 more hours than what is required in the Government and Politics program.

III. Political Economy

A. Introductory economics courses (6 credit hours)

ECON 201	Principles of Macroeconomics	3
ECON 202	Principles of Microeconomics	3

B. Core Advanced Political Science courses in Political Economy (four courses from the following for a total of 12 credit hours):

POLI 334	African Politics	3
POLI 341	Political Economy of Development	3
POLI 344	Comparative Public Policy	3
POLI 346	East Asian Political Economy: Japan, China and Korea	3
POLI 352	World Political Geography	3
POLI 354	Middle East in World Affairs	3
POLI 355	International Political Economy	3
POLI 382	Social Welfare Policy	3

C. Advanced economics courses (6 credit hours from the following):

ECON 320	International Trade and Finance	3
ECON 335	Economic Development	3
ECON 345	Comparative Economic Systems	3
ECON 355	Labor and Industrial Relations	3
ECON 380	Environmental and Natural Resource Economics	3
ECON 405	Industrial Organization (formerly Government Regulation of Business)	3

Note: The Political Economy program requires 45 credit hours.

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:

- Public Law and Policy
- Political Economy
- American Politics
- International Politics
- Comparative Politics
- Political Theory

For a listing of courses in each minor, students should see an advisor or the department chairperson.

Geographic Information Systems

This program is sponsored jointly by Political Science and the Department of Geosciences. Interested persons should refer to page 33 for a description of the concentration.

Certificate in International Political Economy

A certificate program in International Political Economy is available. The program is open only to Business Administration and Economics majors. The certificate is awarded by the political science department following successful completion of the following:

1. POLI 150	U.S. and World Affairs	3
2. Nine credit hours from among the following:		
POLI 334	African Politics	3
POLI 341	Political Economy of Development	3
POLI 344	Public Policies in Advanced Industrial Democracies	3
POLI 346	East Asian Political Economy: Japan, China and Korea	3
POLI 354	Middle East in World Affairs	3
POLI 355	International Political Economy	3

Special Programs

Internships: No more than 3 credit hours of internship credit may count toward the Political Science major or minor.

The department participates in various Interdisciplinary Studies Model Majors and Minors such as Legal Studies, Criminal Justice and International Studies.

The Department of Political Science also participates in the Cooperative Agriculture and Cooperative Engineering programs. Refer to descriptions of these programs on page 7 and page 28, respectively.

PRE-MEDICINE AND ALLIED AREAS

Office: 203 Jewett Hall
(716) 673-3282
E-mail: Premed@fredonia.edu
Wayne Yungans, *Coordinator*

Fredonia graduates have enjoyed considerable success in gaining entry to medical and dental school. The success rate of our recent applicants to health professional programs is about 60 to 75 percent. The Biomedical Professions Council 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 no medical schools stipulate a particular major program of undergraduate study, they do require that students have minimum preparation in a number of areas including biology, chemistry, English, and physics. Most of our students find the Fredonia Biology major meets all the requirements for American medical schools and choose it as the most appropriate undergraduate pre-med program. The American Association of Medical Colleges advises that students may major in any area, but their own (AAMC) admissions data show that the majority of successful applicants to American medical schools have majored in the biological sciences. Students who choose to major in an area outside of biology should register with the council as freshmen to ensure appropriate advice and assistance (register at the biology office in Jewett Hall).

Any student who is seriously considering a medical or dental career should seek out summer employment/internship opportunities in medicine early in their undergraduate experience.

The book, *Medical School Admissions Requirements* (AAMC, Washington, D.C.) is essential reading for any undergraduate who is seriously considering medical school.

Candidates to dentistry, veterinary, and podiatric medicine should also avail themselves of the advising services of the Biomedical Professions Council.

PSYCHOLOGY

Office: W357 Thompson Hall
 (716) 673-3129
 E-mail: Psych@fredonia.edu
Jennifer L. Dyck, Chairperson

The psychology department has several objectives:

To provide the student with a basic knowledge of a broad range of psychological concepts and theories, and an understanding of the methods used by psychologists in the study of human behavior; to contribute to the building of an integrated liberal education, designed to equip the student for postgraduate employment or further specialized education; and to demonstrate the relevance of psychological analysis to current social problems and provide students with the knowledge to better understand themselves and others. A liberal arts education with a major in psychology is good preparation for a wide variety of jobs including human services, sales, and management. Some jobs in psychology and related mental health are available at the bachelor's degree level; others may require an advanced degree. Many of our majors continue in graduate school in fields of study including school psychology, social work, counselor education, cognitive psychology, counseling psychology, and law.

To meet all of these objectives the department offers courses spanning the entire field of psychology. Internships and independent study opportunities are also available. It recognizes superior student performance with the Psychology Merit Award and the Darlene Prokopowicz Memorial Scholarship, and it supports the Psychology Club and a local chapter of *Psi Chi*, the national honor society for psychology. Interested persons should see the department chairperson for additional information.

Requirements for the Bachelor of Arts Degree in Psychology

I. Courses in Psychology

	Hrs.
Core Group - all required	
PSY 129 Introduction to Psychology	3
PSY 130 Psychology Laboratory	1
PSY 200 Statistics	3
PSY 210 Research Methods	4

The above courses are to be completed by the end of the junior year.

One course from the Psychophysiology Area: 3
 PSY 342 Perception
 PSY 351 Physiological Psychology

One course from the Cognitive Area: 3
 PSY 244 Cognitive Psychology
 PSY 344 Psychology of Language
 PSY 364 Cognitive Development

One course from the Social Area: 3
 PSY 245 Social Psychology
 PSY 246 Personality
 PSY 365 Social Development

One course from the Clinical/Counseling Area: 3
 PSY 356 Abnormal Psychology
 PSY 379 Child Psychopathology
 PSY 447 Introduction to Counseling

One Theoretical Thinking course: 3
 PSY 429 History and Systems of Psychology
 PSY 430 Theories of Psychology
 PSY 439 Senior Honors Seminar
 PSY 454 Theories of Memory
 PSY 456 Theories of Personality

Also required: One course of a developmental focus. PSY 364 or PSY 365 may count here as well as in the groupings above. PSY 349 (Child Psychology) also meets this requirement. Students choosing to take PSY 364 or PSY 365 must take an additional psychology elective in order to fulfill the requirement that they have 35 hours of psychology courses.

Psychology electives 6/35

- II. A minimum of 12 hours in a field other than psychology, chosen with advisement to complement the major, of which at least 6 hours must be at the upper level.
- III. At least one course in mathematics (i.e., the MATH code).
- IV. Of the total hours counting for graduation, a minimum of 30 hours must be at the upper level and 75 hours must be outside of psychology.
- V. A minimum of 2.00 cumulative quality point average in all psychology courses.

Requirements for the Minor in Psychology

General Minor:

A minimum of 18 hours in psychology, with at least 9 hours at the upper level. One course must come from the psychophysiology area or the cognitive area (PSY 244, 342, 344, 351, or 364) and one course must come from the social area or the clinical/counseling area (PSY 245, 246, 356, 365, 379, or 447).

Industrial-Organizational Psychology Minor :

A minimum of 21 credit hours, distributed as follows:

Core Courses—12 credit hours	
PSY 129 Introduction to Psychology	3
PSY 200 Statistics	3
PSY 317 Tests and Measurements	3
PSY 347 Industrial-Organizational Psychology	3

Two courses from the following - 6 credit hours

PSY 227 Applied Psychology	
PSY 245 Social Psychology	
PSY 355 Group Dynamics	
PSY 373 Human Factors	
PSY 447 Introduction to Counseling	

One course from the following - 3 credit hours

SOC 322 Work and Society	
SOC 325 Complex Organizations	

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 hours must be taken in the department at SUNY Fredonia.

For a minor, a minimum of 9 hours must be taken in the department at SUNY Fredonia.

The psychology department participates in the Cooperative Agriculture and Cooperative Engineering programs. (See pages 7 and 28, respectively.)

RECOMBINANT GENE TECHNOLOGY

(also see Biology)

Office: 203 Jewett Hall
(716) 673-3282
E-mail: Rgt@fredonia.edu
Roger A. Byrne, *Chairperson*
Department of Biology

Virtually all areas of the life sciences are being affected by the application of Recombinant Gene Technology (molecular genetics) in solving biological problems. The need for personnel trained in recombinant DNA techniques continues to expand with the preferential application of this technology to address problems in medicine, agriculture, environmental science, industry, forensics and basic biology. Indeed, Recombinant Gene Technology is playing a central role in virtually all aspects of modern biological research.

SUNY Fredonia's unique program in Recombinant Gene Technology, the first of its type in New York State, provides students with the necessary background, skills and training to enter these exciting areas of molecular biology and biotechnology. Students enrolled in the program will gain experience in DNA cloning, nucleic acid hybridization, gel transfers, forensic DNA analysis, bioinformatics, and DNA sequencing, which form the basis of the Human Genome project and of other molecular genetic research. The B.S. degree in Recombinant Gene Technology also combines an educational experience in the liberal arts with broad coverage of fundamental aspects of the biological sciences. Graduates in Recombinant Gene Technology are well prepared for graduate work in molecular biology, genetic counseling or forensic science as well as entrance to a medical program, or employment as a research technician.

The first two years of the program consist of a core of courses taken by most students interested in the biological sciences. In addition, a senior-level capstone course in Recombinant Gene Technology provides the student with a sequence of experiments in a research project setting that includes a comprehensive selection of the techniques employed in genetic engineering (see course description in the biology section, page 14).

Requirements for the Bachelor of Science Degree in Recombinant Gene Technology

BIOL 141-142	Plant Diversity and Ecosystem Biology & Lab	4
BIOL 144-145	Animal Biology and Evolution & Lab	4
BIOL 241-242	Introductory Cell Biology & Lab	4
BIOL 333-334	Biochemistry & Lab	4
BIOL 335	Genetics	3
BIOL 338	Microbiology	3
BIOL 340	Cell & Subcellular Biology	3
BIOL 431	Senior Seminar	1
BIOL 435	Developmental Biology	3
BIOL 460	Recombinant Gene Technology	3
	Plus 9 additional hours of biology electives at the 300-400 level.	9
		<hr/>
CHEM 115-115	General Chemistry I & II and CHEM 125-126 (Labs)	8
CHEM 215-216	Organic Chemistry I & II and CHEM 225-226 (Labs)	8
PHYS 121-122	College Physics I & II and PHYS 123-124 (Labs)	8
	or	8
PHYS 230-231	University Physics I & II and PHYS 232-233 (Labs)	6
MATH 120-121	Survey of Calculus I and II	6
	or	
MATH 122-123	University Calculus I & II	8
		<hr/>
		30 or 32

Chemistry and mathematics courses should be completed by the end of the sophomore year, physics courses by the end of the junior year.

Course descriptions for the major are listed on pages 101 to 105 in the biology section.

The Recombinant Gene Technology major is strongly advised to plan on at least one year of Undergraduate Research (BIOL 440-441) in the area of molecular biology.

Requirements for Transfer Credit: The degree offered by the Biology Department requires students to complete 41 credit hours of biology core and elective courses chosen with 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.

SOCIAL WORK

(also see Sociology and Anthropology)
W377 Thompson Hall
(716) 673-3570
E-mail: Socwrk@fredonia.edu
Mary B. Carney, *Director*

The profession of social work is dedicated to solving and preventing social problems, whether they involve individuals, families, small groups, organizations or communities. The Bachelor of Science in Social Work program began in the Fall 1997 semester. We are currently approved by the New York State Education Department and have Candidacy status with the Council on Social Work Education, the profession's educational accreditation organization. This is the final pre-accreditation phase in the CSWE accreditation process.

The program's main goal is to prepare high-functioning generalist social workers who integrate knowledge, values, and skills for competent entry-level professional practice and/or graduate education. The generalist social work perspective adopts the view that the world is complex, multidimensional, interrelated, and interactive. Therefore, social workers need to be open to the unique nature of people and their situations requiring practitioners to have a broad range of knowledge on topics such as political science, economics, sociology, psychology, biology, geography, etc. Social workers need to have an understanding of people as individuals and as members of groups such as families, organizations, communities and societies. Social work students learn to investigate, assess, and intervene with these systems to address individual difficulties; environmental stresses; and problems that result from the interaction between people and their environments.

The Social Work curriculum is designed to provide the professional foundation which gives students specific social work theory, knowledge and skills. It is built upon a liberal arts base and provides individualized opportunities for personal and professional growth. Students work with their advisors to choose elective courses to develop their specific interests. The Social Work Club plans

student-directed activities which increase opportunities to explore the nature of the profession. Through their academic experiences, students become more well-rounded, responsible individuals who possess a spirit of inquiry, critical thinking and helping skills, and have the ability to use the self appropriately in relationships with others.

Social work academic offerings and program activities are continually assessed to help keep the program vibrant and relevant. Student achievement results in each required social work course, portfolio learning, and performance in the Field Practicum are compiled and used to analyze the curriculum. In addition, surveys given to seniors and alumni, Advisement surveys, pre-test/post-test assessment, and focus groups of community practitioners are used to help understand the program's performance. Each of these assessment strategies measures some or all of the program's following objectives:

Graduates of the SUNY Fredonia Social Work Program will

1. apply critical thinking skills within the context of professional social work practice.
2. practice within the values and ethics of the social work profession and with an understanding of and respect for the positive value of diversity.
3. demonstrate the professional use of self.
4. understand the forms and mechanisms of oppression and discrimination and the strategies of change that advance social and economic justice.
5. understand the history of the social work profession and its current structures and issues.
6. apply the knowledge and skills of generalist social work to practice with systems of all sizes.
7. apply knowledge of bio-psycho-social variables that affect individual development and behavior, and use theoretical frameworks to understand the interactions among individuals and social systems (i.e. families, groups, organizations, and communities).

8. analyze the impact of social policies on client systems, workers, and agencies.

9. evaluate research studies and apply findings to practice, and, under supervision, to evaluate their own practice interventions and those of other relevant systems.

10. use communication skills differentially with a variety of client populations, colleagues, and members of the community.

11. use supervision appropriate to generalist practice.

12. function within the structure of organizations and service delivery systems, and under supervision, seek necessary organizational change. (*CSWE Curriculum Policy Statements, B5.7.1-B5.7.12*)

and,

13. will utilize the knowledge base as successful preparation for graduate work and/or continued education for competence.

Advancement into the Professional Methods Sequence

Students who indicate their desire to major in Social Work and who meet the college acceptance requirements are designated official majors at the time of their acceptance. However, in the second semester of the sophomore year, all majors who wish to continue in the program and take upper level social work methods courses must successfully complete the Advancement process. An application with supporting documents must be filed by March 15. Supporting documents include a written response to a question posed on the application, transcripts, and three letters of recommendation. Students must successfully complete an interview with a social work faculty member. Transcripts must document that students have met the following advancement requirements:

1. A 2.0 average for the following prerequisite courses:
 - 24 Completed Hours of the College Core Curriculum (6 hours in humanities required)
 - SOC 116 Introduction to Sociology
 - PSY 129 Introduction to Psychology
 - BIOL 110 Human Biology

SOC 200 Statistics for Sociologists (or any other introduction to statistics course) (prereq: SOC 116)

SOC 218 Introduction to Social Work (prereq: SOC 116)

SOC 272 Exploring Community-Based Social Work (prereq: SOC 218)

2. A cumulative grade point average of 2.5 or higher, and

3. A grade of "C" or better in Introduction to Social Work and Exploring Community-Based Social Work

The application materials with complete instructions can be obtained by contacting the department and/or the Program Director.

Students will not be allowed into the Methods Sequence if they have not successfully completed this process. Once accepted into the advanced course work, students are identified as having "Advanced Status" and must follow the prescribed order of courses. Each course builds upon the knowledge of the course that precedes. Students must also achieve a minimum grade of "C" in their required social work courses to continue in sequence.

Transfer Students

The social work program welcomes transfer students. The curriculum was designed to facilitate a successful transition from other institutions. Incoming freshman and sophomore students are given intensive advising to prepare for advancement and to promote success in all academic pursuits. Incoming juniors who transfer with an A.A./A.S. degree or who have 60 credit hours are also given intensive advisement but they must meet all the advancement criteria prior to transfer. When applying for advancement into the Junior year course work, these students must file their application with supporting documents and they must:

1. Be formally accepted into SUNY Fredonia for the fall semester.
2. Document the completion of 60 credit hours (or submit their plan to complete at least 60 hours before they start the fall semester.)
3. Establish equivalency for courses transferring as Introduction to Social Work (Introduction to Human

Services), Exploring Community-Based Social Work (Human Services Internship), and Human Biology.

To establish equivalency, students must submit a syllabus for the course in question to the Social Work Program Director who must determine that the purpose, content, and scope of the course is the same or similar enough to the SUNY Fredonia course that it can stand in the place of the SUNY Fredonia course. The Program Director may contact the college/university to gather more information to make a determination. If approved, a Transfer Credit Approval form must be filed with the SUNY Fredonia Registrar.

Social work courses transferred from a CSWE Accredited program will be approved for credit but may not be judged equivalent to the SUNY Fredonia social work courses. This occurs because of differences in curriculum and course sequencing among programs. Transfer students from an accredited program need to meet with the Program Director to determine equivalency. No equivalency will be granted for the Field Practicum. Students earning a B.S. degree in Social Work from SUNY Fredonia must complete their 500 practicum hours through the SUNY Fredonia program.

Please note: No academic credit for life or work experience will be given as an equivalent for any required social work course, Introduction to Social Work, or Exploring Community-Based Social Work.

Field Practicum

In the senior year, students must complete a 500 hour professionally supervised placement in a social service agency. Conceived as one experience spread over two semesters, the student must complete a minimum of 250 hours of activities during each of the fall and spring semesters. Students begin the application process for their field practicum placement in the fall semester of the junior year. Students must have completed all prerequisite courses prior to entering their field work. They must also have maintained a 2.0 cumulative G.P.A. and a 2.5 average in all the required social work courses. Field practicum policies and procedures can be found in the *Field Manual* available to the

students during the application-to-the-field process in the spring semester.

Program Policies

The social work profession has been a leader in the cause of fighting prejudice, discrimination, and oppression against all people in society. Admission and advancement in the program is based upon the published criteria. Race, color, religion, creed, gender, ethnic or national origin, disability, age, political orientation, or sexual orientation play no role in the program decisions. However, social work is also a professional field with expectations of professional behavior. Students who meet the published criteria but who have evidenced a pattern of unprofessional, unsuitable behavior may be denied advancement and/or dismissed from the program. Students may also be dismissed from the program for academic reasons. Students must earn a grade of "C" or better in their required social work courses to continue in the major. More specific expectations and policies are detailed in the *Handbook for Social Work Majors* available to each major during the fall orientation period.

Requirements for the Bachelor of Science Degree

Degree candidates in Social Work must (a) complete the College Core Curriculum; (b) complete prerequisite social work courses; (c) successfully complete the Advancement process in the second semester of their sophomore year; (d) complete required social work courses (45 hours); (e) maintain and complete a portfolio, (f) complete enough general elective hours and/or a minor to earn 120 credit hours and (g) consistently demonstrate professional behavior.

Requirements continued

Prerequisite Courses:

SOC 116	Introduction to Sociology	3
PSY 129	Introduction to Psychology	3
BIOL 110	Human Biology	3
BUAD 200 or EDUC 200 or POLI 200 or PSY 200 or		
SOC 200	Statistics	3
SOC 218	Introduction to Social Work	3
SOC 272	Exploring Community-Based Social Work	3
		<hr/>
		18

Required Social Work Courses:

SOCW 249	Social Welfare Institutions	3
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POLI 382	Social Welfare Policy	3
SOC 300	Research Methods	3
SOCW 325	Social Work Practice Methods I	3
SOCW 340	Human Behavior in the Social Environment I	3
SOCW 341	Human Behavior in the Social Environment II	3
SOCW 370	Social Work Practice Methods II	3
SOCW 390	Social Work Practice Methods III	3
SOCW 400	Policy and Social Work Practice	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 Hours of Approved Social Work Electives		6
		<hr/>
		45

Social Work faculty are listed under the Department of Sociology and Anthropology.

**SOCIOLOGY/
ANTHROPOLOGY**

Office: W363 Thompson Hall
(716) 673-3205
E-mail: Soc@fredonia.edu or
Anthro@fredonia.edu
Alan G. LaFlamme, Chairperson

The Department of Sociology/Anthropology offers majors and minors in the disciplines of Sociology and Anthropology.

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, sports 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. The Sociology degree program at SUNY Fredonia has special strengths in medical studies, aging, criminal justice, and social work.

Anthropology investigates human origins and diversity. Anthropologists attempt to understand human existence, both past and present, from

a worldwide perspective. Their discipline has been called the most humanistic of the sciences and the most scientific of the humanities. Anthropology is an integrating academic discipline, consisting of four major divisions: physical anthropology, archaeology, linguistics, and cultural anthropology

Majors in Sociology and Sociology with a Concentration in Anthropology develop skills in evaluating and conducting research through courses in theory, methods, statistics, and many specific content areas. Those skills and that knowledge can be applied in a wide variety of occupations and professions. Majors have the opportunity to prepare for graduate education in sociology, anthropology, law, social work, and related fields as well as careers in various social and human service areas. The department offers interested and qualified students a chance to work for credit on research projects currently being conducted by its faculty. In addition, students are encouraged to undertake faculty-aided projects in areas of their own interest. Our graduates have found a wide range of employment, in both public and private sectors, in criminal justice (with police departments, family courts, correctional facilities, probation and parole departments), in social work (with youth, substance abusers, the mentally ill, the disabled, and the aged), in health services fields (with nursing homes, hospitals, HMOs, and government agencies) and in business (personnel work, retail management, marketing and sales).

Student Honors and Awards

Sociology majors and minors who maintain a minimum 3.0 grade point average in the discipline and overall will be eligible for induction into *Alpha Kappa Delta*, the International Sociology Honor Society. The department recognizes the graduating senior who has made the most significant contribution to the college, the community, and to other students by conveying upon her or him the department's Outstanding Senior Award. Every year, awards are given for the best research papers. In addition, an outstanding graduate who has gone on to make significant contributions in his or her chosen profession is selected to receive the

department's Alumni Achievement Award.

Sociology/Anthropology Club: This student organization provides opportunities for majors to interact with one another and with faculty outside of the classroom. The club conducts a number of activities and events of interest to students and makes important contributions to a variety of public service projects.

Requirements for the Bachelor of Arts Degree in Sociology

Thirty-nine hours in sociology and anthropology including:

Required Courses: 21 hours

ANTH 115	Introductory Anthropology	3
SOC 116	Introductory Sociology	3
SOC 200	Statistics for Sociologists (or equivalent)	3
SOC 202	Social Analysis	3
SOC 300	Research Methods	3
SOC 308	Foundations of Sociological Theory	3
SOC 309	Contemporary Sociological Theory	3

Elective Courses: 18 hours

Requirements for the Minor in Sociology

Eighteen 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.

Requirements for the Bachelor of Arts Degree in Sociology with a Concentration in Anthropology

Forty-two hours of approved courses including:

Required Courses: 21 hours

ANTH 115	Introductory Anthropology	3
SOC 116	Introductory Sociology	3
SOC 200	Statistics for Sociologists	3
ANTH 210	Physical Anthropology	3
ANTH 211	Archaeology	3
ANTH 219	Cultural Anthropology	3
ANTH 475	Theory Seminar in Anthropology	3

Elective Courses in Anthropology: 15 hours

Additional Elective Courses: 6 hours from among

BIOL 110	Human Biology	3
BIOL 115	Environmental Biology	3
BIOL 330	General Ecology	3
BIOL 335	Genetics	3

BIOL 351	Evolution	3
ENGL 294	Introduction to Folklore	3
ENGL 324	Myth and Symbol in Literature	3
GIS 201	Introduction to GIS	3
GEO 100	Geology I	3
GEO 365	Stratigraphy	3
HIST 285	Aztecs, Incas, and Mayas	3
HIST 356	The American Indian	3
POLI 352	World Political Geography	3
SOC 303	Social Class and Inequality	3
SOC 316	Minority Groups	3
SOC 321	Population and Society	3
SOC 361	Law in the World	3

Requirements for an Anthropology Minor

Eighteen hours in Anthropology. ANTH 115 Introductory Anthropology (required) plus 15 additional credits in Anthropology. At least 9 credits must be at the 300 or 400 level.

(Spanish, see Modern Languages and Literatures, page 52).

(Special Education, see Education, page 24).

SOUND RECORDING TECHNOLOGY

(see also Music)
 Office: 1004 Mason Hall
 (716) 673-3151
 E-mail: SRT@fredonia.edu
Peter J. Schoenbach, Director,
 School of Music

Bernd Gottinger, Sound Recording
 Technology Coordinator

The Sound Recording Technology program 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.

Core Curriculum: 35 credit hours

MUS 001	Music Convocation	1
MUS 100	Recital Seminar	0
MUS 120	Concert Attendance	0
MUS 019-020	Ensembles	0
MUS 105-106	Applied Music	4
MUS 113	Voice Class	1
MUS 117-118	Piano Class	2
MUS 121-122	Aural Theory I & II	4
MUS 123-124	Written Theory I & II	4
MUS 131-132	Applied Musicianship I & II	2
MUS 221-222	Aural Theory III & IV	4
MUS 223-224	Written Theory III & IV	4
MUS 263	Music History in Western Civilization	3
MUS 264	Topics in Music History	3
MUS XXX	Music History Elective	3
Total:		35

Sound Recording Technology Requirements (in addition to core):

SRT 100	Introduction to Sound Recording Technology	1
SRT 200-201	Recording Practicum	4
SRT 250-251	Recording Practicum	4
SRT 300-301	Recording Practicum	4
SRT 350-351	Technology & Practices of the Sound Industry	6
SRT 450-451	Senior Project/Seminar	4
CSIT 105	Visual BASIC Programming	3
MATH 122-123	University Calculus I & II	8

PHYS 121-122	College Physics I & II	6
	or	
PHYS 230-231	University Physics I & II	6
PHYS 123-124	College Physics Lab I & II	2
	or	
PHYS 232-233	University Physics Lab I & II	3
PHYS 311	Acoustics	3
PHYS 318	Basic Electronics	3

Internship: Internships within the recording industry are strongly encouraged, to be used as a bridge from the academic environment to fully professional work. Up to 15 credit hours of credit may be earned.

Electives: by advisement from Sound Recording Technology Coordinator.

SPEECH PATHOLOGY AND AUDIOLOGY

Office: W121 Thompson Hall
 (716) 673-3202
 E-mail: SpPath@fredonia.edu
Bridget Russell, Chairperson

The Department of Speech Pathology and Audiology seeks to combine professional preparation with a solid grounding in general and liberal education. To this end, the department offers two degree options; the Bachelor of Science in Education (B.S. Ed.), leading to provisional certification as a Teacher of the Speech and Hearing Handicapped, and the Bachelor of Arts in Communication Disorders and Sciences (B.A.), a pre-professional non-certification option.

Individuals qualified as Speech-Language Pathologists and Audiologists are in demand in a variety of educational and therapeutic settings. Those qualified at the bachelor's level readily obtain employment in school or pre-school settings. Upon completion of a master's degree, the graduate may elect to continue working in school settings or may seek employment in hospitals, medical practice groups, nursing homes, rehabilitation agencies or in private practice.

At SUNY Fredonia, the Bachelor of Science in Education of the Speech

and Hearing Handicapped (housed in the Henry C. Youngerman Center for Communication Disorders) includes clinical practice and student teaching in schools. Recipients of the B.S. Ed. are provisionally certified to work in the schools of New York.

The Bachelor of Arts degree option includes all the academic courses for the B.S. Ed., but in place of the practicum and student teaching courses, a 2 to 3 course sequence in two different academic departments is required. Choices and options are facilitated through advisement. Junior transfers and second baccalaureate degree students are advised into the B.A. program to facilitate timely completion of academic and degree requirements.

Upon completion of either degree option, students may elect to continue graduate studies in the same field. This major also provides a basis or impetus for specializations in education of the deaf, special education, linguistics, counseling and a variety of other professions.

The graduate programs at Fredonia in Speech-Pathology and Audiology are accredited by the Council on Academic Accreditation of the American Speech-Language-Hearing Association and are licensure qualified by the State Education Department.

Scholarships

The following scholarships are awarded by the Department of Speech Pathology and Audiology: the Esau A. and Susan S. Sam Scholarship; the Schaffer Family Scholarship; the Rebecca Snyder Memorial Scholarship; the Lt. Gen. Louis E. Woods Scholarship, and the Henry C. Youngerman Scholarship.

Requirements for all Academic Majors

Students during their fifth semester, or the semester in which 75 credit hours will be earned, must normally meet the following requirements before being permitted to take further courses in the Department of Speech Pathology and Audiology.

1. A minimum overall GPA of 2.75.
2. A minimum overall GPA of 2.75 in all speech pathology and audiology courses completed.
3. Additional requirements as specified elsewhere.

Requirements for the Bachelor of Science in Education, Speech and Hearing Handicapped, and Provisional Certification

	Hrs.
SPA 250 Speech and Language Development	3
SPA 316 Speech Science	3
SPA 318 The Speech and Hearing Mechanism	3
SPA 321 Speech Pathology	3
SPA 322 Hearing Problems and Tests	3
SPA 323 Phonological/ and Language Disorders	3
SPA 350 Phonetics	3
SPA 327 Organization and Administration of Speech and Hearing Programs	2
SPA 328 Clinical Methods, Speech and Hearing	3
SPA 329 Clinical Practice (co-requisite SPA 331)	3
SPA 331 Lecture and Staffing Clinical Practice (co-requisite SPA 329)	1
SPA 418 Stuttering and Voice Problems	3
SPA 419 Aural Habilitation and Rehabilitation	3
SPA 432 Student Teaching of the Speech and Hearing Handicapped	10
	<hr/> 46

Required for Provisional Certification:

EDU 215 Education in American Society or equivalent	3
EDU 225 Developmental Psychology	3
EDU 349 Educational Psychology	3
	<hr/> 9

The New York State Education Department requires a Child Abuse Seminar as well as a Violence Prevention Seminar for all students being recommended for teaching certification; Early Childhood, Elementary Education, Secondary Education, and Speech Pathology/Audiology. These students must successfully complete the New York State Teacher Examination Program. Students are required to demonstrate competence in a foreign language. This requirement may be satisfied in any one of the following four ways: (1) completion of course work at the 116 level at Fredonia, or (2) transferring of two successful college semesters, or (3) scoring at the 50th percentile or higher on the CLEP exam, or (4) completion of three years of high school language with a passing

score on the Regent's examination (passing = 65).

Requirements for the Bachelor of Arts in Communication Disorders and Sciences

	Hrs.
SPA 250 Speech and Language Development	3
SPA 316 Speech Science	3
SPA 318 The Speech and Hearing Mechanism	3
SPA 321 Speech Pathology	3
SPA 322 Hearing Problems and Tests	3
SPA 323 Phonological and Language Disorders	3
SPA 327 Organization and Administration of Speech and Hearing Programs	2
SPA 328 Clinical Methods, Speech and Hearing	3
SPA 350 Phonetics	3
SPA 418 Stuttering and Voice Problems	3
SPA 419 Aural Habilitation and Rehabilitation	3
A two-course sequence in two different academic departments by advisement.	12
	<hr/> 44

Recommended for Future Certification

EDU 215 Education in American Society	3
EDU 225 Developmental Psychology	3
EDU 349 Education Psychology	3
	<hr/> 9

Requirements for a Minor in Speech Pathology and Audiology

Eighteen credit hours including:

SPA 150 Introduction to Communicative Disorders	3
SPA 250 Speech and Language Development	3
SPA 350 Phonetics	3
Plus 9 hours selected from:	9
SPA 318 The Speech and Hearing Mechanism	
SPA 321 Speech Pathology	
SPA 322 Hearing Problems and Tests	
SPA 323 Phonological and Language Disorders	
SPA 418 Stuttering and Voice Problems	
SPA 490 Independent Study	

SPORT AND EXERCISE STUDIES

(interdisciplinary minor only)

Coordinators:

Dr. Charles Davis, *Chairperson*
Health, Wellness & Recreation
Office: 123 Dods Hall
(716) 673-3101
E-mail: Charles.Davis@fredonia.edu

Dr. Bruce Klonsky, *Professor*,
Psychology Department
Office: W339 Thompson Hall
(716) 673-3892
E-mail: Bruce.Klonsky@fredonia.edu

The Sport and Exercise Studies interdisciplinary minor has three options. The Athletic Coaching Certification Track (18 credit hours), The Sports Administration and Communications Track (23 credit hours) and the Sport and Exercise Sciences Track (23-24 credit hours). Each track will include some required courses, and areas of concentration/specialization where there will be a choice of electives. For each track, the electing of an applied outside experience (i.e., practicum/internship or independent study) will be encouraged.

The Athletic Coaching Track

prepares students to meet the New York State established criteria to qualify to coach in elementary and secondary schools and in youth recreation programs. Students can organize 18 credit hours needed for graduation to meet the state mandate for strenuous/contact activities and non-strenuous/non-contact activities. Core courses relate to philosophy, principles and organization of athletics in education; health sciences applied to coaching (e.g. First Aid, Psychology of Coaching, and Adult CPR); and techniques of coaching.

The Sports Administration and Communication Track

will expose students to (a) the behavioral dimensions of sport, (b) general management and organizational skills and issues, (c) sport-specific management principles, strategies, and issues (d) marketing, finance, and legal issues, and (e) communication and ethical issues.

The course categories included in this track were strongly influenced by the Sport Management Program Standards established by the National Association for Sport and Physical Education and the North American

Society for Sport Management. This track will aid in the preparation and viability of students for jobs and graduate work in sports management, marketing, and public relations.

The Sport and Exercise Sciences Track will expose students to scientific principles and issues related to sport and exercise. The contributions of the behavioral, social and physical sciences (psychology, sociology and physiology) will be emphasized. The core courses for this track include Sport Psychology, the Sociology of Sport, and the Physiology of Exercise and Sport. Students will also be required to choose one course in each of the following concentration areas: (a) physiological bases, (b) group and organizational contexts, (c) developmental and educational issues and principles, and (d) personality, assessment, and counseling issues.

The course categories utilized in this track are strongly influenced by the criteria that the Association for the Advancement of Applied Sport Psychology requires for the certification of doctoral-level professional sport consultants. This track will aid in the preparation of students for graduate work dealing with sport and exercise behavior within their discipline (e.g. psychology, sociology, kinesiology, and exercise science). It will also provide important information about sport and exercise behavior for those planning to be coaches, fitness specialists, physical therapists, and athletic trainers.

A maximum of 12 credit hours may be taken in the Sport and Exercise Sciences track from any one department in fulfilling the requirements of this minor.

ATHLETIC COACHING TRACK (18 credit hours)

REQUIRED CORE COURSES:

	Credit hours
HLTH 111 First Aid Skills & Knowledge	2
PHED 210 Phil., Principles, Organ. of Interscholastic Athletics	3
PHED 311 The Psychology of Coaching	2
PHED 315 Prev. & Care of Ath. Injuries*	3
PHED 321 Coaching Techniques	2

ELECTIVE COURSES:

Select courses totalling 6 credit hours from the following listing:

EDU 349 Educational Psychology*	3
HLTH 300 Education In Drugs, Alcohol and Tobacco**	1
HLTH 302 Stress Management	1
HLTH 303 Fitness & Nutrition	2
PHED 318 Athletic Training Internship	3
PHED 399 Independent Readings	1-3
PHED 499 Independent Study	1-3
PSY 237 Sport Psychology*	3
SOC 335 Sociology of Sport*	3
PSY 247 Health Psychology*	3
PHED 400 Internship	1-6

*Prerequisite required

** Education Majors only

SPORTS ADMINISTRATION & COMMUNICATION TRACK (23 credit hours)

REQUIRED CORE COURSES:

	Credit hours
PHED 210 Phil., Principles, Organ. of Interscholastic Athletics	3
PHED 311 Psychology of Coaching*	2
PSY 237 Sport Psychology*	3
SOC 335 Sociology of Sport*	3

ELECTIVE COURSES:

(One course required of students)

BUAD 321 Manag. & Organ. Behav.*	3
PSY 347 Indust./Organ. Psychology*	3

*Prerequisite required

AREAS OF CONCENTRATION

(Select three courses from the following two areas)

MARKETING, FINANCE & LEGAL ISSUES

	Credit hours
BUAD 310 Legal Envir. of Business	3
BUAD 330 Human Resource Manage.*	3
BUAD 325 Principles of Marketing*	3
BUAD 340 Marketing Research*	3
PHIL 310 Administrative Ethics	3

*Prerequisite required

COMMUNICATIONS & ETHICAL ISSUES

COMM 200 Electr. Media Writing*	3
COMM 251 Audio Production I	3
COMM 255 TV Production I *	3
COMM 353 Comm. Law & Ethics*	3
ENGL 270 Intro. to Print Media	3
ENGL 368 Intro. to Public Relations	3
ENGL 370 Report. & News.Writ.*	3
BUAD Business Internship	3

480/481

COMM 480 Communication Internship	3
ENGL 468 Public Relations Internship	3
PHED 400 Health & Wellness Internship	1-6

*Prerequisite required

SPORT AND EXERCISE SCIENCES TRACK (23-24 credit hours)

REQUIRED CORE COURSES:

	Credit hours
PHED 200 Physiology of Exercise & Sport	3
PSY 237 Sport Psychology*	3
SOC 335 Sociology of Sport*	3

ELECTIVE COURSES: (1 course)

PHED 311 The Psychology of Coaching	2
PSY 247 Health Psychology*	3
PHED, PSY, Internship	1-6
SOC	

AREAS OF CONCENTRATION

Physiological Bases (1 course)

PHED 315 Prev. & Care of Ath. Injuries	3
PSY 351 Physiological Psychology*	3

Group and Organizational Contexts (1 course)

PSY 355 Group Dynamics*	3
PSY 347 Indust./Organ. Psychology*	3
SOC 325 Complex Organizations	3

Developmental & Educational Issues (1 course)

EDU 225 Developmental Psychology	3
EDU 349 Educational Psychology*	3
PSY 364 Cognitive Development*	3
PSY 349 Child Psychology*	3
PSY 365 Social Development*	3

Personality, Assessment & Counseling Issues (1 course)

PSY 317 Tests and Measurements*	3
PSY 246 Personality*	3
PSY 356 Abnormal Psychology*	3
SOC 310 Deviant Behavior	3
SOC 311 Sociology of Addiction	3

*Prerequisite required

Note: An independent study or internship in H&W, PSY or SOC can be substituted for 1 course in these areas of concentration.

THEATRE AND DANCE

Office: 213 Rockefeller Arts Center
(716) 673-3596
E-mail: theatre@fredonia.edu
James Ivey, *Chairperson*

It is the mission of the Department of Theatre and Dance to provide training for professional, community and academic theatres within the framework of liberal arts education. The theatre and dance programs also serve as a means of acquiring a liberal education.

A liberal education serves to broaden horizons, break down prejudices, and build inquiring, open minds; it is of value regardless of the student's future goals. Theatre and drama, which are ultimately concerned with all aspects of people's experiences, have special relevance to a liberal education. The greater the understanding of human existence by theatre majors in liberal arts, the more experiences they have entered into imaginatively and projected to others from the stage, the more they will be able to order, clarify and understand their own lives and the world in which they live. Of all the disciplines in a liberal arts university, theatre may be the one most clearly related to the pattern of peoples' lives and normal experiences.

The Department of Theatre and Dance offers the Bachelor of Arts and the Bachelor of Fine Arts degrees. The Bachelor of Arts degree is a General Theatre Studies program. The Bachelor of Fine Arts degree program is limited to those students who demonstrate excellence or the potential for excellence in performance and/or production design. It is designed for those students who enter college with a firm idea of their professional goals.

In conjunction with the School of Music, the department offers study leading to the Bachelor of Fine Arts in Musical Theatre degree. Minors in Theatre and Dance are available as well, allowing the pursuit of a secondary interest in theatre or dance as support for a major area or for personal growth and satisfaction.

Theatre students may participate in the Performing Arts Company, a student-run theatre group at the college. PAC presents one major production each semester and sponsors workshops and experimental

theatre. Juniors and seniors who contribute significantly to the theatre program and who attain a grade point average of 3.25 in their major, may be eligible for *Alpha Psi Omega*, a national dramatic society. Incoming freshmen may be eligible for the Jack L. Cogdill Scholarship, which is based on talent.

Admission to the Department

Bachelor of Arts - General Theatre Studies

All students who indicate Theatre as their first major preference and are academically accepted by the college are automatically admitted to the Bachelor of Arts General Theatre Studies program.

Bachelor of Fine Arts - Acting

In addition to admittance to the college, students must audition during the year prior to entering Fredonia at one of the designated audition dates or may audition during the first semester of residence. Audition information and application forms are available from the Department of Theatre and Dance office.

Transfer students should audition for the B.F.A. Acting program during the semester before transferring. The B.F.A. Acting degree requires four years for completion.

Bachelor of Fine Arts - Musical Theatre

For admission and degree requirements see page 59.

Bachelor of Fine Arts - Production Design

In addition to admittance to the college, prospective students must interview with the design faculty prior to acceptance into the program. This may be done during the year prior to attending Fredonia or B.A. General Theatre Studies students may be admitted during their first year in residence.

Dance

For information on programs and courses in Dance, see page 76.

Additional Requirements

Transfer students admitted into B.F.A. degree programs should expect to spend a minimum of three years on the SUNY Fredonia campus.

In addition to the specific and individual courses, periodic reviews of achievement/improvement will be conducted for the B.F.A. Acting and Production Design candidate with the purpose of determining advancement/retention. At the conclusion of the fourth semester, the student will be reviewed by the performance or design faculty and a determination made as to permission for continuance in the program. Students with unfavorable evaluations will not be permitted to continue study in the B.F.A. but may continue in the B.A. General Theatre program.

Students in the B.F.A. Acting and Musical Theatre programs must present acting juries at the conclusion of the first year, at the end of each semester in the second year, at the end of the third year, and must perform a senior recital or a leading role in a departmental production during their fourth year. B.F.A. Acting and Musical Theatre majors are required to audition for all Department of Theatre and Dance Mainstage productions.

B.F.A. Production Design students, prior to graduation, must formally present their portfolios and participate in the senior design exhibit.

All Theatre Arts majors and minors are required to complete Theatre Practice obligations that are practical extensions of the classroom and vary in accordance with the specific programs. The Theatre Practice commitment requires approximately 12 clock hours per week and may, in special cases, require significantly more time. Theatre Practice credit will not count toward the total number of credits required in the B.F.A. Musical Theatre degree program.

All departmental majors must successfully complete a minimum of 30 upper-level hours and appropriate supporting courses as determined by faculty advisement.

Students who are on academic probation will not be permitted to perform in public performances nor will major technical crew assignments be permitted.

Transfer students in the B.A. General Theatre Studies degree program must complete at least 60 percent (27 credit hours) of their major at Fredonia.

**Degree Requirements:
Bachelor of Arts***General Theatre Studies*

THEA 101-102	Theatre Practice	2
THEA 110	Theatre Visiting Artists	4
THEA 114	Intro. to Performing Arts	3
THEA 117	Script Analysis	3
THEA 121	Intro. to Tech. Theatre	3
THEA 133	Intro. to Acting	3
THEA 201-202	Theatre Practice	2
THEA 220	Makeup	3
THEA 301-302	Theatre Practice	2
THEA 401-402	Theatre Practice	2
THEA 441	Directing I	3
THEA 451-452	History of the Theatre I & II	6
THEA 460	Theatre Management	3
THEA	Electives	6
		<u>45</u>

Students in the B.A. General Theatre Studies program must complete a total of 75 credit hours outside their major.

Bachelor of Fine Arts*Acting:*

THEA 101-102	Theatre Practice	2
THEA 110	Theatre Visiting Artists	4
THEA 121	Intro. to Tech. Theatre	3
THEA 131	Acting Studio: Improvisation	3
THEA 132	Acting Studio: Character Study	3
THEA 140	Stage Dialects	3
THEA 201-202	Theatre Practice	2
THEA 220	Makeup	3
THEA 231-232	Acting Studio: Scene Study I & II	6
THEA 242-243	Acting Studio: Introduction to Voice and Movement I & II	6
THEA 301-302	Theatre Practice	2
THEA 331	Acting Studio: Styles	3
THEA 342-343	Acting Studio: Stage Voice I & II	6
THEA 361-362	Acting Studio: Stage Movement I & II	6
THEA 401-402	Theatre Practice	2
THEA 433	Acting Studio: Audition Techniques	3
THEA 441	Directing I	3
THEA 451-452	History of the Theatre I & II	6
THEA 499	Performance/Production Seminar	3
ENGL 412-414	Shakespeare	6

Plus two courses from the following:	4-6
THEA 353	History of Musical Theatre
THEA 432	Acting Studio: Musical Theatre Styles
DANC 111	Modern Technique I
DANC 121	Beginning Tap Dance
DANC 131	Beginning Jazz Dance
DANC 211	Modern Technique II
DANC 221	Beginning Ballet
ART 115	Masterpieces of Art to 1400
ART 116	Masterpieces of Art from 1400
HIST 115	Western Civilization (Ancient to 1700)
HIST 116	Western Civilization (1700 to Present)
MUS 263	Survey of Western Music
MUS 264	Topics in Music History

Bachelor of Fine Arts*Production Design:**Core Curriculum:*

THEA 101-102	Theatre Practice	2
THEA 110	Visiting Artists	4
THEA 114	Introduction to the Performing Arts	3
THEA 117	Script Analysis	3
THEA 121	Introduction to Technical Theatre	3
THEA 123	Intro. to Tech. Production	3
THEA 133	Intro. to Acting	3
THEA 201-202	Theatre Practice	2
THEA 220	Makeup	3
THEA 221	Computer Drawing and Design Lab	1
THEA 222	Stagecraft I	3
THEA 223	Lighting Design I	3
THEA 226	Scene Painting I	3
THEA 228	Costume Crafts	3
THEA 301-302	Theatre Practice	2
THEA 303	Rendering Techniques I	1
THEA 304	Rendering Techniques II	1
THEA 305	Rendering Techniques III	1
THEA 326	Scene Design I	3
THEA 327	Costume Design I	3
THEA 401-402	Theatre Practice	2
THEA 441	Directing I	3
THEA 451-452	History of Theatre I & II	6
THEA 499	Performance/Production Seminar	3
ART 115	Masterpieces in Art to 1400	3
ART 116	Masterpieces in Art from 1400 to Present	3
ART 150	Drawing I	3
		<u>73</u>

Costume Design Emphasis

THEA 325	History of Fashion	3
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THEA 328	Costume Design II	3
THEA 329	Flat Patterning	3
THEA 324	Lighting Design II or	3
THEA 420	Special Studies (Costuming)	3
THEA 426	Scene Design II	
THEA 482	Directed Study	3
		<u>18</u>
<i>Scenic Design Emphasis</i>		
THEA 322	Stagecraft II	3
THEA 325	History of Fashion	3
THEA 420	Special Studies (Painting)	3
THEA 426	Scene Design II	3
THEA 427	Scene Painting II	3
THEA 324	Lighting Design II or	3
THEA 328	Costume Design II	
		<u>18</u>

Lighting/Technical Production Emphasis

THEA 322	Stagecraft II	3
THEA 324	Lighting Design II	3
THEA 325	History of Fashion	3
THEA 420	Special Topics (Technical Production)	3
THEA 426	Scene Design II	3
THEA 460	Theatre Management	3
		<u>18</u>

Requirements for the Bachelor of Fine Arts in Musical Theatre

For information on the Bachelor of Fine Arts (B.F.A.) in Musical Theatre curriculum requirements, see page 59.

Requirements for the Minor in Dance, see page 76.**Requirements for the Minor in Theatre**

Twenty-one credit hours:

THEA 101-102	Theatre Practice	2
THEA 110	Theatre Visiting Artists (4 semesters)	2
THEA 114	Intro. to Performing Arts	3
THEA 117	Script Analysis	3
THEA 121	Intro. to Tech. Theatre	3
THEA 130	Acting for Non-Majors or	3
THEA 133	Intro. to Acting	
THEA 201-202	Theatre Practice	2
One of the following:		
THEA 325	History of Fashion	3
THEA 451	History of Theatre I	3
THEA 452	History of Theatre II	3
THEA 460	Theatre Organization & Management	3

DANCE

(minor only)

Office: 147 Dods Hall
(716) 673-3107

E-mail: Dance@fredonia.edu

Carol A. Prevet, *Coordinator*

Theatre and television have heightened interest in the moving art forms. The Dance minor combines technique training in movement with training in music and rhythm. Creativity is stressed in two courses in choreography and students have the opportunity to create dances, design sets, costumes, and lights for concerts. Students are welcome to participate in the dance club, Orchesis, which sponsors many activities throughout the year, including master classes and workshops with professional companies and teachers. The Dance minor is especially recommended for students in art, communication, education, music, theatre, and musical theatre.

Requirements for the Minor in Dance

A. 13 credit hours

DANC 105	Folk Dance	1
DANC 110	Dance Productions (4 semesters)	0
DANC 111	Modern Technique I	2
DANC 211	Modern Technique II (Prerequisite: DANC 111)	2
DANC 311	Modern Technique III (Prerequisite: DANC 211)	2
DANC 363	Choreography I (Prerequisite: DANC 211)	3
DANC 364	Choreography II (Prerequisite: DANC 363)	3

B. 3 credit hours:

MUS 101	Music Theory/Non-Majors (may be waived by advisor for those with extensive music background.)	
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C. 8 credit hours: to be selected from the following:

DANC 106	Square Dance	1
DANC 121	Beginning Tap	2
DANC 122	Tap Dance II (Prerequisite: DANC 121)	2
DANC 131	Beginning Jazz	2
DANC 132	Jazz Dance II (Prerequisite: DANC 131)	2
DANC 221	Beginning Ballet	2
DANC 222	Ballet II (Prerequisite: DANC 221)	2
DANC 223	Ballet III (Prerequisite: DANC 222)	2
DANC 231	Afro-Caribbean Dance	2
DANC 241	Improvisation (Prerequisite: DANC 111)	2

DANC 321	Dance for the Musical Theatre (Prerequisites: DANC 121, 211)	2-3
DANC 341	Selected Topics in Dance Practicum in Dance	1-3
461-462	or	6
DANC 561-562	Practicum in Dance (senior or graduate student - by audition only)	

or graduate school for career opportunities. Former students hold jobs as art directors, free-lance artists, teachers, college professors, working artists, business owners of potteries and design firms, and gallery directors and curators.

The Department of Visual Arts offers both the Bachelor of Arts and the Bachelor of Fine Arts degrees with concentrations in Studio Art and Graphic Design; and the B.A. degree with a concentration in Art History. Admission to the department in Studio Art or Graphic Design requires the submission of an acceptable portfolio for both freshman and transfer students. Prospective students may send 10 to 20 slides, or schedule an in-person review. All accepted students must have slides on file. Information about how to shoot slides and what should be included in the portfolio is available from both the department and the Office of Admissions.

Workshops and trips are sponsored throughout the academic year by Art Forum, the art students' club. Glass blowing, software demonstrations and paper making are examples of past workshop offerings. Art Forum also sponsors trips to major art museums in cities like New York, Toronto, Pittsburgh and Cleveland.

VISUAL ARTS

Office: 216 Rockefeller Arts Center
(716) 673-3537

E-mail: Art@fredonia.edu

Mary Lee Lunde, *Chairperson*

The objective of the Department of Visual Arts is to provide a balanced, comprehensive undergraduate program in the practice, theory, and history of art. Acknowledging the pertinent need for a curriculum that includes professional training in studio specialties and art history, the department offers both the Visual Arts major and the elective student an opportunity to experience art as an important and contributing factor in a liberal arts education and to prepare for advanced study or career opportunities. Upon graduation the student may look to the public sector

Internships are available for the student who wants practical experience in addition to his/her class work. The department, as well as the Office of Internships (see page 179), will assist the student in setting up the internship either in the United States or abroad.

The Alford Bjurlin Scholarship, the George W. Booth Visual Arts Scholarship, the Chautauqua Craft Alliance Fund Scholarship, the Marano-Gnirke Scholarship and the Fredonia Potter's Co-op Award are available to students on an annual basis. Every third year, the Robert W. Marvel Scholarship is available to currently enrolled students.

In the practice of art, after completing the basic sequences of the core program, the student must choose a Studio Art concentration with an emphasis from the areas of ceramics, drawing, illustration, painting, photography, sculpture, or graphic design. Successful completion of the 24-hour Review and Senior Seminar are required of all majors concentrating in any of the areas in Studio Art. Students wanting to apply for the B.F.A. degree may do so if they have attained at least a 3.0 average in art courses taken at Fredonia after completing a minimum of 27 credits in the core program. A 2.0 is required for courses taken outside the department. Transfer students should note that only courses taken at Fredonia will count towards the required grade points.

The Art History concentration offers a wide range of courses from ancient to modern art.

Studio Art Concentrations

Bachelor of Arts Degree (Core plus 21 credit hours of Concentration Requirements)

Bachelor of Fine Arts Degree (Core plus 33 credit hours of Concentration Requirements)

Core Program:	36 Hrs.
ART 115 Masterpieces-Art to 1400	3
ART 116 Masterpieces-Art from 1400 to the Present	3
ART 150 Drawing I	3
ART 151 Drawing II	3
ART 155 2-D Design I	3
ART 252 Life Drawing I	3
ART 255 Photography I	3

ART 257 Sculpture I	3
ART 273 Ceramics I	3
ART 258 Sculpture II or Ceramics II	3
ART 274 Ceramics I	3
ART 285 Painting I	3
Art History	3

Bachelor of Arts Degree Concentration Requirements: 21 credit hours in one area (plus AR 120 Visiting Artists program each semester)

Painting

ART 286 Painting II	3
ART 385 Painting III	3
ART 386 Painting IV	3
ART 495 Independent Studio Project	3

Studio Electives	6
Art History	3

Photography

ART 305 Photography II	3
ART 310 Digital Imaging	3
ART 355 Photography III	3
ART 405 Photography IV	3
ART 495 Independent Studio: Photo IV	3
Art History	3
Studio Electives	6

Sculpture

ART 357 Sculpture III	3
ART 358 Sculpture IV	3
ART 441 Directed Studio Sculpture	3
ART 495 Independent Studio Project	3

Studio Electives	6
Art History	3

Ceramics

ART 373 Ceramics III	3
ART 374 Ceramics IV	3
ART 441 Directed Studio Ceramics	3
ART 495 Independent Studio Project	3

Studio Electives	6
Art History	3

Drawing

ART 350 Drawing III	3
ART 370 Drawing IV	3
ART 441 Directed Studio Project	3
ART 495 Independent Studio Project	3

Studio Electives	6
Art History	3

Illustration

ART 253 Life Drawing II	3
ART 263 Printmaking I	3
ART 380 Illustration I	3
ART 381 Illustration II	3
ART 420 Illustration III	3
ART 421 Illustration IV	3
Art History	3

Bachelor of Fine Arts Degree Concentration Requirements: 33 credit hours in one area (plus AR 120 Visiting Artists program each semester)

Painting

ART 253 Life Drawing II	3
ART 286 Painting II	3
ART 350 Drawing III	3
ART 385 Painting III	3
ART 386 Painting IV	3
ART 441 Directed Studio Painting	3
ART 495 Independent Studio Painting	3

Studio Elective	6
Art History	3
Art History /Studio Elective	3

Photography

ART 305 Photography II	3
ART 310 Digital Imaging	3
ART 350 Drawing III	3
ART 355 Photography III	3
ART 405 Photography IV	3
ART 495 Independent Studio: Photography	3
Art History electives	6
Studio electives	9

Sculpture

ART 274 Ceramics II	3
ART 357 Sculpture III	3
ART 358 Sculpture IV	3
ART 441 Directed Studio Sculpture	3
ART 495 Independent Studio Sculpture	3

Studio Electives	12
Art History	3
Art History/Studio	3

Ceramics

ART 258 Sculpture II	3
ART 373 Ceramics III	3
ART 374 Ceramics IV	3
ART 441 Directed Studio Ceramics	3
ART 495 Independent Studio Ceramics	3
Art History	3
Art History/Studio	15

Drawing

ART 253 Life Drawing II	3
ART 263 Printmaking I	3
ART 285 Painting II	3
ART 350 Drawing III	3
ART 370 Drawing IV	3
ART 441 Directed Studio Drawing	3
ART 495 Independent Study	3
Art History/Studio	12

Illustration

ART 253	Life Drawing II	3
ART 263	Printmaking	3
ART 350	Drawing III	3
ART 353	History of Graphic Design	3
ART 380	Illustration I	3
ART 381	Illustration II	3
ART 420	Illustration III	3
ART 421	Illustration IV	3
ART 441	Directed Studio Illustration	3
ART 453	Design Realities and Professional Practices	3
Studio Elective		3

Graphic Design Concentration

Bachelor of Arts Degree (Core plus 24 hours of Concentration Requirements) plus AR 120 Visiting Artists Program each semester

Bachelor of Fine Arts Degree (Core plus 33 credit hours of Concentration Requirements) plus AR 120 Visiting Artists Program each semester

Core Program: 33 Hrs.

ART 115	Masterpieces - Art to 1400	3
ART 116	Masterpieces - Art from 1400 to the Present	3
ART 150	Drawing I	3
ART 151	Drawing II	3
ART 155	2-D Design I	3
ART 255	Photography I	3
ART 257	Sculpture I	3
	or	3
ART 273	Ceramics I	
ART 258	Sculpture II	3
	or	3
ART 274	Ceramics II	
ART 259	Graphic Design I	3
ART 285	Painting I	3
Art History		3

Bachelor of Arts Concentration Requirements:

Graphic Design and/or Typography courses in sequence	15
Studio Electives	6
ART 353 History of Graphic Design	3

Bachelor of Fine Arts Concentration Requirements:

ART 260	Graphic Design II	3
ART 353	History of Graphic Design	3
ART 359	Graphic Design III	3
ART 360	Graphic Design IV	3
ART 361	Typography I	3
ART 362	Typography II	3
ART 401	Graphic Design V	3
ART 402	Graphic Design VI	3
ART 452	Typography III	3
ART 453	Design Realities and Professional Practices	3
Studio Elective		3
Art History Concentration		

Bachelor of Arts Degree (36 credit hours):

ART 115	Masterpieces - Art to 1400	3
ART 116	Masterpieces - Art from 1400 to the Present	3
Art History Courses as Advised		24
Selected Studio Courses		6

Recommended: 6 additional credit hours in Studio or Art History courses.

All Visual Arts majors must enroll each semester in ART 120 Visiting Artists Program, a required departmental activity.

Students concentrating in Studio Art and design must, through enrollment in Senior Seminar, present an acceptable exhibit of their art work during their senior year prepared under advisement of the art faculty, and a slide portfolio of completed work to remain in the student's departmental file.

All graduating visual arts majors must complete the last semester of the senior year enrolled at the SUNY Fredonia campus to provide adequate preparation for the required on-campus senior exhibit.

The visual arts department reserves the right to retain student work for its permanent collection.

It is mandatory that all art majors meet with their visual arts faculty advisor for program and/or career advising at least once per semester.

Additional standards and expectations of the department may be confirmed through the chairperson's office.

Requirements for the Minor in Art History 18 credit hours:

ART 115-116 (6 credit hours); two courses selected from 200 level art history offerings (6 credit hours); one course from the 300 level (3 credit hours); and one course from the 400 level art history (3 credit hours).

Requirements for the Minor in Art Studio 21 credit hours:

ART 115 or ART 116 (3 credit hours); two courses (6 credit hours) selected from the ART 150, 151, and 155 basic Drawing and Design sequences, and four studio courses in sequence from any combination of studio specialties at the 200, 300, and 400 level (12 credit hours).

All courses should be selected with advising and approval of the Visual Art Department.

Students interested in the Visual Arts have other alternatives available to them. Through the Bachelor of Arts in Interdisciplinary Studies program, students with special educational goals not fully served by traditional programs, may, with the aid of an academic advisor and the Associate Vice President for Academic Affairs or the Registrar, propose an alternative preparatory curriculum in the following career-oriented areas: arts administration, art therapy, and communications design. Some of these B.A. in Interdisciplinary Studies alternatives are already operational, others are in the process of being formulated.

WOMEN'S STUDIES

(interdisciplinary minor only)

258 Fenton Hall
(716) 673-3851
Adrienne McCormick, Director

Women's Studies Program Office
E249 Thompson Hall
(716) 673-3158
E-mail: wstudies@fredonia.edu
<http://www.fredonia.edu/womanstudies>

Women's Studies is the study and recognition of the social construction of gender and its grouping with class, race, age, ethnicity, nationality and sexual identity. Women's Studies is a recognized and vibrant curricular field, whose academic function is to analyze society's changing definitions of women and their roles and to offer analyses exploring why and how these changes came about.

The goals of the interdisciplinary minor in Women's Studies are: to introduce a recognized and well-documented area of scholarship to the college curriculum; to challenge the students to contemplate the ways that gender informs our knowledge of the world; and to support and enhance the college's commitment to pluralism and multiculturalism.

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

- an interdisciplinary, multiperspectival approach to the concept of gender as a social construct;
- a critical and cultural analysis of the female experience through work in feminist theory;
- race, ethnicity, nationality, class, age and sexual identity as central categories of analysis.

Student Organizations and Activities

The Women's Student Union (WSU) provides opportunities for students to program special events, participate in relevant off-campus activities, and sponsor activities to raise awareness of women's and gender issues on campus and in the community.

Women's History Month, co-sponsored by WSU and Women's Studies, brings a diverse array of speakers and performers to campus in March to celebrate women's contributions and discuss contemporary issues facing both women and men.

An annual Undergraduate Conference on Women and Gender celebrates student research in women's studies and gender-related areas. Student winners present summaries of their work in a recognition ceremony.

Departmental Awards

The Dean's Award for Excellence in Research on Gender, a cash award, is presented during the undergraduate conference for the outstanding research of the entries submitted.

Requirements for the Minor

Completion of the interdisciplinary minor requires a minimum of 21 credit hours. Up to 6 credit hours of transfer credit may be applied to the minor, based on approval by the director. Students declaring the Women's Studies minor may use past courses retroactively after consultation with the director.

Required Courses (12 credit hours):

WOST 201	Introduction to Women's Studies (offered in fall semester)	3
WOST 301	Feminist Theory (offered in the spring semester)	3
WOST 302	Sex and Gender (offered annually)	3
WOST 401	Feminist Practice (Independent Study)	3

Elective Courses: Minimum of 9 credit hours from the following categories; groups A and B must both be represented.

A. Women and Culture

AMST 202	Introduction to American Studies
AMST 210	Popular and Mass Cultures of the Americas
ENGL 296	American Identities
ENGL 305/ INDS 305	Latina Literary and Cultural Studies
ENGL 314	Major Women Novelists
ENGL 340	Black Women Writers
ENGL 344	Contemporary Multicultural American Literature
ENGL 386	Women and Film
FREN 405	French Women Writers
FREN 406	Women in French Literature
HIST 220	Introduction to Race and Ethnicity
HIST 333-334	African American History
HIST 335	American Women
HIST 339	20th Century American Culture
HIST 353	Creating American Consumer Culture

HIST 375	History of Authority
HIST 376	Film and American Culture
PHIL 313	Philosophy of Sex and Love

WOST 203	Chicana Writers and Visual Artists
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(Other courses such as the Brontes, Canadian Women Writers, Major American Poets, etc. as they are offered, with permission of director).

B. Women and Society

ANTH 201	Anthropology of Human Problems
	or
ANTH 219	Cultural Anthropology
BIO 360	AIDS and STDs
ECON 312	Women in the Economy
POLI 371	Civil Rights and Liberties
	or
POLI 382	Social Welfare Policy
PSY 276	Human Sexuality
PSY 286	Gender Differences
PSY 365	Social Development
	or
PSY 370	Cross-Cultural Psychology
PSY 390	Psychology of Women
SOC 201	Social Problems
	or
SOC 303	Social Class and Equality
SOC 316	Minority Groups
SOC 320	Family Sociology
	or
SOC 321	Population and Society
SOC 322	Work and Society
SOC 345	Women, Health and Society

(Other courses as they are offered, after consultation with director.)



The College's History

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

The Campus

The 266-acre campus of SUNY Fredonia is striking in its beauty. A traditional brick perimeter encloses a modern sculptured core. Well-kept lawns and wooded areas enhance the beauty of the campus. Facilities on the college campus reflect its diversity and reputation for excellence.



There are 13 residence halls on the SUNY Fredonia campus, including corridor and suite-style, as well as apartments. In addition, several lifestyle options are available including residence halls with a Wellness Center and an Aerobics Center, computer labs in some residence halls, and Ethernet access in every room. In addition, all residence halls have electronic entry access for added safety and security. **Hendrix Hall** is also the site of the student-operated television station, WNYF-TV. Residence life offers the added advantage of activities planned by students. **Cranston Hall** and **Erie Hall** are the main dining facilities, supplemented by the **Williams Center** food services, and cafes in selected buildings. **Gregory Hall**, the first residence hall on the present campus, was named in honor of former college president Dr. Leslie R. Gregory, and also is the home of the Office of Residence Life, the Faculty Student Association, Career Development Office, and University Police.

The **Williams Center**, a circular building appropriately situated at the center of campus, houses the Office of Campus Life and the Student Association, and several major student organizations including the student newspaper, *The Leader*. It also contains a variety of dining options, the campus bookstore, meeting, activity and recreation spaces, a lounge, and the Central Box Office. **Dods Hall**, one of two athletic facilities, contains classrooms, gymnasias, the Blue Devil Fitness Center, a dance studio, and racquetball courts. Outside are new lighted tennis and basketball courts. Adjacent to Dods is **Steele Hall**, which contains an indoor ice skating rink, track/basketball arena, and the college's new natatorium/swimming and diving facility.

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.

LoGrasso Hall is the home of the Student Health Center, the Counseling Center, Internship Programs, and the Office of Lifelong Learning, International Programs, and Economic Research and Development. It is also the home of the Center for Rural Regional Development and Governance. **McEwen Hall** includes lecture halls, classrooms, a television studio and Fredonia Radio Systems. **Reed Library**, named in honor of Daniel A. Reed of Sheridan, contains nearly 400,000 volumes, more than 5,000 journals, and collections of microforms and videotapes. The music library houses more than 15,000 sound recordings and over 30,000 musical scores. The library also holds special collections, the college archives, and is the home of the college's Learning Center and Office of Disability Support Services for Students. A library addition and renovation project was completed in 1994.

Maytum Hall is the home of administrative and business offices as well as the Office of the Registrar, Student Affairs, Student Accounts, the Academic Advising Center, and Administrative Information Technology.

Fenton Hall, named in honor of Reuben Fenton, governor of New York State from 1865-1868, 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 College President's office is also located in this building. **Jewett Hall** and **Houghton Hall** are the natural and physical sciences buildings containing classrooms and laboratories, and offices for the departments of Biology, Chemistry, Geosciences and Physics. **Thompson Hall**, the largest academic structure on campus, was opened in the summer of 1973. In addition to the social science departments, the School of Education, the Office of Grants Administration/Research Services, the Henry C. Youngerman Center for Communication Disorders, and the Media Center, are all housed in this building.

Mason Hall, home of Fredonia's School of Music, is named for organist, composer and teacher Lowell Mason, called the "Father of Public School Music in America."

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

Hours when academic buildings are open are published separately.



THE GRADUATE PROGRAM

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, and Advanced Certificate in school administration and supervision. Permanent certification to teach in the public schools of New York may be secured concurrently with the master's degree if the student follows the appropriate program designed for this purpose.

Graduate instruction at Fredonia is offered during the academic year and in summer sessions. Many courses are scheduled in the late afternoon and evening to accommodate the employed student.

Each degree student's program is individually formulated in consultation with a departmental advisor. Within the framework of this program, the student pursues graduate study consistent with his/her previous preparation and directed toward his/her own professional objectives.

The Graduate Faculty

Graduate courses are taught by faculty members who by their scholarly attainments in their own fields of specialization have demonstrated their competence to offer graduate instruction. Since most classes are small, students are able to work closely with their instructors, and often join them in research projects. Information about the research interests of faculty members is available from their department chairpersons.

The Graduate Council

The Graduate Council consists of 11 members, representing the departments which have graduate programs, two elected members from the faculty-at-large, one graduate student appointed by the Student Association, and the Graduate Dean. Members include:

Leonard E. Faulk, Jr., *Chairperson, Associate Vice President for Academic Affairs and Graduate Dean*
Julius Gregg Adams, *Director, School of Education*
Donald A.J. Bohlen, *Professor, School of Music*

Joan A. Burke, *Chairperson/Associate Professor, English*

Gregory F. Harper, *Elected-at-Large - Natural and Social Sciences and Professional Studies, Associate Director/Professor, School of Education*

Keary J. Howard, *Assistant Professor, Mathematics/Computer Science*

Mark Janik, *Assistant Professor, Chemistry*

Dennis M. Perez, *Associate Professor, Speech Pathology and Audiology*

A. Jacqueline Swansinger, *Elected-at-Large - Arts and Humanities, Associate Professor, History*

Wayne N. Yunghans, *Professor, Biology*

The Graduate Council is charged with developing and supporting master's degree programs that provide a sound education for graduate students, lead to advanced qualification in the professions and disciplines, and generate new knowledge through the research and publication of its faculty and students. The committee's primary functions are to approve new graduate courses; to develop standards for admission, matriculation and graduation for graduate programs; and to recommend new graduate programs and graduate education policies to the College Senate and the Vice President for Academic Affairs.

The Graduate Education Program declares as its mission:

- To improve the quality of life for present and future generations by providing a sound education for graduate students.
- To contribute to the knowledge and practice of professionals already in the field and to prepare teachers and administrators of elementary/secondary schools, and health care providers.
- To complement and enhance the undergraduate program by providing models of advanced work in the disciplines and professions.
- To generate and share new knowledge through the research and publication of its faculty and students.

- To provide and support master's degree programs leading to advanced qualification in the professions and disciplines.
- To be actively involved in the life of the surrounding community, in curriculum development, in related professional activities; to encourage a supportive sense of community, and to influence and facilitate the development of social and educational policy.
- To acknowledge the value of pluralism and diversity in culture and society.

Admission to Graduate Study

Applications should be filed with the Office of the Graduate Dean by August 5 for admission to the fall semester, by December 1 for the spring semester, and by the last day to register for courses for summer session for the summer sessions. Students may be admitted into a degree program or as non-degree students.

Exceptions to these admission guidelines may be found in selected academic departments, i.e. the Department of Speech Pathology and Audiology has a November 1 application deadline for spring and January 1 deadline for the following summer or fall semesters. It is important to contact the particular departments for any additional requirements for admission.

Admission to graduate study is based on the following requirements:

1. Completion of the baccalaureate degree at an accredited four-year institution with an appropriate major and depth of undergraduate preparation.
2. An Application for Admission to Graduate Study filed with the Graduate Dean and approved by the chairperson of the desired department and by the Graduate Dean.
3. Submission of official transcripts from all institutions attended (except Fredonia) covering prior graduate as well as undergraduate preparation.
4. Submission of at least two recent letters of recommendation from individuals who can attest to the applicant's qualifications for advanced study.
5. For students in programs leading to permanent certification to teach, proof of the appropriate provisional certification.

Summer Sessions

During the summer months, SUNY Fredonia offers a comprehensive program of undergraduate and graduate course work.

The availability of residence hall living, a wide range of recreational activities along with a busy schedule of cultural events, enable the summer student to enjoy a full college life. The combination of intellectual stimulation in the classroom and a summer resort atmosphere on the campus can provide a very rewarding experience.

For additional information, please contact the Graduate Studies Information Center at (716) 673-3177.

Good Academic Standing

Graduate students pursuing a degree are required to maintain a minimal grade point average of 3.0. At the end of each semester, the records of all degree students are reviewed. Students whose cumulative average is below 3.0 are placed on academic probation for one semester. If, at the end of their next semester, they have not re-established the required average, they will be required to withdraw from the college. A student is considered to be in good academic standing even while on probation. The purpose of the probationary semester is to give the student sufficient warning of academic danger.

The college is aware that there may be exceptional circumstances which make it impossible for a student to regain the required academic average at the end of one semester. Under those circumstances, the student may appeal the required withdrawal, with the support of his or her advisor and the chairperson of the major department.

As a general rule, students taking graduate courses without pursuing a degree who decide to apply for a degree program should 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 in probationary status, with one semester in which to improve their records.

Graduate Degree Requirements

1. Completion of the specific curricular requirements for the degree, as outlined in this catalog, with a minimum cumulative quality point average of 3.00 in all graduate work at SUNY Fredonia.
2. Completion of all degree requirements within a five-year period beginning the semester of admission to a degree program, unless an extension has been recommended by the chairperson of the department in which the student is majoring and approved by the Graduate Dean.
3. Recommendation of the department in which the student is majoring.
4. Fulfillment of residence requirements as explained below.
5. Application for the degree filed with the Registrar at least three months prior to the expected date of completion of degree requirements.

A candidate for the master's degree must have completed at least 15 semester hours of graduate work in residence. A graduate student is expected to make steady and reasonable progress, as determined by the department in which he/she is enrolled, toward the completion of his/her degree requirements. Students not making reasonably steady progress will be required to withdraw from the program.

A maximum of 9 hours credit (of which a maximum of 6 credits in Education courses) in graduate work earned while enrolled as a non-degree student may be applied toward the master's degree, subject to the recommendation of the major department and approval of the Graduate Dean.

The requirements to be met for a graduate degree are those in effect at the time the student is admitted to the degree program.

Thesis and Comprehensive Examination

All degree programs require a thesis, comprehensive examination, or other evidence of the student's mastery of his/her field. Information concerning the requirements for individual programs is contained in the descriptive material under curricular requirements in this catalog.

Thesis and comprehensive examination requirements must be completed at least four weeks prior to the expected date of the award of the degree. All master's theses will be prepared in accordance with a set of uniform instructions which may be secured from the Graduate Dean. A description of specific departmental requirements for the comprehensive examination may be obtained from the individual departments.

Advisement and Registration

At the time of admission to graduate study, the degree-program student is assigned a faculty advisor according to his or her program of study. The advisor should approve the student's overall program and sign the necessary registration and program forms. The student should consult the advisor regularly to discuss the progress of his or her studies.

As the time for the final comprehensive examination, thesis, or project draws near, the student is directed by a graduate committee of at least three members, representing the student's major and related fields of study. The committee is appointed by the chairperson of the major department. One member of the committee is named as the student's major professor. In addition to advising the student on matters pertaining to the program of study, the committee supervises the preparation of the thesis or research project and administers the final written or oral comprehensive examination.

All graduate students are encouraged to pre-register during the time periods listed in the college calendar. Pre-registration greatly facilitates the formal registration process and helps to insure that the student secures the schedule desired. A service charge of \$30 is imposed for late registration.

Completion of a Degree Program

The application for graduation (Application for Degree) should be filed with the Office of the Registrar three months before the expected completion of the degree.

When a graduate degree program is completed, and the necessary fees paid, a student should request his/her department to recommend to the Graduate Dean the approval for the award of the degree. Degrees are awarded in May, August, and December.

The potential degree candidate list is prepared in March and it is the student's and advisor's joint responsibility to see that all eligible persons are named on this list. Students completing degrees in December will have their degrees formally conferred at the following May commencement.

Residence Credit

Students accepted in graduate degree programs must complete at least 15 semester hours of residence credit. Residence credit is defined as credit granted by the SUNY

Fredonia for course work taught by Fredonia faculty or other staff approved by the appropriate college officials, whether on or off campus.

Transfer of Credit

For credit to be accepted from another institution, it must form a related part of the student's total graduate program. Students are advised to secure prior approval before registering for credit courses at other colleges or universities. The request for such approval must include catalog number and title, and be accompanied by a description of each course proposed for transfer credit. Credit will be given only for courses in which the student earns grades of A or B. Transfer credit may not be included in the computation of the graduate student's average. No more than 15 semester hours of credit with permission from the department chairperson and the Graduate Dean will be transferred to a degree program. Courses transferred into a degree program cannot be more than five years old by the time the degree requirements are completed, unless an extension of time has been granted.

Certification

Important Notification to Education Majors

As of July 16, 1998, the New York State Regents have proposed new certification titles for classroom teachers and standards for teacher education programs. Due to the transitional nature of changes in New York State Education requirements, program requirements may be altered according to state specifications. Therefore, students should check with their faculty advisor for explanation of program and certification requirements.

Master's degree programs leading to permanent certification to teach in the public schools of New York State are offered in the fields of Biology, Chemistry, Elementary Education, English, Mathematics, Music Education, and Speech and Hearing Handicapped. A post-master's program leading to an Advanced Certificate and permanent certification is offered in school administration and supervision. A master's degree program offered in Reading will lead to provisional certification.

The Application for Certification should be filed with the Office of the Registrar three months before the expected completion of requirements.

The general requirements for a permanent certificate as set forth by the State Education Department are the completion of the baccalaureate degree, including the requirements for provisional certification, completion of an approved master's degree, and a minimum of two years of full-time elementary and/or secondary service in the candidate's area of provisional certification.

Any questions or concerns dealing with the process of acquiring certification in the field of Education or Music should be directed to either the School of Education or the School of Music.

Academic Credit and Course Load

The unit of academic credit is the semester hour, which normally represents one hour of lecture or recitation each week per semester. Seminars, research courses, and

laboratories bear academic credit appropriate to the work expected of the student in the course.

The maximum course load for a full-time graduate student is 15 hours per semester during the academic year and 6 semester hours in each summer session. Students employed full-time may not carry more than 6 hours per semester during the academic year. Graduate assistants normally carry a course load of from 6 to 9 semester hours during the fall and spring sessions and 3 to 4 hours during a summer session.

Upon recommendation of the chairperson of a student's department and approval of the Graduate Dean, work experience directly related to the student's academic program may be given academic credit via the appropriate departmental Independent Study course number subject to the requirements for independent study in the department, including approval prior to the work experience except in unusual circumstances. No more than 6 credit hours of such work may be applied to the fulfillment of the requirements for a graduate program.

Graduate Course Numbers

Courses numbered 500-599 are graduate courses also open to qualified undergraduates.

Courses numbered 600-699 are graduate courses open to graduate students only.

Although all graduate programs are normally composed of courses from these levels, under exceptional circumstances up to 6 hours of 300- or 400-level courses outside the major area of specialization may be included. This action requires the advisor's recommendation, which must be approved by the chairperson of the department in which the student is majoring and by the Graduate Dean prior to the student's enrollment in the course. Undergraduate courses taken in the major area of specialization may not receive graduate credit.

Qualified undergraduates may apply to enroll in a limited number of 500-level graduate courses, either for undergraduate or graduate credit. Qualifications and procedures may be found in the academic policy section of this catalog.

Full and Part-time Status

A graduate student enrolled in at least 12 credit hours of course work is considered a full-time student. A graduate assistant registered for at least 6 credit hours of course work is considered a full-time student.

Grading System

All courses taken for graduate credit are evaluated by the letter grades A, A-, B+, B, B-, C+, C, C-, D, E (failure), S (satisfactory), U (unsatisfactory), I (incomplete), and X (continuing enrollment). D and E 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 which 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 and, in the case of Special Topics courses, in the *Course Offerings Bulletin*. 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 U are added into the total hours for the quality point average. A maximum of 6 hours credit 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 becomes an E 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 change to an E grade. The responsibility for finishing incomplete work rests with the student. Graduate students may not exercise the course-repeat option to remove poor grades from their records.

Schedule Changes

Changes in student class schedules must be filed in the Office of the Registrar within the period prescribed by that office. As class schedule changes are processed, students receive copies which should be retained as a matter of personal record.

Students may drop courses through the first week of the semester by obtaining the necessary form and submitting it to the Office of the Registrar. Those courses dropped will be removed from the student's permanent record.

A fee of \$15 will be assessed for each course added after the third week of classes. This includes transactions involving a switch from one section to another.

Withdrawal

Beginning with the second week to the seventh full week of the semester, a student may withdraw from a course. A "WC" grade is assigned in such cases and course withdrawal requires the approval of the student's advisor or 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 and withdrawal period are given in the college calendar and in the appropriate *Course Offerings Bulletin* and apply to all full-semester courses.

The college reserves the right to require any student who is not maintaining minimum academic standards or making reasonably satisfactory progress to withdraw.

Student Appeals of Grades

A student who feels that a course grade or other grade reported for him/her is incorrect has the right of appeal by the following procedure:

1. He or she first discusses the grade with the instructor.
2. If after this discussion the student is still unsatisfied, he or she may appeal to the chairperson of the department.
3. If the chairperson decides that the student's case has merit, he or she 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. The committee reviews the case, interviews the student and the instructor separately, and reaches a judgment by majority vote. This judgment is communicated to the chairperson, who in turn reports it to the student and the instructor.

5. If a change of grade is recommended by the committee, the instructor may initiate a change, or the committee's recommendation is forwarded to the Graduate Dean and the Vice President for Academic Affairs for their consideration. The Vice President for Academic Affairs may modify the grade if the committee so recommends.

Financial Aid

Financial aid information can be obtained by visiting the office's web site at www.fredonia.edu/finaid.

Graduate students may be eligible for the following forms of financial aid. Application is made for federal aid by completing a Free Application for Federal Student Aid (FAFSA - use Code 002844) and for state aid by completing a New York State Express TAP application (use Code 0915).

Tuition Assistance Program (TAP): To qualify for Tuition Assistance, graduate students must be legal residents of New York State for at least one year, be in full-time attendance (12 credit hours per semester), and be enrolled in a program leading to a degree. The amount of tuition award is based on the net state taxable family income.

The *Federal Stafford Student Loan Program* consists of the *Subsidized Stafford Loan* and the *Unsubsidized Stafford Loan*. Applicants for either program first complete the Free Application for Federal Student Aid (FAFSA) using Code 002844 to release the data to Fredonia. A student must be in attendance or accepted as at least a half-time student (6 credit hours per semester) and must be either a U.S. citizen or permanent resident of the U.S.

Upon receipt of the FAFSA data from the Federal Central Processor, the Fredonia Financial Aid Office determines loan eligibility and has a preprinted Fredonia loan application mailed directly to the student by the New York State Higher Education Services Corp. (NYSHESC).

The primary differences between *Subsidized* and *Unsubsidized Stafford Loans*:

Subsidized: Interest is paid by the federal government during in-school, grace and deferment periods and is based on need.

Unsubsidized: Interest is paid by the student during in-school, grace and deferment periods and can be used to replace expected family contribution.

The Subsidized and Unsubsidized Stafford Loans are similar in the following ways:

1. Variable Interest Rate - Treasury Bill plus 1.7 percent with an 8.25 percent cap.
2. Repayment on principal begins six months after enrollment on at least a half-time basis ends.

Annual maximums for Subsidized and Unsubsidized Stafford Loans combined:

- \$2,625 for freshmen
- \$3,500 for sophomores
- \$5,500 for juniors
- \$5,500 for seniors
- \$18,500 for graduate students

Aggregate limits:

- \$46,000 for undergraduate study
- \$138,500 for undergraduate and graduate combined.

Electronic Funds Transfer: Loan approvals are sent electronically in two separate disbursements (minus a 3 percent origination fee) by the lender to the college. The first disbursement normally arrives at the Office of Student Accounts one to two weeks after the loan approval during the academic year. The second disbursement is made at the midpoint of the loan period (for the majority of students this is just prior to the spring semester).

Satisfactory Academic Progress

Requirements: State and federal regulations require that all financial aid recipients maintain program pursuit and make satisfactory progress toward completion of degree program requirements (referred to as Satisfactory Academic Progress). The Office of Financial Aid at Fredonia evaluates student aid recipient progress according to *state requirements* for TAP at the completion of each semester. The Office of Financial Aid evaluates progress according to *federal requirements* for Stafford and Parent loans at the completion of the academic year. Students should refer to the chart below.

Before Being Certified For This Payment	1	2	3	4	5	6	7	8
Percentage Of Attempted Hours That Must Be Completed With A Passing/Failing Grade	0	100%	100%	100%	100%	100%	100%	100%
A Student Must Have Accrued At Least This Many Credits	0	6	12	21	30	45	60	75
With At Least This Grade Point Average	0	2.00	2.50	2.75	3.00	3.00	3.00	3.00

Notification Procedure: The Office of Financial Aid will notify the student between two and four weeks after the conclusion of each semester if Satisfactory Academic Progress Standards were not met while the student received federal and/or state aid. The letter will inform the student of loss of aid for the semester immediately following the one in which program pursuit and progress standards were not met and will also apprise the student of the appeal procedure to follow if the student feels financial aid should be reinstated.

Appeal Procedure: A waiver to reinstate state aid (TAP) is available *only once* during graduate study. A request to

reinstate federal aid *may* be granted *only* if exceptional circumstances can be documented. Waivers and reinstatement of aid are not automatic. They are approved by the Office of Student Affairs and the Director of Financial Aid *only* if in the best interest of the student and *only* if unusual circumstances (i.e. family illness or death, personal illness, personal emotional disturbances, change(s) in educational objective) prevented the student from meeting the expected criteria.

Graduate Opportunity Tuition Waiver: The Graduate Opportunity Waiver Program provides a full waiver of tuition to former EOP, SEEK, or HEOP students who are accepted or enrolled as full-time students in a graduate degree program. To apply, students should submit proof that they were enrolled as undergraduates through one of the special admission programs named. Contact any EOP or HEOP office for information.

Vocational and Educational Services for Individuals with Disabilities (VESID): The State of New York, through the Division of Vocational Rehabilitation, provides financial assistance for those students who qualify under prescribed conditions. For additional information contact the nearest Rehabilitation Office.

Veterans Administration Educational Benefits: Those veterans or dependents who are, or feel they are, eligible for federal financial assistance through the Veterans Administration should contact the Coordinator, Office of Veterans Affairs (McGinnies, 716-673-3423) to complete appropriate forms. Students are urged to begin their VA paperwork before the beginning of the school term in order to hasten processing. To further facilitate the start of benefits, the veteran, or the children, spouses, and/or survivors of veterans whose deaths or permanent total disabilities were service-connected, should present pertinent data, such as the service number, Social Security number, dates of service, discharging papers, and any other VA claim information.

Assistantships/Fellowships

Assistantships: Graduate, research, and teaching assistantships are available to highly qualified graduate students in many academic departments. Graduate assistants normally carry a 9 hour course load and perform duties in laboratories, lecture halls, and classrooms. The stipends for assistantships generally begin at \$5,570 plus any negotiated increases for the academic year in addition to waiver of tuition in accordance with the policies and procedures established by the Board of Trustees.

Applicants for academic assistantships should apply directly to the chairperson of the department in which they expect to do their graduate work.

Minority Graduate Fellowship Program: This is a competitive program which provides underrepresented minority graduate students with a stipend to enhance their ability to complete their graduate studies. To be eligible, applicants must be, (1) U.S. citizens or have permanent resident status; and (2) members of one of the following groups: Native American Indians, African Americans, or Hispanic Americans. In addition, special Graduate EOP Tuition Scholarships are available to cover tuition costs for graduates of Educational Opportunity/Higher Educational

Opportunity programs. (See Graduate Opportunity Tuition Waiver, this page.) For details, please contact the Office of Graduate Studies, (716) 673-3808.

* Graduate Tuition And Fees

Tuition

Full-time, per semester:

New York State Resident	\$2,550
Out-of-State Resident	\$4,208

Part-time, per credit hour:

New York State Resident	\$213
Out-of-State Resident	\$351

Note: The above rates are for degree students. In most cases, these rates also apply to non-degree students. However, part-time non-degree students are charged by course level, i.e., \$137 or \$346 per undergraduate-level credit hour and \$213 or \$351 per graduate-level credit hour.

Fees

College Fee:

Full-time student	\$12.50 per semester
Part-time student	\$0.85 per credit hour

Student Services and Program Charge:

Full-time student	\$400 per semester
Part-time student	\$33.25 per credit hour

* All fees and rates are subject to change. See the Student Accounts web pages for the current college charges at www.fredonia.edu/admin/studentaccounts/

NOTE: Further procedural information can be found in the Undergraduate section of this catalog.

GENERAL INFORMATION

Graduate students may attend all campus activities including special lectures and concerts. The Student Services and Program Charge covers the admission charge to many of these functions. The facilities of the Williams Center and of the health, wellness and recreation department are available to graduate students.

Hours when each facility is open are published separately. Hours when academic buildings are open are published separately.

Veterans Affairs

The Office of Veterans Affairs, located in McGinnies Hall, is staffed by the coordinator and work study students. They provide routine certification of enrollments. The staff also monitors student progress and is available for information and referral for problems which might arise. Policy among various administrative offices, as it relates to VA recipients, is also coordinated through the Office of Veterans Affairs. The coordinator is in liaison with the Regional Office in Buffalo for those situations which might need special attention.

Auto Use

Graduate students who operate automobiles on campus are required to register them with the Office of Student Accounts during Registration week. Parking permits, valid during the academic year, will be issued to eligible students.

Housing/Residence Life

The Office of Residence Life is located in Gregory Hall and is readily available to accommodate graduate students. The residence halls are located close to the academic facilities and provide excellent housing accommodations. Special interest areas have been established and students may inquire at the Office of Residence Life for suitable assignments. A limited file of off-campus housing facilities is maintained in the Student Association office, located in the Williams Center.

For further information, students should write directly to the Office of Residence Life, State University of New York at Fredonia, Fredonia, NY 14063.

Note: Graduate residence director positions are often available. Please contact the Director of Residence Life for more information.

Registered Degree Programs

Listed on the following chart are SUNY Fredonia's registered degree programs, 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.

Degrees Offered

Master of Arts	HEGIS Code
English	1501
Mathematics	1701
Interdisciplinary Studies	4901
Master of Music	
Music Education K-12	0832
Music Performance	1004
Music Theory - Composition	1004.10
Master of Science	
Biology	0401
Chemistry	1905
Interdisciplinary Studies	4901
Speech Pathology	1220
Master of Science in Education	
Biology 7-12	0401.01
Chemistry 7-12	1905.01
Elementary Education N-6	0802
English 7-12	1501.01
Mathematics 7-12	1701.01
Reading Teacher	0830
Speech and Hearing Handicapped	0815
Advanced Certificate	
School Administrator and Supervisor	0828

Curriculum Codes

Graduate Status is indicated by the first number of a three digit code as follows:

5XX	Accepted in a Provisional Certification program
6XX	Accepted in a degree program
7XX	Conditionally accepted in a degree program
9XX	Accepted as a non-degree student

The last two digits refer to the area of specialization as follows:

X00	Non-Degree
† X20	Interdisciplinary Studies (M.A.)
† X30	Interdisciplinary Studies (M.S.)
†*X40	Reading
†*X54	El. Ed. - Curriculum and Instruction
X55	El. Ed. - Unclassified
†*X58	Music Education
*X60	School Administrator/ Supervisor
†*X64	Speech Pathology
†*X65	Speech and Hearing Handicapped
†*X66	Sec. Ed. - English
†*X72	Sec. Ed. - Biology
†*X73	Sec. Ed. - Chemistry
†*X74	Sec. Ed. - Mathematics
† X79	Music Theory-Composition
† X81	L.A.-English
† X84	Music Performance
† X92	L.A.-Mathematics
† X93	L.A.-Biology
† X94	L.A.-Chemistry

* Certification program

† Master's program

GRADUATE STUDIES

This section lists graduate programs and requirements. For information on courses, see the course listings section of the catalog on page 97. Students should check the *Course Offerings Bulletin* each semester for an accurate list of proposed offerings.

BIOLOGY

Office: 203 Jewett Hall
(716) 673-3282
E-mail: Biology@fredonia.edu
Roger A. Byrne, *Chairperson*

The Department of Biology offers degrees for both the Master of Science degree in Biology and Master of Science in Education. The department is well-equipped, with instrumentation available for many types of biological research. Students interested in graduate teaching assistantships should apply in writing to the department chairperson. Faculty research interests include: developmental biology, microbiology, microbial genetics, molecular biology, animal behavior, terrestrial ecology, trophic interactions, fisheries, physiological ecology of aquatic plants and animals, animal physiology, cell membrane biochemistry and hormone interaction, and algal physiology. 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.

Master of Science

Departmental requirements for admission to program without deficiencies:

An undergraduate major in the Life Sciences with requisite evidence of training and motivation necessary to succeed in graduate study. Supporting science background to include physics, calculus, and organic chemistry. Prospective students should forward Graduate Record Exam scores along with their application for admission to the program.

Thesis Option	Hrs.
1. A minimum of 30 semester hours, including:	

Seminar (three semesters)	3
Thesis Research	6
Appropriate course work	at least 21
2. Written Thesis	
3. Final Comp. Examination	
Total	<u>30</u>
Non-Thesis Option	Hrs.
1. A minimum of 30 semester hours, including:	
Seminar (three semesters)	3
Biology courses	18
2. Electives (any department)	9
3. Final comprehensive Exam	
Total	<u>30</u>

Appropriate courses are chosen after consultation with the student's thesis advisor and graduate committee. The Department of Biology strongly recommends broad training in biology. Specific courses chosen will depend on the student's background and interests, but a student should design a program combining molecular, organismal and population biology courses. BIOL 690-691 may not be used toward the Non-Thesis Option.

Master of Science in Education

Departmental requirements for admission to the program without deficiencies:

An undergraduate major in Biology or related science with requisite evidence of training and motivation necessary to succeed in graduate study. Supporting science background to include physics, calculus, and organic chemistry. Prospective students should forward Graduate Record Exam scores along with their application for admission to the program.

Candidates must have an initial certification to teach biology and general science in the secondary schools of New York State, or equivalent preparation.

Program Requirements	Hrs.
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A minimum of 30 semester hours of graduate-level courses including:

1. General Requirements	3
EDU 570 Understanding Educational Research	
One course in psychological, historical, philosophical, or comparative foundations of education	3
One course in pedagogy, methodology, or instruction	3
2. Area of Certification	
Eighteen credit hours as follows:	

Fifteen or more hours of 500- and 600-level courses in biology or approved courses in related areas	at least 15
Seminar, BIOL 600 or 601	3
3. Special Project	3
Thesis, independent study project, or research project from either professional education or biology	
4. Final Examination	
A two-part comprehensive examination will be required of each student - an intensive examination written in the areas of specialization; and a written examination covering the professional component of the student's program	
Total	<u>30</u>

CHEMISTRY

Office: 207 Houghton Hall
(716) 673-3281
E-mail: Chem@fredonia.edu
Thomas S. Janik, *Chairperson*

Master of Science

Departmental requirements for admission to program without deficiencies:

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

Program Requirements	Hrs.
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1. A minimum of 30 semester hours, including:	
Graduate-level courses in chemistry, which can include up to 12 credit hours in courses from related fields, e.g., biology, geosciences, mathematics, and physics (approved in advance by the departmental Graduate Study Committee)	12-18
2. Research	12-18
3. Research Proposal	
4. Seminar (One seminar/year is expected)	
5. Written Thesis	
6. Final Comprehensive Oral Examination	
Total	<u>30</u>

Master of Science in Education

Department requirements for admission to program without deficiencies:

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

Initial certification to teach chemistry in the secondary schools of New York State, or equivalent preparation.

Program Requirements	Hrs.
A minimum of 30 semester hours of graduate-level courses, including:	
1. General Requirements	
EDU 570 Understanding Educational Research	3
One course in the psychological, historical, philosophical, or comparative foundations of education	3
One course in pedagogy, methodology, or instruction	3
2. Area of Certification	6-15
Six-fifteen hours to be selected under departmental advisement from 500- and 600-level offerings in chemistry (6-12 credits) and related fields, e.g., biology, geosciences, mathematics and physics (0-6 credits).	
3. Foreign Language 116 or 3 years high school foreign language	
4. Research Proposal	
5. Seminar (One seminar/year is expected)	
6. Research or Special Project	6-15
Thesis, independent study project, or research project from either professional education or chemistry	
7. Thesis or Project Report	
8. Oral Defense	
Total	<u>30</u>

EDUCATION

Office: E268 Thompson Hall
(716) 673-3311

E-mail: Edu@fredonia.edu

Julius Gregg Adams, Director

Gregory F. Harper, Associate Director

* IMPORTANT NOTIFICATION TO EDUCATION MAJORS

As of July 16, 1998, the New York State Regents have proposed new certification titles for classroom teachers and standards for teacher education programs. Due to the transitional nature of changes in New York State Education requirements, program requirements may be altered according to state specifications. Therefore, students should check with their faculty advisor for explanation of program and certification requirements.

The School of Education offers the following graduate degrees:

- Master of Science in Education: Elementary Education
- Master of Science in Education: Reading Teacher

- Master of Science in Education: Secondary Education (Offered in cooperation with the respective arts and sciences departments in the following academic subjects: biology, chemistry, English and mathematics.)

In addition to these degrees, the School of Education also offers a program leading to the Certificate of Advanced Study in School Administration and Supervision.

Master of Science in Education: Elementary Education

Minimum requirements for admission to program without deficiencies:

- Initial certification to teach elementary education in the public schools of New York State or equivalent elementary preparation.
- Undergraduate GPA of 2.5 or above.
- Two current (within six months) letters of recommendation.

Program Requirements	Hrs.
A minimum of 30 semester hours of graduate level courses, including:	

General Requirements	
1. EDU 570 Understanding Educational Research	3
2. One course in psychological foundations, For example: EDU 501 Advanced Study: Child Psychology EDU 502 Psychology of Adolescence EDU 503 Evaluation in the Schools EDU 530 Learning Theories and the Teaching Process EDU 562 Infant Development and Education	3
3. One course in Exceptional Educ. For example: EDU 504 The Exceptional Learner EDU 508 Mainstreaming EDU 529 Behavioral Disorders of School Children	3
4. One course in social, historical, legal philosophical, or comparative foundations of education For example: EDU 531 Philosophy of Education EDU 535 School and Society EDU 539 Current Issues and Problems in Education EDU 545 History of American Education EDU 549 Comparative Education	3
5. Curriculum and Instruction	6

EDU 520 Curriculum Framework Theory	
EDU 525 Curriculum Framework Integration	
6. Plus a combination of curriculum and instruction courses to be chosen in cooperation with the academic advisor, chosen from a broad range of curriculum areas or from a specific area of interest.	9-12
7. Written Comprehensive Examination or EDU 690 Research	3

Master of Science in Education: Secondary Education

Admission Requirements:

Completion of arts and sciences departmental requirements for admission to program without deficiencies.

Appropriate provisional certification to teach in the secondary schools of New York State or equivalent preparation.

Program Requirements	Hrs.
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A minimum of 30 semester hours of graduate-level courses as follows:

General Requirements for All programs (9 semester hours in education)

General Requirements	Hrs.
1. EDU 570 Understanding Educ. Research	3
2. One course in psychological foundations, For example: EDU 501 Advanced Study: Child Psychology EDU 502 Psychology of Adolescence EDU 503 Evaluation in the Schools EDU 530 Learning Theories and the Teaching Process EDU 562 Infant Development and Education or One course in Exceptional Education For example: EDU 504 The Exceptional Learner EDU 508 Mainstreaming EDU 529 Behavioral Disorders of School Children or One course in social, historical, legal philosophical, or comparative foundations of education For example: EDU 531 Philosophy of Education EDU 535 School and Society EDU 539 Current Issues and Problems in Education EDU 545 History of American Education EDU 549 Comparative Education	3

3.	Curriculum and Instruction EDU 520 Curriculum Framework Theory or EDU 525 Curriculum Framework Integration	3
4.	Area of Certification - Eighteen semester hours from one of the following areas: Biology* Chemistry* English * Mathematics *	18
5.	Thesis, independent study project, or research project from either professional education or the academic subject area. * and/or Final Examination A two-part comprehensive examination will be required of each student – an intensive examination either oral or written in the areas of specialization, and an oral or written examination covering the professional component of the student's program.	3 0
	Total	<u>30</u>

* see separate listings under each academic area of concentration.

Master of Science in Education: Reading Teacher

Minimum requirements for admission to program without deficiencies:

- Provisional certification to teach elementary education in the public schools of New York State or equivalent elementary preparation.
- Undergraduate GPA of 2.5 or above.
- Two current (within six months) letters of recommendation.

Program Requirements

A minimum of 36 semester hours of graduate level courses which must include:

	Hrs.
1. EDU 570 Understanding Educational Research	3
2. One course in psychological foundations, For example: EDU 501 Advanced Study: Child Psychology EDU 502 Psychology of Adolescence EDU 503 Evaluation in the Schools EDU 530 Learning Theories and the Teaching Process EDU 562 Infant Development and Education EDU 591 Psychology of Reading or One course in Exceptional Education	3

	For example: EDU 504 The Exceptional Learner EDU 508 Mainstreaming EDU 529 Behavioral Disorders of School Children	
3.	One course in social, historical, legal philosophical, or comparative foundations of education For example: EDU 531 Philosophy of Education EDU 535 School and Society EDU 539 Current Issues and Problems in Education EDU 545 History of American Education EDU 549 Comparative Education EDU 591 Sociolinguistics and Literacy Education	3
4.	Literacy Foundations: EDU 506 Foundations of Reading Instruction in the Elementary School	3
5.	Clinical and Classroom Practice EDU 524 Remediation of Reading Difficulties EDU 606 Methods in Diagnosis and Treatment of Reading Difficulties EDU 608 Clinical Diagnosis of Reading Disabilities	9
6.	Reading Concentration EDU 510 Microcomputers as Applied to Reading Instruction EDU 511 Activities for Individualized Reading EDU 537 Critical Examination of Children's Literature EDU 622 Issues, Trends and Research in Reading	12
7.	Capstone Experience EDU 607 Practicum in Reading	3
8.	Written Comprehensive Examination	0
	Total	<u>36</u>

Certificate of Advanced Study: School Administrator and Supervisor

The School Administrator/Supervisor program leads to a Certificate of Advanced Study and recommendation to the New York State Department of Education for provisional certification as a School Administrator and Supervisor (SAS). This certificate permits the candidate to assume such roles as principal, assistant principal, supervisor, department chairperson, or program coordinator.

Minimum requirements for admission to program without deficiencies:

Appropriate provisional certification to teach in public schools of New York State.

Completion of a master's degree in an appropriate field with a GPA of at least 3.0.

Three years of satisfactory teaching or professional experience at the elementary or secondary level.

Two written recommendations: from the candidate's school superintendent and immediate supervisor

Program Requirements

1. Completion of the master's degree program in the appropriate field.
 2. A minimum of 30 semester hours of graduate-level courses, including: three semester hours from educational research, evaluation or statistics, selected under advisement, if such a course has not previously been taken.
 3. The following course offerings in administration/supervision:

EDU 614 The School Administrator/Supervisor	3
EDU 615 The School Administrator/Supervisor	3
EDU 616 Supervision I: Theory and Practice	3
EDU 617 Supervision II: The Improvement of Instruction	3
EDU 620 Public School Finance	3
EDU 624 Contemporary Problems-School Administration	3
EDU 626 Public School Law	3
EDU 630 Educational Administration	3
 4. Six (6) semester hours from supervised internship and related research paper

EDU 618 Internship: School Administrator/Supervisor, (K-12)	3
EDU 619 Internship: School Administrator/Supervisor, (K-12)	3
 5. Internship portfolio and independent study or research project from professional education related to the internship
 6. A comprehensive examination, either oral or written as determined by the advisor, covering the professional component of the student's program.
- Total 30

Certificate of Continuing Graduate Study

The Certificate of Continuing Graduate Study (CCGS) is offered through SUNY Fredonia to provide an intensive and cohesive program of professional development beyond the master's level. It requires an academic specific specialty area under the guidance of a major department advisor, without the

extended commitment and formal examination of a doctoral program. The CCGS program is not a university degree program, but a SUNY Fredonia certificate program. Upon completion of a 30-credit hour program beyond the master's degree, the student may apply for a certificate of completion. All 30 credit hours must be taken at SUNY Fredonia within a five-year period, and at least 21 credit hours must be taken in the student's major department.

Requirements:

1. Program candidates must hold a master's degree in the major subject to be studied. In Education, the student must hold a teaching certificate with a master's degree in a related field, or its equivalent.
2. Program candidates must complete a CCGS application including complete undergraduate, master's degree transcripts, and a copy of a teaching certificate.
3. Program acceptance is based upon completion of the application and available space.
4. Upon acceptance to the program, a faculty advisor will be assigned to the CCGS student. All courses taken as part of the CCGS must be approved in writing by the student's faculty advisor and recorded in the student's department folder.
5. Students will take and successfully complete 30 credit hours at the graduate level (21 of which must be in the major department) for completion of the certificate.
6. Projects or independent studies will be accepted as part of the CCGS only with the written approval of the student's advisor and the major department chair. Upon completion of the program, the student may request a certificate of completion from SUNY Fredonia.

ENGLISH

Office: 277 Fenton Hall
(716) 673-3125
E-mail: English@fredonia.edu
or joan.burke@fredonia.edu
Joan A. Burke, *Chairperson*

The graduate program in English provides students with the opportunity to study language and literature represented in various cultures and media. The program emphasizes the importance of "learning how to learn" rather than becoming only storehouses of information. Equally important is the objective of offering potential and practicing teachers the opportunity to refine, discover or change their own approaches to the teaching of language and literacy.

Master of Arts

Departmental Requirements for Admission to the Degree Program

1. The deadline for "Completed Applications" conforms to college policy (see general guidelines).
2. "Completed Applications" must include a transcript of prior college performance, at least two letters attesting to the candidate's breadth of preparation and quality of performance in an undergraduate English major or equivalent, and, if applicable, a letter from a school administrator indicating employment as a teacher of English.
3. Students admitted to the program will be assigned advisors and are responsible for conferring with their advisors to insure they are meeting program requirements.
4. Admission to graduate courses in English for approved, non-degree graduate students will be granted at in-person registration on a "space available" basis.

Requirements for Admission to Graduate-level Courses

1. Priority will be given to students who:
 - A. Have already been admitted to graduate studies in English.
 - B. Are already enrolled in a graduate English course at Fredonia. (pre-registration strongly advised).
2. All others will be admitted to graduate courses depending on their preparation and space available.
3. With permission of the instructor, qualified undergraduates may take 500-level graduate courses in accordance with the stated rules provided in the college catalog.

Program Requirements

- I. Minimum of 30 hours of graduate-level courses, including:
 - A. ENGL 510, 512, 514 and 516 (12 credit hours), and
 - B. Either 1) or 2) below, (6 credit hours):
 1. ENGL 690 and 691 (Thesis Research I and II) and an oral defense of the thesis. ENGL 691 must be the final 3 hours taken among the 30 hours required.
 2. Six additional credit hours chosen from English courses numbered 510, 512, 514 and 516.
 - C. Twelve additional credit hours of course work in English chosen in consultation with the student's faculty advisor. No more than 9 of these hours may be earned in courses numbered 580, and no more than 6 in independent studies.
 - D. With the approval of the chairperson of the Department of English, the student may use up to 6 hours of graduate-level work in related fields to complete the 30 hour requirement.
 - E. Portfolio Requirement: Complete portfolio must be approved by advisor prior to approval of degree. Description of portfolio requirements available in English department.

Master of Science in Education

Departmental Requirements for Admission to the Degree Program

1. The deadline for "Completed Applications" conforms to college policy (see general guidelines).
2. "Completed Applications" must include a transcript of prior college performance, at least two letters attesting to the candidate's breadth of preparation and quality of performance in an undergraduate English major or equivalent, and, if applicable, a letter from a school administrator indicating employment as a teacher of English.
3. Initial certification to teach English in the secondary schools of New York State, or equivalent preparation, for those seeking permanent certification.
4. Students admitted to the program will be assigned advisors and are responsible for conferring with their advisors to insure they are meeting program requirements.

Program Requirements:

30 credit hours of graduate-level work, including:

1. 9 credit hours, as follows:
 - A. EDU 570 Understanding Educational Research (3 credit hours).
 - B. One EDU course in psychological, social, historical, philosophical, or comparative foundations of education (3 credit hours).
 - C. One EDU course in pedagogy, methodology, curriculum, or instruction (3 credit hours).
2. 21 credit hours in English as indicated below.
 - A. ENGL 510, 512, 514, and 516 (12 hours).
 - B. ENGL 554 and ENGL 655 (6 hours).
 - C. 3 additional graduate credit hours of English.
3. A project, approved by the student's faculty advisory committee and begun after the student has completed 15 hours of course work. The project should focus on the teaching of literature and/or writing.

GEOSCIENCES

Office: 106 Houghton Hall
(716) 673-3303
E-mail: Geo@fredonia.edu
John L. Berkley, Chairperson

The Department of Geosciences offers graduate courses on an individualized basis in advanced geosciences projects, independent studies and independent research. Students interested in taking any of these courses should contact the department for information and approval prior to enrollment.

INTERDISCIPLINARY STUDIES

Office: 810 Maytum Hall
(716) 673-3808
E-mail: Interdis@fredonia.edu
Leonard E. Faulk Jr., Graduate Dean

Graduate study in Interdisciplinary Studies leads to the completion of Master of Arts and Master of Science degree programs. These types of individually-created degree programs are designed specifically for the highly motivated, self-directed student whose personal, educational or career goals require a program which does not reside within the traditional boundaries or requirements of a specific discipline.

Interdisciplinary graduate study and program design offer possibilities that are not found in the traditional master's programs. Along with the submission of an application form for graduate study, applicants for degree programs in Interdisciplinary Studies must complete a separate two-part form which is available from the Office of Admissions.

Graduate students are admitted into Interdisciplinary Studies areas as non-degree students, unless a specific program proposal accompanies the Interdisciplinary Studies application form (Part 2 completed) and is approved provisionally by a graduate advisor. Non-degree graduate students in Interdisciplinary Studies are encouraged to submit a program proposal within the first semester of study. In any event, non-degree students must have a degree proposal accepted and approved by a graduate advisor and full committee (three members including the advisor) prior to the completion of 15 graduate credit hours. Students must select course work from at least two academic disciplines for this degree program. Normally, no more than 15 credit hours of the required course work should be taken in any single department.

All applicants for graduate study in Interdisciplinary Studies must complete the two-part application form. Part 1 requests the provision of a general outline of the proposed program; Part II requests both a program title and a list of courses that will constitute the entire 30-hour program. Applicants for degree-status upon admission must complete both Parts 1 and 2.

Because student programs are individually designed, the culminating research effort - a topic or project explored in depth - is tailored so as to integrate the previous learning with professional and personal goals. This concentrated study can follow the traditional research pattern or can embody more innovative forms and methods. In any case, there must be demonstrated growth in skills, knowledge, or vision.

All work on Interdisciplinary Studies proposals must be coordinated by the Graduate Dean, with whom proposals are initiated and in whom resides the final authority for approval. Additional information and program planning

assistance is available through the office of the Graduate Dean.

MATHEMATICS

Office: 223 Fenton Hall
(716) 673-3243
E-mail: Math@fredonia.edu
H. Joseph Straight, Chairperson

Requirements for the Master of Science in Education Degree in Mathematics

The program requires a minimum of 30 credit hours at the graduate level distributed as follows:

1. A course in research methods
2. One course from each of 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. One course from each of 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. MATH 602 Mathematics Education Seminar
5. MATH 690 Graduate Project

The student's advisor or the department chair must approve any course used to fulfill the above requirements.

Requirements for Admission to the Program without Deficiencies:

Initial certification in N.Y.S. in Adolescence Education – Mathematics, with a bachelor's degree in mathematics that includes courses equivalent to MATH 210, 223, 323,

331, and at least two of MATH 341, STAT 350, and MATH 381.

OR

Initial certification in N.Y.S. in Middle Childhood Education – Mathematics Specialist, with a bachelor’s degree in mathematics that includes courses equivalent to MATH 123, 201, 202, 210, 231, 301, 341, 381, and a statistics course.

MODERN LANGUAGES AND LITERATURES

Office: 2113 Fenton Hall
(716) 673-3380
E-mail: modlang@fredonia.edu
Thomas H. Goetz, *Chairperson*

The Department of Modern Languages and Literatures offers graduate courses on an individualized basis in special topics and directed studies in Spanish and French. Students interested in taking any of these courses should contact the department for information and approval prior to enrollment.

MUSIC

Office: 1004 Mason Hall
(716) 673-3151
E-mail: Music@fredonia.edu
Peter J. Schoenbach, *Director*
Wade Weast, *Associate Director*
Barry Kilpatrick, *Assistant Director*

Master of Music

Requirements for admission to music programs without deficiencies.

The completion of a baccalaureate degree in Music at an accredited four-year institution.

Applicants in music education must have had undergraduate studies equivalent to the Bachelor of Music or Music Education degree offered at SUNY Fredonia. A performance audition is not necessary for admission to the Master of Music in Music Education degree program. However, students in the Music Education degree program who desire to do a performance project in lieu of a thesis must audition for and be accepted by the appropriate applied music faculty at the time of application and not later than 6 to 12 hours into the program.

Applicants seeking the Master of Music in Performance degree must

audition for and be accepted by the appropriate applied music faculty.

Applicants seeking the Master of Music in Theory-Composition degree must have had undergraduate studies in music equivalent to a Bachelor of Music degree with a major in theory or composition, or any other undergraduate music degree which includes four semesters of music theory (equivalent to SUNY Fredonia's MUS 121-122, 123-124, 221-222, 223-224), a music history survey (equivalent to MUS 263 and 264), and advanced undergraduate courses in theory, composition, orchestration, counterpoint, or music history totaling at least 12 semester hours. The degree program is structured so that the student may place emphasis on either theory or composition. Those who wish to follow the theory emphasis must present evidence of previous analytical work; those who wish to pursue the composition emphasis must present a representative selection of compositions for evaluation. All applicants, therefore, are subject to approval by the theory-composition faculty.

Master of Music in Music Education

Final Project Program

This program leads to one of three Final Project options: Thesis, Composition/Arrangement, or Performance Recital. It is designed to prepare a student for further graduate study or to refine a specific area of interest or competence. This program leads to the academic qualifications required for Professional Certification in New York State.

<i>Program Requirements</i>	<i>Hrs.</i>
Music Education and Related Course Work	
MUED 521 Foundations in Music Education	3
MUED 522 Psychological Research in Music	3
Music Education and/or Music Education related courses, by advisement (MUED or MUS)	6
Course work in theory, history, literature, performance	9
Elective course work by advisement	6
Individualized selection of course work in theory, history, literature, performance and special studies (MUS/MUED 590-591). Course work	

outside of music is also acceptable, subject to the establishing of a clear relationship to the candidate's personal growth and professional competence. Short “workshops” (MUED 555) can be applied only in this category and require prior permission of the program advisor.

Final Project	
MUED 695	3
Total	30

General Requirements

- At least 12 credits for the overall program should be in music education and music education-related course work.
- At least 9 credits for the overall program should be in course work dealing with music theory, history, literature, analysis, or performance.
- At least 15 credits of the overall program should be in course work at the 600 level.
- Comprehensive Final Examinations
 - Music Education. The written comprehensive examination includes questions to be researched and discussed by the student. Questions deal with application of knowledge from classwork and special topics related to current trends in music education.
 - Theory, History, Literature, Performance. Administered by two faculty who teach courses in this category. Evaluates the general competence of the candidate with regard to the level of musical knowledge and skill appropriate to teaching competence and the general musicianship and literacy expected for the Master of Music degree. Questions are based upon course work taken in this category but also may include some general questioning beyond specific course work.
- For more detailed information about program requirements, the candidate is referred to the Policies and Practices for Master of Music Degree Candidates available from the School of Music office.

In-Service Program

This program provides the graduate student who is a teacher a greater range of courses rather than the often more specialized concentration of the Final Project program. In recognition of the great 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. Upon completion of program, students are recommended for Professional Certification (pending approval). This program leads to the academic qualifications required for Professional Certification in New York State.

Program Requirements *Hrs.*

<i>Music Education and Related Course Work</i>	
MUED 521 Foundation in Music Education	3
MUED 522 Psychological Research in Music	3
Music Education and/or Music Education related courses, by advisement (MUED or MUS)	9
Course work in theory, history, literature, performance	12
Elective course work by advisement Individualized selection of course work in theory, history, literature, performance and special studies (MUS/MUED 590-591). Course work outside of music is also acceptable subject to the establishing of a clear relationship to the candidate's personal growth and professional competence. Short "workshops" (MUED 555) can be applied only to this category and require prior permission of the program advisor.	9
	36

General Requirements

- At least 15 credits of the overall program should be in music education and music education related course work.
- At least 12 credits of the overall program should be in course work dealing with music theory, history, literature, analysis, or performance.
- At least 18 credits of the overall program should be in course work at the 600 level.
- Comprehensive Final Examinations
 - Music Education. The written comprehensive examination includes questions to be researched and discussed by the student. Questions deal with application of knowledge from classwork and special topics related to current trends in music education.
 - Theory, History, Literature, Performance. Administered by two faculty who teach courses in this category. Evaluates the general competence of the candidate with regard to the level of musical knowledge and skill appropriate to teaching competence and the general musicianship and literacy expected for the Master of Music degree. Questions are based upon

course work taken in this category but also may include some general questioning beyond specific course work.

- For more detailed information about program requirements, the candidate is referred to the Policies and Practices for Master of Music Degree Candidates available from the School of Music office.

Master of Music in Performance

Program Requirements *Hrs.*

1. A minimum of 30 semester hours of graduate level courses, with a minimum of 15 hours at the 600 level, including:	
Studio instruction, MUS 692-693	6
MUS 694 Recital	3
Music history, literature, or theory courses related to the performance area	9
Music history	3
Music theory	3
Elective courses in supporting areas of arts and sciences, professional education, music, or music education	6
2. Two semesters of ensemble participation (by advisement)	0
3. Final Comprehensive Oral Examination	0
	Total 30

Master of Music in Theory-Composition

Program Requirements *Hrs.*

1. A minimum of 30 semester hours of graduate-level courses, with a minimum of 15 hours at the 600 level, including:	
<i>For Concentration in Theory</i>	
Theory and composition courses, in which Pedagogy of Theory MUS 650 must be included	12
Thesis (theory project) or	3
<i>For Concentration in Composition</i>	
Theory and composition courses, which must include two semesters (6 credit hours) of composition	12
Thesis (large-scale composition)	3
Music history and studio instruction	9
Elective courses in supporting areas of the fine arts, arts and sciences, professional education, music, or music education	6
2. Two semesters of ensemble participation (by advisement)	0
3. Final Comprehensive Oral Examination	0
	Total 30

Initial Certification Program in Music Education

This program of study is designed for holders of accredited baccalaureates in music with majors other than music education. It is a *full-time non-degree* program of study resulting in qualification for New York State Provisional Teaching Certification, Music pre-K through 12. Upon completion of program, students are recommended for professional certification (pending approval).

Program Requirements

- Core Curriculum and College Core Curriculum:
Applicants with accredited baccalaureates in music usually already meet the equivalency of the requirements in (a) the Fredonia School of Music Core Curriculum (applied major, music theory, music history, ensembles, etc.) and (b) Fredonia's College Core Curriculum (liberal arts and sciences for general education). The applicant's status with regard to any deficiencies of these areas, however, is determined by an evaluation of academic transcript/diagnostic examination/audition as applicable. Applicants with serious deficiencies will not be considered for admission to the Provisional Certification Program but instead may apply for the Bachelor of Music in Music Education degree program.
- Certification Curriculum:
Specifically required are music education foundations, methods, conducting, pedagogy, secondary instruments and student teaching. The minimum certification requirements below may be completed by any approved combination of (1) course work at Fredonia; (2) approved transfer of credits for course work completed elsewhere; and (3) special competency examinations in skill areas. Exact requirements and needs will vary by concentration (Choral or Instrumental) and with individual students by advisement. Exceptions or course substitutions are by permission only from the Associate Director of the School of Music upon the recommendation of the student's academic advisor. Students should note that certain courses are offered only in alternate semesters although most do not necessarily need to be taken sequentially. This is typically a three-semester 40 credit hour full-time residence program consisting of two semesters of certification-related course work and one semester of student teaching.

The student is admitted to Curriculum 558 Provisional Certification Music

Education and is eligible to enroll for any Fredonia college course for which he/she has the necessary prerequisites or permission. Tuition is assessed according to the course level (100 to 400-level, undergraduate; 500 and 600-level, graduate). Students should note that this program does not lead to an academic degree although some students may still be eligible for certain types of financial aid. Students completing this curriculum may subsequently apply for admission to enter the Master of Music in Music Education degree program with the acceptance of credit for all graduate level course work already completed at Fredonia.

<i>Certification Requirements</i>	<i>Hrs.</i>
MUED 250 Foundations I	2
MUED 251 Foundations II	2
MUED 300 Foundations III	3
MUED 391 Conducting V (vocal only)	3-2 *
MUED 392 Conducting VI (vocal only)	3-2 *
MUED 301-302, 304-305 Methods Piano, Guitar, Secondary Instruments per Concentration	5-7 *
MUED 400 Professional Semester(Student Teaching)	8
Successful completion of the LAST (Liberal Arts and Sciences Test), the ATS-W (Assessment of Teaching Skills - Written Test), and a Child Abuse Seminar are also required for state certification.	14

* depending upon Concentration

PHYSICS

Office: 118 Houghton Hall
(716) 673-3301
E-mail: Physics@fredonia.edu
Subra Pendyala, *Chairperson*

The Department of Physics offers graduate courses on an occasional basis in kinetic theory and statistical mechanics, mathematical physics, electromagnetic theory, modern optics, advanced dynamics, quantum mechanics, reactor physics, advanced nuclear physics, atomic and molecular structure, and special topics. Students interested in taking any of these courses should contact the department for information and approval prior to enrollment.

PSYCHOLOGY

Office: W357 Thompson Hall
(716) 673-3129
E-mail: Psych@fredonia.edu
Jennifer L. Dyck, *Chairperson*

The Department of Psychology offers graduate courses on an occasional basis in contemporary issues and independent studies in psychology. Students interested in taking these courses should contact the department for information and approval prior to enrollment.

SOCIOLOGY/ ANTHROPOLOGY

Office: W363 Thompson Hall
(716) 673-3205
E-mail: Soc@fredonia.edu
Anthro@fredonia.edu
Alan LaFlamme, *Chairperson*

The Department of Sociology/Anthropology offers graduate courses on an individualized basis in directed studies in Sociology and Anthropology. Students interested in taking these courses should contact the department for information and approval prior to enrollment.

SPEECH PATHOLOGY AND AUDIOLOGY

Office: W121 Thompson Hall
(716) 673-3202
E-mail: SpPath@fredonia.edu
Bridget Russell, *Chairperson*

The graduate program in Speech Pathology and Audiology is designed to enable students to: (1) earn a Master of Science degree; (2) meet New York State Department of Education academic requirements for permanent certification in the education of the Speech and Hearing Handicapped for those having provisional certificates or certificates of qualification; (3) meet New York State Department of Education academic requirements for licensure in Speech Pathology or Audiology; and (4) meet American Speech and Hearing Association academic and practicum requirements for the Certificate for Clinical Competency in Speech-Language Pathology or Audiology.

The deadline for application is November 1 for admission during the spring semester, and January 1 for admission during the following summer and fall semester.

Master of Science in Speech Pathology or Master of Science in Education, Teacher of the Speech and Hearing Handicapped

Departmental requirements for admission to the program without deficiencies:

To be admitted without deficiencies an applicant must have:

A bachelor's degree from an accredited institution; completed a minimum of 15 credit hours in courses related to the normal development of speech-language-hearing and/or the sciences related to the use of speech, language and hearing; 9 credit hours in speech-language pathology; and 6 credit hours in audiology. A minimum of 3.0 GPA is preferred. Applicants who do not meet these requirements may be admitted conditionally by permission of the chairperson. A minimum of 18 semester hours in speech pathology and audiology or permission of the chairperson is required for admission to all graduate courses.

Note: A minimum of 375 clock hours of supervised clinical practice is required for graduation, of which at least 250 hours must be on the graduate level. Two hundred-and-fifty clock hours must be in the major area - speech pathology or audiology.

Program Requirements *Hrs.*

a. A minimum of 39 semester hours in speech-language pathology/audiology courses, including:

(1) A minimum of 21 credit hours in speech-language pathology or

(2) A minimum of 21 credit hours in audiology.

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

SPA 502	Clinical Practice, Communicative Disorders	3
SPA 550	Advanced Audiology (audiology emphasis only)	3
SPA 605	Advanced Clinical Methods & Practice	6
SPA 606	Research Design in Speech Pathology and Audiology or equivalent	3
SPA 620	Diagnostic Theories and Practices	3
SPA 603	Neuropathologies of Speech & Language or	3
SPA 630	Assistive Listening *	

Remaining hours in speech pathology and audiology as advised.

b. Final Comprehensive Examination (Plan I) or Thesis (Plan II) or

Directed Study Research Option (Plan III)

Total 39

* Audiology Emphasis

THEATRE AND DANCE

Office: 209 Rockefeller Arts Center
(716) 673-3596

E-mail: Theatre@fredonia.edu

James Ivey, Chairperson

The Department of Theatre and Dance offers graduate courses on an individualized basis in Theatre Arts selected studies and practicums in dance. Students interested in taking these courses should contact the department for information and approval prior to enrollment.

VISUAL ARTS

Office: 213 Rockefeller Arts Center
(716) 673-3537

E-mail: Art@fredonia.edu

Mary Lee Lunde, Chairperson

The Department of Visual Arts offers graduate courses on an individualized basis in art history independent research, seminar in art history and criticism, and independent studio work. Students interested in taking any of these courses should contact the department for information and approval prior to enrollment.



AADM400 Arts Administration Practicum

Frequency: A
Description: 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

AADM490 Arts Administration Internship

Frequency: A
Description: 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

ACCT201 Financial Accounting

Frequency: A
Description: An introduction to financial accounting theory and practice, including generally accepted accounting principles (GAAP). Emphasis is given to the use of basic financial accounting concepts to make better, more informed business decisions.
Credits: 3

ACCT202 Managerial Accounting

Frequency: A
Description: An introduction to managerial accounting theory and practice. Emphasis is given to the use of accounting techniques and concepts in managing, controlling, and decision-making within the organization.
Prerequisite Courses: ACCT 201
Credits: 3

ACCT301 Intermediate Accounting I

Frequency: B
Description: An in-depth study of the theory and application of generally accepted accounting principles. Emphasis is given to the environment of financial accounting including the standard setting process and the conceptual framework. Specific topics include the time value of money, receivables, inventories, long-term assets, and current liabilities, intangibles, and contingencies.
Prerequisite Courses: ACCT 202
Co-requisite Courses: ACCT 321
Credits: 3

ACCT302 Intermediate Accounting II

Frequency: B
Description: A challenging course including the rigorous study of theory and application of generally accepted accounting principles to complex accounting topics including stockholders' equity, revenue recognition, earnings per share, pensions, leases, accounting for taxes, accounting changes and error analysis, and cash flows.
Prerequisite Courses: ACCT 301
Co-requisite Courses: ACCT 322
Credits: 3

ACCT303 Cost Management

Frequency: B
Description: A study of the concepts and techniques of management and cost accounting including cost-volume-profit analysis, various product costing methods, cost behavior and allocation, and other internal accounting information needs for management decision-making. Computer software is used in solving application problems.
Prerequisite Courses: ACCT 202
Credits: 3

ACCT304 Taxation of Individuals

Frequency: B
Description: An in-depth study of U.S. taxation of individuals including tax policy considerations and the historical development of tax law. The provisions of the Internal Revenue Code and related regulations will be used extensively.
Prerequisite Courses: ACCT 202
Credits: 3

ACCT305 Taxation of Corporations/Partnerships

Frequency: B
Description: An in-depth discussion of federal income taxation of multi-national corporations and partnerships. Tax issues connected to formation, operation, distributions, liquidation will be examined. Other topics discussed include: special tax assessments like the alternative minimum tax, the personal holding company tax, and the accumulated earnings tax, S corporations, taxation of international transactions, and tax research.
Prerequisite Courses: ACCT 202
Credits: 3

ACCT311 Business Law I

Frequency: B
Description: A general study of the functions and procedures of law. Included will be a detailed analysis of legal principles governing contracts, torts, agency and business organizations. This course represents the first half of the Business Law sequence. It is designed to provide accounting students with the required knowledge and theory for the CPA examination, by paying particular attention to practical business law problems involving the application of legal principles.
Prerequisite Courses: ENGL 100
Credits: 3

ACCT312 Business Law II

Frequency: B
Description: A continuation of the study of law begun in ACCT 311. Topics covered include Uniform Commercial Code subjects such as commercial paper, secured transactions, and sales, and other areas of law including bankruptcy, debtor/creditor relations, product liability, estate and trust law, and property, accountant liability and international law. Continuing attention is given to particular issues involving application of the principles discussed.
Prerequisite Courses: ACCT 311
Credits: 3

ACCT321 Accounting Processes

Frequency: B
Description: A mini-course to be taken with ACCT 301 that examines accounting processes, and the related methodology for recording transactions and preparing financial statements.
Prerequisite Courses: ACCT 202
Co-requisite Courses: ACCT 301
Credits: 1

ACCT322 Accounting Practice

Frequency: B
Description: A mini-course to be taken with ACCT 302 which provides lab instruction to accompany topics under study in ACCT 302.
Prerequisite Courses: ACCT 301
Co-requisite Courses: ACCT 302
Credits: 1

ACCT401 Advanced Accounting

Frequency: B
Description: Extension of financial accounting to the study of additional accounting entities such as partnerships and consolidated and multi-national firms. Topics include accounting for mergers and acquisitions, consolidated financial statements, international transactions, and an introduction to fund accounting.
Prerequisite Courses: ACCT 301
Co-requisite Courses: ACCT 421
Credits: 3

ACCT402 Governmental Accounting

Frequency: C
Description: Study of accounting for governmental entities including: budgets, general funds, capital project funds, debt service funds, trust and agency funds, fixed assets, capital expenditures, property tax accounting, and interfund relationships. Also includes accounting standards for voluntary health and welfare organizations, colleges, hospitals, and other types of not-for-profit organizations.
Prerequisite Courses: ACCT 301
Credits: 3

ACCT405 Auditing

Frequency: B
Description: 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 this course.
Prerequisite Courses: ACCT 302
Credits: 3

ACCT421 Accounting Cycles

Frequency: B
Description: A mini-course to be taken with ACCT 401 that emphasizes accounting cycles and the interrelationships of the accounts.
Prerequisite Courses: ACCT 301
Co-requisite Courses: ACCT 401
Credits: 1

ACCT430 Independent Study

Frequency: A
Description: 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

ACCT450-451 Senior Seminar

Frequency: D
Description: 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. This seminar also serves to introduce students to inter-disciplinary 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

ACCT480 Internship

Frequency: A
 Description: This 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 - 6

AMST202 Introduction to American Studies

Frequency: B
 Description: 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

AMST210 American Popular & Mass Cultures

Frequency: B
 Description: An introduction to the methodologies of studying American cultures, with a special focus on popular and mass cultures. Particular course emphasis will be determined by the individual instructor, but topics will stress the multiplicity of American cultures. While literary works will make up the majority of class texts, the course will utilize an interdisciplinary approach integrating materials from fields such as history, anthropology, women's studies, ethnic studies, geography, sociology, music, art, among others.
 Prerequisite Courses: AMST 202 or ENGL 200
Credits: 3

AMST400 Concepts/Methods of American Studies

Frequency: B
 Description: Development of American Studies as a discipline; current splits in concepts and methods of American Studies; practice in making imaginative connections among elements in American culture and testing these connections by appropriate methods.
 Prerequisite Courses: AMST 200 or ENGL 296 or HIST 338
Credits: 3

AMST401 Independent Study

Frequency: D
 Description: Intensive individual study of some aspect of American Studies involving production of paper or project. Request for enrollment must be made prior to registration in the form of a written proposal, signed by the supervising faculty member, and forwarded to the Coordinator of American Studies.
Credits: 3

AMST402 Senior Project

Frequency: D
 Description: Clearly defined independent project utilizing methods and materials of American Studies, culminating in complete written report and analysis. Variable credit to allow internships, study abroad, and similar field projects. Before registration, student must submit detailed description of proposed project, approved by the faculty member(s) who will supervise it, to American Studies Coordinator with request for specific number of credit hours.
 Prerequisite Courses: AMST 400
Credits: 3 - 15

ANTH115 Introductory Anthropology

Frequency: A
 Description: 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

ANTH210 Physical Anthropology

Frequency: D
 Description: Anthropological view of human origins, the primate fossil record, biological aspects of humanity, non-human primates, human biological diversity, and the interplay between culture and biology.
 Prerequisite Courses: ANTH 115
Credits: 3

ANTH211 Archaeology

Frequency: C
 Description: Survey of archaeology, including major theories and methods. Emphasis upon interpretation of major findings, both prehistoric and historic.
 Prerequisite Courses: ANTH 115
Credits: 3

ANTH219 Cultural Anthropology

Frequency: C
 Description: The acquisition, nature, and impact of culture. An examination and comparison of a variety of cultural systems.
 Prerequisite Courses: ANTH 115
Credits: 3

ANTH300 Sex and Gender

Frequency: B
 Description: 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.
 Prerequisite Courses: ANTH 115
Credits: 3

ANTH301 Plagues And Peoples

Frequency: B
 Description: Explores the impact of disease on human populations in terms of demographic, cultural and social changes. The rise of health care delivery systems as a response to epidemics. Examples include the bubonic plague of the 14th and 17th centuries, cholera, influenza, polio and AIDS. Note: Also listed as SOC 312.
 Prerequisite Courses: ANTH 115
Credits: 3

ANTH311 Anthropology of the Supernatural

Frequency: D
 Description: Survey of various belief systems. Topics include: cults, sacred beings, rituals, shamanism, witchcraft, and magic.
 Prerequisite Courses: ANTH 115
Credits: 3

ANTH321 Anthropology of Indian America

Frequency: C
 Description: Survey of past and present Amerindian peoples and cultures of North America. Both aboriginal cultures and responses to European presence are emphasized for each region.
 Prerequisite Courses: ANTH 115
Credits: 3

ANTH322 Anthropology of Africa

Frequency: B
 Description: Survey course dealing with evolution of culture in Africa. Examination of range of variation of traditional African cultures and factors currently modifying them.
 Prerequisite Courses: ANTH 115
Credits: 3

ANTH324 Anthropology of the Caribbean

Frequency: B
 Description: Survey of the prehistory, history, and present day nature of the various cultures of the Caribbean region. Special emphasis placed upon: economic life, family patterns, political movements, and expressive culture.
 Prerequisite Courses: ANTH 115
Credits: 3

ANTH331 Anthropology of American Utopias

Frequency: C
 Description: An examination of the background conditions producing utopias and an ethnographic/historical analysis of selected utopian ventures (e.g. Amish, Shakers, Counterculture Communes).
 Prerequisite Courses: ANTH 115 or HIST 105 or HIST 106 or SOC 116
Credits: 3

ANTH345 Native People - Canada

Frequency: D
 Description: This course focuses on the peoples and cultures which existed in what is now Canada prior to the arrival of Europeans and examines the issues facing them today. It incorporates data from archeology, ethnography, ethnohistory, art, and political science.
 Prerequisite Courses: ANTH 115
Credits: 3

ANTH350 Special Topics

Frequency: D
 Description: Special topics in anthropology not covered in detail by regular courses. Topic announced in *Course Offerings Bulletin*.
Credits: 1 - 3

ANTH370 Seminar in Anthropology

Frequency: D
 Description: Focuses on particular methodological, theoretical, topical, or area concerns within the field of anthropology. Orientation lectures, review of literature, seminar discussions.
 Prerequisite Courses: ANTH 115
Credits: 3

ANTH470 Directed Study

Frequency: D
 Description: Reading and research course intended primarily for upper-level students. Deals with specialized concerns not covered in regular courses.
Credits: 1 - 3

ANTH473 Museum Internship

Frequency: D
 Description: Supervised placement in a museum. This allows a limited number of advanced anthropology students to work with museum staff members on research, curation, and education projects.
Credits: 3

ANTH475 Theory Seminar in Anthropology

Frequency: D
 Description: Surveys the major anthropological theorists' most influential works. Discusses their ideas within the context of their cultures, fieldwork experiences, etc.
Credits: 3

ANTH476 Methods Seminar in Anthropology

Frequency: D
Description: An examination of the basic methods of ethnohistory, ethnography, and cross-cultural comparisons. Applications and limitations of each methodology will be examined.
Credits: 3

ANTH570 Directed Study in Anthropology

Frequency: D
Description: Individualized study under guidance of a member of the anthropology faculty.
Credits: 1 - 3

ART100 Visual Concepts

Frequency: D
Description: Introductory course on the theory and practice of art in a post-modern world.
Credits: 3

ART115 Masterpieces in Art to 1400

Frequency: B
Description: A concise survey of western art and architecture from prehistoric times to the end of the Middle Ages (c. 1400) with emphasis on the understanding and appreciation of key works of art, as well as their social and historical context.
Credits: 3

ART116 Masterpieces From 1400-Present

Frequency: B
Description: A concise survey of western art and architecture from the Italian Renaissance (c. 1400) to the present, with emphasis on the understanding and appreciation of key works of art, as well as their social and historical context.
Credits: 3

ART120 Visiting Artists Program

Frequency: A
Description: 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

ART150 Drawing I

Frequency: A
Description: 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

ART151 Drawing II

Frequency: A
Description: Continuation of Drawing I techniques; increased emphasis in modes of expression, use of color, pastels, and collage.
Prerequisite Courses: ART 150
Credits: 3

ART155 2-Dimensional Design

Frequency: A
Description: 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

ART251 Art/Reality - 19th Century America

Frequency: D
Description: 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.
Prerequisite Courses: ART 115 or ART 116 or ART 215 or ART 325 or ART 327 or ART 340 or ART 345 or ART 346 or ART 347 or ART 451
Credits: 3

ART252 Life Drawing I

Frequency: A
Description: Intensive drawing course related to the human figure. The figure is explored in various mediums and in both realism and abstraction. Research papers and readings out of the textbook are required.
Prerequisite Courses: ART 150
Credits: 3

ART253 Life Drawing II

Frequency: A
Description: Continued concentration on drawing the figure with more emphasis on use of color medium. Research papers will deal with contemporary and traditional artists whose work dealt with the figure.
Prerequisite Courses: ART 252
Credits: 3

ART255 Photography I

Frequency: A
Description: 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.
Credits: 3

ART257 Sculpture I

Frequency: A
Description: Introductory course that explores basic elements, materials and techniques relating to three-dimensional experience. 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 3D expression both past and present.
Credits: 3

ART258 Sculpture II

Frequency: B
Description: More advanced techniques for three-dimensional expression are introduced, as concepts and content relevant to personal expression are explored. Processes and materials may include clay modeling, foundry casting, welding, and papermaking among others.
Prerequisite Courses: ART 257
Credits: 3

ART259 Graphic Design I

Frequency: B
Description: Introduction and orientation to concepts and skills necessary for visual communication. Fundamentals of language and principles of graphic design structure with an emphasis on media for development of ideas and imagery.
Prerequisite Courses: ART 151 and 155
Credits: 3

ART260 Graphic Design II

Frequency: B
Description: Continued application of organizational methods, concept development, structure and graphic translation in design practice. Introduction to fundamentals and language of topography.
Prerequisite Courses: ART 259
Credits: 3

ART263 Printmaking I

Frequency: B
Description: An introduction to the various techniques of linocuts. Students learn traditional techniques as well as monoprints, mixed media experimentation and reduction prints. The development of individual expression is stressed.
Prerequisite Courses: ART 150
Credits: 3

ART264 Printmaking II

Frequency: B
Description: An introduction to monotypes and collagraphs. Students are directed to experiment with a wide range of approaches to the two techniques.
Prerequisite Courses: ART 263
Credits: 3

ART273 Ceramics I

Frequency: A
Description: An introduction to pinchforming, coilbuilding, slab construction of projects designed to explore personal expression with clay. Slides, films and library readings expose students to cross-cultural themes in clay.
Credits: 3

ART274 Ceramics II

Frequency: A
Description: Development of skills involving the potter's wheel, with emphasis on design and glaze application. Critiques and slide lectures augment hands-on training.
Prerequisite Courses: ART 273
Credits: 3

ART285 Painting I

Frequency: A
Description: Basic exercises in fundamental techniques with an emphasis in color theory and formal compositional elements.
Credits: 3

ART286 Painting II

Frequency: A
Description: Begin professional preparation in becoming a painter by learning to create stretcher bars, stretch and prime canvas, build frames while continuing to further explore the foundations in art. Acrylic paint is primarily medium used in this class.
Prerequisite Courses: ART 285
Credits: 3

ART305 Photography II

Frequency: B
Description: An exploration of more advanced techniques of exposure, development and printing of black and white film and print materials, with special emphasis on total control. Increased emphasis is also placed on aspects of composition, perception, content and presentation in black and white photography.
Prerequisite Courses: ART 255
Credits: 3

ART310 Digital Imaging

Frequency: B
Description: 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, web page design, and multimedia production as forms of visual expression. Lectures, laboratory work and individual and collaborative projects.
Prerequisite Courses: ART 255
Credits: 3

ART315 Readings in Art History

Frequency: D
Description: 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. Permission of the department.
Prerequisite Courses: ART 115 or ART 116 or ART 251 or ART 325 or ART 327 or ART 345 or ART 346 or ART 347 or ART 451
Credits: 3

ART325 Art of the Italian Renaissance

Frequency: D

Description: Evolution of Italian Renaissance art and architecture from the 14th century through the High Renaissance masters, including mannerism. General trends as well as careers of major artists emphasized. Permission of the department.

Prerequisite Courses: ART 115 or ART 116 or ART 215 or ART 251 or ART 327 or ART 340 or ART 345 or ART 346 or ART 347 or ART 451

*Credits: 3***ART327 Baroque Art**

Frequency: D

Description: Art and architecture of Baroque and Rococo Europe during the 17th and 18th centuries, with a focus on Italy, France, The Netherlands, and England. Permission of the department.

Prerequisite Courses: ART 115 or ART 116 or ART 215 or ART 251 or ART 325 or ART 340 or ART 345 or ART 346 or ART 347 or ART 451

*Credits: 3***ART340 History of Architecture**

Frequency: D

Description: A study of the evolution of form, style, structure and meaning in Western architecture from the Middle Ages through c. 1800.

*Credits: 3***ART345 Colonial American Architecture**

Frequency: D

Description: A survey of American architecture between 1610 and 1800, focusing on major stylistic trends and architects in New England, the South, and the Southwest. European antecedents will also be explored.

*Credits: 3***ART346 19th Century American Architecture**

Frequency: D

Description: The development of major stylistic movements, technological advances, and the careers of key architects between about 1800 and 1890, with a focus on the European sources and influences. Local versions of national styles will be featured. Permission of the department.

Prerequisite Courses: ART 115 or ART 116 or ART 215 or ART 251 or ART 325 or ART 327 or ART 340 or ART 345 or ART 347 or ART 451

*Credits: 3***ART347 20th Century American Architecture**

Frequency: D

Description: Modernist and traditionalist themes in architecture of this century are explored, with the late 19th century as well as the European background. Technological developments, work of major architects, local variants of national styles will also be examined. Permission of the department.

Prerequisite Courses: ART 115 or ART 116 or ART 215 or ART 251 or ART 325 or ART 327 or ART 340 or ART 345 or ART 346 or ART 451

*Credits: 3***ART350 Drawing III**

Frequency: B

Description: Advanced studio course dealing in experimentation with media and styles. Alternatives to traditional drawing approaches are explored and thematic development is stressed.

Permission of the department. Prerequisite Courses: ART 150 and ART 151

*Credits: 3***ART351 Special Topics: Art History**

Frequency: D

Description: Selected areas of history of art supplementing the regular program. Permission of the department.

Prerequisite Courses: ART 115 or ART 116 or ART 215 or ART 251 or ART 325 or ART 327 or ART 340 or ART 345 or ART 346 or ART 347 or ART 451

*Credits: 1 - 3***ART352 Special Topics: Studio Art**

Frequency: D

Description: Selected studio media and techniques.

*Credits: 1 - 3***ART353 History of Graphic Design**

Frequency: C

Description: Graphic design from the nineteenth 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.

*Credits: 3***ART354 Photojournalism**

Frequency: D

Description: This course develops the ability to communicate emotions and ideas through the marriage of photographs and words.

Prerequisite Courses: ART 255

*Credits: 3***ART355 Photography III**

Frequency: B

Description: Explores aesthetics and technical knowledge necessary to master the art of color processing. While emphasis is placed on the use of negative, reversal and Polaroid films and print materials, attention is also paid to color theory, perception and aesthetics, as well as the use of alternative color processes.

Prerequisite Courses: ART 255

*Credits: 3***ART357 Sculpture III**

Frequency: B

Description: Advanced studio offering greater latitude for personal exploration of materials. Development of a cohesive body of work, based on a strong conceptual foundation is stressed. Technical exploration, craftsmanship, and underlying intent is scrutinized and fostered through class critique, peer review, and required reading.

Prerequisite Courses: ART 258

*Credits: 3***ART358 Sculpture IV**

Frequency: B

Description: A continuation of ART 357 where comprehensive conceptual development is expected as the student continues thematic explorations within their personalized imagery.

Professional practices including portfolio preparation, resumes and artist statements are discussed.

Prerequisite Courses: ART 357

*Credits: 3***ART359 Graphic Design III**

Frequency: B

Description: Methods and processes of graphic design problem solving with an emphasis on symbols and images. Tailoring communication to audiences and acknowledging the role of context in the interpretation of form

Prerequisite Courses: ART 260

*Credits: 3***ART360 Graphic Design IV**

Frequency: B

Description: Development and preparation of design concepts for application in print media.

Students analyze relationships between imagery, typography, sequence and content.

Prerequisite Courses: ART 359

*Credits: 3***ART361 Typography I**

Frequency: B

Description: 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; ART 260.

*Credits: 3***ART362 Typography II**

Frequency: B

Description: Exploration of design using text type and typographic technology. Students investigate narrative and expressive use of typographic form and format/informational organization problems.

Prerequisite Courses: ART 361

*Credits: 3***ART370 Drawing IV**

Frequency: A

Description: Advanced studio course that stresses critical thinking as a means of self appraisal and the refinement of thematic approaches within traditional and non-traditional drawing mediums.

Prerequisite Courses: ART 350

*Credits: 3***ART373 Ceramics III**

Frequency: A

Description: Continues the development of skills and techniques associated with the potter's wheel. Emphasis is placed upon developing surface treatments through experimentation with glazes suitable for wheel thrown forms. Students are required to become involved in both bisque and glaze firing processes.

Prerequisite Courses: ART 274

*Credits: 3***ART374 Ceramics IV**

Frequency: A

Description: Off wheel hand-building techniques are utilized to explore a variety of sculptural applications for vessel forms, with continued emphasis upon a search for appropriate surface treatments and firing techniques. Conceptual development of individual ideas for expression are encouraged.

Prerequisite Courses: ART 274

*Credits: 3***ART380 Illustration I**

Frequency: B

Description: Emphasis on research as it pertains to editorial assignments, including series of drawings and notes before final presentations. Most work will be black and white format.

Prerequisite Courses: ART 150 and ART 151 and ART 155

*Credits: 3***ART381 Illustration II**

Frequency: B

Description: Emphasis continues on research for editorial assignments with more attention given to color comps, drawings, and final presentations.

Prerequisite Courses: ART 252 and ART 380

Credits: 3

ART385 Painting III

Frequency: A
 Description: Professional preparation continues by learning more about intellectual and historic perspectives related to painting while learning to prepare student's promotional support materials (slides, resumes, artist statements, etc.). Oil paint and its use in individual directions are encouraged at this level.
 Prerequisite Courses: ART 286
Credits: 3

ART386 Painting IV

Frequency: A
 Description: Professional development is amplified by further study into elements discussed earlier in sequence. More personal and intellectual interpretation of work is encouraged.
 Prerequisite Courses: ART 385
Credits: 3

ART401 Graphic Design V

Frequency: B
 Description: Emphasis on visual identity systems; conceptualization and development of entire programs, including two-dimensional and three-dimensional applications. Integration of corporate identity and environmental graphics and the formulation of design standards are addressed.
 Prerequisite Courses: ART 360
Credits: 3

ART402 Graphic Design VI

Frequency: B
 Description: 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.
 Prerequisite Courses: ART 401
Credits: 3

ART405 Photography IV

Frequency: B
 Description: 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, and presentations along with individual and group critiques.
 Prerequisite Courses: ART 305 and ART 310 and ART 355
Credits: 3

ART420 Illustration III

Frequency: B
 Description: Projects will be addressed as they correspond to individual styles with assignments from outside sources within the college and community.
 Prerequisite Courses: ART 381
Credits: 3

ART421 Illustration IV

Frequency: B
 Description: Advanced projects working closely with faculty in publication and graphics. Portfolio review and preparation.
 Prerequisite Courses: ART 420
Credits: 3

ART440 Internship

Frequency: D
 Description: This 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.
Credits: 1 - 6

ART441 Directed Studio Projects

Frequency: A
 Description: 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. Permission of the department.
Credits: 1 - 3

ART442 Directed Study: Art History

Frequency: A
 Description: Directed research in specific areas of art history, stressing depth of inquiry. Subject of study chosen in consultation with department.
Credits: 1 - 3

ART451 Modern Architecture

Frequency: D
 Description: A study of architecture in Europe and America from c. 1800 to the present. Both general trends and the careers of major architects (such as Le Corbusier, Gropius, and Frank Lloyd Wright) will be explored.
 Prerequisite Courses: ART 115 or ART 116 or ART 215 or ART 251 or ART 325 or ART 327 or ART 340 or ART 345 or ART 346 or ART 347
Credits: 3

ART452 Typography III

Frequency: B
 Description: Typographic theory exploring traditional and nontraditional forms, both historical and contemporary typographic achievements. Analysis of expressive characteristics and experimental uses of letter forms and text.
 Prerequisite Courses: ART 362
Credits: 3

ART460 Senior Seminar

Frequency: A
 Description: Formal and technical preparation for senior exhibits. Career development includes a writing component to aid the student in developing a resume, cover letter and artist's statement.
Credits: 1

ART462 Design Realities/Professional Practice

Frequency: B
 Description: Comprehensive investigation and research into topics of production and practice in design. Content directed in three primary areas: pre-press preparation and materials, legal affairs, and the professional studio. Issues to be addressed include electronic file management, paper specification, supplier relationships, copyright and plagiarism, business contracts, ethics, studio ownership, management and record keeping. Requires compilation of individual journal and written research/analysis of specific course topic.
 Prerequisite Courses: ART 401 or ART 420
Credits: 1 - 3

ART472 Gallery Practicum

Frequency: D
 Description: This course allows the student first hand 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.
Credits: 1 - 3

ART480 Workshops

Frequency: D
 Description: 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

ART494 Independent Study: Art History

Frequency: A
 Description: Independent research in specific areas of art history, stressing depth of inquiry and development of topic. Subject of study chosen in consultation with department.
Credits: 1 - 3

ART495 Independent Studio Projects

Frequency: A
 Description: Independent studio work in all media. Sound background in area of investigation required. Student must file acceptable plan or proposed project.
Credits: 1 - 3

ART496 Teaching Assistant

Frequency: D
 Description: This course is designed for students who plan to teach at the college/university level. The student will assist the instructor in the classroom throughout the semester. Enrollment is to be arranged with the appropriate instructor.
Credits: 3

ART541 Independent Project Art History I

Frequency: D
 Description: Independent research in specific area of art history, stressing depth of inquiry. Subject to study chosen in consultation with department.
Credits: 3

ART542 Independent Project Art History II

Frequency: D
 Description: Independent research in specific area of art history, stressing depth of inquiry. Subject to study chosen in consultation with department.
Credits: 3

ART545 Seminar in Art History and Criticism

Frequency: D
 Description: Readings and discussions, reportage and criticism, including role of critic, influence of media, and formation of public attitudes.
Credits: 3

ART551-556 Independent Studio Projects

Frequency: D
 Description: Independent studio work in drawing, painting, sculpture, printmaking, ceramics, or combination of media. Sound background in area of investigation required. Student must present an acceptable plan for proposed project.
Credits: 1 - 3

BIOL100 Studying for Success-Biology

Frequency: D
 Description: This one-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, these methods will provide freshmen with the opportunity to succeed and potentially excel in college science courses. Many of these 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

BIOL105 Freshman Seminar on Sexual Concerns

Frequency: D

Description: Introductory course is 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***BIOL110 Human Biology**

Frequency: B

Description: 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***BIOL111 Introduction to Biology**

Frequency: A

Description: 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***BIOL115 Environmental Biology**

Frequency: A

Description: Study of basic relationships between the environment and humans. Discussion of constraints and relationships found 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***BIOL120****Microorganisms/Biotechnology**

Frequency: B

Description: An introductory study of the structure, metabolism, and genetics of microorganisms. Discussion will focus on the methods used to manipulate and transform biological processes and the role that microorganisms play in the rapidly expanding field of biotechnology.

*Credits: 3***BIOL141 Plant Diversity/Ecosystem Biology**

Frequency: B

Description: A survey of the plants, fungi and algae, with emphasis on the comparative form and function among major plant groups. Significant discussion of Angiosperms and a survey of ecological processes and relationships.

*Credits: 3***BIOL142 Plant/Ecosystem Biology Lab**

Frequency: B

Description: Laboratory exercises designed to explore the structure and function of the plants, fungi, and algae and demonstrate ecological principles.

*Credits: 1***BIOL144 Animal Biology and Evolution**

Frequency: B

Description: An evolutionary survey of the animal kingdom emphasizing adaptive aspects of comparative zoological forms and functions. Population genetics and evolutionary theory are considered in detail.

Prerequisite Courses: BIOL 141 and CHEM 115

*Credits: 3***BIOL145 Animal Biology/Evolution Lab**

Frequency: B

Description: A survey of animal types from Protozoa to Chordata with emphasis on the evolution of animal structure and function.

*Credits: 1***BIOL221 Human Anatomy**

Frequency: B

Description: Integrated survey of gross and microscopic anatomy of human body. Lectures correlated with laboratory exercises which present dissections, microscope slides, charts and models. Two lectures, one laboratory.

*Credits: 3***BIOL241 Introductory Cell Biology**

Frequency: B

Description: Introduction to central concepts of cell biology. Includes biologically important macromolecules, basic metabolic processes, cell structure/function, and cell cycle.

Prerequisite Courses: BIOL 144 and BIOL 145 and CHEM 115

*Credits: 3***BIOL242 Introductory Cell Biology Lab**

Frequency: B

Description: A laboratory course emphasizing the methods and techniques used in cellular and molecular biology. Laboratory exercises focus on cell processes and stresses quantitative and computer skills.

*Credits: 1***BIOL250 Basic Concepts in Biology**

Frequency: B

Description: Examination of selected areas of general biology for interested lower division major or non-major. Emphasis on developing basic background in such areas as botany, zoology, and the relationships between these fields and human society. Examples of courses offered include Field Natural History and Fungal Pathogens. Course may not be used as Biology major elective. Topics are determined by student interests.

Prerequisite Courses: BIOL 111 or BIOL 141

*Credits: 1 - 6***BIOL251 Basic Concepts in Biology**

Frequency: B

Description: Examination of selected areas of general biology for interested lower division major or non-major. Emphasis on developing basic background in such areas as botany, zoology, and the relationships between these fields and human society. Examples of courses offered include Field Natural History and Fungal Pathogens. Course may not be used as Biology major elective. Topics are determined by student interests.

Prerequisite Courses: BIOL 111 or BIOL 141

*Credits: 1 - 3***BIOL256 Introduction to Clinical Science**

Frequency: A

Description: 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***BIOL330 General Ecology**

Frequency: B

Description: Introduction to ecology emphasizing general principles at individual, population, and community levels. Examples of various approaches (observation and experimentation, field and laboratory studies, and modeling and computer simulations) are considered.

Prerequisite Courses: BIOL 141 and BIOL 144 and BIOL 241 and CHEM 115 and CHEM 125

*Credits: 3***BIOL331 General Ecology Laboratory**

Frequency: B

Description: 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***BIOL333 Biochemistry**

Frequency: B

Description: The structure and function of proteins and the regulation of metabolic pathways will be the central concepts presented in the course. Students should gain an understanding of the fundamental principles of the biology of protein molecules.

Prerequisite Courses: CHEM 216 and CHEM 226

*Credits: 3***BIOL334 Biochemistry Laboratory**

Frequency: B

Description: Introduction to laboratory practice using biochemical techniques to isolate and characterize proteins. Enzyme kinetics and bioinformatics are also covered.

*Credits: 1***BIOL335 Genetics**

Frequency: B

Description: The principles of genetic analysis and the nature of the gene. Mendelian and molecular genetics; emphasis on the expression of heritable characteristics. Discussion of the chromosomal and molecular basis of inheritance and replication and mutation of hereditary material. Laboratory exercises include analysis of Mendelian genetics and DNA isolation and examination. Two lectures, one laboratory.

Prerequisite Courses: BIOL 241

*Credits: 3***BIOL336 Mammalian Physiology**

Frequency: B

Description: An integrative approach to systems physiology. After an initial discussion on mechanisms of cellular regulation of homeostasis, individual physiological systems, e.g. respiratory, cardiovascular, are examined. Organ and system action are related to demonstrate integration of function within the body. Major emphasis will be on normal human functions.

Prerequisite Courses: BIOL 241 and CHEM 215

Credits: 3

BIOL337 Mammalian Physiology Lab

Frequency: B
Description: 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.
Co-requisite Courses: BIOL 336
Credits: 1

BIOL338 Microbiology

Frequency: B
Description: The course includes a basic study of microbial taxonomy, morphology, biochemistry, and reproduction. Great emphasis is placed on medical microbiology, infectious diseases, microbial genetic regulation, and the application of microorganisms in recombinant gene technology. Laboratory includes identification of microbes by colonial and microscopic features, biochemical properties, and antibiotic sensitivities. Two lectures, one laboratory.
Prerequisite Courses: BIOL 333 and BIOL 335
Credits: 3

BIOL340 Cell and Subcellular Biology

Frequency: B
Description: Cell structure and function at cellular and molecular level using animal, plant, and microbial cells to illustrate common and divergent tenets. Physical and chemical organization of cells, analysis of the cell concept, emphasis on biochemical, physiological, and ultrastructural properties. Laboratory exercises dealing with isolation and characterization of cell fractions. Two lectures, one laboratory.
Prerequisite Courses: BIOL 333 and MATH 120
Credits: 3

BIOL343 Conservation

Frequency: B
Description: 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 BI 343, 345 or 360.
Prerequisite Courses: BIOL 111 and BIOL 141
Credits: 3

BIOL344 Parasitology

Frequency: B
Description: A survey of the more important protozoan and helminth parasites of humans. Special emphasis is given to epidemiology, pathogenesis, diagnosis, and treatment of common parasitic diseases.
Prerequisite Courses: BIOL 144
Credits: 1

BIOL345 Emerging Infectious Diseases

Frequency: A
Description: This 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

BIOL351 Evolution

Frequency: B
Description: Consideration of the theoretical framework of evolutionary biology and the mechanisms of evolution. Special topics include microevolution, macroevolution, and coevolution.
Prerequisite Courses: BIOL 141 and BIOL 144 and BIOL 241
Credits: 3

BIOL360 AIDS and STDs

Frequency: B
Description: 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. Note: Students in any Biology degree program may earn elective credit for only one of BIOL 343, 345 or 360.
Prerequisite Courses: BIOL 111 or BIOL 141
Credits: 3

BIOL370 Advanced Biochemistry

Frequency: B
Description: A continuation of BIOL 333, this course explores biochemical concepts and pathways with an emphasis on problem solving. Cellular control and coordination of biochemical pathways is emphasized in light of an advanced understanding of protein biochemistry. Lecture only.
Prerequisite Courses: BIOL 333
Credits: 3

BIOL397 Biochemistry Seminar I

Frequency: B
Description: 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

BIOL410 Tropical Biology

Frequency: C
Description: 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

BIOL417 Comparative Animal Physiology

Frequency: C
Description: How animals maintain homeostasis in a non-homeostatic world. After a general introduction to mechanisms of cellular regulation and energetics the class will discuss specific physiological systems (respiratory, cardiovascular, osmoregulatory, etc.) and compare the modes and strategies employed by different animal groups in responding to changes in external environment. Particular attention directed to adaptations to marginal habitats, e.g. marine intertidal, deep sea hydrothermal vents, hot desert.
Prerequisite Courses: BIOL 336
Credits: 3

BIOL419 Genes and Genomes

Frequency: C
Description: The course will focus on the study of DNA and genes from the paper by Watson and Crick to the Human Genome Project. The genetic and molecular approaches used to identify genes and the impact of genome study on society and current scientific research will be discussed.
Prerequisite Courses: BIOL 333 and BIOL 335
Credits: 3

BIOL420 Population/Community Ecology

Frequency: C
Description: Reading and discussion of primary literature relating to population and community ecology. Topics include population growth, life history patterns, competition, plant-animal interactions, and community organization.
Prerequisite Courses: BIOL 330
Credits: 3

BIOL422 Physiological Ecology

Frequency: C
Description: Reading and discussion of primary literature relating to animal interactions with the environment. Examination of potential effects of specific habitats (e.g. deserts, deep sea) and the physiological responses of various animals to these environmental challenges.
Prerequisite Courses: BIOL 330
Credits: 3

BIOL424 Aquatic Biology

Frequency: C
Description: Classification and biology of major groups of organisms that inhabit freshwater environments, characteristics of aquatic habitats, pollution of aquatic environments, and the role of physical and chemical factors in aquatic ecosystems.
Prerequisite Courses: BIOL 330
Credits: 3

BIOL429 Field Biology

Frequency: D
Description: A field-oriented course with emphasis on developing and testing scientific hypotheses. Activities include identification of local flora and fauna, using a wide variety of field techniques, statistical analysis, and writing scientific reports. Some Saturday field trips required.
Prerequisite Courses: BIOL 330
Credits: 3

BIOL431 Senior Seminar

Frequency: A
Description: 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

BIOL435 Developmental Biology

Frequency: B
Description: 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 immunohisto-chemistry. Two lectures, one laboratory.
Credits: 3

BIOL440-441 Undergraduate Research

Frequency: A

Description: 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.

Credits: 1 - 3

BIOL443 Plant Physiology

Frequency: C

Description: Study of the life processes and responses of plants, including water relations and transport, photosynthesis and general metabolism, mineral and organic nutrition, photoperiodic responses and rhythms, growth and differentiation, and plant relationships with the environment.

Prerequisite Courses: BIOL 241 and BIOL 333

Credits: 3

BIOL445 Photobiology

Frequency: C

Description: An examination of the interactions of organisms and light. Topics include photochemistry and light measurement techniques, photosynthesis, vision, phototropic and phototactic responses and the role of light in reproduction of both plants and animals.

Credits: 3

BIOL446 Animal Behavior

Frequency: B

Description: Survey on theories and practices in study of animal behavior; emphasis on phylogeny and adaptive significance of behavioral patterns. Research techniques and physiological mechanisms considered in detail.

Prerequisite Courses: BIOL 241

Credits: 3

BIOL450-451 Modern Concepts in Biology

Frequency: A

Description: 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 Genetics, Cell/Hybridoma Culture, Eukaryotic Gene Expression and Biology of Terrestrial Vertebrates.

Credits: 1 - 3

BIOL453 Basic Hematology

Frequency: B

Description: Introduction to the study of blood, its cellular components, and various blood diseases. Laboratory exercises include a variety of manual techniques involved with blood cell counts and determinations.

Prerequisite Courses: BIOL 336

Credits: 1

BIOL457 Biostatistics

Frequency: C

Description: 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

BIOL458 Laboratory Supervision in Biology

Frequency: A

Description: 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 440/441 or 458.

Credits: 1

BIOL460 Recombinant Gene Technology

Frequency: B

Description: Basic molecular biology techniques are taught within a research project in which students isolate and characterize and sequence a gene from a DNA library. Other experiments include the identification of organisms based on DNA sequences and typing of human DNA. One lecture, two laboratories.

Prerequisite Courses: BIOL 333 and BIOL 334 and BIOL 335

Credits: 3

BIOL461 Immunology and Serology

Frequency: B

Description: Study of the mechanisms of the immune response including cellular basis of immunity and molecular basis of antigen-antibody reactions. Regulation of antibody production and cell-mediated reactivity examined. Current clinical applicability considered in discussion of tumor, transplantation, allergy-related, and autoimmune immunobiology. Several laboratory exercises included involving serological/immunological determinations detecting antigen-antibody interactions. Three lectures.

Prerequisite Courses: BIOL 333 and BIOL 335

Credits: 3

BIOL465 Advanced Experimental Biochemistry

Frequency: B

Description: 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 spectrometry (GC-MS), nuclear magnetic resonance (NMR) spectroscopy, high performance liquid chromatography (HPLC), immunochemistry, and/or other contemporary techniques.

Prerequisite Courses: BIOL 334

Credits: 2

BIOL466 Current Issues in Developmental Biology

Frequency: B

Description: 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.

Prerequisite: Junior standing in major.

Credits: 3

BIOL468 Biomembranes

Frequency: C

Description: 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.

Prerequisites: BIOL 333 or equivalent, or permission.

Prerequisite Courses: BIOL 333

Credits: 3

BIOL470 Hormone Mechanisms

Frequency: C

Description: Course will examine the basic physiological, cellular and molecular pathways which regulate metabolism, growth, and neurological activities of organisms, especially mammals. Discussions will follow text information and general models will be supported with primary research literature to show developments from recent experiments.

Prerequisite: BIOL 333 or permission.

Prerequisite Courses: BIOL 333

Credits: 3

BIOL472 Microbial Pathogenesis

Frequency: D

Description: 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 our understanding of the pathogenesis of infectious diseases.

Credits: 3

BIOL497 Biochemistry Seminar II

Frequency: B

Description: 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

BIOL501 Biochemistry

Frequency: D

Description: Advanced discussion of biological chemistry; chemistry of carbohydrates, lipids and proteins, and nucleic acids; bioenergetics; the structure and mechanism of enzyme action; protein biosynthesis; molecular genetics; selected topics in immunochemistry, and biochemical endocrinology.

Prerequisite Courses: CHEM 216

Credits: 3

BIOL502 Methods in Biochemistry

Frequency: D

Description: Theory and laboratory experiments demonstrating the techniques and applications of contemporary biochemistry including electrophoresis, chromatography, centrifugation, radioisotope methods, DNA sequencing, enzymology, spectrophotometry and gas chromatography.

Prerequisite Courses: BIOL 501

Credits: 3

BIOL510 Tropical Biology

Frequency: C
Description: 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

BIOL517 Comparative Animal Physiology

Frequency: C
Description: How animals maintain homeostasis in a non-homeostatic world. After a general introduction to mechanisms of cellular regulation and energetics, discussion will include specific physiological systems (respiratory, cardiovascular, osmoregulatory, etc.) and compare the modes and strategies employed by different animal groups in responding to changes in external environment. Particular attention directed to adaptations to marginal habitats, e.g. marine intertidal, deep sea hydrothermal vents, hot desert.
Prerequisite Courses: BIOL 336
Credits: 3

BIOL520 Population and Community Ecology

Frequency: C
Description: Reading and discussion of primary literature relating to population and community ecology. Topics include population growth life history patterns, competition, plant-animal interactions, and community organization.
Prerequisite Courses: BIOL 330
Credits: 3

BIOL522 Physiological Ecology

Frequency: C
Description: Reading and discussion of primary literature relating to physiological and ecosystem ecology. Topics include resource acquisition, energetics, nutrient cycling, and energy flow.
Prerequisite Courses: BIOL 330
Credits: 3

BIOL524 Aquatic Biology

Frequency: C
Description: The course covers the classification and biology of major groups of organisms found in fresh water, characteristics of aquatic habitats, pollution of aquatic environments, and the role of physical and chemical factors in aquatic ecosystems.
Prerequisite Courses: BIOL 330
Credits: 3

BIOL543 Plant Physiology

Frequency: C
Description: 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

BIOL544 Radiation Biology

Frequency: C
Description: 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

BIOL545 Photobiology

Frequency: C
Description: An examination of the interactions of organisms and light. Topics include photochemistry and light measurement techniques, photosynthesis, vision, phototropic and phototactic responses and the role of light in reproduction of both plants and animals.
Credits: 3

BIOL546 Evolution

Frequency: D
Description: Consideration of the theoretical framework of evolutionary biology and the mechanisms of evolution. Special topics include microevolution, macroevolution and coevolution.
Credits: 3

BIOL550-551 Current Concepts in Biology

Frequency: D
Description: 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

BIOL557 Biostatistics

Frequency: C
Description: Statistical tests frequently used in the biological sciences. Emphasis is placed on understanding what statistics can and cannot do, the meaning of a statistical test, and how to choose an appropriate statistical test. Uses of micro-computer and mainframe statistical packages (SPSS or MINITAB) are also considered.
Credits: 3

BIOL564 Mammalogy

Frequency: C
Description: 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

BIOL566 Current Issues in Developmental Biology

Frequency: B
Description: 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.
Prerequisite: Junior standing in the major.
Credits: 3

BIOL600-601 Seminar

Frequency: C
Description: 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

BIOL611 Cell Regulation

Frequency: D
Description: Integrated study of regulation at various levels within the cell. Molecular control of cellular activity and its interconnection with biochemistry including regulation of enzyme activity, nucleic acid and protein biosynthesis, metabolic control by hormones, and membrane regulatory functions.
Prerequisite Courses: BIOL 501
Credits: 3

BIOL646 Reproductive Physiology

Frequency: D
Description: Treatment of reproductive mechanisms in higher vertebrates; particular attention to mammals. Topics include biology of sex, structure-function relationship in male and female reproductive systems, gametogenesis, gonadal steroids, nongonadal endocrine control mechanisms, cyclic reproductive phenomena, insemination and fertilization, viviparity, pregnancy, parturition and lactation, fertility and sterility, and effects of environment and nutrition on reproductive processes.
Prerequisite Courses: BIOL 501
Credits: 3

BIOL650 Special Topics in Biology

Frequency: D
Description: 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: 3

BIOL690-691 Thesis Research

Frequency: A
Credits: 3 - 9

BUAD100 Freshman Seminar

Frequency: B
Description: A one-credit course intended to help incoming freshman succeed in Business Administration and Accounting at SUNY Fredonia. The course provides an introduction to the nature of college education and an orientation to the functions and resources of the Business Administration department and the college as a whole.
Credits: 1

BUAD101 Understanding Business

Frequency: D

Description: 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. This course is designed primarily for non-majors, although open to Business Administration freshmen/sophomore students.

*Credits: 3***BUAD161 Information Technology Literacy**

Frequency: A

Description: Course examines the selection and use of basic hardware/software technologies for personal productivity in every day business settings. Students are introduced to how common informational business productivity software such as electronic mail, desktop publishing, presentation, electronic spreadsheets, file management and web browsers are used to gather, store, analyze and report information. Lab instruction is used to complement the course by providing student with hands-on experience with a set of the above-mentioned applications.

*Credits: 3***BUAD200 Fundamentals of Statistics for Business and Economics**

Frequency: A

Description: 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.

*Credits: 3***BUAD235 Introduction to Business Communication**

Frequency: B

Description: This highly practical course focuses on the critical communication skills involved in effective written and oral communication while emphasizing applications of communication concepts in the world of business. Students will be able to engage in application exercises, build their exploratory skills, and confront problems of diversity. The course is cross-listed with COMM 235.

Prerequisite Courses: ENGL 100

*Credits: 3***BUAD261 Management Information Systems**

Frequency: A

Description: Course provides an overview of strategic, tactical and operational systems used in business, and how these systems are used for decision support in organizations. The course discusses the concepts of IS for competitive advantage, data as a resource, IS and IT planning and implementation. Topics include systems theory and concepts, information theory and quality, decision theory, systems analysis, database management, network and telecommunication management, electronic commerce and social and ethical issues related to information systems. Lab instruction in developing of databases and decision support systems using an office software suite complements the course. Prerequisite: BUAD 161 or permission of department.

Prerequisite Courses: BUAD 161

*Credits: 3***BUAD266 Business Application Development**

Frequency: B

Description: Course covers the development of computer software for business information processing. Topics include flowcharting, pseudocode, algorithm development, data and file structures and representation and programming. The course also introduces students to basic software management practices for application development. Lab instruction in visual programming language-supporting objects is used to complement the course material. Prerequisite Courses: BUAD 161 and MATH 120 or MATH 122

*Credits: 3***BUAD300 Statistical Analysis**

Frequency: B

Description: Continuation of BUAD 200. A study of the techniques and tools used in analyzing business and economic data with equal emphasis on interpretation of results while concentrating on estimation techniques. Simple and multiple linear regression, non-parametric tests, analysis of variance, time series, and surveying are discussed, although topics will vary depending upon students' needs. Use of SPSS/SAS computer software packages.

Prerequisite Courses: ECON 200

*Credits: 3***BUAD310 Legal Environment of Business**

Frequency: B

Description: A one semester survey course of legal issues affecting individuals and businesses. Topics covered include dispute resolution, contract law, torts, agency law, and laws governing the creation, operation, and termination of business organizations. Various public law topics will be examined, as well as principles of international law, and theoretical considerations.

Prerequisite Courses: ENGL 100

*Credits: 3***BUAD313 Health Law**

Frequency: C

Description: An introduction to the major legal issues and principles in the health care field and in administration of health care services, including federal and state legislation and regulations on private and public insurance programs, and on operation of hospitals, and other health care facilities. Other issues examined include medical malpractice, patients rights, confidentiality, living wills, and patient designation of a representative or proxy to act on their behalf.

*Credits: 3***BUAD315 Principles of Business Finance**

Frequency: A

Description: An examination of the conceptual and institutional framework within which the financial manager operates. Topics cover management and valuation of assets, including management of funds and working capital, financial planning and capital budgeting in a national and global environment.

Prerequisite Courses: ACCT 201 and ECON 200 and ECON 201 and ECON 202

*Credits: 3***BUAD317 Corporate Finance I**

Frequency: B

Description: An examination of problems related to the investment, acquisition, and distribution of financial resources. Stress is placed upon integrating these areas into one system to facilitate and evaluate the operation of the finance function. Topics include cash flows, risk analysis, capital budgeting and structure, and international financial management.

Prerequisite Courses: BUAD 315

*Credits: 3***BUAD319 Health Care Finance**

Frequency: C

Description: An introductory course on the application of financial management techniques in the health care industry. Particular emphasis is placed on understanding the unique problems facing the industry in the financial relationships among hospitals, patients, physicians and other providers, insurance, capital suppliers and governmental agencies.

Prerequisite Courses: BUAD 315

*Credits: 3***BUAD321 Management/Organizational Behavior**

Frequency: B

Description: 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***BUAD325 Principles of Marketing**

Frequency: A

Description: An introduction to the field of marketing and marketing management. Emphasis on the marketing function of pricing, promotion, distribution, and product design both domestically and internationally. Students will learn to employ state-of-the-art information to plan, price, distribute, advertise, and promote products and services in the 21st century global economy as symbolic analysts and knowledge workers. The course will focus on how skilled marketers apply their knowledge and creative ideas to insure competitive success and market position and to fuel the high-tech information society.

Prerequisite Courses: ECON 201 and ECON 202

Credits: 3

BUAD327**Production/Operations Management I**

Frequency: A

Description: A fundamental course in the concepts of production and operations management (P/OM), and the use of quantitative methods and computer applications related to effective control of products and operative systems. Topics include P/OM strategy and international competition issues, decision-making tools, linear programming, waiting line models, process strategies, work measurement techniques, and purchasing management and Just-In-Time strategies.

Prerequisite Courses: ECON 200 and MATH 120

Credits: 3

BUAD330 Human Resource Management

Frequency: C

Description: A study of the Human Resource function. Topics covered include recruitment, selection, hiring, performance evaluation, compensation, motivation, training and development, legal environment such as OSHA, EEOC and sexual harassment issues, and industrial relations. Emphasis on how managers can deal with and use the Human Resources function.

Prerequisite Courses: BUAD 321

Credits: 3

BUAD340 Marketing Research

Frequency: D

Description: A specialized marketing course that examines modern methodologies needed to effectively use new information technologies to meet the world's growing demand for competitively priced quality products and services. The nature and scope of computer-aided marketing research, research design and data collection methods, including sampling and focus groups, are reviewed. Individual and group field projects will be reported in oral and written presentations.

Prerequisite Courses: BUAD 161; BUAD 325; and BUAD 300 or ECON 300

Credits: 3

BUAD342 Consumer Behavior

Frequency: B

Description: An integrative marketing course that examines individual psychological and social environments in which consumers attempt to satisfy felt needs and wants. Both marketing and personal perspectives are explored in class resulting in greater student appreciation and understanding of the complexity of human behavior in the new high-tech cross-cultural setting around the world.

Prerequisite Courses: BUAD 325

Credits: 3

BUAD350 Special Topics

Frequency: D

Description: Special topics in Business Administration not covered in detail by regular courses and not offered on a regular basis. Topic announced in *Course Offerings Bulletin* each semester.

Credits: 1 - 3

BUAD361 Networks, Distributed Systems, Telecommunications

Frequency: B

Description: Course provides an in-depth knowledge of data communications and networking requirements including networking and telecommunications technologies, hardware, and software. Emphasis is upon the analysis and design of networking applications in organizations. Management of telecommunications networks, cost-benefit analysis, and evaluation of connectivity options are also covered. Topics include communications protocols, local area networks (LAN), wide area networks (WAN), distributed systems, client-server systems, telephone service and internetting. Lab instruction in administering a LAN complements the course.

Prerequisite Courses: BUAD 261 and MATH 120 or MATH 122

Credits: 3

BUAD363 Systems Analysis and Design

Frequency: B

Description: Course provides an introduction to the analysis and logical design of computer-based information systems (IS) in business settings. This course is a survey of modern systems development practices and methods such as systems development life cycle, rapid applications development and prototyping. Topics include techniques for studying business information flows, defining information requirements, designing and implementing computer-based solutions, the roles of systems analysts and designers; and global and ethical concerns in systems development. The system analysis and design techniques and tools introduced in the course are integrated with lab instruction using Computer Aided Software Engineering (CASE) tools.

Prerequisite Courses: BUAD 261 and MATH 120 or MATH 122

Credits: 3

BUAD366 Database Management Systems

Frequency: B

Description: This course introduces the technologies used to develop and implement database applications for business. All major database management systems (DBMS), including hierarchical, network, relational and post-relational (object-relational and object-oriented) are covered, with relational database systems as the main focus. Special emphasis is placed on data modeling (entity-relationship and semantic-object), database design and normalization, and relational database querying through SQL (Structured Query Language) and QBF (Query-By-Form). Lab instruction in desktop and high-end DBMS using SQL complements the course.

Prerequisite Courses: BUAD 363

Credits: 3

BUAD376 Business and Culture

Frequency: B

Description: 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

BUAD411 Marketing Management

Frequency: D

Description: A challenging course employing the Harvard Case Method in which students will develop an ability to make critical marketing decisions, support those decisions with appropriate analysis, and communicate ideas both orally and in writing. The goal of the course is to help develop students' critical reasoning powers using real-life examples of marketing problems encountered by both domestic and multi-national companies and comparing student recommendations with actual results.

Prerequisite Courses: BUAD 325

Credits: 3

BUAD416 Investment Analysis

Frequency: B

Description: A study of investment objectives; basic determinations of investment values; securities market organization; approaches to investment analysis; evaluation of valuation theories and procedures and individual and institution portfolio policies.

Prerequisite Courses: BUAD 315

Credits: 3

BUAD418 Corporate Finance II

Frequency: D

Description: A continuation of the study of problems related to the management of financial resources. Topics such as capital budgeting and cost of capital are covered in greater depth. Other topics such as leasing and mergers which are not covered in prior courses are introduced.

Prerequisite Courses: BUAD 317

Credits: 3

BUAD423 Strategic Management

Frequency: A

Description: A capstone course emphasizing top multi-national management issues through utilization of knowledge and skills developed in previous courses. Problem analysis and decision-making in case studies and group projects simulate the process of strategy formulation in the firm.

Prerequisite Courses: BUAD 315 and BUAD 321 and BUAD 325

Credits: 3

BUAD427 Production/Operations Management II

Frequency: B

Description: Continuation of BUAD 327 with emphasis on the nature of the production, operations, and material functions and their interrelationship with quality. Discussions, problems, computer applications, and case studies of qualitative and quantitative methods of analysis currently available (e.g., material requirement planning, MRP I) to manage production operations functions. In-depth coverage of management science/operations research models to optimize resource utilization and management control in a production environment; capacity planning, reliability sampling, PERT/CPM scheduling and project management systems, transportation and location strategies, aggregate planning tactics, inventory management and Just-In-Time tactics, and materials resource planning (MRP II).

Prerequisite Courses: BUAD 327

Credits: 3

BUAD430 Independent Study

Frequency: C

Description: A course for highly motivated students to undertake, under faculty guidance, special studies in areas of Business which are not normally covered in other courses.

Credits: 1 - 3

BUAD440 Advanced Human Resource Management

Frequency: D

Description: The application of Human Resource Management concepts to specific business problems through case analysis relating to the Human Resource Management topics covered in BUAD 330.

Prerequisite Courses: BUAD 330

Credits: 3

BUAD445 Integrated Marketing Communications (IMC)

Frequency: B

Description: This advanced marketing course analyzes the components of integrated marketing communications which includes all communication functions, both internal and external, of an organization employing new information technologies. Class discussions will explore determining domestic and international consumer needs and wants, creating advertising and promotional messages, media strategy, and message strategy. Students will gain practical experience in developing a comprehensive marketing plan.

Prerequisite Courses: BUAD 325

Credits: 3

BUAD446 Sales Management

Frequency: B

Description: This advanced marketing course of study includes how modern sales managers employ state-of-the-art technology to identify, process, and solve sales management problems. Class assignments and discussions reveal contradictory perspectives to complex marketing problems. The course will also cover sales force structure in new lean-management organizations, determining needed characteristics and recruiting of new sales representatives, and processing, hiring, training, and ethically managing a multi-national sales force in the 21st century. Individual and group presentations, both written and oral, will be required.

Prerequisite Courses: BUAD 325

Credits: 3

BUAD450-451 Senior Seminar

Frequency: D

Description: Seminar dealing with contemporary problems that is designed so that students may utilize what they have learned. This 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

BUAD462 Electronic Commerce

Frequency: D

Description: Course provides more in-depth knowledge of current and emerging e-commerce technologies using the Internet introduced in earlier MIS courses.

Topics include Internet technology for business advantage, managing e-commerce funds transfers, business opportunities in e-commerce, Web site design, social, political and ethical issues associated with e-commerce, and business plans for technology ventures. The purpose of this course is to educate managers, planners, analysts, and programmers of the realities and potential for e-commerce. Lab instruction in modern Internet application development complements the course.

Prerequisite Courses: BUAD 261

Credits: 3

BUAD463 Information Technology Project Management

Frequency: B

Description: A survey of general management processes for planning, managing and controlling IT projects. Both technical and behavioral aspects of project management are discussed. The focus is on management of development for enterprise-level systems. Topics include defining project scope, cost and resource management, scheduling using PERT/CPM, quality management, risk management and project integration management. Lab instruction in a modern project management software tool complements the course.

Prerequisite Courses: BUAD 363

Credits: 3

BUAD466 Business Object-Oriented Modeling

Frequency: B

Description: Course covers physical design, programming, testing and implementation of object-oriented and client-server business information systems. Students learn how to define business objects and how to use them in creating a component-based application. Lab instruction using visual programming language supporting objects is used to complement the course material.

Prerequisite Courses: BUAD 361 and BUAD 366

Credits: 3

BUAD480 Internship

Frequency: A

Description: This 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 - 6

CHEM105 Food Chemistry

Frequency: B

Description: 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

CHEM107 Chemistry for Consumers

Frequency: A

Description: 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. May include a laboratory component.

Credits: 3

CHEM113 Chemistry and the Environment

Frequency: C

Description: Basic chemical principles presented. Emphasis on their relationship to environmental problems of our society. Study of chemical nature of substances and their transformations from environmental point of view. Not applicable toward a major or minor in Chemistry.

Credits: 3

CHEM115 General Chemistry Lecture I

Frequency: A

Description: 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 with consideration of oxidation-reduction, equilibrium, free energy, entropy, electrochemistry, and rates of chemical reactions.

Prerequisite Courses: MATH 105 or MATH 106 or MATH 120 or MATH 122

Credits: 3

CHEM116 General Chemistry Lecture II

Frequency: A

Description: 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 with consideration of oxidation-reduction, equilibrium, free energy, entropy, electrochemistry, and rates of chemical reactions.

Prerequisite Courses: CHEM 115

Credits: 3

CHEM125 General Chemistry Laboratory I

Frequency: A

Description: 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

CHEM126 General Chemistry Laboratory II

Frequency: A

Description: 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

CHEM130 Honors General Chemistry Laboratory

Frequency: B

Description: Directed studies designed to foster independence of thought and improve laboratory technique. Emphasis on quantitative determinations by acid-base, complexation, and spectroscopic methods. Open to Chemistry majors and others by permission of department. One laboratory period per week.

Prerequisite Courses: CHEM 115 and CHEM 125

Credits: 1

CHEM215 Organic Chemistry Lecture I

Frequency: A

Description: Structure and reactions of the most important classes of organic compounds: hydrocarbons and principal functional groups of the compounds of carbon. Structure, occurrence, properties of organic compounds of biological significance.

Prerequisite Courses: CHEM 116

Credits: 3

CHEM216 Organic Chemistry Lecture II

Frequency: A

Description: Structure and reactions of the most important classes of organic compounds: hydrocarbons and principal functional groups of the compounds of carbon. Structure, occurrence, properties of organic compounds of biological significance.

Prerequisite Courses: CHEM 116

Credits: 3

CHEM225 Organic Chemistry Laboratory I

Frequency: B

Description: 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***CHEM226 Organic Chemistry Laboratory II**

Frequency: B

Description: 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***CHEM230 Advanced Organic Laboratory**

Frequency: B

Description: The utilization of instrumental methods and advanced laboratory techniques in organic chemistry. Includes hands-on use of various instrumental methods including infrared, nuclear magnetic resonance, and gas chromatography. One three-hour laboratory period per week.

Prerequisite Courses: CHEM 225

*Credits: 1***CHEM300 The Nature of Science**

Frequency: B

Description: For non-science majors only. Acquaints students with the principles and methods of science using examples taken mainly from chemistry. Relationships of science to the activities of non-scientists. Not applicable toward a major or minor in Chemistry.

*Credits: 3***CHEM302 Chemistry in Today's Society**

Frequency: D

Description: 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***CHEM305 Laboratory Supervision in Chemistry**

Frequency: A

Description: 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***CHEM314 Principles of Physical Chemistry**

Frequency: B

Description: A one semester introduction to physical chemistry intended primarily for biology and biochemistry majors. It emphasizes thermodynamics and kinetics, especially as applied to biological phenomena. Also included will be discussions of transport processes, solutions and electrolytes. Quantum chemistry will be briefly discussed. The course is only for biochemistry majors pursuing the biological emphasis track.

Prerequisite Courses: CHEM 116

and MATH 121 or MATH 123

*Credits: 3***CHEM315 Physical Chemistry Lecture I**

Frequency: B

Description: Application of the laws of kinetics, thermodynamics, quantum mechanics, and statistical thermodynamics to chemical systems. Theories relating to spectroscopy and molecular structure.

Prerequisite Courses: CHEM 116

and MATH 123 and PHYS 231

and PHYS 233

*Credits: 3***CHEM316 Physical Chemistry Lecture II**

Frequency: B

Description: Application of the laws of kinetics, thermodynamics, quantum mechanics, and statistical thermodynamics to chemical systems. Theories relating to spectroscopy and molecular structure.

Prerequisite Courses: CHEM 116

and MATH 123 and PHYS 231

and PHYS 233

*Credits: 3***CHEM317 Analytical Chemistry I Lecture**

Frequency: B

Description: Gravimetric, volumetric, and elementary instrumental determinations. Emphasis on volumetric analysis. Neutralization, oxidation-reduction, complexometric, and electrochemical methods. Introduction to computer methods in chemistry.

Prerequisite Courses: CHEM 116

*Credits: 3***CHEM318 Analytical Chemistry II Lecture**

Frequency: B

Description: Continuation of CHEM 317. Application of instrumental methods to quantitative chemical analysis, including spectroscopy, coulometry, potentiometry, polarography, chromatography, nuclear and chemical methods.

*Credits: 3***CHEM325 Physical Chemistry Laboratory I**

Frequency: B

Description: Laboratory experiments designed to accompany CHEM 315. One laboratory period per week.

*Credits: 1***CHEM326 Physical Chemistry Laboratory II**

Frequency: B

Description: Laboratory experiments designed to accompany CHEM 316. One laboratory period per week.

*Credits: 1***CHEM327 Analytical Chemistry I Laboratory**

Frequency: B

Description: Laboratory experiments designed to accompany CHEM 317.

*Credits: 1***CHEM328 Analytical Chemistry II Laboratory**

Frequency: B

Description: Laboratory experiments designed to accompany CHEM 318.

*Credits: 2***CHEM370 Advanced Biochemistry**

Frequency: B

Description: A continuation of BIOL 333, the course explores biochemical concepts and pathways with an emphasis on problem solving. Cellular control and coordination of biochemical pathways is emphasized in light of an advanced understanding of protein biochemistry. Lecture only.

Prerequisite Courses: BIOL 333

*Credits: 3***CHEM371-372 Internship in Chemistry**

Frequency: A

Description: Approved practical experience in industrial, environmental, commercial, forensic, or other laboratories. Internships may accompany paid working time arrangements.

*Credits: 1 - 3***CHEM391 Independent Laboratory Research**

Frequency: A

Description: For students having junior standing. See CHEM 491 for list of study and research areas.

*Credits: 1 - 3***CHEM392 Independent Laboratory Research**

Frequency: A

Description: For students having junior standing. See CHEM 492 for list of study and research areas.

*Credits: 1 - 3***CHEM395 Introduction to Research**

Frequency: B

Description: Prepares the student to carry out independent research. Topics include the philosophy of research, descriptions of current faculty research interests, research records, laboratory safety, use of the chemical literature, technical writing, and research tools and methodology. One lecture per week.

*Credits: 1***CHEM397 Biochemistry Seminar I**

Frequency: B

Description: Current biochemical research papers are analyzed in a journal club (open discussion) 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***CHEM401 Computational Chemistry**

Frequency: C

Description: Discussion of the use of computers in chemistry. Topics include data acquisition, statistical analysis, databases and spreadsheets, Monte Carlo and molecular dynamics simulations, and quantum methods.

Prerequisite Courses: CHEM 315

*Credits: 1 - 3***CHEM405 Industrial Chemistry**

Frequency: C

Description: Application of chemical principles to chemical and environmental processes. Topics include mass and energy balances over complex systems, reaction kinetics and thermodynamics, combustion, behavior of real gases, and waste minimization. Directed toward students with career interests in industry and/or chemical or environmental engineering.

Prerequisite Courses: CHEM 315

*Credits: 3***CHEM407 Organometallics**

Frequency: C

Description: Introduction to the chemistry of transition metal organometallics. Descriptions of the bonding, synthesis, structures, and reactions of major classes of organometallic compounds, as well as their role in organic synthesis and catalysis.

Prerequisite Courses: CHEM 216

Credits: 3

CHEM412 Advanced Organic Chemistry

Frequency: C

Description: The discussion of certain types of reactions for the synthesis of compounds having significance to organic or bioorganic chemistry. Examples include addition/elimination; oxidation/reduction; free radical; carbanionic; pericyclic; and other types of reactions.

Prerequisite Courses: CHEM 215 and CHEM 216

Credits: 3

CHEM417 Polymer Chemistry I

Frequency: C

Description: An overview of polymers, with an emphasis on their chemistry, properties, and significance. Focus on the synthesis, characterization, and fabrication of polymers.

Prerequisite Courses: CHEM 215 and CHEM 216 and CHEM 315

Credits: 2

CHEM418 Polymer Chemistry II

Frequency: C

Description: Continuation of CHEM 417. Emphasis on the physical chemistry of polymers.

Prerequisite Courses: CHEM 315 and CHEM 417

Credits: 1

CHEM462 Inorganic Chemistry

Frequency: B

Description: Topics include introduction to molecular symmetry and group theory. Discussions of electronic structure of atoms and their periodic properties followed by detailed considerations of ionic and covalent bonding. Acid-base theories presented in addition to general chemistry of the elements with emphasis on transition metals. Introduction to organometallic chemistry and bio-inorganic chemistry included.

Prerequisite Courses: CHEM 315

Credits: 3

CHEM465 Advanced Experimental Biochemistry

Frequency: B

Description: State-of-the-art biochemical and molecular techniques are taught within these hands-on, laboratory-based course. Potential topics include the polymerase chain reaction (PCR), oligonucleotide synthesis, DNA/protein sequencing and analysis (BLAST, DNASIS), pulse-field gel electrophoresis, gas chromatography-mass spectroscopy (GC-MS), nuclear magnetic resonance (NMR) spectroscopy, high performance liquid chromatography (HPLC), immunochemistry, and/or other contemporary techniques.

Prerequisite Courses: BIOL 334

Credits: 2

CHEM472 Inorganic Chemistry Laboratory

Frequency: B

Description: Laboratory studies of inorganic and organometallic compounds and ions. Synthetic experiments require inert atmosphere (vacuum line, dry box, and Schlenk) techniques; characterization by spectral, solid-state, and electrochemical methods. One laboratory period per week.

Prerequisite Courses: CHEM 315 and CHEM 325

Credits: 1

CHEM473 Environmental Chemistry

Frequency: C

Description: Interrelationships of chemistry with the environment. Topics include water quality and chemistry, waste disposal, atmospheric chemistry, and the chemistry of energy and power production. Class activities will include discussions of technical papers drawn from the contemporary scientific literature and simulation of environmental problems through computer models.

Prerequisite Courses: CHEM 315 and CHEM 317

Credits: 3

CHEM481 Special Topics in Chemistry

Frequency: A

Description: Topics of special or current interest offered periodically.

Credits: 1 - 3

CHEM490 Independent Study

Frequency: A

Description: Topics of special interest. Non-laboratory work in association with faculty supervisor. May require course prerequisites as determined by instructor.

Credits: 1 - 3

CHEM491-492 Independent Laboratory Research

Frequency: A

Description: For students having senior standing. Study and research areas include analytical, inorganic, organic, physical, and polymer chemistry. Prerequisites depend upon areas of study and research.

Prerequisite Courses: CHEM 395

Credits: 1 - 3

CHEM495 Seminar: Advances in Chemistry

Frequency: A

Description: 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.

Credits: 1

CHEM496 Seminar: Advances in Chemistry

Frequency: A

Description: 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.

Credits: 1

CHEM497 Biochemistry Seminar II

Frequency: B

Description: 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

CHEM499 Senior Thesis

Frequency: B

Description: 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

CHEM511 Physical Organic Chemistry

Frequency: D

Description: Molecular orbital theory, resonance, acid-base theory and mechanisms of organic reactions including unimolecular and bimolecular substitution reactions and intramolecular rearrangements.

Prerequisite Courses: CHEM 215 and CHEM 216 and CHEM 315 and CHEM 316

Credits: 3

CHEM512 Advanced Organic Chemistry

Frequency: D

Description: 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

CHEM515 Applied Spectroscopy

Frequency: D

Description: 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

CHEM521 Advanced Physical Chemistry - Thermodynamics

Frequency: D

Description: Application of theory of thermodynamics to chemical systems, including methods of quantum statistics.

Prerequisite Courses: CHEM 326 and MATH 121 or MATH 123

Credits: 3

CHEM522 Advanced Physical Chemistry - Quantum Chemistry

Frequency: D

Description: Basic concepts of wave mechanics and the application to topics of interest to chemists.

Credits: 3

CHEM562 Advanced Inorganic Chemistry

Frequency: D

Description: 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

CHEM573 Chemistry and the Environment

Frequency: D

Description: Interrelationships of chemistry with the environment. Topics include water quality and chemistry, waste disposal, atmospheric chemistry, and the chemistry of energy and power production. Class activities will include discussions of technical papers drawn from the contemporary scientific literature and simulation of environmental problems through computer models.

Credits: 3

CHEM581 Special Topics in Chemistry

Frequency: D

Description: 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 bio-chemistry, quantum chemistry, computers, or selected topics in chemical education.

Credits: 1 - 3

CHEM690 Independent Study

Frequency: D

Description: Extensive study on advanced level of chemistry not covered in detail in formal courses. Paper or other demonstration of accomplishment required.

Credits: 1 - 3

CHEM691 Research I

Frequency: D
Description: Projects in areas of analytical, physical, organic, inorganic, and biochemistry.
Credits: 1 - 3

CHEM692 Research II

Frequency: D
Description: Projects in areas of analytical, physical, organic, inorganic, and biochemistry.
Credits: 1 - 3

CHEM693 Research III

Frequency: D
Description: Projects in areas of analytical, physical, organic, inorganic, and biochemistry.
Credits: 1 - 3

CHEM694 Research IV

Frequency: D
Description: Projects in areas of analytical, physical, organic, inorganic, and biochemistry.
Credits: 1 - 3

COMM101 Fundamentals of Communication

Frequency: A
Description: An introduction to the study of human communication as it occurs within interpersonal, public, group, organizational, and mass communication settings. Provides a broad, general survey of literature relevant to human communication.
Credits: 3

COMM102 Mass Media and Society

Frequency: B
Description: 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 - 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

COMM105 Public Speaking

Frequency: A
Description: 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

COMM110 Desktop Presentation

Frequency: A
Description: Five week mini-course dealing with skills and concepts involved in preparing desktop presentations. Students will be introduced to Macintosh desktop and network operations, presentation software including Powerpoint and Photoshop, and associated computer input and output devices.
Credits: 1

COMM112 Desktop Video

Frequency: A
Description: 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

COMM114 Electronic Darkroom

Frequency: A
Description: 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

COMM116 Desktop Publishing

Frequency: A
Description: 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

COMM118 Desktop Audio

Frequency: A
Description: Learn to create and edit audio on a Macintosh computer. Work with the latest audio software and hardware for hard disc recording and CD production techniques in a desktop computer environment.
Credits: 1

COMM120 WCVF/WDVL, WNYF, ACA Operations

Frequency: A
Description: Extracurricular participation in the staffing of the college's radio station, WCVF, and WDVL; television station, WNYF; or department societies.
Credits: 0

COMM155 Rhetoric of Vision and Sound

Frequency: A
Description: A foundational course for communication students. Grounds students in close attention to sight and sound and in basics of perceptual processes. Explores the ways in which media code images and sound in order to communicate ideas and emotions.
Credits: 3

COMM199 Communication Orientation

Frequency: B
Description: A course designed to introduce new majors to the department, and faculty, and to suggest areas of study and activity.
Credits: 0

COMM200 Electronic Media Writing

Frequency: A
Description: Writing for the ear and writing in relation to visual images. Weekly writing exercises and discussions relative to audio and video news, documentary, sports, advertising and other non-fiction formats.
Prerequisite Courses: ENGL 100
Credits: 3

COMM201 Rhetoric and Criticism

Frequency: A
Description: Study of human discourse (oral and mediated) as a rhetorical communication process from an historical perspective. Developments in rhetorical and western intellectual thought will be examined for their influence and contributions to rhetorical theory. The main goal of the course is to develop knowledge of and ability to apply rhetorical thought in the analysis of messages.
Prerequisite Courses: COMM 101
Credits: 3

COMM221 Interpersonal Communication

Frequency: A
Description: Focuses on the description and explanation of relationship development. Emphasis on the analysis of communicative behavior and its role in interpersonal relations. Examines the functions of verbal and nonverbal messages, the characteristics of communicative processes, and the link between communication and various social and psychological variables. Uses the laboratory method for learning communication skills.
Prerequisite Courses: COMM 101
Credits: 3

COMM222 Principles of Public Relations

Frequency: A
Description: 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 pitch letters.
Prerequisite Courses: COMM 101
Credits: 3

COMM235 Introduction to Business Communication

Frequency: A
Description: This highly practical course focuses on the critical communication skills involved in effective written and oral communication while emphasizing applications of communication concepts in the world of business. Students will be able to engage in application exercises, build their exploratory skills, and confront problems of diversity. The course is cross-listed with BUAD 235.
Credits: 3

COMM251 Audio Production I

Frequency: A
Description: 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.
Prerequisite Courses: COMM 155
Credits: 3

COMM255 Television Production I

Frequency: A
Description: 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.
Prerequisite Courses: COMM 155
Credits: 3

COMM295 Communication Research Methods

Frequency: B
Description: Study of both qualitative and quantitative approaches to inquiry and their applications in theoretic and applied communication research. Emphasis will be devoted to basic statistical analysis and interview and survey methods as they apply to evaluating communication practices and assessing communication needs.
Prerequisite Courses: COMM 101
Credits: 3

COMM301 Group Communication

Frequency: B
Description: Communication and its relationship to small task groups. Includes discussion of group process, team building, decision-making techniques, leadership, conflict resolution, meeting organization, and public presentation. Emphasizes the application and development of skills for building cohesive groups, organizing group tasks effectively, and diagnosing and correcting problems in group member relations.
Prerequisite Courses: COMM 221
Credits: 3

COMM310 Language and Communication

Frequency: B
Description: Provides an understanding of the relationship between language and communication, or of the role language plays in communication. Language is viewed from the following three perspectives: (a) language is a system of symbols; (b) there is an interaction between language and thought; and (c) language embodies action.
Prerequisite Courses: COMM 221
Credits: 3

COMM312 Multimedia Integration

Frequency: A

Description: Course concentrates on authoring multimedia projects which integrate graphics, animation, digital video, and audio. It combines both multimedia theory and production. Students will learn how to structure information, anticipate user experience and create transparent interfaces.

Prerequisite Courses: COMM 112 or COMM 114 or COMM 116 or COMM 118 or COMM 351 or COMM 354 or MEDA 120
Credits: 3

COMM314 Multimedia Supervision

Frequency: A

Description: Course trains students to be proctors in the Sheldon Lab. Through class workshops students will become familiar with the basics of the MAC operating system and with all of the software applications in the Sheldon Lab. Students will gain experience in supervising a computer lab. Must be taken concurrently with COMM 475, Section 7, Communication Studio Supervision. At least one of the prerequisite courses listed or consent of instructor.

Prerequisite Courses: COMM 110 or COMM 112 or COMM 114 or COMM 116 or COMM 118
Credits: 1

COMM320 WCVF/WDLV, WNYF, ACA Management

Frequency: A

Description: Extracurricular participation as a manager on the elected board of directors of the college's radio stations, television station, or Applied Communication Association.
Credits: 0

COMM322 Public Relations Writing

Frequency: B

Description: Students learn basic research principles associated with public relations writing and how to prepare an assortment of public relations documents. AP style is reinforced and students learn how to construct sophisticated written documents such as campaign proposals and executive summaries, news releases, fact sheets, business letters, instructional manuals, brochures, and resumes. Students are encouraged to begin portfolio building.

Prerequisite Courses: COMM 101 and COMM 222
Credits: 3

COMM325 Performance of Electronic Media

Frequency: D

Description: A course designed to aid people who plan to appear on television or radio as artistic performers or presenters of information or persuasion.

Emphasis will be placed on appearance, vocal analysis, script reading and movement. Practical experience in the college's television and radio studios.
Credits: 3

COMM350 Telecommunication Technology

Frequency: C

Description: Examination of the historical, technical, economic and regulatory status of communications technologies such as cable television, satellites, telephone, and computer communications. Discussion of general communication systems theory of video, audio and data communication including analog and digital signal transmission.

Prerequisite Courses: COMM 102
Credits: 3

COMM351 Intermediate Radio Production

Frequency: A

Description: Refining skills and techniques acquired in COMM 251; more emphasis on announcing and interviewing; understanding the ethical and legal perspectives of broadcast material; introduction to the design, scripting, production and promotion of programs.

Prerequisite Courses: COMM 251
Credits: 3

COMM354 Video Field Production

Frequency: A

Description: Basic skills and techniques for shooting video outside the studio in ENG and EFP configurations, and for editing on control track and non-linear video editing systems. Camera, lighting, sound and editing skills applicable to news, documentary, narrative, and art or music video.

Prerequisite Courses: COMM 255
Credits: 3

COMM357 Corporate Video

Frequency: D

Description: Design and production of internal communications, promotional programs and training utilizing video in the corporate setting. Instructional Systems Design approach to training.

Prerequisite Courses: COMM 366
Credits: 3

COMM358 Television News

Frequency: B

Description: Electronic news gathering and studio news techniques in the context of a weekly news program. Legal and ethical issues in news gathering.

Prerequisite Courses: COMM 354
Credits: 4

COMM359 Special Topics in Media

Frequency: D

Description: In-depth investigation of some area of media not fully covered in other courses.

Credits: 1 - 3

COMM360 Mexican Cinema/Video

Frequency: D

Description: The purpose of this course is to look at Mexico's Cinema and Video in terms of its historical context, its situation within a culturally diverse people, its internal and external controls and articulated and underlying cultural and political issues. Examples are drawn from the entire history of Mexican Cinema, with an emphasis on the "Golden Age" and the '90s. The importance of video in developing independent voices apart from the state controlled mass media will be explored. Students will write research papers and short reaction papers and give classroom presentations. Junior or Senior status.

Credits: 3

COMM361 Script Writing Video/Film/Radio

Frequency: B

Description: Techniques of developing concepts, treatments, outlines and scripts for dramatic fictions in the media of video, film and radio. Emphasis on traditional, modern and post-modern dramatic structure with units on character, dialogue, setting, visual narration, etc.

Prerequisite Courses: COMM 251 or COMM 255 or ENGL 260 or THEA 121 or THEA 123 or THEA 220
Credits: 3

COMM366 Postproduction

Frequency: A

Description: A balance between editing concepts such as continuity, pacing, dramatic focus, etc. and editing skills such as A/B SMPTE code, signal monitoring, and digitized non-linear techniques. Students will learn the rules and methods by which an editor constructs fiction or a representation of actual events. Applicable to video or digital film. Weekly editing assignments. Lab required.

Prerequisite Courses: COMM 354
Credits: 4

COMM373 Gender and Communication

Frequency: D

Description: Using a variety of theoretical models and critical approaches, students examine everyday communication practices to identify how gender, communication and culture create a complex and dynamic web of meaning with significant implications for individuals and society.

Prerequisite Courses: COMM 101 or WOST 201
Credits: 3

COMM375 Media Criticism

Frequency: D

Description: Study of selected theories and methods of criticism relevant to the evaluation of mediated message genres from a communication perspective.

Emphasis is placed on applying critical perspectives to the criticism of print and electronic media, especially in film, radio and TV. Prerequisite Courses: COMM 102 and COMM 155 and COMM 201
Credits: 3

COMM379 Persuasion

Frequency: B

Description: Examination of a wide body of humanistic, and social scientific literature concerning persuasion and persuasive techniques. Emphasizes evaluation and potential application of persuasion theory in communicative transactions.

Prerequisite Courses: COMM 101 and COMM 105
Credits: 3

COMM385 International Media

Frequency: B

Description: An examination of the media in a global context.

Attention is focused on public and private management, regulatory mandates, and programming and publishing philosophy in the global village. Topics will include cultural exchange and interaction between the media and consumers.

Credits: 3

COMM395 Radio News

Frequency: C

Description: Theory and practice of radio journalism including writing and reporting news and journalism law and ethics.

Students produce weekly radio newscasts during the second half of the semester.

Prerequisite Courses: COMM 351
Credits: 4

COMM400 Broadcast Station Operation

Frequency: C

Description: Analysis of the various techniques and problems involved in management of radio and television stations. Topics examined include general theories of management, audience research, programming, sales, business and station ethics.

Prerequisite Courses: COMM 102
Credits: 3

COMM420 Media Law and Ethics

Frequency: A

Description: Assessment of the regulatory framework and major legal issues of the mass media. Examination of ethical issues in the media as well as principles and concepts of ethical theory.

Prerequisite Courses: COMM 102
Credits: 3

COMM422 Public Relations Management

Frequency: B
 Description: Public Relations course designed to teach management and planning skills. In this course students will work on a public relations campaign (real or hypothetical) from conception (or RFP) through execution and development of materials.
 Prerequisite Courses: COMM 322
Credits: 3

COMM430 Communication Theory

Frequency: B
 Description: Provides a comprehensive investigation into various theoretical and metatheoretical perspectives which currently direct theory building and research in communication. Emphasis on critical thinking as literature in the field is investigated and evaluated in light of accepted scientific criteria.
 Prerequisite Courses: COMM 221
Credits: 3

COMM441 Multitrack Radio Production

Frequency: B
 Description: Examination and practice of advanced sound design, production with ancillary equipment, and multitrack recording techniques for broadcast applications.
Credits: 3

COMM451 Radio Documentaries

Frequency: C
 Description: Exploration and execution of steps involved in writing and producing a documentary: preliminary research, program concept, aesthetic and ethical issues, target audience, outline, research, interviews, treatment, script, and production.
 Prerequisite Courses: COMM 351
Credits: 4

COMM452 Video/Film Documentaries I

Frequency: B
 Description: To be taken as first of two semester sequence continuing with COMM 462 or as stand alone critical course. Analysis, research and planning of documentaries. Study of examples of key video and film documentary types with emphasis on makers point of view: concept, structure, development, ethical issues. Research and planning for projected documentaries. Funding strategies. Demonstrations of shooting techniques.
 Prerequisite Courses: COMM 155 and COMM 354
Credits: 4

COMM454 Fiction Video/Film I

Frequency: B
 Description: A production oriented critical course. Script analysis, analysis of films and videos representing several dramatic genres from both traditional critical and production analysis points of view. Unit on directing actors. Script research, visualization and planning for future productions.
 Prerequisite Courses: COMM 155 and COMM 354
Credits: 4

COMM456 Radio Programming/Production

Frequency: C
 Description: Theory and practice of programming and promoting a radio station: formats, sources, techniques; and development and production of a weekly radio series.
 Prerequisite Courses: COMM 351
Credits: 4

COMM457 Television Apprenticeship

Frequency: A
 Description: Provides a variety of experience in both studio and field production. Simulation of actual work situation with weekly assignments. Requires commitment to responsibilities and substantial production skills.
 Prerequisite Courses: COMM 255
Credits: 1 - 3

COMM458 Special Topics in Human Communication

Frequency: D
 Description: An in-depth seminar on an advanced topic in human communication. Topic announced in *Course Offerings Bulletin* each semester.
Credits: 1 - 3

COMM459 Special Topics in Media Production

Frequency: D
 Description: Individual and/or small group learning; experience in-depth of some area of radio-television production not fully covered in other courses. Special attention to innovative and creative utilization of production techniques.
Credits: 1 - 3

COMM460 Organizational Communication

Frequency: B
 Description: An advanced study of communication patterns in social organizations. In particular, communication environments within business and industry are analyzed. Application of procedures commonly used to evaluate and improve communication in organizations.
 Prerequisite Courses: COMM 101
Credits: 3

COMM462 Video/Film Documentaries II

Frequency: B
 Description: Production, postproduction and distribution of video or digital film documentaries. Small teams produce the documentaries they planned in COMM 452. Emphasis on perfecting either mortgage or observational shooting techniques, on structuring before and through editing, and in achieving a development with a spine, related segments, climax, visual coherence and multi-layered sound visual relationships. Must be taken consecutively with COMM 452.
 Prerequisite Courses: COMM 366 and COMM 452
Credits: 4

COMM464 Fiction Video/Film II

Frequency: B
 Description: Production, editing and distribution of fiction digital films in COMM 454. Emphasis on single camera, multiple take methods. Students all learn one or more production roles for a complex digital film with high production values. Must be taken consecutively with COMM 454.
 Prerequisite Courses: COMM 366 and COMM 454
Credits: 4

COMM465 Intercultural Communication

Frequency: B
 Description: An advanced course dealing with the problems and processes of communication in various domestic and international settings. Emphasis on personal aspect of communication, that is, what happens when people from different cultures interact face-to-face. Attention given to the improvement of intercultural communication skills.
 Prerequisite Courses: COMM 221
Credits: 3

COMM475 Communication/Studio Supervision

Frequency: A
 Description: Advanced students are given opportunities to demonstrate knowledge of and practice application of skills in educational setting or specific subjects.
Credits: 2 - 3

COMM480 Communication Internship

Frequency: A
 Description: Participation in off-campus professional, subject-related experience. Requires a Learning Contract proposal prepared in consultation with agency representative and with faculty sponsor describing experience, its relationship to course of study, and how it will be monitored and evaluated. Internships are graded satisfactory/unsatisfactory. Proposal must be approved in advance by internship coordinator in communication department. Appropriate courses in specialization are required.
Credits: 1 - 15

COMM490 Independent Study

Frequency: A
 Description: 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

CSIT100 Freshman Seminar

Frequency: D
 Description: Introduction to computing environments available on campus; email, 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. Co-requisite: Freshman Standing.
Credits: 1

CSIT104 Introduction to Microcomputer Software

Frequency: A
 Description: Introduction to microcomputers; overview of MS-Windows; 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 Windows-based software. Prerequisite: Three units of high school mathematics.
Credits: 3

CSIT105 Visual Basic I

Frequency: A
 Description: Object-oriented and event-driven programming, concepts using Visual Basic (VB); VB development environment; intrinsic controls and programming structures: data types, declarations, input/output, decision-making and loops; formatting; functions and subroutines. Prerequisite: Three units of high school mathematics.
Credits: 3

CSIT106 Scientific Programming Using C++

Frequency: B
 Description: Scientific problem solving; structured program development; simple algorithm design, arithmetic operations, data types and their declarations, control statements, loops, input and output, 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 CSIT 121.
 Prerequisite Courses: MATH 120 or MATH 122
Credits: 3

CSIT107 Web Programming I

Frequency: A
 Description: 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

CSIT120 Computer Science Overview

Frequency: B
 Description: 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.
 Prerequisite: NYS Regents Course III or MATH 104.
Credits: 3

CSIT121 Computer Science I

Frequency: A
 Description: Problem solving, algorithm design and development, structured programming; elementary data types; expressions, I/O functions and control structures; functions: scope rules, pass by value, pass by reference; built-in functions; arrays; strings; structures; elementary sort and search algorithms; files. Credit will not be given for both CSIT 106 and CSIT 121. Prerequisite: NYS Regents Course III or MATH 104
Credits: 4

CSIT205 Visual Basic II

Frequency: B
 Description: Advanced Visual BASIC programming techniques; Active X controls, multiple forms, file I/O, interacting with databases, and error handling; Windows API calls and Windows registry functions; and advanced event-driven business applications.
 Prerequisite Courses: CSIT 105 or CSIT 121
Credits: 3

CSIT207 Web Programming II

Frequency: B
 Description: An advanced course in server-side web programming. Topics include: cookies, file and database access, portals and web applications; CGI programming using current technologies.
 Prerequisite Courses: CSIT 107 or equivalent experience
Credits: 3

CSIT221 Computer Science II

Frequency: A
 Description: Abstract data types; static and dynamic data structures; recursion; recursive programming; class concepts, encapsulation; linked lists; doubly linked lists; stacks, queues and their implementations and applications; binary trees; binary search tree; tree traversals; polymorphism and inheritance.
 Prerequisite Courses: CSIT 121
Credits: 4

CSIT225 Java Programming

Frequency: B
 Description: 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; audio processing and other applications.
 Prerequisite Courses: CSIT 221
Credits: 3

CSIT231 Systems Programming

Frequency: A
 Description: Introduction to Unix and Unix utilities; shell programming; C programming language; Unix system calls for process communication and file structures; X-windows, windows managers; resource management, X-lib, and programming with toolkits and widget classes.
 Prerequisite Courses: CSIT 221
Credits: 3

CSIT241 Discrete Mathematics for Computer Science I

Frequency: A
 Description: 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. Credit will not be given for both CSIT 241 and MATH 210.
 Prerequisite Courses: CSIT 121 and MATH 121 or MATH 123
Credits: 4

CSIT242 Discrete Mathematics for Computer Science II

Frequency: B
 Description: A continuation of CSIT 241. Topics include combinatorics, digraphs, and trees; recurrence relations; switching circuits and logic gates; automata, grammars and languages; other topics as time permits.
 Prerequisite Courses: CSIT 221 and CSIT 241 or MATH 210
Credits: 4

CSIT300 Internship in Computer Science

Frequency: A
 Description: 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: 3 - 12

CSIT305 Computer Laboratory Assistantship

Frequency: A
 Description: 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

CSIT311 Assembly Language and Computer Organizations

Frequency: A
 Description: Introduction to the basic concepts of computer architecture and machine instructions repertoire; memory access and storage; instruction execution; assembly language; computer organization; levels of computer structures; data representation and transfer; digital arithmetic; memory structure and addressing methods; cache; secondary memory structure and organization.
 Prerequisite Courses: CSIT 121
Credits: 3

CSIT321 Paradigms of Programming Languages

Frequency: A
 Description: Brief history of programming languages; language design issues; syntax and translation; data types; sequence control; data control; the procedural paradigm; the object-oriented paradigm; the functional paradigm; the logical paradigm.
 Prerequisite Courses: CSIT 221
Credits: 3

CSIT341 Data Structures

Frequency: A
 Description: Review of object-oriented programming; introduction to algorithmic complexities; sorting; generalized lists and list processing; priority queues; trees: (m-ary trees, heaps, balanced trees, tries); hashing; graphs and graph algorithms; memory management; applications of these data structures.
 Prerequisite Courses: CSIT 221, and CSIT 241 or MATH 210
Credits: 3

CSIT351 Business Systems Development

Frequency: B
 Description: 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 systems analysis, design, and implementation; introduction to business information systems.
 Prerequisite Courses: CSIT 205
Credits: 3

CSIT390 Directed Study

Frequency: D
 Description: An intensive project-oriented course utilizing emerging technologies.
 Prerequisite Courses: CSIT 341
Credits: 1 - 3

CSIT400 Directed Independent Study of Selected Topics

Frequency: D
 Description: Independent study of a selected list of readings approved by a faculty advisor. Permission of the department required.
Credits: 1 - 3

CSIT413 Computer Architecture

Frequency: B
 Description: Review of computer organization; digital logic; components of micro, mini, and mainframe architectures; architecture design principles; architecture classes; microprogramming; stack machines; parallel computers; pipeline processing; vector processors; VLSI and systolic architectures; data flow architectures; RISC machine; performance evaluation; architecture design languages; application and high level language oriented architectures.
 Prerequisite Courses: CSIT 311
Credits: 3

CSIT425 Software Engineering

Frequency: B
 Description: Basic concepts and major issues of software engineering; current tools and techniques providing a basis for analysis, design, development, maintenance, and evaluation of the system; structured walkthrough, testing; verification and validation; technical, administrative, and operating issues; privacy, security, and legal issues; developing a team project using software engineering principles.

Prerequisite Courses: CSIT 341
Credits: 3

CSIT431 Introduction to Operating Systems

Frequency: A
 Description: System software organization, purpose and functions of computer operating systems, batch processing systems: translation, loading and execution; serial and parallel I/O processing; spooling; interrupt facilities; memory protection and management; file systems; multi-access and special-purpose systems; process scheduling; accounting procedures and resource management; classical and popular operating systems.

Prerequisite Courses: CSIT 231, CSIT 311, and CSIT 341
Credits: 3

CSIT433 Compiler Construction

Frequency: C
 Description: Finite automata; languages and grammars; review of language structure, translation, linking, loading, execution; run-time storage organization; compilation of simple structures; compiler design principles, organization and implementation; lexical analysis; symbol tables; parsers and semantic analysis; code generation and optimization; error diagnostics.

Prerequisite Courses: CSIT 311 and CSIT 341
Credits: 3

CSIT435 Data Communication and Networks

Frequency: B
 Description: Teleprocessing; data communication system components: media, hardware and software; network architectures and topology; communication protocols and interfaces; functional layers; line utilization, switching and error handling; network interfaces; routing and flow control; point-to-point, broadcasting and local networks theory and current practices; reliability and security, encryption and compression; network programming.

Prerequisite Courses: CSIT 311
Credits: 3

CSIT437 Advanced Operating Systems

Frequency: B
 Description: Review of contemporary operating systems, OS design principles and strategies; examination of communication and synchronization protocols; concurrent processes and process scheduling including their statistical analysis; distributed operating systems; client-server computing model; distributed resource management; multiprocessor OS; failure recovery and fault tolerance; data security; applications.

Prerequisite Courses: CSIT 431
Credits: 3

CSIT441 Analysis and Design of Algorithms

Frequency: C
 Description: 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, graph problems, matrices, polynomial arithmetic, cryptography; hard problems and approximation algorithms: Knapsack, bin packing, and graph coloring problems, etc.

Prerequisite Courses: CSIT 242 and CSIT 341
Credits: 3

CSIT443 Theory of Computation

Frequency: C
 Description: Formal languages and grammars; context free and context sensitive grammars; pumping arguments; closure properties; decision algorithms; Turing machines; computability and decidability; halting problem; elementary complexity theory.

Prerequisite Courses: CSIT 242 and CSIT 341
Credits: 3

CSIT451 Introduction to Files and Databases

Frequency: A
 Description: Large scale information organization; basic concepts of file management techniques; storage hierarchies, external storage devices; mass storage systems; common file structures and organization methods; physical file organization; list, indexed, and tree-structured file organization methods; file systems; concepts of data modeling; data languages; search, retrieval and processing methods; introduction to relational databases and database management systems.

Prerequisite Courses: CSIT 341
Credits: 3

CSIT455 Relational and Object Databases

Frequency: B
 Description: Review of data modeling and databases; 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; other advanced topics.

Prerequisite Courses: CSIT 341 and CSIT 451
Credits: 3

CSIT456 Information and Decision Support Systems

Frequency: C
 Description: Information and computer information systems; information hierarchy; decisions and decision-making; functional components of a decision support system; intelligent/knowledge-based decision-making and knowledge management; architecture of decision systems; distributive and group decision-making; executive information systems; expert and fuzzy systems; reasoning and explanation; knowledge elicitation and representation; logistics and long-term decision-making.

Prerequisite Courses: CSIT 341 and CSIT 351
Credits: 3

CSIT461 Introduction to AI and Knowledge Engineering

Frequency: C
 Description: Overview of artificial intelligence tools and techniques; searching methods; applications of AI: game playing, expert systems and knowledge based systems; components of a knowledge based system; knowledge acquisition, representation, and formalization; numerical and symbolic processing; information theoretic and decision theoretic algorithms; inference engine; machine learning; reasoning and explanation; basic concepts and major issues of knowledge engineering; current tools and techniques for analysis, design, development of the knowledge based systems; applications in robotics, medical diagnosis, smart decision systems, etc.

Prerequisite Courses: CSIT 341
Credits: 3

CSIT462 Computer Graphics

Frequency: B
 Description: Introduction to Computer Graphics; display memory; generation of points, vectors, shapes, objects, etc.; raster and geometric graphics; interactive and passive graphics; graphics peripherals; analog and digital images and analog/digital conversion; mathematics of 2-D and 3-D transformations; applications in animation, computer aided design and instruction; hypertext and multimedia; dialog design; user-interface.

Prerequisite Courses: CSIT 242 and CSIT 341
Credits: 3

CSIT463 Introduction to Digital Image Processing and Computer Vision

Frequency: C
 Description: Introduction to digital image and signal processing, computer vision and pattern recognition; image acquisition, registry and display; elementary image processing algorithms: sampling, preprocessing, smoothing and sharpening; Fourier optics; orthogonal transformation; filtering; image encoding and restoration; analog and digital images and image processing systems; feature extraction and selection; elementary pattern classification and vision systems; robotics; machine learning.

Prerequisite Courses: CSIT 341
Credits: 3

CSIT490 Seminar on Selected Topics

Frequency: D
 Description: Studies, discussions, workshops and seminars on selected topics in computer science. Written reports and a formal presentation are required. Permission of the instructor required.

Prerequisite Courses: CSIT 341
Credits: 1 - 3

CSIT497 Computer Science Thesis

Frequency: D
 Description: 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. Permission of the department required.

Prerequisite Courses: CSIT 431
Credits: 3

CSIT499 Computer Science Project

Frequency: D
Description: Faculty-directed work on a computer and information sciences project of interest to the faculty member and student. Minimum of 80 hours of productive work required. A report of presentation discussing approach, methodology, and results will be submitted upon completion. Permission of the department required.
Prerequisite Courses: CSIT 431
Credits: 3

DANC105 Folk Dance

Frequency: C
Description: Designed to cover the basics of folk dancing in many countries of the world.
Credits: 1

DANC106 Square Dance

Frequency: B
Description: An introductory course for the beginning square dancer. Emphasis is on modern square dancing, although other forms are covered.
Credits: 1

DANC110 Dance Productions

Frequency: A
Description: Designed to give practical experience in all aspects of dance productions including technique classes, rehearsals, lighting and costume designs, crew work, and stage managing.
Credits: 0

DANC111 Modern Technique I

Frequency: B
Description: Introductory course in modern dance for the novice, covering various techniques. Attendance at all dance concerts on campus required.
Credits: 2

DANC121 Beginning Tap Dance

Frequency: B
Description: An introductory course in tap dance.
Credits: 2

DANC122 Tap Dance II

Frequency: B
Description: A continuation of DANC 121. Emphasis will be on artistic execution of dance combinations. Tap shoes and attendance at all dance concerts on campus required.
Prerequisite Courses: DANC 121
Credits: 2

DANC131 Beginning Jazz Dance

Frequency: B
Description: An introductory course in jazz dance. Attendance at all dance concerts on campus required.
Prerequisite Courses: DANC 111
Credits: 2

DANC132 Jazz Dance II

Frequency: C
Description: A continuation of DANC 131 with emphasis placed on artistic performance. Attendance at all dance concerts on campus required.
Prerequisite Courses: DANC 131
Credits: 2

DANC211 Modern Technique II

Frequency: B
Description: Modern dance technique class for the student who has had DANC 111 or permission of instructor. Martha Graham technique emphasized. Outside practice strongly recommended. Attendance at all dance concerts on campus required.
Prerequisite Courses: DANC 111
Credits: 2

DANC221 Beginning Ballet

Frequency: B
Description: A beginning class in classical ballet technique. Strongly recommended for Musical Theatre majors.
Credits: 2

DANC222 Ballet II

Frequency: B
Description: A continuation of the classical ballet technique offered in DANC 221 with special attention to alignment, execution and mastery of the classical movement repertoire. Strongly recommended for Musical Theatre majors. Attendance at all dance concerts on campus required.
Prerequisite Courses: DANC 221
Credits: 2

DANC223 Ballet III

Frequency: C
Description: A continuation of classical ballet technique offered in DANC 222 with emphasis on pointe work and partnering. The Russian Vaganova and the Italian Cecchetti method of classical ballet will be taught. Attendance at all dance concerts on campus required.
Prerequisite Courses: DANC 222
Credits: 2

DANC231 African-Caribbean Dance

Frequency: C
Description: 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.
Credits: 2

DANC241 Dance Improvisation

Frequency: D
Description: This course involves creative movement problem-solving through the study of basic elements in dance and choreography. The class will perform studies ranging from human emotion to abstract shape and design. Attendance at some campus productions is required.
Prerequisite Courses: DANC 111
Credits: 2

DANC311 Modern Technique III

Frequency: B
Description: Continuation of DANC 211 for intermediate dancer. Humphrey-Weidman, Limon and Luigi jazz techniques covered. Outside practice strongly recommended. Attendance at all dance concerts on campus required.
Prerequisite Courses: DANC 211
Credits: 2

DANC321 Dance for the Musical Theatre

Frequency: C
Description: Designed to familiarize the intermediate dancer with the techniques of musical theatre ballroom dance for the stage; jazz and tap techniques are also covered. Films and video tapes will be utilized. Dances for musicals will be taught.
Prerequisite Courses: DANC 121 and DANC 211
Credits: 2 - 3

DANC341 Selected Topics in Dance

Frequency: A
Description: Independent Study in dance-related topics.
Credits: 1 - 3

DANC353 Dance History

Frequency: D
Description: The history and philosophy of dance from ancient times until the present. Also some examination into the criticism and evaluation of dance. Attendance at all dance concerts on campus required.
Credits: 3

DANC363 Choreography I

Frequency: B
Description: Introductory course in dance composition covering such topics as space, design, rhythm, dynamics, sensation, and form. Attendance at all dance concerts on campus required.
Prerequisite Courses: DANC 211
Credits: 3

DANC364 Choreography II

Frequency: C
Description: Continuation of Choreography I. Covers pre-classic dance forms, as well as primitive, archaic, medieval, introspective, jazz, Americana, cerebralistic, and impressionistic dance forms. Attendance at all dance concerts on campus required.
Prerequisite Courses: DANC 363
Credits: 3

DANC461-462 Practicum in Dance

Frequency: A
Description: Teaching Beginning Technique class. By audition only.
Credits: 3

DANC561-562 Practicum in Dance

Frequency: D
Description: Internship in dance teaching for graduate dance students. By audition only. May be repeated.
Credits: 3

DIST399 Distance Learning Special Topics

Frequency: A
Description: Topics vary from semester to semester and are listed in the *Course Offerings Bulletin*.
Credits: 3

ECON101 Introductory Economics

Frequency: A
Description: 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

ECON102 Current Economic Issues

Frequency: B
Description: An introduction to current economic problems and public policy issues and the techniques used by economists to address these 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

ECON200 Fundamentals of Statistics for Business Administration/Economics

Frequency: A
Description: 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.
Credits: 3

ECON201 Principles of Macroeconomics

Frequency: A

Description: Study of the organization and functioning of the contemporary American economic system with emphasis on the twin problems of unemployment and inflation. Topics covered include aggregate income and employment, money and banking, monetary and fiscal policies, and international trade and finance.

*Credits: 3***ECON202 Principles of Microeconomics**

Frequency: A

Description: 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***ECON300 Statistical Analysis**

Frequency: B

Description: Continuation of ECON 200. A study of the techniques and tools used in analyzing business and economic data with equal emphasis on interpretation of results while concentrating on estimation techniques. Simple and multiple linear regression, non-parametric tests, analysis of variance, time series, and surveying are discussed, although topics will vary depending upon students' needs. Use of SPSS/SAS computer software packages.

Prerequisite Courses: ECON 200

*Credits: 3***ECON305 Intermediate Microeconomic Theory**

Frequency: B

Description: Analysis of economic behavior of consumers, producers, and markets. Major topics include utility and production theories, market structures (pure competition, monopoly, monopolistic competition, and oligopoly) and theories of factors of production, income distribution, resource allocation, and economic efficiency.

Prerequisite Courses: ECON 201 and ECON 202 and MATH 120

*Credits: 3***ECON310 Intermediate Macroeconomic Theory**

Frequency: B

Description: Study of the overall performance of an economy. A theoretical analysis of the determinants of employment, income, consumption, investment, the role of government, the general price level, wage rates and interest rates. An analysis of the impact of monetary and fiscal policies, within the framework of various contemporary aggregate models of the open economies, on economic activity.

Prerequisite Courses: ECON 201 and ECON 202

*Credits: 3***ECON312 Women in the Economy**

Frequency: C

Description: Exploration of the economic status of women in the United States. Studies the changing role of women in the American economy from colonial times to the present. Emphasis is placed on women's labor market experiences and how these experiences are explained by economic theory. A major part of the course stresses current economic issues and policies specifically aimed at women including poverty, welfare, labor market mobility, and the status of the family.

Prerequisite Courses: ECON 101 or ECON 202

*Credits: 3***ECON315 Money/Banking/Monetary Economics**

Frequency: B

Description: Study of money and the financial system. In particular, the operation, functions, structure and regulations of the banking system, and organization and functions of central banking.

Special emphasis given to the study of monetary theories, monetary management, and the effectiveness of monetary policy.

Prerequisite Courses: ECON 201 and ECON 202

*Credits: 3***ECON320 International Trade/Finance**

Frequency: B

Description: Study of international economic relations and international finance - determination of trade patterns and competitiveness, tariff and nontariff barriers, economic integration, multinational corporations, exchange rates, balance of payments problems and policies, and international monetary system.

Prerequisite Courses: ECON 201 and ECON 202

*Credits: 3***ECON321 Multinational Corporations**

Frequency: C

Description: Economic analysis of the operations of multinational corporations and the implications of global production, resource allocation, and distribution of goods and services. Emphasis on capital and technology transfer, intercontinental flow of information, transaction costs, transfer pricing and tax policies.

Prerequisite Courses: ECON 201

*Credits: 3***ECON325 Labor and Employment**

Frequency: C

Description: Study of the public policy and theoretical bases of employer/employee relationships. Focus is on the economic behavior of employers and employees in response to the general incentives of wages, prices, profits, and working conditions, and on the legislative and policy treatments of this relationship in both unionized and non-unionized environments in both the public and private sectors of the economy.

Prerequisite Courses: ECON 202

*Credits: 3***ECON330 Public Sector Economics**

Frequency: C

Description: (formerly Public Finance) Analysis of governmental policies involving taxes and expenditures and how effectively these policies attain their objectives. Government investment decision criteria and public choice theory are discussed.

Prerequisite Courses: ECON 201 and ECON 202

*Credits: 3***ECON335 Economic Development**

Frequency: C

Description: Problems of economic growth and development of less developed countries with emphasis on economic and non-economic obstacles to growth and development, financing of development, strategy of development policy, development planning and project evaluation, industrial and agricultural development, and the role of international trade in growth and development.

Prerequisite Courses: ECON 201 and ECON 202

*Credits: 3***ECON340 Urban and Regional Economics**

Frequency: D

Description: Study of the economics of urban and regional development. Emphasis on principles of regional analysis, location theories, population movements, urban base, problems of urban renewal, economics of poverty, transportation, pollution, and housing.

Prerequisite Courses: ECON 202

*Credits: 3***ECON345 Comparative Economic Systems**

Frequency: B

Description: Comparative study of organization, operation and performance of some important economic systems. Emphasis on the socio-cultural and political environment, and on the institutional factors explaining the differences in the performance of various systems.

Prerequisite Courses: ECON 101 or ECON 102 or ECON 201 or ECON 202

*Credits: 3***ECON350 Managerial Economics**

Frequency: C

Description: 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.

Prerequisite Courses: ECON 202 and MATH 120

*Credits: 3***ECON355 Labor and Industrial Relations**

Frequency: D

Description: Emphasis on the theoretical bases and development of labor organizations and their interactions with managements in a social, economic, political, and legal context. Topical areas include the process of union organization, certification, bargaining structures, contract administration, and methods of impasse resolution. Current issues are discussed that have an impact upon employees, their organizations, and the public.

Prerequisite Courses: ECON 202

Credits: 3

ECON360 Health Care Economics

Frequency: C

Description: Application of economic analysis to the health care industry. Emphasis on the demand and supply of health care services, and private and group health insurance (HMO, PPO, Medical Care, Medicaid). Analysis of for-profit and non-profit production of health care services under different market structures. Other topics include problems of allocation of medical care resources and analysis of health care policies.

Prerequisite Courses: ECON 201 and ECON 202

Credits: 3

ECON370 Evolution of Economic Thought

Frequency: C

Description: 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 these topics have been addressed by major thinkers in the field of economics.

Prerequisite Courses: ECON 201 and ECON 202

Credits: 3

ECON380**Environmental/Natural Resource Economics**

Frequency: C

Description: Economic analysis of natural resource and environmental issues and policies. Social cost-benefit analysis, theories of externalities and intertemporal resource allocation and their application to renewable and exhaustible natural resources are emphasized. Topics include pollution control, efficient and equitable resource management, energy issues, ecological and environmental quality, and global sustainability.

Prerequisite Courses: ECON 201 and ECON 202

Credits: 3

ECON381 Special Topics in Economics

Frequency: D

Description: Examination of topics in economic issues, problems, theory and policy not covered in any other course offered by the department.

Prerequisite Courses: ECON 201 and ECON 202

Credits: 3

ECON395 Comparative Human Resources

Frequency: C

Description: 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, employment training, minimum wages, work standards, unemployment insurance, retirement systems and collective bargaining.

Prerequisite Courses: ECON 201 or ECON 202

Credits: 3

ECON400 Econometrics and Business Applications

Frequency: C

Description: Analysis and application of regression covering topics on econometric problems and techniques of estimation (both single and multi-equation models). The science and art of econometric model building and forecasting with its wide application in finance, marketing, banking, and other fields in business and economics are discussed. Use of the computer is an integral part of the course.

Prerequisite Courses: ECON 201 and ECON 202 and ECON 300

Credits: 3

ECON405 Industrial Organization

Frequency: C

Description: Study of the sources and consequences of monopoly power in the U.S. economy. Deals with both the economic definitions and measures of market power and with the legal standard of monopoly; includes study of major court decisions that have shaped antitrust policy; also covers economic regulation as a response to monopoly power.

Prerequisite Courses: ECON 305

Credits: 3

ECON425 Financial Markets/Institutions

Frequency: C

Description: Study of the operation of the capital and money markets, determinants and structure of interest rates. Broad analysis of financial intermediaries, and regulation of the financial systems.

Prerequisite Courses: ECON 315

Credits: 3

ECON430 Independent Study

Frequency: A

Description: Individualized study under the supervision of a faculty member.

Credits: 1 - 3

ECON450 Senior Seminar

Frequency: B

Description: Application of research and writing skills to the critical analysis of selected broad current economic problems and issues, integrating several areas of study in economics and other disciplines.

Prerequisite Courses: ECON 305 or ECON 310

Credits: 3

ECON480-481 Internship

Frequency: A

Description: Provides students the opportunities to earn credits for professional experience gained through learning-by-doing techniques.

Credits: 1 - 6

EDU100 Tutoring Theory Practice

Frequency: A

Description: This 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 5 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

EDU101 First Field Experience

Frequency: D

Description: Secondary Education majors are introduced to teaching by enrolling in a 25-hour observation participation experience.

Credits: 0

EDU105 Introduction to Contemporary Education

Frequency: A

Description: Introduction to elementary education, its principles and practices. Organization of schools, planning, teaching styles, classroom management, and instructional materials are among the topics considered. Direct experiences with children are an integral part of the course.

Co-requisite Courses: EDU 106

Credits: 3

EDU106 Introduction to Contemporary Education-Field Experience

Frequency: A

Description: Provides participants an opportunity to observe classroom operations, observe and describe the role of the teacher, conduct focused observations and interviews, work with individual students in a tutorial relationship, work with small learning groups, assist the classroom teacher with teaching and if appropriate, instruct the whole class in individual lessons.

Co-requisite Courses: EDU 105

Credits: 0

EDU110 Education Literature/Composition

Frequency: D

Description: An integration of how one writes and how one can effectively teach writing to students. Using the writing workshop approach, the course examines principles, teaching methodologies, and techniques pertaining to the writing process from both the perspective of writer and teacher of writing.

Credits: 3

EDU200 Statistics

Frequency: D

Description: Elements of probability theory; fundamental concepts and techniques of statistics with application. May not be repeated for credit.

Credits: 3

EDU214 Introduction to Children's Literature

Frequency: D

Description: 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

EDU215 Education in American Society

Frequency: D

Description: 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

EDU218 Children's Literature in Literacy Instruction

Frequency: D

Description: This course is part of the Literacy Block of the Early Childhood Program in Education. It 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. The course concentrates on pre-K through grade three.

Credits: 3

EDU220 Child**Development/Observation/Assessment**

Frequency: D

Description: Development of the child from beginning of life: prenatal development through age 12. This course will focus on the physical cognitive, social, emotional, and moral development of the child. Appropriate instruments and tests to assess development in each domain will be examined. Techniques for observing and recording child behavior will be presented.

*Credits: 3***EDU221 Introduction to Early Childhood Education Curriculum I**

Frequency: D

Description: A history and philosophy of early childhood education. Theoretical perspectives influencing early childhood program models. Emphasis on observing, recording, and interpreting the behavior of young children in a variety of child care settings (Infant-Preschool).

*Credits: 3***EDU224 Adolescent Development & Child Abuse Workshop**

Frequency: A

Description: Physical, mental, and emotional influences on the human growth periods in terms of habits, interests, and social adjustment. Factors in home and school that influence adolescent behavior and personality. CAW-Child Abuse Workshop discusses means for identifying and reporting suspected child abuse and maltreatment in accordance with the requirements of Section 3004 of the Education Law.

*Credits: 3***EDU225 Developmental Psychology & Child Abuse Workshop**

Frequency: A

Description: Orderly sequence of human growth and development. Principles of physical, intellectual, and personality changes emphasized along with procedures for evaluating relevant research. CAW-Child Abuse Workshop discusses means for identifying and reporting suspected child abuse and maltreatment in accordance with the requirements of Section 3004 of the Education Law.

*Credits: 3***EDU227 The Electronic Classroom**

Frequency: D

Description: An introduction to computer managed instruction, computer based instruction, and the design and use of multimedia resources in the classroom.

*Credits: 3***EDU250 Introduction to the Exceptional Learner**

Frequency: A

Description: Introductory survey of nature, needs, and education of children who are exceptional because of intelligence, behavioral disorders, and/or physical development.

Co-requisite Courses: EDU 251

*Credits: 3***EDU251 Introduction to the Exceptional Learner – Field Experience**

Frequency: A

Description: Required lab for students enrolled in Introduction to the Exceptional Learner. Students work directly with youngsters with learning difficulties in area schools and agencies in after-school tutoring programs.

Co-requisite Courses: EDU 250

*Credits: 0***EDU275 Introduction to Teaching Reading**

Frequency: D

Description: Introduction to techniques, activities, and materials employed in teaching elementary school students 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***EDU276 Literacy & Teaching Elementary/Secondary Schools**

Frequency: B

Description: Course is designed to provide students with an overview of the processes involved in literacy acquisition and the instructional approaches that acknowledge current thinking. Reading and writing development are closely intertwined; therefore, some aspects of writing development and writing processes that are appropriate to each stage of reading development will be included. There is a lab component to this course.

*Credits: 3***EDU305 Cultural and Linguistic Diversity in the Classroom**

Frequency: A

Description: Provides a theoretical framework of multicultural diversity in N-12 classrooms, focusing on educational equity and the culture of underrepresented populations in the U.S. (Latino, African-American, Asian, Native American). The course then provides theory and practice of English as a Second Language and Bilingual Education, basics of second language acquisition and methods for ALL teachers, regardless of certification area. Finally, the course incorporates the field experience (EDU 313) projects of students into classroom discussion to demonstrate the practical application of the theory studied. Required for TESOL and Bilingual Education majors as well as all Elementary Education majors and for all Secondary Education minors.

Co-requisite Courses: EDU 313

*Credits: 3***EDU312 Infant/Toddler Care & Education**

Frequency: D

Description: This course examines learning environments for children ages birth to three with particular emphasis on center based settings. Topics include a review of infant/toddler development, characteristics of quality education, developmentally appropriate curriculum in developmental areas, guidance based on observation and family dynamics and relations affecting infant development and growth, and parenting/teaching strategies.

Prerequisite Courses: EDU 105 and EDU 220

*Credits: 3***EDU313 Cultural and Linguistic Diversity - Field Experience**

Frequency: D

Description: Required for students enrolled in EDU 305 Cultural and Linguistic Diversity in the Classroom. Students spend 7-8 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 teach several lessons, for small groups or entire class, and incorporate multicultural concepts, including culture awareness; tolerance and acceptance; cooperative learning; multiple intelligence theory; and multicultural literature, among others.

Co-requisite Courses: EDU 305

*Credits: 0***EDU314 Developmental Learning and Child Abuse Workshop**

Frequency: D

Description: This 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***EDU315 Early Childhood Curriculum II**

Frequency: D

Description: Emphasis on integrated curriculum planning to meet the developmental needs of the young learner (preschool-age 8). Students will plan and implement teaching strategies and activities in any early childhood classroom setting. Field experience component required.

Prerequisite Courses: EDU 221

*Credits: 3***EDU321 Teaching in the Middle School**

Frequency: B

Description: Principles, materials, curriculum, and methods for teaching in the middle school. Required for certificate extension to middle school grades.

*Credits: 3***EDU326 Elements of Public School Law**

Frequency: D

Description: 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***EDU349 Educational Psychology & Child Abuse Workshop**

Frequency: A

Description: Areas of psychology utilized in the teaching and learning processes. Analyzing and interpreting scientific data related to individual differences, growth, learning, group processes, and evaluation. CAW-Child Abuse Workshop discusses means for identifying and reporting suspected child abuse and maltreatment in accordance with the requirements of section 3004 of the Education Law.

Credits: 3

EDU351 Classroom Management/Learning Principles

Frequency: D
 Description: Examination of significant research in areas of human learning and motivation as they relate to effective instructional strategies. An investigation into how teachers can translate theories and research from such areas as achievement motivation, learner cognitive style, emotional climate of the classroom, concept learning, creativity, and problem-solving into constructive classroom action.
 Prerequisite Courses: EDU 349
Credits: 3

EDU355 Learning/Behavior Disorders of Children

Frequency: D
 Description: Critical examination of the etiology of learning and behavioral disorders, and a review of effective treatments of management procedures. Etiological factors covered include the role of biology, the family and the school. Disorders reviewed include hyperactivity, attention deficit disorders, aggressiveness and depression. Emphasis is placed on implications for the potential classroom teacher.
Credits: 3

EDU360 Developmental Disabilities

Frequency: D
 Description: An examination of the etiology, characteristics, and psychological development associated with developmental disabilities. While focusing largely on mental retardation, the course is non-categorical in orientation. Particular attention is paid to techniques and strategies for integration of developmentally disabled children into the mainstream of education.
 Prerequisite Courses: EDU 250
Credits: 3

EDU390 Special Topics in Education

Frequency: D
 Description: Study of special areas in education not covered by existing courses. Content varies from semester to semester. Consult the appropriate *Course Offerings Bulletin* and department notices.
Credits: 1 - 3

EDU402 Teaching Mathematics in Elementary School

Frequency: B
 Description: Curriculum, materials, and procedures in teaching mathematics in the elementary school.
Credits: 1.5 - 3

EDU403 Teaching Science in Elementary School

Frequency: B
 Description: Materials and procedures in a process-centered science curriculum. Investigation of new curricula illustrating guided discovery approach to teaching sciences.
Credits: 1.5 - 3

EDU404 Teaching Social Studies in Elementary School

Frequency: B
 Description: Curriculum, materials, and procedures in teaching social studies in the elementary school.
Credits: 1.5 - 3

EDU405 Reading/Literature/Language - Primary

Frequency: B
 Description: Curriculum, materials and procedures in teaching reading in the elementary school.
Credits: 1.5 - 3

EDU406 Reading/Literature/Language - Intermediate

Frequency: B
 Description: Curriculum, materials and procedures in teaching language arts in the elementary school.
Credits: 1.5 - 3

EDU412 Integrated Methods for Early Childhood Education

Frequency: D
 Description: Prepares students to teach in early childhood classrooms. Information on the national and state learning standards in science, social studies, and the creative arts. Topics include constructivist curriculum planning, preparing the teaching/learning environment, the anti-bias curriculum, project work, authentic assessment, and the role of play in the early childhood classroom.
 Prerequisite Courses: EDU 105 and EDU 220 and EDU 250 and EDU 276 and EDU 314
Credits: 6

EDU416 Classroom Organization/Management/Foundations

Frequency: A
 Description: Focus on classroom management and organizational methods, legal, and historical, and social foundations of education. Repeated twice.
Credits: 1.5 - 3

EDU419 Secondary School (Adolescence) Methods

Frequency: B
 Description: 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.
Credits: 3

EDU420 Student Teaching - Elementary (Childhood) Primary

Frequency: A
 Description: A field assignment to teach Elementary Education. Assignment provided at the primary level; arrangements made by the Office of Field Experiences. Open only to students accepted in Elementary and Early Childhood.
Credits: 6

EDU421 Student Teaching - Early Childhood Education

Frequency: A
 Description: A field assignment to teach in Early Childhood Education. Assignments provided at two different grade levels; arrangements made by the Office of Field Experiences.
Credits: 6

EDU422 Student Teaching - Elementary (Childhood) Intermediate

Frequency: D
 Description: A field assignment to teach in Elementary Education. Assignments provided at the intermediate level; arrangements made by the Office of Field Experiences. Open only to students accepted in Elementary and Early Childhood Education.
Credits: 6

EDU424 Student Teaching - Elementary (Childhood) Primary-Hamburg

Frequency: D
 Description: A field assignment to teach on the primary level in the elementary school. Open only to students accepted into the Fredonia-Hamburg Program.
Credits: 3

EDU426 Student Teaching - Elementary (Childhood) Intermediate-Hamburg

Frequency: D
 Description: A field assignment to teach on the intermediate level in the elementary or middle school. Open only to students accepted into the Fredonia-Hamburg Program.
Credits: 3

EDU430 Student Teaching Grades 7-12

Frequency: B
 Description: A field assignment to teach in secondary education. Assignments provided by subject area in grades seven through 12; arrangements made by Office of Field Experiences. Open only to students accepted in Secondary Education Certification.
 Prerequisite Courses: EDU 419
Credits: 15

EDU432 Home/School Partnerships in Diverse Society

Frequency: B
 Description: Prepares the preservice teacher with strategies for facilitating family involvement in the education process. This course will place emphasis on the skills of communication (both personal and written). Topics covered include: parent conferences, volunteers in the classroom, barriers to parent involvement and one-way and two-way communication strategies.
Credits: 1.5 - 3

EDU442 Integrating Mathematics in Elementary (Childhood) Curriculum

Frequency: B
 Description: Current theory and practice of mathematics instruction across the curriculum using constructivist methods.
 Prerequisite Courses: EDU 402
Credits: 1.5

EDU443 Integrating Science in Elementary (Childhood) Curriculum

Frequency: B
 Description: Current theory and practice of integrating science instruction across the curriculum.
 Prerequisite Courses: EDU 403
Credits: 1.5

EDU444 Integrating Social Studies in Elementary (Childhood) Curriculum

Frequency: B
 Description: Current theory and practice of social studies instruction across the curriculum using constructivist methods.
 Prerequisite Courses: EDU 404
Credits: 1.5

EDU445 Integrating Reading in Elementary (Childhood) Curriculum

Frequency: B
 Description: Current theory and practice of integrating reading instruction across the curriculum.
 Prerequisite Courses: EDU 405
Credits: 1.5

EDU446 Integrating Language Arts in Elementary (Childhood) Curriculum

Frequency: B
 Description: Current theory and practice of language arts instruction across the curriculum using constructivist methods.
 Prerequisite Courses: EDU 406
Credits: 1.5

EDU480 Internship

Frequency: A
 Description: Participation in a professional, subject related experience. The student must submit a proposal stating what the experience is, how it relates to the student's course of study, and how it will be monitored and evaluated. The instructor will be responsible for the supervision of the intern. The proposal must be approved one month in advance by the advisor, instructor, and chairperson prior to registration.
Credits: 3 - 15

EDU490 Independent Study

Frequency: A
 Description: Study of a particular problem in education. Periodic meetings with instructor and the writing of a substantial paper.
Credits: 1 - 3

EDU501 Advanced Study: Child Psychology

Frequency: D
 Description: Methods for observing and measuring child behavior. Principles of research relating to the study of children. Study of contemporary areas of concern in child development including psychological consequences of marital discord, day care, television, paternal behavior, and family size.
Credits: 3

EDU502 Psychology of Adolescence

Frequency: D
 Description: Influence of physical, sexual, and social factors upon total personality during adolescence. Relationship to formation of attitudes toward self and others. Social, emotional, intellectual, and vocational adjustment demanded of youth in contemporary life.
Credits: 3

EDU503 Evaluation in the Schools

Frequency: D
 Description: Practical applications of evaluation theory in the schools: preparation and use of teacher-made tests; selection, administration, and interpretation of standardized tests; the use of evaluation techniques in curriculum decisions and in interpersonal relationships.
Credits: 3

EDU504 The Exceptional Learner

Frequency: D
 Description: Survey of specific areas of exceptionality including handicapped, gifted, and emotionally disturbed children. Etiology, definition, classification, and educational problems of teaching exceptional children.
Credits: 3

EDU505 Writing Process K-12

Frequency: D
 Description: 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

EDU506 Foundations of Reading in Elementary Schools

Frequency: B
 Description: Reading as a developmental process, including mechanics of reading, general and specific comprehensive skills, and reading attitudes. Reading program in the school, including the reading lesson, evaluation, individualization, coordinating total school effort, and current trends in reading instruction.
Credits: 3

EDU507 Group Processes in Education

Frequency: D
 Description: 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

EDU508 Mainstreaming

Frequency: D
 Description: Introduces teachers to the legal and legislative bases for integrating exceptional learners into regular education programs. Provides information regarding placement options and support services available to integrated students. Practical approaches dealing with teaching and behavior management techniques are emphasized.
Credits: 3

EDU509 Teaching of Thinking

Frequency: D
 Description: 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 various programs, systems and resources currently available.
Credits: 3

EDU510 Microcomputers in Reading Instruction

Frequency: D
 Description: This course is designed to apply existing microcomputer software and hardware to instruction in basic reading skills. Strategies used to evaluate commercially prepared software will also be taught. Teachers will be provided with sufficient skill and knowledge to author instructional materials for both individual students and entire classes.
Credits: 3

EDU511 Activities for Individual Reading

Frequency: C
 Description: Encourages and prepares classroom teachers to teach reading through individualized and learner-oriented activities. Selection, preparation, production, and use of distinctive activities to individualize reading emphasized.
Credits: 3

EDU512 Creative Writing in Elementary School

Frequency: D
 Description: Study of the conditions fostering creative expression, ways of motivating children to write and use language creatively, the teacher's role in creative expression, and the study of prose and poetry forms appropriate for use in the elementary classroom. Directed experience in writing provided.
Credits: 3

EDU515 Dramatic Experiences in Elementary School

Frequency: D
 Description: Introduces teachers to techniques, methods, and materials of creative dramatic activities in the elementary classroom. Role of dramatics in various curricular areas explored. Directed experiences as leader and participant in a variety of dramatic activities provided.
Credits: 3

EDU519 Curriculum Development: English as a Second Language I

Frequency: C
 Description: Historical, theoretical basis for curriculum. Analysis of development of curriculum. Hands-on project with intent for District use. Curriculum project must be grounded in ESL/Bilingual theory and designed for ELL populations. K-12 course focus. Prerequisite Courses: EDU 563 and EDU 568
Credits: 3

EDU520 Curriculum Framework Theory/Development

Frequency: B
 Description: 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

EDU522 Process of Valuing

Frequency: D
 Description: Examination of theories of valuing. A variety of instructional approaches, materials, skills, and ways of organizing curriculum to assist students in dealing systematically with values both their own and the values of society. Strategies are offered for identifying values, clarifying them, detecting inconsistencies, and strengthening values.
Credits: 3

EDU524 Remediation of Reading Deficiencies

Frequency: B
 Description: In-depth preparation in the remediation of specific skill deficiencies in reading including a review of the procedures involved in identifying those deficiencies. Extensive use of both teacher-made and commercially prepared materials.
Credits: 3

EDU525 Curriculum Framework Integration/Innovation

Frequency: B
 Description: Builds upon the information provided in ED 520. a 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

EDU526 Middle School Curriculum

Frequency: D
 Description: Study of the philosophy, organization, and curriculum of the middle school; emphasis on the role of the teacher in changing from junior high school to middle school. Important research and experimental models examined.
Credits: 3

EDU527 Microcomputers in Education

Frequency: D
 Description: Examines the impact of the microcomputer in today's schools. Machine functions and software will be introduced, utilized, and reviewed. Programming (BASIC) will be introduced and utilized in class to develop sample programs.
Credits: 3

EDU528 Computer Literacy for Educators

Frequency: D

Description: This course is designed to introduce education personnel to the techniques and equipment involved in the use and development of computer-assisted instruction. 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

EDU529 Behavioral Disorders

Frequency: D

Description: Study of the child with mild to severe behavior disorders, emphasizing etiology, diagnosis, and strategies for management of the child and modification of the behavior. Examination of both non-categorical approaches, and clinical syndromes such as autism.

Credits: 3

EDU530 Learning Theories & Teaching

Frequency: D

Description: Theoretical and scientific bases underlying the teaching-learning process. Applications to the learning process in the classroom.

Credits: 3

EDU531 Philosophy of Education

Frequency: C

Description: Orientation to major philosophical outlooks and problems in contemporary education.

Credits: 3

EDU534 Curriculum Development: English as a Second Language II

Frequency: C

Description: This course provides an opportunity for students to develop curriculum units, applying curriculum theory to various content areas. Students will apply ESL methods and materials to curriculum units and develop instructional strategies that exemplify "best practices" in the field, applying this to N-12 classrooms. Required for TESOL majors.

Prerequisite Courses: EDU 105 and EDU 519 and EDU 568

Credits: 3

EDU535 School and Society

Frequency: D

Description: Analysis of the school in relation to other socializing influences. Cultural change and its effect upon education. The school in relation to specific problems of changing American communities. Review of studies of teaching as an occupation.

Credits: 3

EDU537 Comparative Children's Literature

Frequency: D

Description: Investigation and study of children's literature, including recent research. Critical analysis of all literary genres for children, preschool through middle school. Emphasis on stimulation of interest and inquiry through current concerns (values education, stereotyping, censorship, visual literacy, etc.)

Credits: 3

EDU538 Cultural Literature for ESL Students

Frequency: D

Description: Survey of literature course covering theory and practice of using juvenile literature with ELL students. Issues such as selection, censorship, transcultural considerations will be included. Classroom applications emphasized for pre K-6 learners; can also be interpreted and extended to the Middle School and Secondary situations. Technology component included.

Credits: 3

EDU539 Current Issues & Problems

Frequency: C

Description: Identification, definition, and analysis of problems and issues facing education today. Current criticisms of public schools. Proper responsibilities of the schools. Questions of curriculum development and how well schools are teaching basic skills.

Credits: 3

EDU540 Content Area English as a Second Language

Frequency: D

Description: This course will give students an opportunity to do in-depth study of integrated ESL and content areas, often referred to as "Sheltered English".

Students will research theory and scientific findings and will complete field projects that demonstrates the application of theory to classroom practice in N-12 classrooms. This course is highly recommended as an elective for TESOL majors.

Prerequisite Courses: EDU 519

Credits: 3

EDU543 Education for Gifted & Talented

Frequency: D

Description: The study and development of educational programs for optimum growth of gifted/talented children. Study and observation of curriculum content, organization of special schools and classes, teaching materials and methods, and the evaluation and administrative adjustments being made for gifted/talented children.

Credits: 3 - 6

EDU544 Secondary School (Adolescence) Curriculum

Frequency: D

Description: Study of current revival of interest in secondary school curriculum: new mandates, emerging practices, varied points of view, and sample programs. Role of classroom teacher and school administrator in curriculum development.

Credits: 3

EDU545 History of American Education

Frequency: D

Description: 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

EDU546 Models of Classroom Management

Frequency: D

Description: Designed to expand the traditional understanding of classroom management that focuses on discipline and behavioral problems. The course follows a comprehensive classroom management approach focusing on five specific areas of knowledge and skills that teachers need in order to be effective classroom managers.

Credits: 3

EDU548 Practicum in International Teaching

Frequency: D

Description: This 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 have the opportunity to participate in classrooms where they can observe, assist, and teach. Readings will be designed to compliment the practical experiences and discussion seminars on topics and themes associated with the international experience will be conducted in the host country with an on-site tutor from the U.S.A.

Credits: 3

EDU549 Comparative Education

Frequency: C

Description: Educational systems of selected foreign countries emphasizing educational philosophies and practices. Cultural, historical, and philosophical foundations underlying each educational system.

Credits: 3

EDU550 Composition in Secondary School (Adolescence)

Frequency: D

Description: Examination of relationship between linguistic concepts and writing process. Analysis of relative values and appropriate levels of instruction for various types of writing. Investigation of effective instructional and evaluation procedures.

Credits: 3

EDU553 Citizenship Education Moral-Legal

Frequency: D

Description: 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

EDU555 Methods of Bilingual Education

Frequency: C

Description: This course 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 (portfolios will develop and teach reading and/or writing lessons using strategies, peer groups and self-assessments, etc). Emphasis is made on methods and techniques using the language in which the bilingual extension is sought. The course will include suggestions for coordination with ESL content area instruction. Students will produce and carry out lessons in the various subject areas. Required course for future teachers pursuing a New York State bilingual education extension and recommended as an asset for any school teachers working with English Language Learners in the area school districts.

Credits: 3

EDU556 Teaching Language Arts in Spanish

Frequency: C

Description: A study of teaching approaches and methodology used in the development of literacy skills in Spanish speaking students in the United States. Emphasis on the understanding of the active interaction of reading, writing, listening, and speaking in the process of acquiring and mastering communication skills. This course also will review and analyze current technology and curricular materials used to teach the language arts. Students will develop and teach reading and/or writing lessons using strategies and methodology studies in the course as well as appropriate teaching materials. Required course for inservice teachers as well as for future teachers pursuing a New York State Bilingual Education extension.
Credits: 3

EDU561 Contemporary Issues Parent/Teacher Relationships

Frequency: D

Description: Focus on building successful partnerships with parents from diverse family structures. Identifies models of parent involvement currently in schools and shares practical ideas for increasing parent involvement in classrooms. Discusses current educational mandates for parent involvement and implications for school districts.
Credits: 3

EDU562 Infant Development and Education

Frequency: C

Description: Nutritional and psychological influences on prenatal, infant, and toddler growth and development. Topics covered: childbirth, breastfeeding, infant stimulation, intellectual development, attachment behavior, and infants in group care. Current research in infant development.
Credits: 3

EDU563 Cultural Perspectives

Frequency: C

Description: This course focuses on the history and culture of the various ethnolinguistic groups in the State of New York. The course content will be divided in two interrelated parts. The first part of the course will provide an overview of the history and culture of several ethnolinguistic groups in New York State including Haitian, Hispanic, Chinese, and Korean. This course will introduce the student to the wide language and cultural diversity represented in each school district. In addition to the study of the culture and history of these ethnic groups, emphasis will be made on the origins of racial and ethnic groups in the United States, a discussion of immigration, and how these unique histories have shaped the American linguistic mosaic. Required for students pursuing a New York State teacher certification in ESL and/or the bilingual education extension and an important elective for teachers pursuing any other certification. This knowledge should foster the necessary awareness that teachers need in order to be more effective educators when working with English language learners.
Credits: 3

EDU564 Linguistic Consideration-LEP Educators

Frequency: C

Description: This course will provide an examination of English grammar and errors common to second language learners. Students will learn how to conduct an Error Analysis of student errors to maximize acquisition of the second language. The course will provide an overview of linguistic theories related to bilingual second language learners. Language transfer, BICS vs. CALP; Krashen's hypothesis, and other linguistic, language acquisition, and language use models will be discussed. The course will allow students to apply theoretical models and scientific findings to classroom practice in grades N-12 through research and practice. Student will often take this course with EDU 538 so that linguistic analyses can be applied to the teaching of literature, reading, and increased literacy in the second language. Required for all TESOL and Bilingual Education majors.
Prerequisite Courses: EDU 305 and EDU 563
Credits: 3

EDU565 Methods of Bilingual Education

Frequency: C

Description: This course is designed to provide students with an introduction to the many facets of human language and their impact on classroom learning. Discussions will focus on issues of language acquisition, speech perception, production, and literacy with an emphasis on second language learning. Both theoretical and empirical claims will be examined. Applications to ESL learners will be explored. Required course for future teachers pursuing a New York State bilingual education extension. This course is also recommended for any school teacher working with English Language Learners in the area school districts.
Credits: 3

EDU566 Sociolinguistics for ESL Teachers

Frequency: D

Description: After reviewing models of first and second language acquisition, this course will discuss sociolinguistic phenomena such as code switching, dialects and idiolects, language transfer, loan words, and appropriate discourse. Common misconceptions regarding "Spanglish" and other linguistic phenomena will be discussed. The course will acquaint students with the social aspects of literacy acquisition and language learning through discussions and the reading of ethnographic research studies. Students will apply theoretical models to classroom practice through research and projects. Can be taken instead of EDU 565 Language and Learning.
Credits: 3

EDU568 Fundamentals, Theory, Practice: Bilingual-Cultural Education

Frequency: C

Description: This course provides future educators an overview of the educational reality of limited English proficient (LEP) students in the United States. The course approach to the education of limited English proficient students in the U.S. is threefold: historical, theoretical, and practice/methods used in schools. This course will provide future teachers with important basic knowledge that will help them to better understand the different philosophies behind bilingual education and ESL programs in the U.S. This course will also review different theories of language acquisition and current research on language acquisition. Finally, this course will review and examine methods, strategies, and teaching techniques currently used in the bilingual classroom. The historical approach of the course provides an overview of the origins and development of bilingual education from colonial times to present. Required course for students pursuing a New York State teacher certification in ESL and/or the bilingual education extension.
Credits: 3

EDU570 Understanding Educational Research

Frequency: A

Description: The course assists educational practitioners to become knowledgeable consumers of research and evaluation reports by helping them to critically analyze and evaluate a variety of research studies. 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 specific research studies. Required in first 9 hours of graduate study.
Credits: 3

EDU571 Seminar/Practicum Educators LEP

Frequency: C

Description: This course provides classroom instruction and field practice for educators of LEP/ELL students. It provides a supervised student teaching experience for graduate students who are already certified in an approved area of education. Students are placed in an ESL/BE classroom or resource room at a grade level appropriate to their circumstances; students already holding an early childhood or childhood certificate will be placed in a middle school or secondary school (grades 5-12); students already holding a middle school or adolescent certificate will be placed in an elementary school setting (grades K-6). The field placement shall be for 4 days per week, 6 hours per day, for a minimum of 6 weeks, maximum of 10 weeks depending on whether taken in the fall/spring or summer session. The seminar focuses on topics germane to teaching students in grades K-12 in an ESL/BE setting. Students will attend a 3 hour seminar once per week throughout the semester or summer session. Classroom theory is applied to field practice. Required course.

*Credits: 6***EDU573 Production/Use Instructional Media**

Frequency: D

Description: Laboratory course in instructional graphics, film, and photography production and design, and production techniques. Series of individual projects completed, field tested, and evaluated.

*Credits: 3***EDU580 Teaching Grades 7-12**

Frequency: D

Description: (A selected area to be designated - General, English, Mathematics, Foreign Languages, Science, or Social Studies.)

Practical suggestions for teachers working in secondary school. 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 which have affected the curriculum. Special attention to selected topics according to needs and interests of participants.

*Credits: 3***EDU591 Special Topics**

Frequency: B

Description: Exploration in depth of selected topics in professional education. Principal focus of the course varies from semester to semester. EDU 591 courses qualify for the master's program, maximum of 6 hours in EDU 591.

*Credits: 3***EDU603 Issues, Trends and Research in Elementary (Childhood) Science**

Frequency: C

Description: Issues, trends, and research in teaching science in the elementary school. Primary and secondary sources of research findings dealing with these issues. Emphasis on individual readings and seminar discussions.

*Credits: 3***EDU605 Issues Trends and Research in Elementary (Childhood) Language**

Frequency: B

Description: Structure and organization of language arts programs. Examination of past and current research. Evaluation of current programs.

*Credits: 3***EDU606 Methods Diagnosis Treatment Reading Difficulties**

Frequency: B

Description: Nature and possible causes of reading disabilities. Principles underlying the diagnosis of reading difficulties.

Development of competence in analyzing reading problems through use of diagnostic techniques.

*Credits: 3***EDU607 Practicum in Reading**

Frequency: B

Description: Supervised laboratory experiences in diagnosis and treatment of reading difficulties.

*Credits: 3***EDU608 Clinical Diagnosis Reading Disabilities**

Frequency: B

Description: Administration, interpretation, and evaluation of individual diagnostic instruments used in diagnosis of reading disabilities. Preparation of case studies. Diagnosis of more severe types of reading disabilities.

Prerequisite Courses: EDU 607

*Credits: 3***EDU611 Advanced Seminar Elementary Education**

Frequency: D

Description: Individual problems of the teachers enrolled. Individual research on problems of special interest under guidance of one or more staff members.

*Credits: 3***EDU614 Principles of Administration**

Frequency: D

Description: Basic functions of educational administration. Role of administrator as service agent for instruction and his/her function as coordinator of school programs.

*Credits: 3***EDU615 School Administrator/Supervisor**

Frequency: D

Description: Nature, responsibilities, and developing status of elementary and secondary principals. Role of principal and supervisor as educational leader: relationships with parent and community groups, guidance functions, management of administrative records, administration of equipment and supplies.

*Credits: 3***EDU616 Supervision I: Theory/Practice**

Frequency: D

Description: Nature and function of supervision in modern school. Role of supervisor in cooperative group planning and development of programs for improving instruction. Supervisor's part in development of common aims and guiding principles of instruction. Ways of studying and improving curriculum practices. Development of public understanding of and participation in school policies.

*Credits: 3***EDU617 Supervision II: Improve Instruction**

Frequency: D

Description: Supervisor's role in improving quality of instruction. Relation of purpose of supervision to goals of the school. Appraisal of school programs and quality of instruction. Techniques for improvement of instruction. Instructional supplies and equipment; school facilities.

*Credits: 3***EDU618 Intern: School Administrator/Supervisor Elementary (Childhood)**

Frequency: D

Description: Field experience in activities related to functions of elementary school administrator/supervisor.

*Credits: 3 - 6***EDU619 Intern: School Administrator/Supervisor Secondary (Adolescence)**

Frequency: D

Description: Field experience in activities related to functions of secondary school administrator/supervisor.

*Credits: 3 - 6***EDU620 Public School Finance**

Frequency: D

Description: Factors associated with financial support of public education in U.S. Study and analysis of local, state, and federal responsibilities for support of education. Support programs and efforts at all levels. Development of local budget as instrument for achieving educational objectives of the school.

*Credits: 3***EDU622 Issues Trends Research in Reading**

Frequency: D

Description: Critical analysis of past and current issues, trends, and research in reading. Evaluation of current reading programs. Seminar discussions.

*Credits: 3***EDU624 Contemporary Problems in School Administration**

Frequency: D

Description: Intensive study of selected current or emerging problems in administration. Significant problems chosen for study will vary.

*Credits: 3***EDU625 Early Childhood Curriculum**

Frequency: D

Description: Special attention to 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***EDU626 Public School Law**

Frequency: D

Description: Study of law and principles of law as they apply to organization and administration of education in the nation and state. Special attention to teacher and the law; impact of court decisions on the school.

*Credits: 3***EDU629 Issues Trends Research Early Childhood**

Frequency: D

Description: Basic issues in early childhood education explored, current trends delineated, and past and current research studies.

*Credits: 3***EDU630 Educational Administration**

Frequency: D

Description: Advanced course devoted to analysis of one of the following topics: The Politics of Education, Studies in Administrative Leadership, School-Community Relations, Collective Negotiations, School Personnel Administration, Administering Innovative Programs, or Management Objectives.

*Credits: 3***EDU635 Curriculum Development Social Studies Education**

Frequency: D

Description: Investigation of basic principles in curriculum development in elementary social studies. Examination of current social studies curricula and materials. Individual students or small groups work on social studies curriculum projects of special interest.

Credits: 3

EDU636 Issues Trends Research Elementary (Childhood) Social Studies

Frequency: D
Description: Structure and organization of social studies programs. Examination of past and current issues, trends, and research in social studies education. Evaluation of current social studies programs.
Credits: 3

EDU640 Issues Trends Elementary (Childhood) School Mathematics

Frequency: D
Description: Systematic examination of the issues and trends in a modern program of elementary school mathematics. Basic review of what constitutes a modern program in elementary school mathematics, based on an examination of experimental programs, trends, and current materials. Attention focused on the nature of current programs as to content, instructional materials, procedures, and evaluation.
Credits: 3

EDU642 Activity-Oriented Elementary Mathematics

Frequency: D
Description: Encourages and 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

EDU643 Diagnosis Treatment Learning Difficulties Elementary (Childhood) Mathematics

Frequency: D
Description: Examination of symptoms and causes of learning difficulties in mathematics, including a systematic approach to the diagnosis of these difficulties through the use of both individual and group techniques. Basic guidelines for prescribing and evaluating remedial instruction.
Credits: 3

EDU670 Independent Study

Frequency: A
Description: 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 department member.
Credits: 1 - 12

EDU690-691 Research

Frequency: A
Description: Research including the preparation of a project, essay, or thesis.
Credits: 3 - 6

ENGL100 The Craft of Writing

Frequency: A
Description: An experiential, student-based 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. Emphasis as well on reading critically.
Credits: 3

ENGL101 Introduction to English Education

Frequency: B
Description: Secondary English Education majors are introduced to teaching in this course which combines 25 hrs. of classroom observation with reading, writing, and discussion about the principles and practices of Secondary English Education. Planning teaching strategies, learning styles, socioeconomics and classroom management are among the topics considered.
Credits: 1

ENGL103 Readings and Observation in English Education

Frequency: B
Description: Students participate in 25 hours of classroom observation in the public schools. Students write a detailed report answering defined questions about more advanced issues in pedagogy as well as writing responses to articles on the foundations of education in the United States. Particular emphasis on the development of education in the Language Arts. Students meet with the instructor to discuss their observations and written responses.
Prerequisite Courses: ENGL 101
Credits: 3

ENGL104 English Online

Frequency: D
Description: To develop in students knowledge of the basic sources of information, their location, as well as how to access and manipulate them. Emphasizes the evaluation and assessment of the quality of the information found, not just the mastery of certain technical skills.
Credits: 0

ENGL200 Introduction to American Studies

Frequency: B
Description: An introduction to the interdisciplinary study of American cultures, their historical development and contemporary status. Focusing on literary and cultural representations of specific aspects of the American experience, the course will examine the constructed nature of American self-perceptions and of U.S. history. The course contextualizes U.S. cultures within the Americas and the global arena. Particular course emphasis is selected by the instructor.
Cross-listed as AMST 202.
Credits: 3

ENGL204 Survey of English Literature

Frequency: D
Description: 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

ENGL205 Epic and Romance

Frequency: A
Description: Study of works of epic and romance from a variety of times and places, their function as literary works, their similarities, and their different concepts of the human.
Credits: 3

ENGL206 Survey of American Literature

Frequency: D
Description: 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

ENGL207 Drama and Film

Frequency: A
Description: Study of plays and some films from different times and places, their possible interrelations and ways they reflect their various cultures.
Credits: 3

ENGL208 American Popular & Mass Cultures

Frequency: B
Description: 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, art, among others. Cross-listed as AMST 210.
Prerequisite Courses: AMST 202 or ENGL 200
Credits: 3

ENGL209 Novels and Tales

Frequency: A
Description: Study of long and short fiction of several kinds, including myth, fable, and realistic narrative, from a variety of places and times, and their relation to their different cultures.
Credits: 3

ENGL211 World Poetry

Frequency: A
Description: Study of lyric poetry from different times and places showing similarities and differences in themes and poetic methods.
Credits: 3

ENGL214 American Fiction

Frequency: D
Description: 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

ENGL215 English Detective Fiction

Frequency: B
Description: A survey of English mystery writers from Sir Arthur Conan Doyle to P.D. James, exploring their techniques with the genre and the methods of their detectives. A requirement is that students create their own mystery fiction.
Credits: 3

ENGL216 Science Fiction

Frequency: B
Description: Historical and generic survey of science fiction through representative works and major authors; examination of its relationships with other types of literature.
Credits: 3

ENGL240 African-American Literature & Culture

Frequency: B

Description: 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.

Credits: 3

ENGL241 Introduction to Latino Literature

Frequency: B

Description: 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. Course is cross-listed with INDS 241.

Credits: 3

ENGL242 American Indian Literature

Frequency: B

Description: Study of a variety of works, including traditional tales, novels, poems and memoirs, produced by American Indians from historical beginnings to the present.

Credits: 3

ENGL250 Literacy and Technology

Frequency: A

Description: Designed primarily for secondary and elementary Education majors, this course teaches students to navigate Windows and the World Wide Web, use Microsoft Word and e-mail, construct basic web pages, explore the theoretical and practical implications computer use has on the nature of literacy as well as learning approaches to teaching students to improve their literacy levels through the use of computers. Involves electronic tutoring with students in grades one through 12 and various other tutoring possibilities.

Credits: 3

ENGL260 Introduction to Creative Writing

Frequency: A

Description: First in the sequence of creative writing courses, a 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

ENGL280 Introduction to Film

Frequency: A

Description: 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

ENGL291 The Bible as Literature

Frequency: B

Description: 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

ENGL296 American Identities

Frequency: B

Description: An exploration of the historical construction of American gender, ethnicity/race, and class; their present status; and their literary and cultural representations. Focusing on intersections between these categories of identity, the course will utilize an interdisciplinary approach, integrating materials from fields such as literary studies, history, women's studies, ethnic studies, geography, sociology, music, and art. Required course for American Studies minor.

Credits: 3

ENGL299 Special Topics

Frequency: A

Description: Variable-content course; topic announced in *Course Offerings Bulletin* each semester.

Credits: 3

ENGL304 Latina Literature and Cultural Studies

Frequency: C

Description: 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. Crosslisted as INDS 305.

Credits: 3

ENGL310 Medieval Literature

Frequency: C

Description: Study of selected texts representative of the literature flourishing in Western Europe between 600 and 1500.

Credits: 3

ENGL312 The Age of Elizabeth

Frequency: B

Description: Study of the literature of the Renaissance in England and elsewhere in Western Europe, culminating in the reign of Elizabeth I.

Credits: 3

ENGL314 Major Women Novelists

Frequency: C

Description: An in-depth study of novels by women ranging from Jane Austen and Emily Bronte to Doris Lessing and Joyce Carol Oates. Emphasis is upon the female writers as distinct from the male in subjects and themes. The course seeks to explore their differences but also to place them in the context of the culture as a whole.

Credits: 3

ENGL316 The Early Seventeenth Century

Frequency: D

Description: Study of the metaphysical and neo-classic traditions in the poetry of Donne and Jonson, Herrick, Crashaw, and Marvell; study of a variety of emerging prose styles in works by Raleigh, Bacon, Donne, Browne, Burton, and Bunyan.

Credits: 3

ENGL318 Studies in Poetry

Frequency: B

Description: Advanced level course in analysis of poetry: introduction to various critical approaches; background study of poetic techniques; independent work on one poet.

Credits: 3

ENGL320 The Restoration & 18th Century

Frequency: C

Description: Critical study of major literary forms within historical context of period. Swift, Pope, and Johnson among the authors considered.

Credits: 3

ENGL322 The Romantic Age

Frequency: B

Description: 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

ENGL324 Myth and Symbol in Literature

Frequency: B

Description: Examination of symbolic forms of literary expression and their interrelationships in selected works.

Credits: 3

ENGL326 Victorian/Early Modern Literature

Frequency: B

Description: Introduction to later 19th century English poetry and prose; emphasis on relationship between social-intellectual history and the 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

ENGL328 Modern British Literature

Frequency: B

Description: 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

ENGL330 The Contemporary Novel

Frequency: B

Description: 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/American novels of the period reflective of long-established, quite separate tradition.

Credits: 3

ENGL331 American Literary Roots

Frequency: B

Description: 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

ENGL332 American Romanticism in Literature

Frequency: B

Description: 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

ENGL333 Environmental Literature

Frequency: C
Description: 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

ENGL334 Realism/Naturalism in American Literature

Frequency: B
Description: 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 Afro-American slaves.
Credits: 3

ENGL335 Modern American Poetry

Frequency: B
Description: 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

ENGL336 Modernism in American Literature

Frequency: B
Description: 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

ENGL338 Contemporary American Literature

Frequency: B
Description: Study of contemporary directions, including those suggested by the works of Hispanic, native American, Afro-American, and other ethnic groups that contribute to the meaning of the American identity today.
Credits: 3

ENGL339 Contemporary American Poetry

Frequency: B
Description: 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

ENGL340 Black Women Writers

Frequency: B
Description: 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

ENGL341 Harlem Renaissance

Frequency: B
Description: Study of texts representative of the literature flourishing within the African-American community between approximately 1919 and 1930. Focuses on the political, social and literary origins of this movement, as well as the different literary and artistic genres created during this era.
Credits: 3

ENGL344 Contemporary Multicultural American Literature

Frequency: B
Description: Study of the novels, poems, plays, and essays of contemporary African American, Asian American, Native American, and Hispanic American writers. Key questions explored include whether or not these writers exhibit shared concerns, how they represent identity and difference pertaining to race and ethnicity, and how race and ethnicity intersect with gender, class, sexuality, and nationality.
Credits: 3

ENGL345 Critical Reading

Frequency: A
Description: 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

ENGL346 History of Literary Criticism

Frequency: D
Description: Survey of representative texts in literary criticism from Plato to the mid-19th century.
Credits: 3

ENGL348 Modern Literary Criticism

Frequency: D
Description: Study of major documents, theoretical concerns, and dominant trends in literary criticism from the mid-19th century to the present.
Credits: 3

ENGL349 Feminist Theory

Frequency: B
Description: In-depth critical exploration of selected theories to explain the sources of women's roles in society. A multidisciplinary approach will be employed to account for the social, economic, political, and cultural status of women in contemporary societies. Cross-listed as WOST 301.
Credits: 3

ENGL350 Literary Landmarks

Frequency: D
Description: In-depth critical examination of selected "landmarks" of a literary tradition of the instructor's choice: British, American, or World. Focus on issues of interpretation, intertextuality, literary movements and periods, canon information, and pedagogy.
Credits: 3

ENGL351 Language and Society

Frequency: D
Description: Survey of ways language interacts with social features such as sex, race, age, class, and nationality. Includes such areas as slang, obscenity, and folk speech, as well as aspects of language acquisition and change.
Credits: 3

ENGL355 Literature for Adolescents

Frequency: A
Description: 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 basic concepts, theories, and issues involving multicultural education, cultural diversity, and the educational system, as appropriate to the required readings. Students will discuss and prepare to teach adolescent literature to children from diverse cultural and linguistic backgrounds.
Credits: 3

ENGL356 Teaching Writing in Secondary School

Frequency: B
Description: Study of, and practice in, strategies for teaching the process of writing: pre-writing, drafting, revision, editing, and publication. Approaches to whole-language instruction in writing, and to evaluating writing in the secondary school.
Credits: 3

ENGL357 Literacy/Language/Learning Theory

Frequency: A
Description: 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

ENGL358 Composition for Elementary Education Teachers

Frequency: A
Description: Analysis of the writing process as it applies to elementary and junior high students. Practical approaches to persuasive writing, descriptive writing, report writing, letter writing, and grammar.
Credits: 3

ENGL360 Intermediate Creative Writing

Frequency: B
Description: Continued study of forms, techniques, genres, and theories of poetry and fiction. Emphasis on further development of students' skills in writing and self-criticism through intensive workshop experience. Students may write poetry, fiction, or both. Readings in contemporary poetry and fiction.
Prerequisite Courses: ENGL 260
Credits: 3

ENGL368 Introduction to Public Relations

Frequency: B
Description: A general orientation to the professional responsibilities of a public relations practitioner. Special attention is paid to relations with the news media, forming and changing opinion, communications vehicles in the new electronic age, acceptable and unacceptable PR practices, a theory of managing PR, some important legislation, and the Public Relations Society of America.
Credits: 3

ENGL375 Writing for the Professions

Frequency: D
Description: 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

ENGL378 Advanced Writing I: The Essay

Frequency: D
Description: Workshop oriented course in which students write, examine, and discuss the essay as a distinct mode. Through this course, students can expect to extend the range of their writing, their understanding of rhetorical traditions, and their freedom and flexibility as writers of essays.
Prerequisite Courses: ENGL 100
Credits: 3

ENGL380 Film: Silence to Sound

Frequency: C

Description: 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

ENGL381 Narrative Film After 1940

Frequency: C

Description: 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

ENGL386 Women and Film

Frequency: C

Description: A study of women filmmakers and their uses of documentary, experimental, and narrative forms. Particular focus on the role of the female spectator, the redefinition of traditional gender roles through film, and the (re)production of knowledge about women and femininity through the cinematic apparatus. Cross-listed as WOST 383.
Credits: 4

ENGL389 Greek and Roman Literature

Frequency: D

Description: Introduction to major literary genres of classical Greece and Rome; emphasis on characteristic forms and themes. Readings in Modern English translations.
Credits: 3

ENGL390 Jewish Literature

Frequency: D

Description: 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

ENGL391 Romanticism in World Literature

Frequency: C

Description: An exploration of basic themes commonly associated with the concept of Romanticism as identified in literature from eastern and western cultures.
Credits: 3

ENGL392 Asian Literature

Frequency: D

Description: A study of selected works from the 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

ENGL393 Asian-U.S. Confrontations

Frequency: D

Description: Comparative study of texts and cultural events involved in moments of confrontation; variable emphasis from offering to offering; includes Islamic, Indian, Chinese, and Japanese works.
Credits: 3

ENGL394 Japanese Literature

Frequency: D

Description: Study of selected works from the 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.; this course also examines cultural assumptions in the works and in ourselves, and looks closely at the problem of language in translation and cultural contexts.
Credits: 3

ENGL395 Third World Literature

Frequency: C

Description: Examination of works by women and men from countries that, by various definitions, are considered to be part of the Third World. Focus on cultural relativism and competing ideologies.
Credits: 3

ENGL396 Russian Literature

Frequency: C

Description: 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

ENGL399 Special Topics

Frequency: C

Description: Variable-content course; topic announced in *Course Offerings Bulletin* each semester.
Credits: 3 - 4

ENGL400 Senior Seminar: Advanced Writing

Frequency: A

Description: Study of and practice in writing of many kinds, including a significant critical paper, with an emphasis on metacognitive awareness of the writing process and of the student's development as an English major. Portfolio completion is one integral feature of the course.
Prerequisite Courses: ENGL 401
Credits: 3

ENGL401 Portfolio Completion

Frequency: A

Description: Required for all English and English Education majors. Gives recognition for thoughtful completion of all elements of the reflective portfolio except the exit paper.
Credits: 0

ENGL408 Arthurian Literature

Frequency: C

Description: Study of the many works about King Arthur and his knights of the Round Table, extending from the 8th century to the present.
Credits: 3

ENGL410 Chaucer

Frequency: C

Description: Study of The Canterbury Tales and Troilus and Criseyde. Introduction to Middle English language and period and to significant Chaucerian scholarship.
Credits: 3

ENGL412 Early Shakespeare

Frequency: B

Description: Study of Shakespeare's works to 1600; emphasis on his growth as a dramatist.
Credits: 3

ENGL414 Later Shakespeare

Frequency: B

Description: Study of Shakespeare's works from 1600 to end of his career.
Credits: 3

ENGL416 Elizabethan Drama

Frequency: D

Description: 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

ENGL418 Restoration/18th Century Drama

Frequency: D

Description: Study of the drama and theatre of Jonson, Dryden, Wycherley, Congreve, and Sheridan, with extension of their influence through the works of Wilde; focus on the major changes which the tenets of classicism brought to the English stage after Shakespeare.
Credits: 3

ENGL420 Milton

Frequency: C

Description: 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

ENGL422 English Novel I

Frequency: C

Description: Study of representative novels of 18th and early 19th centuries. Particular attention to human and literary concerns which contribute to development of the novel. Writers include Richardson, Fielding, Sterne, and Austen.
Credits: 3

ENGL424 English Novel II

Frequency: C

Description: 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

ENGL425 Yeats and Company

Frequency: C

Description: An intensive reading of certain major works of William Butler Yeats and of his contemporaries and successors. Considerable attention to the mythologies, history, and politics of Ireland.
Credits: 3

ENGL426 Major American Writers

Frequency: A

Description: Close study of one or more writers and themes significant in American culture.
Credits: 3

ENGL428 Major English Writers

Frequency: A

Description: Study of the works of one English author or a few authors whose works are related thematically, historically, generically, or on another literary basis.
Credits: 3

ENGL446 Contemporary Literary Theory

Frequency: C

Description: A study of the most recent American and international literary critical thinking, emphasizing both theory and practice.
Credits: 3

ENGL450 Seminar for Teachers of English

Frequency: B

Description: Workshop designed to immerse students in the processes of preparing high-school students to read drama, fiction, and poetry. Emphasis on pre-reading activities, construction of discussion questions and classroom activities, development of a three week unit for teaching literature, and participation in a micro-teaching activity. Permission of instructor.
Credits: 3

ENGL455 Writing Tutors

Frequency: B
Description: An eight-week training program preparing students to tutor writing in the college Learning Center for a minimum of four hours per week. Permission of instructors.
Credits: 3

ENGL456 ESL Tutoring

Frequency: B
Description: Focus on tutoring students whose first language is not English.
Credits: 1

ENGL460 Advanced Creative Writing - Poetry

Frequency: B
Description: 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. Prerequisite courses or permission of instructor.
Prerequisite Courses: ENGL 260 and ENGL 360
Credits: 3

ENGL461 Advanced Creative Writing - Fiction

Frequency: C
Description: 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. Prerequisite courses or permission of instructor.
Prerequisite Courses: ENGL 260 and ENGL 360
Credits: 3

ENGL465 English Internships

Frequency: A
Description: English internships. Interns work four hours per week for 1 credit hour. Permission of instructor.
Credits: 1 - 3

ENGL466 Seminar in Journalism Topics

Frequency: D
Description: A seminar on the function of print media from the perspective of writers and readers. Topics include access to print, the problem of objective reporting/writing, and the ethical problems and legal status of the print media. Topical readings as well as analytical papers and in-depth articles. Prerequisite course or permission of instructor.
Prerequisite Courses: ENGL 371
Credits: 3

ENGL468 Public Relations Internships

Frequency: A
Description: Open to students on a competitive basis. Students work in professional settings on or off campus, 12 hours per week.
Credits: 1 - 15

ENGL472 News Writing Intern

Frequency: D
Description: Internship in news writing in area newspapers by individual arrangements.
Prerequisite Courses: ENGL 371
Credits: 3

ENGL490 Independent Study

Frequency: A
Description: Study of a particular author, topic, or work. Periodic meetings with instructor and writing a substantial paper.
Credits: 1 - 3

ENGL499 Special Topics

Frequency: C
Description: A variable-content course on topic announced in *Course Offerings Bulletin* each semester.
Credits: 3

ENGL510 Major Writers

Frequency: B
Description: Study in-depth of one writer or up to three writers related on the basis of a unifying principle.
Credits: 3

ENGL512 Historical Perspectives in Literature

Frequency: B
Description: Study of the development of important movements or concepts in literature.
Credits: 3

ENGL514 Comparative Approaches to Literature

Frequency: B
Description: Study of literary works from different time periods, nations, or cultures.
Credits: 3

ENGL516 Criticism and Theory

Frequency: B
Description: Study of theoretical approaches to literature and to the teaching of literature.
Credits: 3

ENGL554 Teaching Writing in the Secondary School

Frequency: C
Description: 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

ENGL580 Studies in Literature

Frequency: A
Description: 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

ENGL605 Independent Study

Frequency: A
Description: Independent study of a defined topic under the supervision of an instructor. No more than 6 hours of this course may be applied to degree requirements.
Credits: 3

ENGL665 Studies in English Education

Frequency: C
Description: Study of components of English with emphasis on the relationships between linguistics, criticism, composition, media, and learning theories. Focus is on the implications of these relationships for teaching English.
Credits: 3

ENGL690-691 Thesis Research I and II

Frequency: A
Description: Directed research leading to the preparation of a thesis. ENGL 690 and ENGL 691 must be taken sequentially in separate semesters.
Credits: 3

ESCI115 Introduction to Environmental Science

Frequency: B
Description: This course outlines the concepts and approaches used in the study of environmental science. The interdisciplinary nature of the science is emphasized in the discussion of topics such as energy production, consumption and flow, natural resources, pollution, and nutrient and chemical cycling. Quantitative skills are emphasized.
Credits: 3

ESCI310 Methods in Environmental Analysis

Frequency: C
Description: 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

ESCI410 Environmental Risk Assessment

Frequency: C
Description: Introduction to concepts involved in risk assessment and how they are applied to formulating a human or ecological risk assessment. Modern methods and models describing environmental risk assessment strategies will be emphasized. Topics will include fate and transport processes of pollutants in the environment, data evaluation, air and water quality, human health risk assessment, ecological risk assessment, and hazardous waste remediation. Case studies will be drawn from the contemporary literature and students will formulate a risk assessment as part of a team.
Credits: 3

ESCI440 Environmental Sciences Seminar

Frequency: B
Description: 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

ESCI490 Environmental Sciences Practicum

Frequency: A
Description: Independent research, independent study, or internship under the direction of a participating faculty advisor.
Credits: 3

FILM470 Senior Film Seminar

Frequency: B
Description: The capstone experience for the Film Studies Minor. Content varies according to instructor and student interest, but could involve work on a cooperative project such as a spring semester film festival, or take a more traditional form, with advanced readings in film or a research project. Prerequisites: 18 credits of film courses or consent of instructor.
Credits: 3

FREN115 Elementary French I

Frequency: A
Description: For students with no previous preparation. Study of fundamental speech patterns. Initial stress on listening comprehension and oral ability. Progressively greater emphasis on reading and writing skills.
Credits: 3

FREN116 Elementary French II

Frequency: A
Description: Continuation of FREN 115. Further introduction to fundamental speech patterns. For students with one semester of college-level French or equivalent. Stress on listening comprehension, oral ability, reading, and writing skills.
Prerequisite: FREN 115.
Credits: 3

FREN215 Intermediate French I

Frequency: B
Description: Continues the work required for increasing performance levels in the four skills of reading, writing, speaking, and understanding of the language. Regular language laboratory work for further reinforcement and drill.
Prerequisite: FRENCH 116 or equivalent.
Prerequisite Courses: FREN 116
Credits: 3

FREN216 Intermediate French II

Frequency: B
Description: Brings student to a level of competence in the language allowing them entry into upper level courses. Regular integrated language laboratory drills and tests. Adult reading materials, adult speaking levels.
Prerequisite: FREN 215.
Prerequisite Courses: FREN 215
Credits: 3

FREN305 French for Business I

Frequency: D
Description: Designed to reinforce student's language skills so as to permit him/her to use French meaningfully in the business world. Introduction to basic geography of France and French social institutions as they affect economic life of the nation. Study of commercial vocabulary, introduction to business correspondence and business practices.
Credits: 3

FREN306 French for Business II

Frequency: D
Description: Continues the work of FREN 305 in reinforcing the student's language skills in the context of the business world, as well as exploring the impact of various areas of French culture in the economic life of the country.
Credits: 3

FREN310 The Literature/Culture of Quebec

Frequency: D
Description: 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

FREN315 French Masterpieces

Frequency: B
Description: Readings from beginning to 17th century. Representative works in novel, drama, and poetry. Oral and written reports.
Prerequisite Courses: FREN 216
Credits: 3

FREN316 French Plays & Prose

Frequency: B
Description: Readings from 17th century through present. Representative works in novel, drama, and poetry. Oral and written reports.
Prerequisite Courses: FREN 216
Credits: 3

FREN317 French Conversation

Frequency: B
Description: Oral-aural drills, conversational exercises; practice in understanding and speaking French.
Prerequisite Courses: FREN 216
Credits: 3

FREN318 French Composition

Frequency: B
Description: Syntactical patterns of French, vocabulary building, translation, and free composition. Useful techniques of composition, problems of translation and questions of style discussed.
Prerequisite Courses: FREN 216
Credits: 3

FREN319 Survey of French Literature I

Frequency: B
Description: History of principal movements and writers, from the beginning through the 17th century, studied in light of historical and social backgrounds. Lectures in French. Student reports.
Prerequisite Courses: FREN 316
Credits: 3

FREN320 Survey of French Literature II

Frequency: B
Description: History of principal movements and writers, from the 17th century to the present, studied in light of historical and social backgrounds. Lectures in French. Student reports.
Prerequisite Courses: FREN 216
Credits: 3

FREN323 France Today

Frequency: D
Description: 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

FREN341 Le Grand Siecle

Frequency: D
Description: Detailed study of 17th century French classicism, its formation, flowering. Student reports, discussions.
Prerequisite Courses: FREN 316
Credits: 3

FREN351 The Enlightenment

Frequency: D
Description: Major works of 18th century French literature; emphasis on Montesquieu, Voltaire, Diderot, Rousseau, Marivaux, and Beaumarchais.
Prerequisite Courses: FREN 316
Credits: 3

FREN361 Contemporary French Literature

Frequency: D
Description: Novel and theater since Proust. Emphasis on post-1940 trends: existentialism, the New Novel and Theatre of the Absurd.
Prerequisite Courses: FREN 316
Credits: 3

FREN400 Special Topics in French

Frequency: D
Description: Special areas in French language, literature, or culture and civilization not covered by regular courses.
Credits: 1 - 3

FREN410 Directed Study

Frequency: D
Description: 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

FREN417 Romanticism and Realism

Frequency: D
Description: Detailed study of literary movements and major writers of 19th century.
Prerequisite Courses: FREN 316
Credits: 3

FREN421 Advanced French Pronunciation/Diction

Frequency: B
Description: Study of phonetics. Intensive drill in intonation and articulation.
Prerequisite Courses: FREN 215
FREN 216
Credits: 3

FREN422 Advanced French Conversation

Frequency: D
Description: Intensive practice in spoken French.
Prerequisite Courses: FREN 317 and FREN 421
Credits: 3

FREN423 Senior Seminar

Frequency: B
Description: Allows qualified upper-level students to supplement course offerings or probe more deeply into areas of their own interest.
Credits: 3

FREN424 Stylistics

Frequency: B
Description: To give feeling for French style, shades of meaning, and mastery of stylistic difficulties not taken up in more elementary courses. Study of classic French prose; translations and free composition.
Prerequisite Courses: FREN 318
Credits: 3

FREN500 Special Topics in French

Frequency: D
Description: Special areas in French not covered by regular courses. Permission of department.
Credits: 1 - 3

FREN510 Directed Study in French

Frequency: D
Description: 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 a substantial paper. Permission of department.
Credits: 1 - 3

GEO121 Landform Geography

Frequency: B
Description: 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

GEO150 Moons and Planets

Frequency: B
Description: 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

GEO160 Oceanography

Frequency: B
Description: Origin of the oceans, chemical and physical properties of sea water, circulation of the oceans, waves, tides, shoreline processes, marine biology, and the productivity of the ocean.
Credits: 3

GEO165 Geology I

Frequency: A
 Description: Introduction to earth materials (minerals, rocks, soils); Earth's interior structure; geological processes in operation on and beneath the surface of the earth and their effects (weathering, erosion, deformation and geologic structures, earthquakes, plate tectonics, ocean basins, running water, ground water, glaciers, winds and deserts, coasts and shorelines); techniques of dating geological events. Lectures, group discussion. High school background in earth sciences not required. Geosciences majors and minors, including Elementary Education Science/Geoscience Concentration majors, should take GEO 169 General Geology Lab as a co-requisite.
Credits: 3

GEO169 General Geology Lab

Frequency: A
 Description: 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.
 Prerequisite Courses: GEO 165
Credits: 1

GEO180 Weather and Climate

Frequency: B
 Description: Introduction to the transitory and long-term physical, chemical, and dynamic states of the atmosphere, measurement of weather factors, weather forecasting, regional climates, climatic change, weather and climate modification, and practical aspects and applications of weather and climate.
Credits: 3

GEO210 Geology II

Frequency: B
 Description: Physical history of the earth in relationship to orderly development of life throughout geological time. Lecture format.
 Prerequisite Courses: GEO 165
Credits: 3

GEO215 Minerals and Rocks

Frequency: C
 Description: Theory, geological occurrence, and identification of the common minerals and rocks. A well-written report, critiqued and returned for revision, is required. Laboratory work includes a brief introduction to the petrographic microscope, but mostly emphasizes hand specimen identification. Two-day field trip to the Thousand Islands/Laurentian lowlands of New York State, or to Bancroft, Ontario mineral localities.
 Prerequisite Course: GEO 165
Credits: 4

GEO301 Cartography

Frequency: B
 Description: 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 GIS elective.
Credits: 4

GEO311 Global Climate

Frequency: B
 Description: 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. Prerequisite: Any introductory science course.
Credits: 3

GEO329 Regional Field Geology

Frequency: C
 Description: Participants are exposed to issues of regional Historical Geology during a seven-day field trip (Summer 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. This course applies principles learned in GEO 210, but it also supplements information in GEO 345, GEO 370, and GEO 400. Students attend several orientation classes during the Spring semester in preparation for the field course. During the course, students keep notes and prepare a field diary containing information from field stops. The course grade is based on the notebook turned in upon completion of the course. Offered in years when GEO 461 is not offered.
 Prerequisite Courses: GEO 210
Credits: 2

GEO330 Geomorphology

Frequency: B
 Description: Study of geomorphic processes, relating topographic features to underlying rocks and structures and to processes of erosion, deposition, and earth movements. Lectures and laboratory supplemented by field work. Library research leads to a written term paper.
 Prerequisite Courses: GEO 165
Credits: 4

GEO331 Restless Earth

Frequency: D
 Description: This 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

GEO335 Geophysics

Frequency: C
 Description: Emphasis on how problems dealing with the shape, mass, structure, composition, and tectonic history of the Earth can be resolved using such methods of geophysics as gravity, magnetics, and seismology. Lectures, laboratory, and field work lead to several written papers.
 Prerequisite Courses: GEO 165
Credits: 4

GEO341 Stars and Galaxies

Frequency: D
 Description: Properties and evolution of stars. Description and origin of galaxies, quasars, black holes and other objects in the known universe. Lecture format. Any introductory science course is required.
Credits: 3

GEO345 Paleontology

Frequency: C
 Description: Principles of paleontology; biologic relationships of fossil organisms, particularly ancient invertebrates. Emphasizes evolutionary principles and trends. Field work supplements lecture and laboratory.
 Prerequisite Courses: GEO 210
Credits: 4

GEO370 Structural Geology

Frequency: B
 Description: Theoretical aspects of stress and strain as applied to natural rock systems; description and origin of rock structures in Earth's crust. Laboratory work stresses structural interpretation of geologic maps. Field work supplements lectures and laboratory. Students are required to complete a paper on some aspect of structural geology; part of the revision processes will include peer review.
 Prerequisite Courses: GEO 120 and GEO 165
Credits: 4

GEO400 Stratigraphy

Frequency: B
 Description: Principles of stratigraphy with examples of stratigraphic successions from various sedimentary basins around the world. Course emphasizes techniques of basin analysis and mechanisms of basin formation. The writing and peer review of abstracts are stressed in the course. In addition, students are required to submit a written report describing their results of a field stratigraphic study of the Devonian section of western New York.
 Prerequisite Courses: GEO 165 and GEO 169 and GEO 210
Credits: 4

GEO410 Directed Study

Frequency: A
 Description: Independent study and research in areas beyond formal courses. Permission of department.
Credits: 1 - 3

GEO411 Mineralogy

Frequency: C
 Description: An introduction to descriptive crystallography and to chemical, physical, determinative and descriptive mineralogy. Areas covered include crystal symmetry, classification, morphology, crystal chemistry, physical properties, geologic occurrence, significance and characteristic properties of minerals. Lectures and laboratory supplemented with one field trip.
 Prerequisite Courses: CHEM 115 and GEO 165
Credits: 4

GEO421 Petrology

Frequency: C
 Description: Lecture emphasis on problems and hypotheses involved with the origin of rocks. Laboratory stresses use of the petrographic microscope for identification, description, and analysis of rock materials. A well-written research paper, which may include computer, lab, and library research, is required. Course includes a weekend trip to study classic rock terrains in the Adirondack Mountains.
 Prerequisite Courses: GEO 411
Credits: 4

GEO431 Geochemistry

Frequency: C
 Description: Scope, literature, and history of geochemistry. Principles and applications of geochemistry, including the elements; isotope geology; thermodynamics; water chemistry; crystal chemistry; organic geochemistry; geochemistry of sedimentary, igneous and metamorphic rocks. Lab work emphasizes instrumental methods of analysis.
 Prerequisite Courses: GEO 411
Credits: 4

GEO445 Geosciences Internship

Frequency: A
Description: Approved work-training experience with state or federal agency, museum, or industrial firm. Permission of department.
Credits: 1 - 15

GEO450 Hydrogeology

Frequency: C
Description: Hydrologic problems are analyzed by organizing information into a water budget and then quantifying the variables in the water budget equation. Common hydrologic variables include precipitation, evaporation, transpiration, stream flow, infiltration and groundwater. Groundwater is emphasized. Lectures supplemented by field work, lab measurements, and computer modeling.
Prerequisite Courses: GEO 165 and GEO 330
Credits: 4

GEO455 Laboratory Supervision in Geosciences

Frequency: A
Description: 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

GEO459 Seminar in Geosciences

Frequency: A
Description: Individual student presentation of two 20-minute seminars pertaining to the geology and geologic evolution of different provinces of the North American continent. Students are required to prepare an abstract and bibliography of their presentations. Permission of department.
Credits: 1

GEO461 Field Geology

Frequency: C
Description: Two-week geologic mapping course immediately following end of Spring semester (Summer I). Held at Catskill, NY.
Prerequisite Courses: GEO 370
Credits: 3

GEO471 Senior Thesis

Frequency: A
Description: 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

GEO480-489 Special Topics in Geosciences

Frequency: A
Description: Special area of geosciences not covered by regular courses.
Credits: 1 - 4

GEO580-589 Special Topics in Advanced Geosciences

Frequency: D
Description: Special areas of problems in advanced geosciences not covered by regular graduate courses.
Credits: 3

GEO590 Independent Study

Frequency: D
Description: Independent study of topics not covered in regular graduate course offerings and pertinent to student's program of study or future career.
Credits: 3

GEO610 and 615 Independent Research

Frequency: D
Description: Independent research and study in current geoscientific problems based on laboratory and field research or current literature.
Credits: 3

GEO690 Thesis Research

Frequency: D
Description: Thesis research projects in an area of the Geosciences.
Credits: 1 - 3

GERM115 Elementary German I

Frequency: A
Description: For students with no previous preparation. Study of fundamental speech patterns. Initial stress on listening comprehension and oral ability. Progressively greater emphasis on reading and writing skills.
Credits: 3

GERM116 Elementary German II

Frequency: A
Description: Continuation of GERM 115. Further introduction to fundamental speech patterns of spoken German. Increasing stress on listening comprehension, oral ability, reading and writing skills.
Credits: 3

GERM215 Intermediate German I

Frequency: A
Description: Continuation of oral and aural training; broadens reading and listening experience.
Prerequisite Courses: GERM 116
Credits: 3

GERM216 Intermediate German II

Frequency: A
Description: Increases student's ability to read, write, understand, and speak German through written analysis and discussion of German literary and expository works.
Prerequisite Courses: GERM 215
Credits: 3

GERM317 German Conversation

Frequency: D
Description: Conversational exercises: reports, discussions. Readings from newspapers and cultural texts stressing contemporary colloquial German. Emphasis on idioms.
Prerequisite Courses: GERM 215
Credits: 3

GERM318 German Composition

Frequency: D
Description: Practice in writing colloquial and formal German. Emphasis on idioms; style and structure in dialogue, descriptive and critical writing.
Prerequisite Courses: GERM 215
Credits: 3

GERM323 Germany Since 1918

Frequency: D
Description: Cultural aspects of the Weimar Republic, the Third Reich, and contemporary Germany. Guest lecturers, readings, and films. In English.
Credits: 3

GERM387 German Songs

Frequency: D
Description: Literary background and analysis of selected *Lieder*. In English.
Co-requisite Courses: MUS 387
Credits: 1

GERM400 Special Topics in German

Frequency: D
Description: Special areas in German language, literature, or culture and civilization not covered by regular courses.
Credits: 1 - 3

GERM410 Directed Study

Frequency: D
Description: 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

GIS201 Geographic Information Systems I

Frequency: B
Description: 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

GIS301 Geographic Information Systems II

Frequency: B
Description: The expanded theory, components and applications of Geographic Information Systems. This course builds on topics presented in GIS 201 Geographic Information Systems I, and introduces students to additional commercially available Geographic Information Systems software.
Prerequisite Courses: GIS 201
Credits: 3

GIS350 Remote Sensing/Image Processing

Frequency: C
Description: Study of the conditions and/or state of remotely sensed objects and scenes. Application to many real world problems including harvest prediction, containment migration, forest mapping, resource delivery, and extraterrestrial exploration. Image processing, pattern recognition, and geographic information systems (GIS).
Prerequisite Courses: CSIT 121
Credits: 3

GIS360 Mapping the Social World

Frequency: C
Description: 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.
Prerequisite Courses: GIS 301
Credits: 3

GIS370 Earth Systems Science

Frequency: C
Description: The synthesis and development of a holistic model by which disciplinary processes and actions lead to synergistic interdisciplinary components. Topics include, earth system history; remote sensing; biosphere; atmosphere; economics; sustainability and natural resources; earth energy budget; El Nino; hydrological cycle; biogeochemistry; human environmental interactions; health and climate changes; soil processes; land use/land cover changes.
Prerequisite Courses: GIS 201
Credits: 3

GIS401 Special Topics in GIS

Frequency: D
Description: In-depth examination of GIS topics introduced in GIS 201 or GIS 301. May be taken more than once as topics vary.
Prerequisite Courses: GIS 301
Credits: 3

GIS450 Directed Study

Frequency: A
Description: Participation in GIS-related faculty research.
Credits: 3

GIS460 Teaching Assistant

Frequency: A
Description: Students have the opportunity to assist the instructor in the laboratory components of GIS 201 and GIS 301.
Credits: 1 - 3

GIS480 Independent Study

Frequency: A
Description: 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

GIS490 Internship

Frequency: A
Description: Provides opportunities for testing concepts and applications presented in the classroom. Interns have found opportunities in both the public and private sector.
Credits: 3 - 6

HIST101 World History I

Frequency: A
Description: Survey of the human experience from the Neolithic Revolution to the linking of the world (3500 BCE – 1500 CE).
Credits: 3

HIST102 World History II

Frequency: A
Description: Survey of the human experience from the linking of the world to the present (1500 CE – 2000 CE).
Credits: 3

HIST105 United States History I

Frequency: A
Description: Survey from colonial times to 1877 of political, economic, social, and cultural development of America, including examples from New York State.
Credits: 3

HIST106 United States History II

Frequency: A
Description: Survey from 1877 of political, economic, social, and cultural development of America, including examples from New York State.
Credits: 3

HIST107-114 Themes from American History

Frequency: D
Description: Exploration in depth of single themes from the history of America. Specific themes vary from semester to semester. Course may have co-requisite.
Credits: 1 - 3

HIST115 Western Civilization I

Frequency: A
Description: A survey of civilization in the West from ancient times to the 17th century.
Credits: 3

HIST116 Western Civilization II

Frequency: A
Description: A survey of civilization in the West from the 17th century to the present.
Credits: 3

HIST117 History Through Art

Frequency: B
Description: This course traces the evolution of western civilization from its Greco-Roman roots to the end of the Renaissance. Illustrations from the plastic arts are employed to interpret the leading characteristics and the lasting achievement of those societies and their institutions that are discussed.
Credits: 3

HIST118 Themes from Western Civilization

Frequency: D
Description: Exploration in depth of single themes from history of the Western world and its antecedent civilizations. Specific themes, which vary from semester to semester.
Credits: 1 - 3

HIST119-130 Themes from Western Civilization

Frequency: D
Description: Exploration in depth of single themes from history of the Western world and its antecedent civilizations. Specific themes, which vary from semester to semester.
Credits: 1 - 3

HIST201 Doing History

Frequency: A
Description: Intensive writing offering. Format varies depending on instructor, but all sections include intensive instruction in grammar, syntax, paper organization, research, and other aspects of literacy. About 20-30 pages of required written work each semester. History and Social Studies majors should take the course in the sophomore year. Prerequisite: Sophomore standing.
Credits: 3

HIST202 Applied History

Frequency: D
Description: Introduces students to applied historical research. Focus varies with semesters, e.g., creation of historical documentaries; local history archives and research.
Credits: 3

HIST203 History Through Films

Frequency: D
Description: Examination of life, values, and beliefs of various cultures, countries, and epochs as exhibited in films. Film images compared with historical writing. Course may have co-requisite.
Credits: 1 - 3

HIST205 History and Technology Workshop

Frequency: B
Description: Introduction to the Windows environment, use of search engines, critical analysis of web resources. Intended primarily for History and Social Studies majors.
Credits: 1

HIST212 History of the Holocaust

Frequency: B
Description: 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. This introductory, multimedia course surveys the Nazi programs of mass murder, explores their historical roots, and their consequences for our world today.
Credits: 3

HIST220 Introduction to Ethnicity/Race

Frequency: B
Description: Interdisciplinary approach to race and ethnicity in the United States and other contemporary multiethnic/multiracial societies.
Credits: 3

HIST252 Communication: Yesterday/Today

Frequency: B
Description: Evolution of Western communication and media from the printing press to telecommunications, including the newspapers, photography, broadcasting, and cable and satellite transmissions.
Credits: 3

HIST261 Islamic Civilization

Frequency: C
Description: The political, religious and social development of the Islamic Empire from pre-Islamic to Napoleonic era.
Credits: 3

HIST264 East Asian Civilizations

Frequency: B
Description: Introduction to the history of East Asia from the Neolithic age to the present, with emphasis on the modern period. Domestic economic and political developments in China, Japan, Korea and Vietnam, regional interaction, contact with the West, and development of the Pacific rim economic zone, are among the topics covered.
Credits: 3

HIST265 Premodern East Asia

Frequency: D
Description: 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

HIST266 Modern East Asia

Frequency: D
Description: 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

HIST268 History of South Asia

Frequency: B
Description: Survey of the subcontinent from the Indus civilization to the present (3000 BCE – 2000 CE).
Credits: 3

HIST282 Pre-Columbian and Colonial Latin America

Frequency: B
Description: An introductory survey of the history of early Latin America, from antiquity to the European conquest to the wars for independence in the early nineteenth century. Special attention is given to Native American and African influences in the shaping of cultural forms and political economy.
Credit: 3

HIST285 Indigenous America: Aztecs/Neighbors

Frequency: B
Description: Pre-Columbian America from early hunting and gathering bands, through farming villages and chiefdoms, to the great urban states and civilizations of the Mayas, Aztecs, Incas and their neighbors. Concludes with conquest culture, i.e., the history of European-Indian relations since 1492.
Credits: 3

HIST299 Experimental Course in History

Frequency: D
Description: Varies in content from semester to semester. Consult college *Course Offerings Bulletin* and department notices for specific subject covered each semester.
Credits: 1 - 3

HIST301 Greek World: Classical Greece

Frequency: C

Description: Evolution of Greek society from Minoan and Mycenaean culture to empire of Alexander the Great and his successors. Includes world of Homer, dark ages, the tyrants, colonial period, age of Pericles, rise of Macedonia, and the Hellenistic age. The legacy of Greece.

Prerequisite Courses: HIST 101 and HIST 102 or HIST 115
Credits: 3

HIST302 Republican/Imperial Rome

Frequency: C

Description: Legends and stories of Rome's foundation, early republic, absorption of Italy, Punic wars, conquest of Mediterranean world, conflicts of late republic. Augustus and the empire, the Pax Romana, time of troubles, decline and fall of the empire. The legacy of Rome.

Prerequisite Courses: HIST 101 and HIST 102 or HIST 115
Credits: 3

HIST303 Medieval History I

Frequency: C

Description: History from legalization of Christianity by Constantine to Renaissance of 12th century. Includes Germanic invasions, Charlemagne, feudalism, the Crusades, birth of Europe, and first clashes of church and state.

Prerequisite Courses: HIST 101 and HIST 102 or HIST 115
Credits: 3

HIST304 Medieval History II

Frequency: C

Description: History from high Middle Ages to c. 1500. Includes decline of feudalism and serfdom, great disputes on religion and society, world of new cities and trade, the new national spirit, and end of medieval unity.

Prerequisite Courses: HIST 101 and HIST 102 or HIST 115
Credits: 3

HIST305 The Renaissance

Frequency: B

Description: General study of European development during Renaissance. Major emphasis on social and cultural development. Slides, tapes, and films utilized.

Prerequisite Courses: HIST 101 and HIST 102 or HIST 115
Credits: 3

HIST306 The Age of Reformation

Frequency: B

Description: Origins of Protestant and Catholic reformations will contribute to an understanding of the persistence of conflict. Intellectual issues of the age presented in light of social, cultural, economic and political conditions.

Prerequisite Courses: HIST 101 and HIST 102 or HIST 115
Credits: 3

HIST309 The Modernization of Europe

Frequency: B

Description: The major social, political, economic and cultural trends that have laid the foundations for our contemporary world: nationalism; scientific, technological and industrial revolutions; modern ideologies, especially Marxism; modern militarism; imperialism; revolutions of 1789, 1830, 1848, 1905; modernization of society, life styles and values.

Prerequisite Courses: HIST 102 or HIST 116
Credits: 3

HIST311 Europe in the Modern World

Frequency: B

Description: The major transition of European society from World War I, when Europe ruled the world, to its present status, newly liberated from the super powers of the Cold War, perhaps to be united as a new super power. Special attention to international tensions, fascism, and the Nazi and Soviet experiences.

Prerequisite Courses: HIST 102 or HIST 116
Credits: 3

HIST312 Modern Germany

Frequency: C

Description: Germany from its modern unification in 1870 to its recent reunification. Emphasis will vary: nationalism and the impact of industrialization, imperialism; World War I and the revolution; problems of Weimar Republic; the Nazi experience, World War II, Holocaust; Cold War divisions, role in European unification and end of Cold War.

Prerequisite Courses: HIST 102 or HIST 116
Credits: 3

HIST315 The Formation of France

Frequency: B

Description: The social, political, economic and cultural history of France from 1200 to 1789. Emphasis on the rise of the monarchy, religious dissension, popular culture, the age of Louis XIV, the growth of Enlightenment thought and the origins of the French Revolution.

Prerequisite Courses: HIST 101 and HIST 102 or HIST 115
Credits: 3

HIST316 Twentieth-Century Russia

Frequency: D

Description: 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

HIST317 Modern France

Frequency: D

Description: The leading social, economic and political events since the revolution of 1789. The major theme is the transformation of a rural and agrarian society in conflict with an urban nucleus of heavy industry into a modern technological community in which the schisms of 1789 are no longer relevant.

Prerequisite Courses: HIST 116
Credits: 3

HIST322 French Revolution and Napoleon

Frequency: B

Description: A major turning point in the ideological, social, and constitutional evolution of the modern West. Far-reaching change during a decade of revolutionary turmoil, followed by the dazzling career of Napoleon, who introduced the ideas and institutions of the Revolution to Europe and at the same time provided the substance of modern tyranny.

Prerequisite Courses: HIST 101 and HIST 102 or HIST 116
Credits: 3

HIST323 The Victorian Epoch

Frequency: D

Description: The transformation of Great Britain from an agrarian country governed by landed patricians to a nation directed by a commercial middle-class. The rise of democracy, an industrial economy, an urban society, public opinion, and a populist monarchy.

Prerequisite Courses: HIST 101 and HIST 102 or HIST 116
Credits: 3

HIST325 Colonial America

Frequency: C

Description: American history from European settlement through the American Revolution. Focus on the lives and perceptions of ordinary men and women.

Prerequisite Courses: HIST 105
Credits: 3

HIST327 Antebellum U.S., 1820-1861

Frequency: C

Description: Territorial expansion and resistance, the rise of the factory system and labor unions, political and cultural democratization, social reform, immigration and nativism, religious revivalism, slavery, and the causes of the Civil War.

Prerequisite Courses: HIST 105
Credits: 3

HIST328 Civil War Era

Frequency: C

Description: The roots of the Civil War in antebellum northern and southern societies, war-time military, political, and social developments in the North and South, the Reconstruction experiment, the retreat from Reconstruction and the legacy of the war in the immediate post-war era and today.

Prerequisite Courses: HIST 105
Credits: 3

HIST330 Industrial America, 1890-1920

Frequency: C

Description: The transformation of the U.S. from a rural/agrarian to an urban/industrial society. Topics include the process of industrialization and social upheavals that resulted; the development of the New South and New West; the emergence of the U.S. as a world power; the challenge of ethnic/cultural diversification; and the social and political reform movements of the era.

Prerequisite Courses: HIST 106
Credits: 3

HIST331 The Inter-War Years, 1919-1945

Frequency: C

Description: The domestic scene in America from end of World War I to end of World War II, including discussion of business dominated 1920s, economic crisis and the New Deal of the 1930s, second World War, and other major trends, events, and figures.

Prerequisite Courses: HIST 106
Credits: 3

HIST332 U.S. HY: 1945-Present

Frequency: B

Description: The major cultural, economic, and political developments since World War II, including the Cold War, 1960s counterculture, Civil Rights movement, the Reagan era.

Prerequisite Courses: HIST 106
Credits: 3

HIST333 African-American History to 1877

Frequency: A

Description: 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 people in the colonies and the United States from their African origins through Reconstruction.

Credits: 3

HIST334 African-American History Since 1877

Frequency: A
Description: Survey of the historical forces, within the African-American community and elsewhere, which have shaped the African-American experience. The course includes the failures of Reconstruction, Jim Crow, issues of accommodation and separatism, the Harlem renaissance, the African-American experience in wartime, the civil rights movement, and current problems in race relations.
Credits: 3

HIST335 American Women

Frequency: D
Description: A survey of women's history from colonial times to present with emphasis on the changing status and definition of women's roles, race and ethnicity, and women's writings.
Prerequisite Courses: HIST 106
Credits: 3

HIST338 19th Century American Culture

Frequency: C
Description: Examines how social, political, and economic changes have affected American culture and Americans' lives. Topics include consumption patterns; recreational activities; architectural styles; high and popular culture; holidays; family life; and social and cultural rituals.
Prerequisite Courses: HIST 105
Credits: 3

HIST339 20th Century American Culture

Frequency: C
Description: Examines how social, political, and economic changes have affected American culture and Americans' lives. Topics include consumption patterns; recreational activities; architectural styles; high and popular culture; holidays; family life; and social and cultural rituals.
Prerequisite Courses: HIST 106
Credits: 3

HIST340 The Westward Movement

Frequency: D
Description: The importance of the frontier and the expanding West to the development of the U.S., its history, institutions, beliefs, values, and national character. The West as myth and reality, from colonial times to issues confronting the 20th century trans-Mississippi West.
Prerequisite Courses: HIST 105 or HIST 106
Credits: 3

HIST342 The American Century

Frequency: C
Description: The major issues in American foreign policy in the 20th century. The focus is on America's economic ascendancy and the effect of this prominence on 20th century world order.
Prerequisite Courses: HIST 106
Credits: 3

HIST344 African-American Social Thought

Frequency: B
Description: Critical reading of primary texts authored by African-American social thinkers beginning in the 19th century up to the present day. Special emphasis on placing these writings within the scholarly debates about the paradigmatic theories of race relations - integrationism, accommodationism, and the separatism/nationalism.
Prerequisite Courses: HIST 333 or HIST 334
Credits: 3

HIST347 U.S. Immigration

Frequency: C
Description: Immigration to the U.S., with an emphasis on comparing the experiences of European, African, Latin American, and Asian immigrants. Topics will include immigrants' lives, work, and communities; assimilation and cultural persistence; and the development of U.S. immigration policy.
Prerequisite Courses: HIST 105 or HIST 106
Credits: 3

HIST349 U.S. Military History

Frequency: D
Description: The development of American military strategy and tactics. Focus on Civil War, World War I, and World War II.
Credits: 3

HIST350 Vietnam/National Security State

Frequency: C
Description: American foreign policy from F.D.R. to Nixon and its effects on Vietnam, American domestic policy and the growth of the National Security State.
Prerequisite Courses: HIST 106
Credits: 3

HIST351 Defining America

Frequency: D
Description: Examines how private citizens, writers, politicians, business, the media and popular culture have defined America since 1776, how these definitions have changed over time, and the impact of race, ethnicity, gender, and class on these definitions.
Prerequisite Courses: HIST 106
Credits: 3

HIST353 U.S. Consumer Culture

Frequency: B
Description: Examines the historical development of a consumer culture and its effects on American culture. Topics include the roots of consumer culture; the industrial revolution; the development of advertising; and the impact of consumer culture on concepts of gender, race, ethnicity, age and class, and on cultural values.
Prerequisite Courses: HIST 106
Credits: 3

HIST355 American Religious History

Frequency: D
Description: American religion from the Puritans to the present as set in the larger social, economic and cultural context.
Prerequisite Courses: HIST 105 or HIST 106
Credits: 3

HIST356 The American Indian

Frequency: B
Description: History of the American Indian, with special focus on the American Indian nations' reactions to European invasion and to changing government policies toward them.
Credits: 3

HIST358 20th Century American Indian Issues

Frequency: C
Description: American Indian peoples in the twentieth century. Emphasis on federal policy development, the growth of political pan-Indian movements, the Indian image in popular culture, and current issues raised in the writings of contemporary authors representing a diversity of Indian nations.
Prerequisite Courses: HIST 356
Credits: 3

HIST361 Modern Middle East

Frequency: C
Description: History of the Modern Middle East (18th-20th century) with emphasis on the social, political and economic repercussions of the Western presence in the region.
Prerequisite Courses: HIST 261
Credits: 3

HIST366 Late Imperial China

Frequency: B
Description: From the late Ming dynasty to the fall of the Manchu Qing dynasty in 1912. Covers the rise of the Manchus, political and cultural developments in the Qing empire, and the Western impact in the 19th century.
Prerequisite Courses: HIST 264 and HIST 265 or HIST 266
Credits: 3

HIST367 20th Century China

Frequency: B
Description: From the fall of the Manchus (1912) to the present. Covers political and cultural developments, including nationalist and Communist revolutions, the Anti-Japanese War, and the People's Republic through the post-Mao reforms.
Prerequisite Courses: HIST 264 and HIST 265 or HIST 266
Credits: 3

HIST368 Modern Japan

Frequency: B
Description: Japanese history from the founding of the Tokugawa shogunate to the present. Covers political and cultural developments during the shogunate, the Meiji Restoration, domestic political and cultural developments, and Japan's interactions with the West and other East Asian nations in the 19th and 20th centuries.
Prerequisite Courses: HIST 264 and HIST 265 or HIST 266
Credits: 3

HIST375 History of Authority

Frequency: C
Description: 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

HIST376 Film and American Culture

Frequency: B
Description: 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

HIST378 Canada and the Canadians

Frequency: C
Description: Contemporary Canada: history, geography, population, parliamentary government, economic structure, free trade, Quebec nationalism and the British legacy.
Credits: 3

HIST380 History of Mexico I

Frequency: C
Description: First semester, geography and political, economic, and social development from pre-Columbian times to beginnings of independence in 1800.
Credits: 3

HIST381 History of Mexico II

Frequency: C
Description: Emphasis on social and economic history of Mexico's Revolution, 1910-1940. Mexican-U.S. relations stressed along with theme of revolutionary nationalism in contemporary Mexico.
Credits: 3

HIST383 History of Latin America II

Frequency: C
Description: Political, economic, and social development of Latin America; national period.
Credits: 3

HIST385 International Communication

Frequency: B

Description: An examination of the media in a global context.

Attention is focused on public and private management, regulatory mandates, and programming and publishing philosophy in the global village. Topics include cultural exchange and interaction between the media and consumers.

*Credits: 3***HIST386 Global Studies**

Frequency: C

Description: 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***HIST387 Comparative Slave Societies**

Frequency: C

Description: The development, effects, and elimination of slavery in different societies and in various eras. Includes historians' debates on slavery and its impact.

*Credits: 3***HIST388 Origins of Civil Liberty**

Frequency: D

Description: Medieval origins of modern constitutional rights; the historical origins and development of modern social rights and institutions, e.g., jury trial, habeas corpus, due process, voting.

Prerequisite Courses: HIST 101 and HIST 102 or HIST 115

*Credits: 3***HIST389 Religion in Western Tradition**

Frequency: C

Description: Historical development of three great monotheistic faiths: Judaism, Christianity, Islam. Comparison of these creeds with earlier religions. The development of monotheistic faiths and their divergent branches and heresies into modern times. Changing religious ideals, values and practices over time.

Prerequisite Courses: HIST 101 and HIST 102 or HIST 115 or HIST 116

*Credits: 3***HIST390 Interpreting the Global Past**

Frequency: D

Description: 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***HIST399 Experimental Course in History**

Frequency: D

Description: Varies in content from semester to semester. Consult college *Course Offerings Bulletin* and department notices for specific subject covered each semester.*Credits: 1 - 3***HIST400 Directed Study**

Frequency: A

Description: 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***HIST401-402 Topics in Ancient History**

Frequency: D

Description: Subject matter and credit hours will vary by semester and by instructor.

*Credits: 1 - 3***HIST403-404 Topics in Medieval History**

Frequency: D

Description: Subject matter and credit hours will vary by semester and by instructor.

*Credits: 1 - 3***HIST405-408 Topics in Early Modern Europe**

Frequency: D

Description: Subject matter and credit hours will vary by semester and by instructor.

*Credits: 1 - 3***HIST409-424 Topics in Modern/Contemporary Europe**

Frequency: D

Description: Subject matter and credit hours will vary by semester and by instructor.

*Credits: 1 - 3***HIST425-426 Topics in Early American History**

Frequency: D

Description: Subject matter and credit hours will vary by semester and by instructor.

*Credits: 1 - 3***HIST427-429 Topics in 19th Century U.S. History**

Frequency: D

Description: Subject matter and credit hours will vary by semester and by instructor.

*Credits: 1 - 3***HIST430-432 Topics in 20th Century U.S. History**

Frequency: D

Description: Subject matter and credit hours will vary by semester and by instructor.

*Credits: 1 - 3***HIST460-469 Topics in Asian History**

Frequency: D

Description: Subject matter and credit hours will vary by semester and by instructor.

*Credits: 1 - 3***HIST480-484 Topics in Latin American History**

Frequency: D

Description: Subject matter and credit hours will vary by semester and by instructor.

*Credits: 1 - 3***HIST490 Public History Internship**

Frequency: A

Description: 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***HIST499 Research Seminar**

Frequency: B

Description: Historiography, methodology of research through preparation of research paper requiring use of primary sources. By invitation only.

Prerequisite Courses: HIST 201

*Credits: 3***HIST523 Readings in World History**

Frequency: B

Description: Themes and issues in recent scholarship on world history. Graduate standing.

*Credits: 4***HLTH115 First Aid Skills and Knowledge**

Frequency: A

Description: Prepares student, through knowledge and skills, to meet the needs of most emergency situations when first aid care is required and medical attention is not readily available. Personal-safety and accident-prevention information incorporated to acquaint individuals with causes of many accidents, so that action may be taken to eliminate or minimize such causes. This course meets the coaching first aid requirements of the New York State Coaching Mandate.

*Credits: 2***HLTH215 Personal and Community Health**

Frequency: B

Description: 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***HLTH300 Education in Drugs/Alcohol/Tobacco**

Frequency: A

Description: Knowledge and methods in dealing 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***HLTH302 Stress Management**

Frequency: A

Description: 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***HLTH303 Fitness and Nutrition**

Frequency: B

Description: The development of knowledge and skills necessary to become personally responsible for fitness and nutrition. Contents will be used as a basis for assessment of personal fitness and nutritional status and necessary personal behavior modification. Investigation of basic fitness and nutritional facts, energy balance, obesity, dieting, nutrition as related to disease, for personal goal setting.

*Credits: 2***HLTH343 Drugs and Behavior**

Frequency: A

Description: 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***HLTH386 Wellness and Health Promotion**

Frequency: A

Description: 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

HLTH400 Internship

Frequency: D
 Description: Work under supervision in a community setting. Students are expected to complete 40 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

HLTH499 Independent Study

Frequency: A
 Description: 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

HONR201-209 Honors Seminar

Frequency: A
 Topics vary from semester to semester.
Credits: 3

HONR300 Honors Colloquium

Frequency: A
 Description: A discussion course for students in the Honors Program. Subjects of discussion range from current events to campus activities to metaphysical speculations.
Credits: 1

HONR400-401 Honors Thesis

Frequency: D
 Description: Directed research leading to the preparation of a thesis.
Credits: 3

HSA300 Health Services Management

Frequency: B
 Description: The course is designed to introduce students to the application of organizational theory and research, and principles of administration in the management of a variety of health services organizations. Various aspects of management, including institutional planning and policy development, financial management and personnel administration are examined for hospitals, health maintenance organizations, skilled nursing and health facilities, and various community-based programs.
Credits: 3

HSA310 Health Law

Frequency: B
 Description: This course provides an introduction to the major legal issues and principles in the health care field and in administration of health care services, including federal and state legislation and regulations on private and public insurance programs, and on operation of hospitals, and other health care facilities. Other issues examined include medical malpractice, patients rights, confidentiality, living wills, and patient designation of a representative or proxy to act on their behalf.
Credits: 3

HSA350 and 390 Special Topics

Frequency: D
 Description: Special topics in Health Services Administration not covered in detail by regular courses and not offered regularly.
Credits: 3

HSA377 Health Administration Intern

Frequency: B
 Description: Internships are designed to allow students to gain practical work experience and knowledge in health administration in an affiliated health facility. Six hours of academic credit are awarded for 240 hours of supervised work experience, including a rotation through major departments, and successful completion of one or more major projects. Students develop a Learning Contract approved by both the college and institution which specifies educational objectives, job requirements, and work schedules. Evaluation of student performance is based on reports from the on-site supervisor, daily logs, written material from the student's project(s) and a final paper. Permission of instructor.
Credits: 1 - 15

INDS101 Colloquium

Frequency: D
 Description: Explores the basic concepts and views of International Studies as well as offering an introduction to each area of specialization.
Credits: 1

INDS105 Introduction to American Indian Studies

Frequency: D
 Description: Introduces students to the multi-disciplinary nature of American Indian Studies. The course is divided into 3 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

INDS201 Science for Elementary Educators

Frequency: D
 Description: Introduction to topics in biology, chemistry, earth science, and physics with emphasis on real life applications. Much of this course focuses on lab experimentation and the design of activities for use in the elementary education classroom.
Credits: 3

INDS220 Introduction to Ethnicity/Race

Frequency: B
 Description: Interdisciplinary beginning course on race and ethnicity in the United States and other contemporary multiethnic/multiracial societies.
Credits: 3

INDS241 Introduction to Latino Literature and Culture

Frequency: B
 Description: 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

INDS305 Latina Literature & Cultural Studies

Frequency: B
 Description: This course examines contemporary Latina literary productions in the context of representations of Latinas in mainstream U.S. society. Course materials will include poems, short stories, novels and essays, as well as a look at mass media, performance, and film including at least one documentary. Focus is on U.S. Latinas, women of Hispanic descent living and writing in the United States, including work by and about Chicanas, Puerto Ricans, Dominican-Americans, and Cuban-Americans. The links between these communities, the relationship of Latinas to other U.S. women of color, and the evolving transnational focus of recent work by U.S. Latinas will be examined.
Credits: 3

INDS400 Independent Study

Frequency: D
 Description: Intensive individual study of some aspect of multicultural studies involving a paper or project in support of the findings. Results to be communicated to faculty and students in a public forum.
Credits: 3

INDS401 International Studies: Senior Colloquium

Frequency: D
 Description: Approved and supervised work training experience in a multiethnic organization. Results to be communicated to faculty and students in a public forum.
Credits: 1

INDS480 Independent Study

Frequency: A
 Description: Open only to Interdisciplinary Studies majors. Proposed independent studies must be described in the student's approved Interdisciplinary Studies proposal.
Credits: 1 - 6

INDS489 Special Topics

Frequency: B
 Description: Topics of special or current interest offered periodically and taught from an interdisciplinary perspective.
Credits: 1 - 3

INDS490 Internship

Frequency: A
 Description: 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

INDS589 Special Topics

Frequency: B
 Description: Topics of special or current interest offered periodically and taught from an interdisciplinary perspective.
Credits: 1 - 3

INDS590 Independent Study

Frequency: A
 Description: Independent study of interdisciplinary topics not covered in regular graduate course offerings and pertinent to the student's program of study.
Credits: 3

INDS690-691 Research

Frequency: A
 Description:
Credits: 3

INED400 Study Abroad

Frequency: A
 Description: Opportunities for study abroad as arranged through the Office of International Education.
Credits: 3 - 16

INED450 International Internship

Frequency: A
 Description: Opportunities for international internships as arranged through the Office of International Education.
Credits: 1 - 15

ITAL115 Elementary Italian I

Frequency: A
 Description: For students with no previous preparation. Study of fundamental speech patterns. Initial stress on listening comprehension and oral ability. Progressively greater emphasis on reading and writing skills.
Credits: 3

ITAL116 Elementary Italian II

Frequency: A
 Description: Continuation of ITAL 115. Further introduction to fundamental speech patterns. For students with one semester of college-level Italian or equivalent. Stress on listening comprehension, oral ability, reading and writing skills.
 Prerequisite: ITAL 115.
 Prerequisite Courses: ITAL 115
Credits: 3

JOUR270 Introduction to Print and Broadcast Journalism

Frequency: A
 Description: The basic course in journalism focuses on how the print media function in our society and provides practice in writing for such media. Major ethical and legal issues are introduced and discussed.
Credits: 3

JOUR366 Opinion Writing

Frequency: B
 Description: Introduction to techniques appropriate to presentation of opinion and critical commentary in print and electronic media: editorials, political columns, critical reviews of books, films, theatre, art, etc.
 Prerequisite Courses: JOUR 270
Credits: 3

JOUR370 Reporting & Newspaper Writing I

Frequency: B
 Description: Emphasizes reporting skills and gathering of information for breaking/hard/spot news stories through interviews and public record research. Small group editing and discussion of legal and ethical issues which bear on print and electronic media.
 Prerequisites: JOUR 270 or consent of instructor.
 Prerequisite Courses: JOUR 270
Credits: 3

JOUR371 Reporting & Newspaper Writing II

Frequency: C
 Description: Reviews and expands reporting/writing skills; in-depth interviews and more extensive search. Peer editing groups, rewriting, and a continued examination of ethical and legal questions and the role of print and electronic media in society.
 Prerequisite: JOUR 370 or consent of instructor.
 Prerequisite Courses: JOUR 370
Credits: 3

JOUR372 Reporting & Newswriting III

Frequency: C
 Description: Students will learn about the special problems and skills involved in reporting within the television and radio milieus. They will study the organization and process that is typical of a variety of market sizes; develop their own approaches to the special ethical and legal problems presented by these media; understand and learn how to cope with the special team environment and the technological preconditions presented, especially by video. They will discuss ways of preserving journalistic integrity within the pressures of deadlines, corporate profitability and a complex process and technological apparatus. They will study the special news gathering techniques involved with vocalization, pictorial representation and the presence of intrusive technological tools, and will study the writing techniques of voicing to the ear and writing to image.
 Prerequisite Courses: JOUR 371
Credits: 3

JOUR465 Internship

Frequency: A
 Description: Journalism internships. Interns work four hours per week for 1 credit hour. Permission of instructor.
Credits: 1 - 3

JOUR470-471 Journalism Seminar

Frequency: A
 Description: For editors and assistant editors on "The Leader." Students enrolled must be approved as assistant editors by an appropriate section editor; editors must apply for and be elected to the position by the editorial board. Students not only fulfill all duties of their positions but also complete a project of lasting value to them and the newspaper (decided on in consultation with advisor and editorial board).
 Prerequisite Courses: JOUR 371
Credits: 3

LANG322 French Civilization/Culture

Frequency: B
 Description: 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

LANG323 Germany Since 1918

Frequency: D
 Description: Cultural aspects of the Weimar Republic, the Third Reich, and contemporary Germany. Guest lecturers, readings, and films in English.
Credits: 3

LANG327 Sex/Magic in Latin American Literature

Frequency: D
 Description: (Spanish majors will read the Spanish originals). A study of 20th century Spanish-American thought and culture through reading and discussing works of fiction and popular song lyrics, and interviews with writers. Some of the central issues will involve attitudes toward sex and sexual roles as well as the peculiarly Latin American brand of literature known as Magical Realism.
Credits: 3

LANG328 Don Juan and Don Quixote

Frequency: D
 Description: (Spanish majors will work with original texts). A defining characteristic of Spanish literature is the creation of supremely powerful personalities. The purpose of the course is to introduce the student to the development of two of these archetypes: Don Juan and Don Quixote. Discussion of the chronological development of these figures from the earliest representation to the present day, and discussion of those aspects which mark the works to be studied as products of particular cultures at specific historical moments.
Credits: 3

LANG371 Canadian Writers

Frequency: D
 Description: 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

LANG378 Canada Today

Frequency: B
 Description: A look at the history, politics, culture, and geography of Canada and an analysis of contemporary issues affecting Canada and its neighbors.
Credits: 3

LANG385 German Film

Frequency: D
Description: This course will address contemporary civilization in Germany in that it will examine its artistic expression in drama and film. The works of major directors such as Fritz Lang, Leni Riefenstahl, Werner Herzog, and Wim Wenders will be examined. Short examples of Fassbinder, Schlöndorff and vonTrotta will be shown to contrast their work and style.

Credits: 3

LANG388 Spanish Civilization/Culture

Frequency: D
Description: A comprehensive introduction to aspects of Spanish civilization and culture: geography, history, social customs, political movements, literature and art. In English.

Credits: 3

LANG398 The Holocaust in Literature

Frequency: D
Description: An interdisciplinary attempt to make sense of the Holocaust through a variety of literary, philosophical, religious, historical, and allegorical formulations.

Credits: 3

LANG400 Special Topics in Foreign Language

Frequency: D
Description: Special areas in foreign languages and literature not covered by regular courses.

Credits: 1 - 3

LANG405 French Women Writers

Frequency: B
Description: 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

LANG406 Women in French Literature

Frequency: B
Description: 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

LANG410 Directed Study

Frequency: D
Description: Individual supervised study of a particular area or topic in any of the department's language or literature offerings. Periodic meetings with instructor; writing a substantial paper.

Credits: 1 - 3

LANG500 Special Topics in Foreign Language

Frequency: D
Description: Special area in any of the foreign languages and literatures not covered by regular courses.

Credits: 1 - 3

LANG510 Directed Study

Frequency: D
Description: Individual supervised study of a particular area or topic in any of the department's language or literature offerings. Periodic meetings with instructor; writing a substantial paper.

Credits: 1 - 3

MAED500 Independent Study

Frequency: D
Description: Independent study of a set of related topics agreed to by the student and the instructor. Permission of instructor required.

Credits: 3

MAED509 Technology in Mathematics Education

Frequency: D
Description: 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

MAED512 Design and Evaluation of Mathematics Curricula

Frequency: D
Description: Study of the design and evaluation of various models of mathematics curricula including the latest NCTM materials.

Credits: 3

MAED514 Instructional Methods in Mathematics

Frequency: D
Description: A critical study of the literature on current methods of teaching mathematics.

Credits: 3

MAED518 History of Mathematics Education

Frequency: D
Description: 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

MAED523 Real Analysis

Frequency: D
Description: Topology of the real line, measure and integration on the real line, function spaces and their topologies.

Prerequisite Courses: MATH 323 or equivalent

Credits: 3

MAED524 Complex Analysis

Frequency: D
Description: 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.

Prerequisite Courses: MATH 323 or equivalent

Credits: 3

MAED531 Rings and Fields

Frequency: D
Description: 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.

Prerequisite Courses: MATH 331 or 301 or equivalent

Credits: 3

MAED532 Abstract Algebra with Applications

Frequency: D
Description: Study of selected applications of abstract algebra. Topics selected from: identification numbers, symmetry, applications to combinatorics, coding theory, cryptography.

Prerequisite Courses: MATH 331 or 301 or equivalent

Credits: 3

MAED535 Number Theory

Frequency: D
Description: 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.

Permission of instructor required.

Credits: 3

MAED537 Combinatorics

Frequency: D
Description: Addition, multiplication, and pigeonhole principles; permutations and combinations; principle of inclusion/exclusion; recurrence relations; generating functions; combinatorial algorithms and/or combinatorial designs as time permits. Permission of instructor required.

Credits: 3

MAED540 Graph Theory

Frequency: D
Description: Graph models; graph structure and representation; trees; connectivity; graph traversals; coloring graphs; other topics as time permits. Permission of instructor required.

Credits: 3

MAED541 Euclidean Geometry

Frequency: D
Description: 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. Permission of instructor required.

Credits: 3

MAED543 Projective Geometry

Frequency: D
Description: The real projective plane; duality; perspectivity; Desargues' theorem; projective transformations; finite projective planes; pure analytic geometry.

Prerequisite Courses: MATH 341 or equivalent

Credits: 3

MAED545 Geometric Topology

Frequency: D
Description: 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, applications to systems of differential equations.

Prerequisite Courses: MATH 341 or equivalent

Credits: 3

MAED551 Statistics

Frequency: D
Description: Regression, hypothesis testing & confidence intervals in regression, Nonparametric statistics, chi-square tests, sampling, use of activities in probability & statistics.

Prerequisite Courses: STAT 350 or STAT 200 or equivalent

Credits: 3

MAED581 History of Mathematics

Frequency: D
Description: A study of selected topics in the history of mathematics and their applications to teaching. Permission of instructor required.

Credits: 3

MAED602 Mathematics Education Seminar

Frequency: D
Description: Selected readings, discussions, and reports on current issues in mathematics education. Permission of instructor required.

Credits: 3

MAED690 Graduate Project

Frequency: D
 Description: Students will be required to research a topic pertaining to mathematics education and apply it to their own classroom experiences if possible. This project will require a written proposal, a final report and an oral defense.
 Prerequisite: MATH 602 and permission of the department
Credits: 3

MATH100 Freshman Seminar

Frequency: B
 Description: This course seeks to help students utilize campus resources effectively, learn useful academic skills, develop a support network, become more self-aware, promote personal health and wellness, and appreciate diversity.
 Co-requisite Courses: MATH 122
Credits: 1

MATH104 Elementary Mathematical Models

Frequency: B
 Description: Sequences and difference equations; models of growth, including linear, quadratic, geometric, and logistic growth models; linear regression; other growth and regression models and an introduction to chaos as time permits. The course uses elementary mathematical models as a vehicle for developing the students' algebraic, geometric, and problem-solving abilities.
 Prerequisite: NYS Regents Course II or equivalent.
Credits: 3

MATH105 Precalculus I

Frequency: A
 Description: Algebraic, exponential, and logarithmic functions with an emphasis on multi-step problem solving and on those skills necessary for success in calculus, such as finding intercepts, finding points of intersection, testing for symmetry, and shifting and/or reflecting graphs; also covers systems of equations and inequalities. Review of high school algebra and geometry as needed. (Intended for students who need to take a calculus course and did not complete N.Y.S. Regents Course III or did not perform well in this course. Not open to students who have completed MATH 106 with a grade of C- or better or who have completed a calculus course.)
 Prerequisite: NYS Regents Course II or equivalent.
Credits: 3

MATH106 Precalculus II

Frequency: A
 Description: A continuation of MATH 105 covering additional classes of functions, including trigonometric functions, with the same strong emphasis on multi-step problem solving and on those skills necessary for success in calculus; also covers topics from analytic geometry. Review of concepts from MA 105 and high school trigonometry as needed. (Intended for students who need to take a calculus course and need additional preparation. Not open to students who have completed a calculus course with a grade of C- or better.)
 Prerequisite Courses: MATH 105 or NYS Regents Course III or equivalent.
Credits: 3

MATH108 Mathematics for the Management, Life, and Social Sciences

Frequency: B
 Description: Introduction to concepts in mathematics considered essential in business, biology, and the social and behavioral sciences. Topics are selected from linear models, matrices, linear programming, nonlinear models, probabilistic models. Includes applications to biology, business, economics and the mathematics of finance.
 Prerequisite Courses: MATH 104 or NYS Regents Course III
Credits: 3

MATH109 Honors Problem Solving

Frequency: B
 Description: 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.
 Co-requisite Courses: MATH 123
Credits: 2

MATH110 Mathematics in Action

Frequency: A
 Description: 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.
 Prerequisite Courses: MATH 104 or NYS Regents Course III
Credits: 3

MATH117 Why Mathematics?

Frequency: A
 Description: 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.
 Prerequisite Courses: MATH 104 or NYS Regents Course III
Credits: 3

MATH120 Survey of Calculus I

Frequency: A
 Description: Introduction to differential calculus for functions of a single variable, with applications to the behavioral, management and social sciences. Not open to students majoring in Mathematics, Physics or Chemistry. Credit will not be given for both MATH 120 and MATH 122.
 Prerequisite Courses: MATH 106, a grade of B or better in MATH 105, or four years of college preparatory mathematics.
Credits: 3

MATH121 Survey of Calculus II

Frequency: A
 Description: Introduction to integral calculus for functions of a single variable and to the calculus of functions of several variables. Included are techniques of integration and differentiation, and applications of these techniques to the behavioral, management and social sciences. Not open to students majoring in Mathematics, Physics or Chemistry. Credit will not be given for both MATH 121 and MATH 123.
 Prerequisite Courses: MATH 120
Credits: 3

MATH122 University Calculus I

Frequency: A
 Description: Functions, limits, continuity, derivatives, inverse functions, antiderivatives; applications to rectilinear motion, graphing, maxima-minima, and related rates. Credit will not be given for both MATH 120 and MATH 122.
 Prerequisite Courses: MATH 106 or four years of college preparatory mathematics
Credits: 4

MATH123 University Calculus II

Frequency: A
 Description: Definite integrals, the fundamental theorem of calculus, techniques of integration, applications of the definite integral in the physical sciences and geometry, indeterminate forms, improper integrals, sequences and series. Credit will not be given for both MATH 121 and MATH 123.
 Prerequisite Courses: MATH 122
Credits: 4

MATH124 Survey of Calculus III

Frequency: B
 Description: Calculus of the trigonometric and inverse trigonometric functions; linear approximations and differentials; L'Hospital's rule; additional techniques and applications of integration; volumes; techniques of integration; arc length; surface area; infinite series; key examples from the physical sciences. Not open to students who have completed MATH 123 or equivalent.
 Prerequisite Courses: MATH 121
Credits: 3

MATH125 Software for Mathematics

Frequency: B
 Description: Introduction to software packages appropriate for use by mathematics students. Topics selected from, but not limited to: web browsers, scientific word processors, spreadsheet programs, computer algebra systems, and specialized packages such as Geometers Sketchpad.
Credits: 3

MATH201 Mathematics for School Teachers I

Frequency: A
 Description: Meaning, development, and communication of number ideas and the logical structure of number systems other than base 10; the how and why of the basic algorithms or arithmetic; problem solving. Course open only to students seeking certification to teach at the early childhood, childhood, or middle childhood level.
 Prerequisite: Sophomore standing
Credits: 3

MATH202 Mathematics for School Teachers II

Frequency: A
 Description: 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.
 Prerequisite Courses: MATH 201
Credits: 3

MATH207 America Counts

Frequency: D
 Description: This course is designed for students working as American Counts tutors. It examines issues such as getting children interested in mathematics, how to explain various topics, working with groups vs. individuals, cultural differences. Problems encountered in the tutoring experience will be discussed. Students must apply through the Mathematics and Computer Science Department.
 Prerequisite Courses: MATH 120 or MATH 122
Credits: 1

MATH210 Discrete Mathematics

Frequency: A
 Description: Careful study of the foundations of mathematics needed for study of mathematics at the advanced undergraduate level. Topics from logic, set theory, elementary number theory, mathematical induction, functions, relations, basic combinatorics. Credit will not be given for both MATH 210 and CSIT 241.
 Prerequisite Courses: MATH 121 or MATH 123
Credits: 4

MATH223 University Calculus III

Frequency: A
 Description: Vector algebra; calculus of functions of several variables including multiple integration; applications to the physical sciences and geometry.
 Prerequisite Courses: MATH 123 or MATH 124
Credits: 4

MATH224 Differential Equations

Frequency: B
 Description: Introductory course with emphasis on methods of solution of differential equations and applications in physical settings. Topics include: first order equations, homogeneous equations with constant coefficients, undetermined coefficients, variation of parameters, power series solutions, Laplace transforms.
 Prerequisite Courses: MATH 123
Credits: 3

MATH231 Linear Algebra

Frequency: A
 Description: Thorough treatment of linear algebraic systems. Matrix algebra; determinants; vector spaces; linear independence; basis and dimension; inner product spaces; least squares approximation; eigenvalues and eigenvectors; diagonalization. Selected applications to physics, economics, geometry, statistics, and differential equations.
 Prerequisite Courses: MATH 121 or MATH 123; MATH 210 recommended
Credits: 4

MATH301 Mathematics for School Teachers III

Frequency: B
 Description: Logic, further development of geometry, problem solving, use of calculators. This course requires a project.
 Prerequisite Courses: MATH 202
Credits: 3

MATH310 Reading and Writing Mathematics

Frequency: A
 Description: This 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. This 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 this standard.
 Prerequisite Courses: EDU 276 and MATH 210
Credits: 3

MATH315 Theory of Equations

Frequency: D
 Description: Study of the theory of polynomial equations. Rational, real and complex roots of algebraic equations, the Remainder and Factor theorems, Fundamental Theorem of Algebra, solutions of cubic and bi-quadratic equations and approximation of roots.
 Prerequisite Courses: MATH 210
Credits: 3

MATH322 Partial Differential Equations

Frequency: C
 Description: A first course with emphasis on boundary value problems encountered in mathematical physics. Fourier series; separation of variables; D'Alembert's solution; the heat, wave and potential equations. Additional topics such as Sturm-Liouville problems or Laplace transforms as time permits.
 Prerequisite Courses: MATH 224
Credits: 3

MATH323 Intermediate Real Analysis

Frequency: B
 Description: Careful presentation of the ideas of calculus that are developed intuitively in the usual freshman-sophomore calculus courses. Techniques of proof in analysis; countable sets and cardinality; the real line as a complete ordered field; some topology of the real line; sequences and their limits; continuous functions and their properties; Other topics as time permits.
 Prerequisite Courses: MATH 210 and MATH 223
Credits: 3

MATH325 Numerical Analysis

Frequency: C
 Description: Introductory course in numerical methods for digital computers. Floating point arithmetic, errors, error analysis. Roots of equations, systems of equations. Numerical differentiation and integration. Interpolation and least squares approximations.
 Prerequisite Courses: MATH 123 and CSIT 106 or CSIT 121
Credits: 3

MATH329 Mathematical Modeling

Frequency: B
 Description: An introduction to the development of mathematical models to solve various applied and industrial problems. Topics will include one and multivariable optimization, Lagrange multipliers, sensitivity analysis in optimization models, analysis and simulation of discrete and continuous dynamic models.
 Prerequisite Courses: MATH 223 and MATH 231
Credits: 3

MATH331 Abstract Algebra I

Frequency: B
 Description: Study of algebraic structures, such as groups, rings, integral domains, and fields. Basic homomorphism theorems for groups and rings are presented.
 Prerequisite Courses: MATH 210 and MATH 231
Credits: 3

MATH332 Abstract Algebra II

Frequency: C
 Description: Continuation of the study of groups, rings, and fields, with applications to geometric symmetry, crystallography, switching networks, and error-correcting codes.
 Prerequisite Courses: MATH 331
Credits: 3

MATH335 Number Theory

Frequency: C
 Description: Study of integers and their properties; divisibility; primes; congruences; multiplicative functions; quadratic residues; quadratic reciprocity; Diophantine equations.
 Prerequisite Courses: MATH 210 and MATH 231
Credits: 3

MATH337 Combinatorics

Frequency: C
 Description: 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.
 Prerequisite Courses: MATH 210 and MATH 231
Credits: 3

MATH341 Geometry

Frequency: B
 Description: Study of Euclidean geometry from both a synthetic and analytic viewpoint. Axioms for geometries; transformations; triangles and other basic shapes; constructions. Some consideration given to finite, neutral, and non-Euclidean geometries.
 Prerequisite Courses: MATH 210
Credits: 3

MATH359 Probability Models in Operations Research

Frequency: C
 Description: Topics chosen from stochastic processes; birth-death processes; queueing theory; inventory theory; reliability; decision analysis; simulation.
 Prerequisite Courses: MATH 231 and STAT 350
Credits: 3

MATH365 Financial Mathematics

Frequency: C
 Description: A rigorous treatment of the mathematical theory associated with financial transactions, including simple and compound interest, annuities, bonds, yield rates, amortization schedules and sinking funds, option pricing, capital asset pricing model, and portfolio risk analysis.
 Prerequisite Courses: MATH 223, MATH 224, and STAT 350
Credits: 3

MATH375 Deterministic Models in Operations Research

Frequency: C
 Description: Topics chosen from linear programming and applications; network analysis; game theory; dynamic, integer and nonlinear programming.
 Prerequisite Courses: MATH 231
Credits: 3

MATH381 History of Mathematics

Frequency: B
 Description: Chronological study of the development of mathematics. Emphasis on the solution of selected mathematical problems associated with historical periods.
 Prerequisite Courses: MATH 210
Credits: 3

MATH400 Independent Study

Frequency: A
 Description: Independent study of a selected list of readings approved by a faculty advisor. Permission of department required.
Credits: 1 - 3

MATH405 Senior Seminar

Frequency: A
 Description: Studies from selected areas of mathematics. Written reports and formal presentations will be required.
 Prerequisites: Senior standing or permission of instructor
Credits: 1

MATH408 Special Topics Seminar

Frequency: D

Description: Selected readings, discussions, and reports on topics in mathematics. Permission of department required.

Credits: 1 - 3

MATH420 Advanced Calculus

Frequency: B

Description: 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' theorem, and Stokes' theorem; potential theory.

Prerequisite Courses: MATH 231 and MATH 323

Credits: 3

MATH423 Topics in Analysis

Frequency: D

Description: Topics vary, depending on the instructor, but may include measure and integration, basic functional analysis, complex analysis, residue theory, and special functions.

Prerequisite Courses: MATH 231 and MATH 323

Credits: 3

MATH440 Graph Theory

Frequency: D

Description: Introduction to graph theory. Topics chosen from: connectivity, trees, eulerian and hamiltonian graphs, matchings, factorizations, and colorings. Applications chosen from: the shortest path problem, communication networks, the traveling salesman problem, the optimal assignment problem, and scheduling algorithms.

Prerequisite Courses: MATH 210 and MATH 231

Credits: 3

MEDA100 Media Arts Seminar

Frequency: B

Description: An introduction to interdisciplinary learning with a focus on the elements of desktop multimedia design, production and critique. Media Arts faculty, as well as guest lecturers from on and off campus will discuss their areas of expertise. An overview of related campus resources will be presented.

Credits: 3

MEDA101 Media Literacy

Frequency: B

Description: The course facilitates baseline literacy with regard to our increasingly mediated society.

Explores the many ways people "consume" the media. Discussion of the devices and strategies used by media makers to produce effective visual and aural messages across television, radio, film, graphic design, the Web, photography, typography, informational graphics and other forms of mediated and interactive communication.

Credits: 3

MEDA102 Media Arts Production I

Frequency: B

Description: Basic introductory course to computer applications used in the creation of computerized multimedia. Students will gain introductory skills in navigating through computer programs and producing computer-mediated projects. The focus of this course is in print and presentation applications, including desktop publishing, image editing and computer presentation software. Students will also gain beginning skills in designing for the computer.

Prerequisite: Media Arts majors only.

Credits: 3

MEDA105 Computers and Society

Frequency: B

Description: 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

MEDA120 Multimedia Applications

Frequency: B

Description: 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

MEDA152 Media Production II

Frequency: B

Description: Course is an introduction to applications used to present content dynamically. The course will present an overview of production in motion graphics, video, audio and web publication using HTML. Class is geared to give the student a comprehensive understanding of the convergence of visual and audio production through digital media.

Prerequisites: Media Production I; Media and Society.

Prerequisite Courses: MEDA 102 and MEDA 105

Credits: 3

MEDA200 Systems/Languages/Protocols

Frequency: B

Description: The course is designed to be an in-depth look at some of the more common computer systems, languages and protocols used by today's personal computer systems. Students will learn the fundamentals of operating systems, scripting languages, protocols which allow computers to talk to each other, and the various terms involved with computer hardware and software issues.

Credits: 3

MEDA215 Interactive Design I

Frequency: B

Description: Course will introduce students to the production and presentation of interactive multi-media content. Class will take into consideration a wide range of elements both in traditional design; i.e. color, line, type and spacing as well as design issues of new media such as user recognition, successful navigation, use of animation and kinetic typography to dynamically present content both on-line and on CD-ROM.

Prerequisite Courses: MEDA 101 and MEDA 102 and MEDA 105 and MEDA 152

Credits: 3

MEDA220 Sight, Sound and Motion

Frequency: B

Description: The course continues the work in understanding the aesthetic underpinnings of concepts in sight, sound and motion including the perceptual process at work as audiences interact with mediated messages. The course is especially attenuated towards extending traditional understandings of new media including contemporary applications in creative computing.

Prerequisite Courses: COMM 155

Credits: 3

MEDA240 Computers in Corporate Communications

Frequency: B

Description: Introduction to the role of modern micro-computers in personal, entertainment, and corporate communications. Topics range from differences in popular computer platforms to the use of specific types of hardware and software used in electronic communication. Addresses the use of computers in the creative environment including digital audio, video, multimedia production, the Internet, and the World Wide Web.

Credits: 3

MEDA250 Web Page Design

Frequency: B

Description: The course is designed to introduce to the student the basic principles of designing web pages for the World Wide Web. Mixing traditional design concepts with web-based tools, students will learn how to code pages for the web across platforms. Students will also gain practice in the use of HTML, Java and CGI/Perl scripting.

Prerequisite Courses: MEDA 120

Credits: 3

MEDA260 Drawing for New Media

Frequency: D

Description: The class is offered as an introduction to electronic equivalents of traditional drawing and painting techniques. Students will become proficient in software applications such as Painter and Photoshop, and learn to capture drawings/paintings created with traditional studio techniques using scanners, digital cameras, film recorder and direct input (electronic drawing tablet). The course also recognizes that good technology will not save a bad idea. Consequently, students will use drawing to stimulate visual thinking that discovers, clarifies, creatively amplifies and manipulates the development of ideas and concepts.

Prerequisite Courses: ART 151

Credits: 3

MEDA265 Interactive Design II

Frequency: B

Description: Interactive Design II will expand upon the tools gained in Interactive Design I, but with a focus in programming for multi-media applications. Students will gain an applied knowledge of various multi-media languages. Course interweaves programming and design to give Media Arts students a well-rounded understanding of what goes into rich media production.

Prerequisite Courses: MEDA 101 and MEDA 102 and MEDA 105 and MEDA 152 and MEDA 215

Credits: 3

MEDA300 Video Production for Media Arts

Frequency: B

Description: An introduction to the concepts and tools involved in digital video production. This includes analog to digital conversion, production related aspects of compression and storage, and computer-based video editing. An introduction to Adobe Premiere, digital editing software, will be followed by training on a Media 100 advanced digital editing system.

Prerequisite Courses: MEDA 120
Credits: 3

MEDA301 Media Performance I

Frequency: B

Description: 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. Permission of instructor required.

Prerequisite Courses: MEDA 102 and MEDA 152
Credits: 3

MEDA310 Media Criticism

Frequency: D

Description: The study of selected theories and methods of criticism relevant to the evaluation of mediated message genres from a communication perspective. Emphasis is placed on applying critical perspectives to the criticism of film and electronic media.

*Credits: 3***MEDA311 Video for Media Arts**

Frequency: D

Description: Students will learn about concepts and techniques for production and editing of video which is to be used on the Web or on CD-ROMS. At the current state of the technology, this is an area very distinct from older forms of video production and requires a different aesthetic and different production and post production skills. The course will focus on those differences and the development of those aesthetic concepts and skills.

*Credits: 3***MEDA320 Audio and Desktop Multimedia**

Frequency: D

Description: A course designed for Media Arts sound production majors and other students with a strong interest and background in composition, multimedia, audio and MIDI. A project-oriented course focusing on audio design, analysis, and integration as it applies to multimedia authoring, motion video, and web content creation.

Prerequisite Courses: SRT 200 and SRT 201 and SRT 250 and SRT 251
Credits: 3

MEDA330 Special Topics in Media Arts

Frequency: D

Description: Selected areas of Media Arts supplementing the regular program offerings.

*Credits: 1 - 3***MEDA350 Media Performance II**

Frequency: B

Description: Course is a continuation of Media Performance I and is designed to develop and create a major piece of interactive performance.

Students will further refine and develop their production skills in interactive performance by developing new performance works or adapting other styles of performance (such as dance or theatre) to new media production.

Prerequisites: MEDA 102, 152 and 301 or permission of instructor.

Prerequisite Courses: MEDA 102 and MEDA 152 and MEDA 301

*Credits: 3***MEDA352 Media Production III Audio/Video**

Frequency: B

Description: Course is an advanced media production design course specializing in visual and audio production for new media. Students will work intensively to create projects which integrate the use of video, visual and audio components into final productions. Students will also learn the basics of camera and sound production skills for the field. Media Arts majors only.

Prerequisite Courses: MEDA 102 and MEDA 152

*Credits: 3***MEDA355 Interactive Design III**

Frequency: B

Description: The culmination of a series of three production classes in Interactive Design. Interactive Design III allows the students time to expand and solidify their knowledge of multimedia production with an emphasis of delivery on the Web. This class will give the student the opportunity to create a dynamic portfolio web site and CD-ROM.

Prerequisite Courses: MEDA 101 and MEDA 102 and MEDA 105 and MEDA 152 and MEDA 200 and MEDA 215 and MEDA 220 and MEDA 265

*Credits: 3***MEDA360 Film and Special Effects**

Frequency: B

Description: 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***MEDA410 Media Production IV Audio/Visual**

Frequency: B

Description: Media Production IV allows Media Arts' students to solidify their knowledge of the production and presentation of audio/visual projects. Final projects will be presented as streaming media for on-line dissemination. Careful attention will be paid to the various processes of media production: conceptualization, production, post-production and the publicizing, and presentation of projects.

Prerequisite Courses: MEDA 101 and MEDA 102 and MEDA 105 and MEDA 152 and MEDA 200 and MEDA 215 and MEDA 220 and MEDA 265 and MEDA 352 and MEDA 355

*Credits: 3***MEDA440 Directed Study in Media Arts**

Frequency: A

Description: Directed work in specific areas of Media Arts, stressing depth of enquiry. Student meets with designated faculty member on a regular basis throughout the semester after filing an acceptable plan for the proposed project.

*Credits: 1 - 3***MEDA441 Media Arts Practicum**

Frequency: B

Description: The course is team-taught by instructors in the Media Arts program and is designed as a preparatory course for MEDA 495 Media Arts Capstone Practicum. Students will function in teams selected from the various tracks in Media Arts, with each team creating three multimedia projects for faculty and peer review. Projects could be defined by each team or assigned by faculty. The assigned projects will be designed to serve either the college community or be for a local charity, outside business or group, either commercial, artistic, or not-for-profit.

*Credits: 3***MEDA480 New Media Writing**

Frequency: D

Description: Course will study writing for media projects. Course will also provide insight into common constructs and approaches used in writing and producing media projects including audio, video, film, Web and CD-based interactive projects. Designed first to look at various structures and approaches, and second to move students from the idea phase of a project through writing, storyboarding and pre-production (everything ready to actually go into production). Projects may subsequently be produced in Media Arts Capstone.

*Credits: 3***MEDA490 Independent Study Media Arts**

Frequency: B

Description: Independent work in specific areas of Media Arts, stressing depth of inquiry and development of topic. Subject of study chosen in consultation with Media Arts faculty/advisor.

*Credits: 1 - 3***MEDA495 Capstone Practicum**

Frequency: B

Description: Students work in teams consisting of one student from each track in the Media Arts program. Each group will work on an assigned multimedia project, or after approval from a faculty mentor, work on a project identified by and agreed on by the group as a whole.

Prerequisite Courses: MEDA 441
Credits: 6

MEDT490 Clinical Internship

Frequency: A

Description: A full year program of study conducted at a N.A.A.C.L.S.-approved hospital medical technology program, typically one of the five programs with which 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 exams offered by the American Society of Clinical Pathologists and are eligible to work as medical technologists in a variety of laboratory settings.

Credits: 15

MEDT491 Clinical Internship

Frequency: A
 Description: A full year program of study conducted at a N.A.A.C.L.S.-approved hospital medical technology program, typically one of the five programs with which 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 exams offered by the American Society of Clinical Pathologists and are eligible to work as medical technologists in a variety of laboratory settings.
Credits: 15

MUED128 Secondary Chamber Ensemble

Frequency: A
 Description: For students who have achieved some proficiency on an instrument besides their major instrument. Students will participate in chamber ensembles, assigned by instructor, in which they will learn to coach ensembles, as well as perform at a higher level on their secondary instrument. Elective course for any Music Education major. Demonstrated playing proficiency on selected instrument through NYSSMA Level II.
Credits: 1

MUED150 Introduction to Public School Music

Frequency: D
 Description: 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

MUED161 Beginning Trumpet

Frequency: A
 Description: 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

MUED162 Beginning Trombone

Frequency: A
 Description: 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

MUED163 Beginning French Horn

Frequency: A
 Description: 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

MUED164 Beginning Tuba/Euphonium

Frequency: A
 Description: 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

MUED171 Beginning Clarinet

Frequency: A
 Description: 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

MUED172 Beginning Flute

Frequency: A
 Description: 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

MUED173 Beginning Oboe

Frequency: A
 Description: 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

MUED174 Beginning Bassoon

Frequency: A
 Description: 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

MUED175 Beginning Saxophone

Frequency: A
 Description: 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

MUED185 Beginning Violin/Viola

Frequency: A
 Description: 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

MUED186 Beginning Cello

Frequency: A
 Description: 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

MUED187 Beginning String Bass

Frequency: A
 Description: 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

MUED203 Intermediate Voice Class

Frequency: B
 Description: Applied group instruction in voice. Emphasis on development of an individual's performance ability.
 Prerequisite Courses: MUS 113
Credits: 1.5

MUED204 Advanced Voice Class

Frequency: B
 Description: Concentration on methods of developing and building singing voices. Student further develops performing ability and enlarges his/her repertoire.
 Prerequisite Courses: MUED 203
Credits: 1.5

MUED210 Guitar Class

Frequency: A
 Description: 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

MUED211 Guitar Class

Frequency: A
 Description: Continuation of MUED 210. Includes I, IV, V7 chords in the keys of A, F, B; secondary dominants; more advanced accompaniment patterns.
 Prerequisite Courses: MUED 210
Credits: 1

MUED221 Percussion Class

Frequency: A
 Description: Group applied instruction and pedagogical approaches on percussion designed to develop a playing competence sufficient to teach beginning students through NYSSMA Level II. Required course for Music Education majors with an instrumental concentration. Students who already possess playing and teaching competence may examine out of the requirement and substitute another percussion course in its place.
Credits: 1

MUED222 Advanced Percussion

Frequency: A
 Description: Group applied instruction on cymbals, drum set, and field drums and accessories. Designed to develop a playing competence sufficient to teach advanced percussion to public school students. Demonstrated playing proficiency on basic percussion and MUED 221.
Credits: 1

MUED250 Foundations of Music Education I - CAW

Frequency: B
 Description: Emphasizes growth characteristics typical of public school students K-6 with special regard for their ability to process and respond to and with music: perceptual, psychomotor, and cognitive abilities; affectivity; brain development and function; creativity. Students are expected to develop a knowledge base sufficient to demonstrate competence in working effectively with students in music classes at the elementary level of public school. Child Abuse Workshop training will be conducted.
 Co-requisite Courses: MUED 255
Credits: 2

MUED251 Foundations of Music Education II

Frequency: B
 Description: For Music Education students to develop an understanding of basic principles of educational psychology and educational sociology, with specific application to teaching of music to adolescents in the public schools. The course will cover theories, methods, principles and current issues within educational psychology and sociology. Included will be a seminar in alcohol, tobacco and drug abuse.
 Co-requisite Courses: MUED 256
Credits: 2

MUED255 Foundations I Practicum - Elementary

Frequency: A
 Description: Students act as music teachers or teacher aides for approximately 40 contact hours. This requirement may be completed during the January recess, in May/June after the student has taken MUED 250 or by several other alternatives approved by the Area Chair for Music Education/Music Therapy.
 S/U Grade.
Credits: 0

MUED256 Foundations II Practicum - Middle School

Frequency: A
 Description: Students act as music teachers or teacher aides for approximately 40 contact hours. This requirement may be completed during the January recess, in May/June after the student has taken MUED 250 or by several other alternatives approved by the Area Chair for Music Education/Music Therapy.
 S/U Grade.
Credits: 0

MUED260 Brass Pedagogy

Frequency: A
 Description: 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

MUED261 Advanced Trumpet

Frequency: A
 Description: 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. Demonstrated playing proficiency on a contrasting brass instrument through NYSSMA Level II.
Credits: 1

MUED262 Advanced Trombone

Frequency: A
 Description: 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. Demonstrated playing proficiency on a contrasting brass instrument through NYSSMA Level II.
Credits: 1

MUED263 Advanced French Horn

Frequency: A
 Description: 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. Demonstrated playing proficiency on a contrasting brass instrument through NYSSMA Level II.
Credits: 1

MUED264 Advanced Tuba/Euphonium

Frequency: A
 Description: 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. Demonstrated playing proficiency on a contrasting brass instrument through NYSSMA Level II.
Credits: 1

MUED271 Advanced Clarinet

Frequency: A
 Description: 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. Demonstrated playing proficiency on a contrasting woodwind instrument through NYSSMA Level II.
Credits: 2

MUED272 Advanced Flute

Frequency: A
 Description: Group applied instrument and pedagogical approaches on the flute designed to develop a playing competence sufficient to teach beginning students through NYSSMA Level IV. Required course for Music Education majors with an instrumental concentration. Students who already possess playing competence may examine out of the requirement and substitute another woodwind instrument in its place. Demonstrated playing proficiency on a contrasting woodwind instrument through NYSSMA Level II.
Credits: 2

MUED273 Advanced Oboe

Frequency: A
 Description: 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. Demonstrated playing proficiency on a contrasting woodwind instrument through NYSSMA Level II.
Credits: 2

MUED274 Advanced Bassoon

Frequency: A
 Description: 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. Demonstrated playing proficiency on a contrasting woodwind instrument through NYSSMA Level II.
Credits: 2

MUED275 Advanced Saxophone

Frequency: A
 Description: 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. Demonstrated playing proficiency on a contrasting woodwind instrument through NYSSMA Level II.
Credits: 2

MUED285 Advanced Violin/Viola

Frequency: B
 Description: 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. Demonstrated playing proficiency on cello/string bass through NYSSMA Level II.
Credits: 2

MUED286 Advanced Cello/String Base

Frequency: B
 Description: 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. Demonstrated playing proficiency on violin/viola through NYSSMA Level II.
Credits: 2

MUED291 Technology in Music

Frequency: A
 Description: Overview of technology and its application to music composition, instruction, notation, performance, theory, and music education. Fundamentals of electronic music, MIDI, and computer usage.
 Prerequisite Courses: MUS 124
Credits: 1 - 3

MUED292 Technology in Music

Frequency: B
 Description: Overview of technology and its application to music composition, instruction, notation, performance, theory, and music education. Fundamentals of electronic music, MIDI, and computer usage.
 Prerequisite Courses: MUS 124
Credits: 1 - 3

MUED300 Foundations in Music Education III

Frequency: B
 Description: Foundations in Music Education III is the final foundations course in the music education sequence. It is a reading intensive course in the history of educational thought and practices in music education in the United States from the Colonial Period to current times. Students will study the philosophical bases and historical foundations for music education praxis. The course moves chronologically from the roots of Philosophy in Ancient Greece to today, but most emphasis is placed on twentieth-century thought and movements in American music education.
Credits: 3

MUED301 General Music in Elementary School

Frequency: B
 Description: Specific competencies are developed for implementing general music activities and programs in grades K through six.
 Prerequisite Courses: MUED 300
 Co-requisite Courses: MUED 356
Credits: 2

MUED302 General Music in Secondary School

Frequency: B
 Description: Specific competencies are developed for implementing general music activities and programs in middle school through high school.
 Prerequisite Courses: MUED 300
 Co-requisite Courses: MUED 356
Credits: 3

MUED304 Teaching Instrumental Music I

Frequency: A
 Description: Covers various strategies and techniques employed in elementary and middle school lessons, small and large ensembles, various instructional models, methods, and materials. Emphasis on developing new skills and strategies to plan, deliver, and assess meaningful educational experiences in elementary and middle school settings. Intern teaching with students in elementary and middle school classrooms. Professional standing.
 Prerequisite Courses: MUED 250 and MUED 251 and MUS 232
 Co-requisite Courses: MUED 355
 MUED 393
Credits: 2

MUED305 Teaching Instrumental Music II

Frequency: A
 Description: Covers various strategies and techniques employed in high school lessons, small and large ensembles, various instructional models, methods and materials. Emphasis on developing new skills and strategies to plan, deliver and assess meaningful educational experiences in a high school setting. Intern teaching with high school students. Professional standing.
 Prerequisite Courses: MUED 250 and MUED 251 and MUS 232
Credits: 2

MUED310 Guitar Class

Frequency: A
 Description: Designed to enable students to accompany themselves and to lead others in the singing of simple folk and popular songs. Includes use of transposition and capo, more advanced melodic patterns, and melody and accompaniment combinations.
 Prerequisite Courses: MUED 211
Credits: 1

MUED311 Guitar Class

Frequency: A
 Description: Continuation of MUED 310; includes pedagogy of guitar for individuals in public schools, music therapy, and private instruction.
Credits: 1

MUED315 Music, Play, and Self

Frequency: A
 Description: 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

MUED331 Marching Band Techniques

Frequency: D
 Description: 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

MUED355 Foundations III Practicum - Secondary

Frequency: A
 Description: Continuation of previous practicum. S/U Grade.
 Prerequisite Courses: MUED 256
Credits: 0

MUED356 Methods Practicum - Elective

Frequency: A
Description: Continuation of previous practicum. S/U Grade.
Prerequisite Courses: MUED 355
Credits: 0

MUED391 Public School Vocal Conducting

Frequency: B
Description: Methods and materials for starting and sustaining public school vocal ensemble programs. Stressed are score preparation, advanced conducting problems, and the refinement of rehearsal skills suitable for public school vocal ensembles.
Prerequisite Courses: MUS 232
Credits: 3

MUED392 Public School Vocal Conducting

Frequency: A
Description: Methods and materials for starting and sustaining public school vocal ensemble programs. Stressed are score preparation, advanced conducting problems, and the refinement of rehearsal skills suitable for public school vocal ensembles.
Prerequisite Courses: MUED 391
Credits: 3

MUED393 Public School Instrumental Conducting

Frequency: A
Description: Implements methods and strategies studied in MUED 304 in a laboratory rehearsal experience. Score study, rehearsal planning, assessment, conducting, and rehearsal techniques appropriate to elementary and middle school levels. Professional standing.
Prerequisite Courses: MUS 232
Credits: 2

MUED394 Public School Instrumental Conducting

Frequency: A
Description: Implements methods and strategies studies in MUED 305 in a laboratory rehearsal experience. Score study, rehearsal planning, assessment, conducting, and rehearsal techniques appropriate to high school level. Professional standing.
Prerequisite Courses: MUS 232
Credits: 2

MUED400 Professional Semester

Frequency: A
Description: Student teaching in selected public schools in western New York State under the supervision of college 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.
Credits: 14

MUED450-451 Directed Study in Music Education

Frequency: A
Description: 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 Area Chair for Music Education.
Credits: 1 - 3

MUED470-479 Special Topics in Music Education

Frequency: D
Description: Studies of area supplementing, not replacing, regular course offerings.
Credits: 1 - 3

MUED485 Advanced Instrument Pedagogy

Frequency: A
Description: For instrument majors to learn advanced techniques for teaching their instrument. Course involves teaching beginning instrument classes with guidance and instruction from faculty.
Prerequisite Courses: MUED 304 and MUED 393 and MUS 325
Credits: 2

MUED510 Principles of Music Education with Media

Frequency: D
Description: 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

MUED513 Systematic Design of Curricula for Music Education

Frequency: D
Description: 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

MUED514 Psychology of Music

Frequency: D
Description: 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 these theoretical contexts.
Credits: 3

MUED521 Foundations of Music Education I

Frequency: C
Description: Study of philosophical and historical foundations of music education, emphasizing current issues and developments. Particular application to curriculum and instruction in school music.
Required.
Credits: 3

MUED522 Foundations of Music Education II

Frequency: B
Description: Study of psychological and sociological foundations of music education, emphasizing current issues and developments. Particular application to curriculum and instruction in school music.
Required.
Credits: 3

MUED555 Special Topics Workshop

Frequency: B
Description: 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

MUED565 Special Topics Seminar

Frequency: B
Description: 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

MUED590-591 Special Studies

Frequency: A
Description: Studies not otherwise available as regular course offerings relevant to students' programs or career plans, pursued in independent, directed, or 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 - 6

MUED609 Administration and Supervision of School Music

Frequency: D
Description: Study of current practices. Topics include supervision, in-service education, curricular and instructional developments, public relations, finance, facilities, and resources. Individual projects connected to teaching situations.
Credits: 3

MUED618 Seminar in Music Education

Frequency: D
Description: 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

MUED651 Philosophical Perspectives of Music Education

Frequency: D
Description: 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

MUED652 Psychological Perspective for Music Education

Frequency: D
Description: Examination of important psychological developments and theories and their importance for music education and the music educator: psychology of aesthetics, humanistic psychology, current learning theory, and child and adolescent development as related to problems of instruction in music. Emphasis on articulating and defending methods of instruction and choice of musical content in terms of psychological principles.
Credits: 3

MUED695 Thesis/Final Project

Frequency: D
Description: Study/research culminating in a Thesis, a Composition/Arrangement, or a Performance Recital as required in the Final Project Program. Candidate must register for this 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

MUS001 Music Freshmen Seminar

Frequency: D

Description: An introduction to music designed to acquaint first semester music majors with the basics of the field. Topics include studying music and using the library; an outline of the basic concepts, styles and terminology found in the world; and an introduction to the many professions available to musicians.

*Credits: 1***MUS021-048 Music Ensembles**

Frequency: A

Description: All music students participate in the college music ensembles, the required number of participation varying among the several music curricula. Participation in any ensemble is open to students in other departments of the college by audition and consent of the conductor and/or Director of the School of Music.

MUS021 Festival Chorus*
 MUS022 College Choir
 MUS023 Chamber Singers
 MUS024 Women's Chorus
 MUS025 All-College Band*
 MUS026 Concert Band
 MUS027 Wind Symphony
 MUS028 Wind Ensemble
 MUS029 Symphony Orchestra
 MUS030 Chamber Orchestra
 MUS031 String Chamber Orchestra
 MUS032 Musical Theater Ensemble
 MUS033 Opera Production Practicum
 MUS034 Opera Workshop
 MUS035 Piano Ensemble
 MUS036 Woodwind Chamber Ensemble
 MUS037 Brass Chamber Ensemble
 MUS038 Saxophone Ensemble
 MUS039 Flute Ensemble
 MUS040 Brass Choir
 MUS041 Percussion Ensemble
 MUS042 African Drumming Ensemble
 MUS043 Guitar Chamber Ensemble
 MUS044 Guitar Quartet
 MUS045 Guitar Ensemble
 MUS046 Jazz Ensemble
 MUS047 Jazz Combo
 MUS048 Special Ensemble
 MUS049 Special Ensemble
 MUS050 Special Ensemble

* Ensembles that do not require an audition and are open to non-music majors.

*Credits: 0***MUS100 Recital-Seminar**

Frequency: A

Description: Required of all freshman music majors enrolled in private applied music instruction or composition. Students perform or critique performance or composition of colleagues during one recital-seminar each week. Recital schedule rotated: one week, studio; next week, area; following, school recitals.

*Credits: 0***MUS101-102 Music Theory for Non-Majors**

Frequency: B

Description: 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***MUS103 Beginning Piano Class for Non-Majors**

Frequency: D

Description: A one semester beginning piano class for non-majors.

*Credits: 1***MUS104 Applied Music Class Non-Music Majors**

Frequency: D

Description: 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***MUS105-106 Applied Music Major**

Frequency: A

Description: Weekly half-hour private applied instruction for music majors in Bachelor of Arts and Bachelor of Science degree programs. See MUS 125-126 for further information about the requirements of specific studios.

*Credits: 2***MUS107 Double Reed Class I**

Frequency: B

Description: (Required for all freshman oboe and bassoon majors.) The beginning fundamentals of reed making are covered including formation of a blank and rudimentary scraping skills.

*Credits: 0.5***MUS108 Double Reed Class II**

Frequency: B

Description: (Required for all freshman oboe and bassoon majors.) A continuation of Class I. The course covers shaping, gouging and refinement of scraping skills.

Prerequisite Courses: MUS 107

*Credits: 0.5***MUS109 Harp Class, Elementary**

Frequency: A

Description: Introductory course for beginners on the harp. Hand position, finger exercises, and tone production.

*Credits: 1***MUS110 Harp Class, Intermediate**

Frequency: B

Description: Continuing development of tone and technique: elementary harp repertoire.

Prerequisite Courses: MUS 109

*Credits: 1***MUS113 Voice Class**

Frequency: A

Description: 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***MUS115 Music Appreciation**

Frequency: A

Description: Introduction to music in Western civilization: materials of music (melody, harmony, rhythm, tempo, dynamics, musical structure and design, and musical style); various performance media. Major composers of each musical epoch discussed, musical examples listened to in class.

Covers 19th century Romanticism; 18th century classicism; medieval, renaissance, and baroque music; the 20th century, and the American scene.

*Credits: 3***MUS116 Conditional Applied Major**

Frequency: A

Description: Instruction in voice, keyboard, and orchestral instruments for those music majors not eligible to enroll in MUS 125 (or 105) Applied Music Major. A student may enroll for this course twice.

*Credits: 2***MUS117-118 Piano Class, Elementary**

Frequency: A

Description: 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***MUS119 Free Improvisation**

Frequency: A

Description: This 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***MUS120 Concert Attendance**

Frequency: A

Description: Attendance at a minimum of eight approved concerts (including faculty solo and ensemble recitals, Fredonia Chamber Players, visiting artists, and major student ensembles) each semester.

*Credits: 0***MUS121 Aural Theory I**

Frequency: A

Description: Course deals with various aspects of ear training including melodic, harmonic, and formal perception as well as sight-singing skills.

*Credits: 2***MUS122 Aural Theory II**

Frequency: A

Description: A continuation of MUS 121 dealing with various aspects of ear training including melodic, harmonic, and formal perceptions as well as sight-singing skills.

Prerequisite Courses: MUS 121

*Credits: 2***MUS123 Written Theory I**

Frequency: A

Description: Course deals with the rudimentary aspects of harmony, melody, form, and style analysis.

*Credits: 2***MUS124 Written Theory II**

Frequency: A

Description: A continuation of MUS 122 dealing with more advanced aspects of harmony, melody, form, and style analysis.

Prerequisite Courses: MUS 123

*Credits: 2***MUS125-126 Applied Music Major**

Frequency: A

Description: 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***MUS127-128 Applied Music (Composition)**

Frequency: A

Description: Weekly half-hour private applied instruction for music majors in Bachelor of Music-Composition degree program.

*Credits: 1***MUS131-132 Applied Musicianship**

Frequency: A

Description: Study of solfege and conducting as basic tools of musicianship.

*Credits: 1***MUS137-140 Diction for Singers**

Frequency: B

Description: A two-semester sequence intended to give singers an understanding of the International Phonetic Alphabet (IPA) and a thorough application of IPA symbols to the sounds of Italian, German, French, Latin and English dictions. The course is designed for voice students in all music curricula, and may be taken by students from other majors as well.

Credits: 1

MUS200 Recital Seminar

Frequency: A
 Description: Required of all sophomore music majors enrolled in private applied music instruction or composition. Students perform or critique the performance or composition of colleagues during one recital-seminar each week. Recital schedule rotated: one week, studio; the next week, area; and the following week, school recitals.
Credits: 0

MUS205 Applied Music Major

Frequency: A
 Description: Weekly half-hour private applied instruction for music majors in Bachelor of Arts, Bachelor of Science and Bachelor of Music in Composition degree programs. See MUS 225-226 for further information about the requirements of specific studios.
 Prerequisite Courses: MUS 106
Credits: 2

MUS206 Applied Music Major

Frequency: A
 Description: Weekly half-hour private applied instruction for music majors in Bachelor of Arts, Bachelor of Science and Bachelor of Music in Composition degree programs. See MUS 225-226 for further information about the requirements of specific studios.
 Prerequisite Courses: MUS 205
Credits: 2

MUS209 Harp Class, Advanced

Frequency: D
 Description: Advanced training in technique: scales, arpeggios, harmonies, pedal studies, chords, octaves, glissandi, and finger exercises in velocity.
 Prerequisite Courses: MUS 110
Credits: 1

MUS217 Piano Class, Intermediate

Frequency: A
 Description: 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 and sight reading.
 Prerequisite Courses: MUS 118
Credits: 1

MUS218 Piano Class, Intermediate

Frequency: A
 Description: Continuation of development of functional piano skills through technique studies, harmonization, part reading, transposition, improvisation and accompanying. Piano Standards barrier exam at end of course.
 Prerequisite Courses: MUS 217
Credits: 1

MUS221 Aural Theory III

Frequency: A
 Description: A continuation of MUS 123 dealing with more advanced aspects of ear training including melodic, harmonic, and formal perception as well as sight-singing skills.
 Prerequisite Courses: MUS 122
Credits: 2

MUS222 Aural Theory IV

Frequency: A
 Description: A continuation of MUS 221 dealing with the more advanced aspects of ear training including melodic, harmonic, and formal perception as well as sight-singing skills.
 Prerequisite Courses: MUS 221
Credits: 2

MUS223 Written Theory III

Frequency: A
 Description: A continuation of MUS 124 dealing with more advanced aspects of harmony, form, and style analysis.
 Prerequisite Courses: MUS 124
Credits: 2

MUS224 Written Theory IV

Frequency: A
 Description: A continuation of MUS 223 dealing with advanced harmony, form, and style analysis.
 Prerequisite Courses: MUS 223
Credits: 2

MUS225 Applied Music Major

Frequency: A
 Description: Bassoon, Cello, Clarinet, Classical Guitar, Double Bass, Euphonium, Flute, French Horn, Harp, Oboe, Percussion, Piano, Saxophone, Trombone, Trumpet, Tuba, Viola, Violin, Voice.
 Prerequisite Courses: MUS 126
Credits: 2

MUS226 Applied Music Major

Frequency: A
 Description: Bassoon, Cello, Clarinet, Classical Guitar, Double Bass, Euphonium, Flute, French Horn, Harp, Oboe, Percussion, Piano, Saxophone, Trombone, Trumpet, Tuba, Viola, Violin, Voice.
 Prerequisite Courses: MUS 225
Credits: 2

MUS231 Conducting I

Frequency: B
 Description: Basic conducting technique with special emphasis on score reading and improved aural skills, rehearsal planning and efficient use of time, conducting leadership style, and ability to communicate effectively with an ensemble.
 Prerequisite Courses: MUS 132
Credits: 2

MUS232 Conducting II

Frequency: B
 Description: Continuation of skills developed in MUS 231. Special emphasis on interpretation within defensible parameters, aural refinements in overcoming difficulties, diction (chorus)/articulation (instrumental), balance, and blend.
 Prerequisite Courses: MUS 231
Credits: 2

MUS235 Musical Theatre Voice

Frequency: A
 Description: Continuation of fundamentals of vocal technique. Emphasis upon German literature and literature from the Broadway stage. Continued study of contemporary vocal literature as well as introduction to operatic and oratorio repertoire.
 Prerequisite Courses: MUS 126
Credits: 3

MUS236 Musical Theatre Voice

Frequency: A
 Description: Continuation of fundamentals of vocal technique. Emphasis upon German literature and literature from the Broadway stage. Continued study of contemporary vocal literature as well as introduction to operatic and oratorio repertoire.
 Prerequisite Courses: MUS 235
Credits: 3

MUS237 Composition Seminar

Frequency: B
 Description: First semester: introduction to free composition concentrating on creative musical inclinations of individual student. Second semester: continuation of first, increased attention to preparing student compositions for performance.
 Prerequisite Courses: MUS 122 and MUS 123 and MUS 124
Credits: 2

MUS238 Composition Seminar

Frequency: B
 Description: First semester: introduction to free composition concentrating on creative musical inclinations of individual student. Second semester: continuation of first, increased attention to preparing student compositions for performance.
 Prerequisite Courses: MUS 237
Credits: 2

MUS245 Performance Major

Frequency: A
 Description: Bassoon, Cello, Clarinet, Classical Guitar, Double Bass, Euphonium, Flute, French Horn, Harp, Oboe, Percussion, Piano, Saxophone, Trombone, Trumpet, Tuba, Viola, Violin, Voice.
 Prerequisite Courses: MUS 126
Credits: 4

MUS246 Performance Major

Frequency: A
 Description: Bassoon, Cello, Clarinet, Classical Guitar, Double Bass, Euphonium, Flute, French Horn, Harp, Oboe, Percussion, Piano, Saxophone, Trombone, Trumpet, Tuba, Viola, Violin, Voice.
 Prerequisite Courses: MUS 245
Credits: 4

MUS262 American Music

Frequency: C
 Description: 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

MUS263 Music History in Western Civilization

Frequency: D
 Description: Survey of western art music from the medieval era to the present day, 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 aspect of society and culture.
Credits: 3

MUS264 Topics in Music History

Frequency: D
 Description: A conceptual approach to music history of common practice period (1730-1850) to the early 20th century with an emphasis on music of the United States. Materials will be presented in a topical fashion, introducing specific issues relevant to musical developments such as Music Aesthetics and Music as Intellectual Property among others.
Credits: 3

MUS265 History of Jazz

Frequency: B
 Description: 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

MUS267 African-American Music

Frequency: B

Description: Non-chronological history of African-American music from its African roots through American forms of work songs, cries, hollars, spirituals, blues, ragtime, jazz, rhythm and blues, rock and roll, soul, gospel, reggae, rap, and zydeco, and music written by 20th century black composers.

*Credits: 3***MUS269 Music Criticism**

Frequency: B

Description: 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 other arts. Writing assignments include reviews of concerts and recordings.

Non-music majors should have taken a college-level music course or have significant experience in music activities.

Prerequisite Courses: ENGL 100

*Credits: 3***MUS300 Recital Seminar**

Frequency: A

Description: 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***MUS305 Applied Music Major**

Frequency: A

Description: Weekly half-hour private applied instruction for music majors in Bachelor of Arts and Bachelor of Music in Composition degree programs. See MUS 325-326 for further information about the requirements of specific studios.

Prerequisite Courses: MUS 206

*Credits: 2***MUS306 Applied Music Major**

Frequency: A

Description: Weekly half-hour private applied instruction for music majors in Bachelor of Arts and Bachelor of Music in Composition degree programs. See MUS 325-326 for further information about the requirements of specific studios.

Prerequisite Courses: MUS 305

*Credits: 2***MUS315-316 Secondary Applied Study**

Frequency: A

Description: 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***MUS317 Piano Class**

Frequency: A

Description: More advanced class for non-keyboard major with emphasis on technique development, sight reading, ensemble playing and repertoire such as Bach, Two-Part Invention; Chopin, Prelude in B minor, and Sonatinas by Clementi, Kuhlau.

Prerequisite Courses: MUS 218

*Credits: 1***MUS318 Piano Class**

Frequency: A

Description: More advanced class with emphasis on performance of solo piano literature, accompaniment of vocal and instrumental solos and choral accompaniments.

Prerequisite Courses: MUS 317

*Credits: 1***MUS325-326 Applied Music Major**

Frequency: A

Description: Bassoon, Cello, Clarinet, Classical Guitar, Double Bass, Euphonium, Flute, French Horn, Harp, Oboe, Percussion, Piano, Saxophone, Trombone, Trumpet, Tuba, Viola, Violin, Voice.

Prerequisite Courses: MUS 226

*Credits: 2***MUS333 Musics of the World**

Frequency: B

Description: Non-technical introduction to ethnomusicology. Survey of musical styles from around the world emphasizing how music reflects and influences society.

*Credits: 3***MUS334 Music of Latin America**

Frequency: D

Description: 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.). All genres, major composers (Villa-Lobos, Ginastera, Chavez et al), and basic bibliography will be studied. Although there are no prerequisites, a reading knowledge of Spanish would be desirable.

*Credits: 3***MUS335-336 Musical Theatre Voice**

Frequency: A

Description: Continuation of the study of vocal techniques. Possible inclusion of the French repertoire. Continuation of the study of literature of the Broadway stage, opera and oratorio.

Prerequisite Courses: MUS 236

*Credits: 3***MUS337 Composition Seminar**

Frequency: B

Description: Original work in composition accompanied by study and analysis of past and contemporary musical compositions and creative concepts.

Prerequisite Courses: MUS 222

and MUS 223 and MUS 224

*Credits: 2***MUS338 Composition Seminar**

Frequency: B

Description: Original work in composition accompanied by study and analysis of past and contemporary musical compositions and creative concepts.

Prerequisite Courses: MUS 337

*Credits: 2***MUS340 Piano Pedagogy**

Frequency: C

Description: Study of the various methods and literature for the elementary student. Lectures and discussions. Observations of private and class lessons. Supervised teaching.

Prerequisite Courses: MUS 226

*Credits: 2***MUS344 Vocal Pedagogy**

Frequency: D

Description: 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: 2***MUS345-346 Performance Major**

Frequency: A

Description: Bassoon, Cello, Clarinet, Classical Guitar, Double Bass, Euphonium, Flute, French Horn, Harp, Oboe, Percussion, Piano, Saxophone, Trombone, Trumpet, Tuba, Viola, Violin, Voice.

Prerequisite Courses: MUS 246

*Credits: 4***MUS347-348 Applied Music Recitation**

Frequency: A

Description: Student prepares Junior Performance Recital while enrolled in MUS 347-348.

Recitations scheduled concurrently with appropriate semesters of Applied Music (MUS 345, 347, and 346, 348).

*Credits: 1***MUS349 Vocal Pedagogy Practicum**

Frequency: A

Description: Students act as voice instructors for approximately 15 contact hours per semester teaching studio voice lessons. One 2 hour weekly seminar concentrates on methods of building voices, assessing and assigning vocal literature, building recital programs, choice and use of exercises and vocalizes.

Prerequisite Courses: MUS 344

*Credits: 1***MUS350 Special Topics in Music History**

Frequency: D

Description: A course to permit music history instructors to initiate special studies in specialized subjects.

Prerequisite Courses: MUS 160 and MUS 252 and MUS 255

*Credits: 3***MUS351 Independent Study Music History**

Frequency: D

Description: An opportunity for a student to pursue a limited study under supervision. The study will usually result in a research-based term paper.

Prerequisite Courses: MUS 160

and MUS 252 and MUS 255

*Credits: 1***MUS354 Form and Analysis**

Frequency: C

Description: Development of skills for analysis of musical form, from small song forms to large symphonic works.

Prerequisite Courses: MUS 222

and MUS 223 and MUS 224

*Credits: 3***MUS355-356 Performance Practicum**

Frequency: A

Description: Music Performance majors in orchestral instruments tutoring secondary or non-major applied music classes under supervision of applied studio faculty.

Credits: 0

MUS358 Governments and the Avant Garde

Frequency: D
Description: 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

MUS361 Jazz Improvisation

Frequency: B
Description: A performance lab and study of various theoretical foundations of improvised jazz. Mainstream style is emphasized.
Prerequisite Courses: MUS 122 and MUS 124
Credits: 2

MUS362 Jazz Theory

Frequency: B
Description: A study of jazz harmony: chord symbols, melody, harmonization, chord extensions and substitutions in various jazz styles. Ear training in jazz style will also be included.
Credits: 2

MUS363 Jazz Pedagogy

Frequency: B
Description: Methods, procedures and concepts of teaching various styles of jazz. The emphasis will be on public school education.
Credits: 2

MUS371 Woodwind Repair

Frequency: C
Description: Introduction to common repair problems, preventative maintenance, adjustments necessary to maintain good playing condition, and emergency repairs on the woodwind instruments. Replacement of pads, springs, corks and felts.
Prerequisite Courses: MUED 271 and MUED 272
Credits: 2

MUS372-379 Special Topics in Music

Frequency: D
Description: Study of music areas supplementing but not replacing regular courses. Topics, credit hours, and instructor determined by school.
Credits: 1 - 3

MUS380 The Business of Music

Frequency: C
Description: 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

MUS383 French Song

Frequency: D
Description: A study of selected 19th and 20th century French vocal literature in its literary and musical context, to acquaint singers and pianists with composers and poets from the viewpoint of intellectual history and literary movements.
Prerequisite Courses: MUS 137 and MUS 138 and MUS 139 and MUS 140
Co-requisite Courses: GERM 387
Credits: 2

MUS387 German Song

Frequency: D
Description: A study of selected German vocal literature in its literary and musical context to acquaint singers and pianists with authors and their background from the viewpoint of intellectual history and literary movements.
Credits: 2

MUS395 Career/Business Management for Musicians

Frequency: C
Description: 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.
Prerequisite: Junior standing in Music or permission of instructor.
Credits: 3

MUS400 Recital Seminar

Frequency: A
Description: 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

MUS401 Orchestration

Frequency: C
Description: Fundamentals of scoring for orchestra with particular attention to range, color, transposition, and technical possibilities of individual instruments. Special characteristics of the various choirs and appropriate scoring for different styles of compositions. Student papers projected on screen for class performance and evaluation.
Prerequisite Courses: MUS 122 and MUS 123 and MUS 124 and MUS 160
Credits: 3

MUS403 20th Century Counterpoint

Frequency: C
Description: A study of the art of counterpoint as practiced from its beginning in western musical history to the present, concentrating on analysis of important examples and some compositional exercises based thereon.
Prerequisite Courses: MUS 160 and MUS 222 and MUS 224
Credits: 3

MUS404 Choral Arranging

Frequency: B
Description: Fundamental techniques of arranging for a cappella and accompanied choral groups. Deals primarily with problems of public school-aged choral ensembles, their specific characteristics and limitations, including ranges, voice combinations, and suitable material. Includes consideration of use of special choral devices and treatments.
Prerequisite Courses: MUS 222 and MUS 223 and MUS 224
Credits: 2

MUS405-406 Applied Music Major

Frequency: A
Description: Weekly half-hour private applied instruction for Music majors in Bachelor of Arts in Applied Music degree program. See MUS 425-426 for further information about the requirements of specific studios.
Prerequisite Courses: MUS 306
Credits: 2

MUS408 History and Literature of the Wind Band

Frequency: D
Description: 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

MUS409 History and Literature of the Guitar

Frequency: D
Description: 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: the 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.
Prerequisite Courses: MUS 160
Credits: 3

MUS415 Piano Class for Keyboard Majors

Frequency: B
Description: 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 and improvisation.
Prerequisite Courses: MUS 317 and MUS 318
Credits: 1

MUS416 Piano Class for Keyboard Majors

Frequency: B
Description: Continuation of development of functional piano skills of harmonization, part-reading, transposition, sight reading, and improvisation; playing and improvising rags, and writing or arranging a piano duet. Piano standards barrier exam at end of course.
Prerequisite Courses: MUS 415
Credits: 1

MUS417 Piano Class for Non-Keyboard Major

Frequency: A
Description: More advanced course in functional piano with emphasis on harmonization in pop and jazz style. Continued work on transposition, sight reading, playing by ear and part-reading. Music Education majors take the piano proficiency barrier at conclusion of course.
Prerequisite Courses: MUS 317 and MUS 318
Credits: 1

MUS418 Piano Improvisation for Non-Keyboard Majors

Frequency: A
Description: Emphasis on harmonization of lead sheets with jazz voicings, chord substitution, creative harmonization, tri-tone substitution; improvisation of 12 bar blues and boogie.
Prerequisite Courses: MUS 317 and MUS 318
Credits: 1

MUS420 Piano Literature

Frequency: C
Description: Survey of representative piano literature for performance and teaching. Analysis of principal works of Bach, Haydn, Mozart, Beethoven, Chopin, Brahms, Schumann, Liszt, and the impressionistic and modern composers. Emphasis on structural and stylistic considerations.
Prerequisite Courses: MUS 160 and MUS 221 and MUS 222 and MUS 223
Credits: 3

MUS424 The History of Opera

Frequency: D
Description: Technical study of opera emphasizing its musical and dramatic development, relating it to social, cultural, and intellectual forces influencing it.

Prerequisite Courses: MUS 122 and MUS 123 and MUS 124 and MUS 160

Credits: 3

MUS425-426 Applied Music Major

Frequency: A
Description: Preparation for senior recital. Bassoon, Cello, Clarinet, Classical Guitar, Double Bass, Euphonium, Flute, French Horn, Harp, Oboe, Percussion, Piano, Saxophone, Trombone, Trumpet, Tuba, Viola, Violin, Voice.

Prerequisite Courses: MUS 326

Credits: 2

MUS433 Romanticism and Music

Frequency: D
Description: 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

MUS435-436 Musical Theatre Voice

Frequency: A
Description: Preparation of the B.F.A. in Musical Theatre recital which includes dance technique, acting technique and the culmination of the three previous years of vocal study.

Prerequisite Courses: MUS 336

Credits: 3

MUS437 Composition Seminar

Frequency: B
Description: Free composition in seminar and semi-private consultations.

Prerequisite Courses: MUS 338

Credits: 2

MUS438 Composition Seminar

Frequency: B
Description: Free composition in seminar and semi-private consultations.

Prerequisite Courses: MUS 437

Credits: 2

MUS439 Composition Seminar

Frequency: A
Description: Continuation of free composition with detailed study of 20th century compositional techniques.

Credits: 3

MUS440 Composition for Electronic Media I

Frequency: B
Description: Basic compositional and technical skills necessary for realization of electronic music. Emphasis on proper recording, editing, mixing, and synthesis techniques as they relate to the composer. Analog synthesis is stressed. An introduction to digital synthesis (MIDI, FM, computer-assisted composition) also included. Brief historical survey of medium presented.

Prerequisite Courses: MUS 122 and MUS 123 and MUS 124 and MUS 160

Credits: 3

MUS441 Composition for Electronic Media II

Frequency: B
Description: Electronic music composed and realized using a variety of computer-related techniques. Covers digital recording and synthesis using MIDI and other digital audio hardware/software. Emphasis on MIDI and audio sequencing. Related topics include electronic orchestration, computer assisted software and algorithms, and literature.

Prerequisite Courses: MUS 122 and MUS 123 and MUS 124 and MUS 440

Credits: 3

MUS445-446 Performance Major

Frequency: A
Description: Preparation for senior recital. Bassoon, Cello, Clarinet, Classical Guitar, Double Bass, Euphonium, Flute, French Horn, Harp, Oboe, Percussion, Piano, Saxophone, Trombone, Trumpet, Tuba, Viola, Violin, Voice.

Prerequisite Courses: MUS 346

Credits: 4

MUS447-448 Applied Music Recitation

Frequency: A
Description: Student prepares Senior Performance Recital while enrolled in MUS 447-448.

Recitations scheduled concurrently with appropriate semesters of Applied Music (445, 447 and 446, 448).

Credits: 1

MUS450-451 Directed Studies

Frequency: A
Description: Directed Studies in music. Designed exclusively for Elementary Education majors with a concentration in music. Includes voice proficiency, vocal instruction, observation of elementary music classrooms, and conducting.

Credits: 2

MUS453 The Baroque Period in Music

Frequency: D
Description: Detailed study of styles, trends, and developments in music, 17th and 18th centuries through pre-classic era. Music studied through scores, recordings, and performance. Review of important historical and theoretical developments.

Prerequisite Courses: MUS 160

Credits: 3

MUS454 The Classical Period in Music

Frequency: D
Description: Study of styles, trends, and developments in music in Classical period (ca. 1740-1820). Study of music of Haydn, Mozart, and other composers included. Music studied through scores, recordings, and performance. Historical and theoretical developments.

Prerequisite Courses: MUS 160

Credits: 3

MUS455 The Romantic Period in Music

Frequency: D
Description: 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.

Prerequisite Courses: MUS 252

Credits: 3

MUS456 The Modern Period in Music

Frequency: D
Description: 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.

Prerequisite Courses: MUS 255

Credits: 3

MUS458 Cult of Elizabeth/Patronage in Arts

Frequency: D
Description: 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

MUS460-461 Independent Study

Frequency: A
Description: Maximum of 6 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

MUS470-471 Special Topics Workshop

Frequency: D
Description: Usually summer or other short-term workshops/institutes dealing with specific music literature, topics, problems, or teaching approaches and techniques.

Credits: 2 - 6

MUS476 Audio and Desktop Multimedia

Frequency: B
Description: Course designed for Media Arts Sound Production Majors and other students with a strong interest and background in composition, multimedia, audio and MIDI. A project-oriented course which focuses on audio design, analysis, and integration as it applies to multimedia authoring, motion video, and web content creation.

Prerequisite Courses: MUED 291

Credits: 3

MUS485 Audio and Desktop Multimedia

Frequency: B
Description: A course designed for Media Arts Sound Production majors and other students with a strong interest and background in composition, multimedia, audio and MIDI. A project-oriented course which focuses on audio design, analysis, and integration as it applies to multimedia authoring, motion video, and web content creation.

Prerequisite Courses: MUS 441 and SRT 200 and SRT 201 and SRT 250 and SRT 251

Credits: 3

MUS491 Senior Project in Composition

Frequency: A
Description: An original composition representing the most mature work of the apprentice composer. Students with inclinations toward graduate work in music theory 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 chairperson.

Credits: 3

MUS502 Harmonic Styles Since 1850

Frequency: D
 Description: Analytical and compositional study of stylistic developments since 1850 which extend, expand, depart from or negate "common-practice" harmony and tonality. Major composers studied. Emphasis on gaining understanding of their harmonic styles via analysis and compositional imitation by student. Individual projects required.
 Prerequisite Courses: MUS 160 and MUS 221
Credits: 3

MUS503 Twentieth Century Counterpoint

Frequency: D
 Description: 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.
 Prerequisite Courses: MUS 160
Credits: 3

MUS506 Basic Studies Seminar: Theory

Frequency: C
 Description: 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

MUS507 Basic Studies Seminar: History

Frequency: C
 Description: 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

MUS508 History and Literature of the Wind Band

Frequency: C
 Description: Survey of various influences (political, social, musical, etc.) upon the development of the Wind Band and its repertory. Extensive listening, analysis and discussion with individual projects including bibliography and discography development.
Credits: 3

MUS520 Piano Literature

Frequency: C
 Description: Survey of representative piano literature for performance and teaching. Analysis of principal works of Bach, Haydn, Mozart, Beethoven, Chopin, Brahms, Schumann, Liszt, and the impressionistic and modern composers. Emphasis on structural and stylistic considerations.
Credits: 3

MUS542 Renaissance Period in Music

Frequency: D
 Description: 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.
 Prerequisite Courses: MUS 160
Credits: 3

MUS543 Baroque Period in Music

Frequency: D
 Description: Detailed study of styles, trends, and developments in music, 17th and 18th centuries through pre-classic era. Music studied through scores, recordings, and performance. Review of important historical and theoretical developments.
 Prerequisite Courses: MUS 160
Credits: 3

MUS544 Classical Period in Music

Frequency: D
 Description: Study of styles, trends, and developments in music in classical period (ca. 1740-1820). Study of music of Haydn, Mozart, and other composers included. Music studied through scores, recordings, and performance. Historical and theoretical developments.
 Prerequisite Courses: MUS 160
Credits: 3

MUS545 Romantic Period in Music

Frequency: D
 Description: 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.
 Prerequisite Courses: MUS 160
Credits: 3

MUS546 Modern Period in Music

Frequency: D
 Description: 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.
 Prerequisite Courses: MUS 160
Credits: 3

MUS550 Compositional Technology Since 1950

Frequency: D
 Description: Survey of music since 1950. Emphasis upon main stylistic trends, avant-garde music, electronic music, multi-media, and new younger composers. Musical analysis and composition required of students.
Credits: 3

MUS555 Special Topics Workshop

Frequency: D
 Description: Usually summer or other short-term workshops dealing with specific topics, techniques or problems in music theory, analysis, history or literature. Maximum of 6 credits in increments of no more than 3 credits may apply with permission to requirements in categories of theory, history and literature, or electives.
Credits: 1 - 3

MUS565 Special Topics Seminar

Frequency: D
 Description: 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 credits (in different topics) and may apply with permission to requirements in categories of theory, history and literature, or electives.
Credits: 1 - 3

MUS566 Advanced Choral Conducting/Analysis of Historical Styles

Frequency: D
 Description: Advanced choral conducting techniques and analysis of choral scores. Students will conduct in class from choral repertory 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 twentieth century styles. Some class time will also be devoted to presentation and discussion of appropriate choral literature of high quality in the school curriculum.
 Prerequisite Courses: MUS 222 and MUS 224 and MUS 232
Credits: 3

MUS575 Music & Computer Multimedia

Frequency: A
 Description: 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

MUS576 Audio and Desktop Multimedia

Frequency: B
 Description: Course designed for Media Arts Sound Production majors and other students with a strong interest and background in composition, multimedia, audio and MIDI. A project-oriented course which focuses on audio design, analysis, and integration as it applies to multimedia authoring, motion video, and web content creation.
 Prerequisite Courses: MUS 291
Credits: 3

MUS590-591 Special Studies

Frequency: D
 Description: 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 credits of any combination of MUS and MUED may be earned this way in increments of no more than 3 credits.
Credits: 1 - 3

MUS601-604 Applied Music Minor

Frequency: A
 Description: Half-hour lessons in secondary applied instruments. Permission of School of Music.
Credits: 1

MUS605-608 Applied Music Major I

Frequency: A
 Description: Hour lessons in major applied instruments. Permission of School of Music.
Credits: 2

MUS609 Composition

Frequency: A
 Description: Advanced free composition for graduate study, concentrating on individual creative musical inclinations of each student. Seminar and private study of 20th century creative concepts.
 Prerequisite Courses: MUS 438 or MUS 439
Credits: 3

MUS610 Composition

Frequency: A
 Description: Advanced free composition for graduate study, concentrating on individual creative musical inclinations of each student. Seminar and private study of 20th century creative concepts.
 Prerequisite Courses: MUS 438 or MUS 439 and MUS 609
Credits: 3

MUS611 Composition

Frequency: D
 Description: Continuation of advanced composition pursuing mature, professional creative expression.
 Prerequisite Courses: MUS 610
Credits: 3

MUS612 Composition

Frequency: D
 Description: Continuation of advanced composition pursuing mature, professional creative expression.
 Prerequisite Courses: MUS 610 and MUS 611
Credits: 3

MUS692-693 Studio Instruction I and II

Frequency: A
 Description: Two semesters of advanced studio instruction for candidates for Performance degree culminating in MUS 694 Recital.
Credits: 3

MUS694 Recital

Frequency: A
 Description: Concurrently with MUS 693 or in any subsequent semester, candidate for degree in Performance presents public recital under supervision of major instructor and two other instructors from same area.
Credits: 3

MUS695 Thesis

Frequency: D
 Description: Candidate for degree in theory-composition engages in advanced work culminating in thesis project or composition/arrangement.
Credits: 1 - 3

MUTY115 Introduction to Music Therapy

Frequency: B
 Description: 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

MUTY240 Music for Children with Disabilities

Frequency: B
 Description: A basic introduction to the child with disabilities, state and federal guidelines applicable to music in special education and how music can be used as a teaching method. Lecture, discussion, class demonstration.
Credits: 2

MUTY270 Social Instruments

Frequency: A
 Description: 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

MUTY300 Orientation Clinic Practicum

Frequency: B
 Description: An introduction to the clinical experience as a beginning process toward becoming a music therapist. Designed to develop skills in observation, behavioral objectives and therapeutic techniques. A look at the professional aspect of music therapy, i.e., Code of Ethics, Standards of Clinical Practice, etc. Assigned observations, development of music skills and readings are part of class requirements.
 Prerequisite Courses: MUTY 115
Credits: 1

MUTY301 Seminar in Music Therapy

Frequency: A
 Description: Designed to support the clinical practicum experience. Fall semester seminars correspond to clinical population; spring semester seminars involve psychological approaches to music therapy.
 Prerequisite Courses: MUTY 115 and MUTY 300
Credits: 1

MUTY302 Practicum in Music Therapy

Frequency: A
 Description: 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

MUTY345 Foundations of Music Therapy

Frequency: B
 Description: Introduction to music therapy literature and research. Historical and philosophical approach to how music has influenced human behavior. Introduces students to problems of writing in psychological style as well as how to read research critically and analytically and how to write articulately. Research abstracts, and a major historical paper are part of the class requirements.
Credits: 3

MUTY401 Principles of Music Therapy

Frequency: B
 Description: A synthesis of all previous classroom and clinical experiences in the form of the senior portfolio. Students develop a major work designed to produce administrative/management skills required for entry level music therapists. Development in scheduling, budgets, treatment programs, assessment, evaluation, etc. are major areas of concern.
Credits: 3

MUTY414 Psychology of Music

Frequency: B
 Description: 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

MUTY415 Methods/Materials for Music Therapy

Frequency: B
 Description: Available materials for music therapy application in all target populations. A look at different methods used in music therapy practice, i.e., Orff Schulwerk, Nordoff-Robbins, Improvisation, etc. Students prepare their own resource materials as part of class requirements.
 Prerequisite Courses: MUTY 115
Credits: 2

MUTY422 Psychological Research in Music

Frequency: B
 Description: 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

MUTY450 Internship in Music Therapy

Frequency: A
 Description: Six-month clinical internship in AMTA-approved facility.
Credits: 0

PHED100 CHAMPS/Lifeskills

Frequency: D
 Description: This 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

PHED101 Aqua-Aerobics

Frequency: A
 Description: Course introduces a sequence of water exercises that enhances the students aerobic fitness.
Credits: 1

PHED102 Learn to Swim

Frequency: A
 Description: Course emphasizes the basic skills needed to learn to swim. The course is designed for non-swimmers.
Credits: 1

PHED103 Intermediate Swimming

Frequency: A
 Description: Course emphasizes the intermediate skills needed to develop individual strokes.
Credits: 1

PHED104 Advanced Swimming

Frequency: A
 Description: Course emphasizes advanced stroke development and training techniques involved in advanced swimming.
Credits: 1

PHED105 Swimming & Conditioning

Frequency: A
 Description: Course educates students about how to use the swimming pool to develop and maintain a sensible level of physical fitness. Water exercises and technique is taught.
Credits: 1

PHED106 Lifeguard Training

Frequency: B
 Description: Course emphasizes the skills and techniques needed to gain lifeguard certification. Lifeguard certification is possible at the end of this course.
Credits: 2

PHED107 WSI-Water Safety Instructor

Frequency: B
 Description: Course follows the Red Cross guidelines to train Water Safety Instructors. WSI is possible at the completion of this course.
Credits: 2

PHED108 Basic Scuba Diving

Frequency: A
 Description: 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

PHED109 Advanced Scuba Diving

Frequency: A
Description: Course introduces the advanced techniques of SCUBA diving needed for open water diving. Prerequisite: PHED 108 or equivalent.
Credits: 1

PHED113 Basic Bowling

Frequency: A
Description: Introduces students to the fundamentals of bowling including scoring, approaches and strategies needed to attain basic competencies as a beginning bowler.
Credits: 1

PHED116 Golf - Basic

Frequency: B
Description: Course introduces the student to the skills and rules needed to develop introductory golf proficiency.
Credits: 1

PHED117 Running & Conditioning

Frequency: A
Description: Course teaches the student the basics of aerobic conditioning as a means of developing physical fitness.
Credits: 1

PHED120 Ice Skating - Basic

Frequency: A
Description: Student will learn the basic skills need to begin ice skating. Balance, footwork, turning and stopping are emphasized in this course.
Credits: 1

PHED121 Ice Skating - Intermediate

Frequency: A
Description: Course emphasizes in-depth skills that were introduced in basic ice skating.
Credits: 1

PHED122 Figure Skating

Frequency: A
Description: 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.
Prerequisite Courses: PHED 120
Credits: 1

PHED124 Basic Aerobics

Frequency: A
Description: Course is designed to introduce the student to low and high impact aerobic exercise.
Credits: 2

PHED125 Step Aerobics

Frequency: A
Description: Course introduces the student to aerobic exercise through a step aerobics technique.
Credits: 2

PHED126 Body Sculpting (Women)

Frequency: A
Description: Course introduces the student to strength training, body toning and the basics of aerobic exercise. The development of individual programs will be directed at the fitness needs of women.
Credits: 2

PHED127 Yoga

Frequency: A
Description: 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 and deepen respiration and mind-body awareness.
Credits: 2

PHED128 Racquetball - Basic

Frequency: D
Description: The basic skills, rules and techniques of scoring are taught in this course.
Credits: 1

PHED129 Racquetball - Intermediate

Frequency: D
Description: Strategies of singles and doubles play are emphasized in this course.
Credits: 1

PHED131 Self-Defense

Frequency: A
Description: Course emphasizes the basic techniques needed to defend oneself. Stances and defensive strategies are emphasized.
Credits: 1

PHED132 Skiing

Frequency: A
Description: The basic techniques needed to ski are taught. This course is designed to meet the needs of beginners as well as intermediate and advanced skiers.
Credits: 1

PHED134 Tennis - Basic

Frequency: A
Description: Course emphasizes the rules, grips, stances and elementary stroke development for the beginning player.
Credits: 1

PHED135 Tennis - Intermediate

Frequency: A
Description: Course introduces in-depth tennis skills and advanced techniques and strategies for singles and doubles play.
Credits: 1

PHED138 Volleyball

Frequency: A
Description: Course introduces basic volleyball skills necessary for the student interested in intramural or recreational play.
Credits: 1

PHED139 Weight Training

Frequency: A
Description: 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

PHED180 Assistant Scuba Instructor

Frequency: A
Description: This 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.
Prerequisite: PHED 108 or permission of instructor.
Prerequisite Courses: PHED 108
Credits: 2

PHED199 Special Topics

Frequency: D
Description: Special topics in physical education.
Credits: 1 - 6

PHED200 Physiology of Sport/Exercise

Frequency: D
Description: A comprehensive overview of the field without being overwhelming. It provides a solid foundation of basic physiology from which 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

PHED210 Philosophy/Principles and Organization of Athletics in Education

Frequency: A
Description: The philosophy, principles and organization of interscholastic athletics are presented in this course
Credits: 3

PHED311 The Psychology of Coaching

Frequency: B
Description: 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

PHED315 Prevention and Care of Athletic Injuries

Frequency: B
Description: Study of prevention and recognition of injuries commonly associated with athletic competition. Includes the study of anatomy and physiology involved in injuries. One of several courses designed to meet state mandate for interscholastic coaching.
Prerequisite: HLTH 115 or permission of the instructor.
Prerequisite Courses: HLTH 115
Credits: 3

PHED316 Athletic Training Internship

Frequency: A
Description: 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. Prerequisite: PHED 315 or permission of the Athletic Trainer.
Prerequisite Courses: PHED 315
Credits: 3

PHED321 Coaching Techniques

Frequency: A
Description: A course designed to introduce the prospective coach to the basic skills, strategies and coaching techniques required in organizing a particular sport. While this course is one of several courses designed to meet state mandates for interscholastic coaching, the student is expected to have completed all other courses in the mandate before enrolling in PHED 321 or attain the permission of the instructor.
Credits: 2

PHED400 Sports Studies Internship

Frequency: A
Description: 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 40 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

PHED499 Independent Study

Frequency: A
Description: 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 - 3

PHIL105 Philosophical Ideas

Frequency: B
 Description: Introduction to the central ideas of prominent Western philosophers, earliest times to present. Lecture class.
Credits: 3

PHIL106 Critical Thinking

Frequency: C
 Description: This course concerns the study and practice of critical thinking. Through analysis of dramatic examples of the critical thinking skills necessary for effective deliberation, it hones analytic skills and encourages careful thought. The primary feature of the course is the consideration of an abundance of exercises, examples, and applications from everyday life, ranging from the courtroom to political debate and from advertising to current social issues.
Credits: 3

PHIL115 Philosophical Inquiry

Frequency: A
 Description: Discussion of some central problems of philosophy such as existence of God, nature of reality, conditions of knowledge, question of free will versus determinism, and foundations of morality. How should one live? What makes society just? Is there a Supreme Being? Can we survive death? Such questions are universal and fundamental to all humanity, although various cultures offer radically different solutions. The course aspires to reveal the rich diversity that comprises global philosophizing. Discussion class.
Credits: 3

PHIL116 Introduction to Deductive Logic

Frequency: A
 Description: 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

PHIL218 Introduction to Ethics

Frequency: C
 Description: Ethics is the study of morality. It is central to issues relating to what a person should believe and how they should act. The investigation of morality occurs via an analysis of metaethics (the fundamental status of moral judgements), normative ethics (the nature of a right action and the nature of a virtuous person), and applied ethics (the application of normative ethics to particular moral issues). These areas are explored through the discussion of such issues as: Is morality relative to culture? Is morality independent of religion? Do the ends of one's action justify the means? What does it mean to be a virtuous person?
Credits: 3

PHIL222 The Greek Way

Frequency: C
 Description: 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

PHIL224 Medieval Thought

Frequency: C
 Description: 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

PHIL226 The Age of Reason and Its Legacy

Frequency: C
 Description: The nature of reality, knowledge, and experience as portrayed by the Rationalists (Descartes, Leibniz, and Spinoza) and the Empiricists (Locke, Berkeley, and Hume). 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

PHIL228 American Philosophy

Frequency: C
 Description: The political philosophy, epistemology, scientific method, and criteria of truth, argument, and reason which distinctively characterize the Founding Fathers, the Transcendentalists, and the Pragmatists. Includes consideration of the question: Is there something distinctively American about American philosophy?
Credits: 3

PHIL238 Philosophy of Religion

Frequency: B
 Description: 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

PHIL258 Life and Death

Frequency: B
 Description: 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

PHIL262 Crime and Punishment

Frequency: C
 Description: This 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? We 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, we explore contemporary moral issues such as whether the state should criminalize recreational drug use, hate crimes, or blackmail.
Credits: 3

PHIL265 Social and Political Philosophy

Frequency: C
 Description: 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 origins of human communities and the nature of social commitment as viewed by major political philosophies such as classical republicanism, libertarianism, liberalism, socialism, and communism.
Credits: 3

PHIL270 Philosophy of the Arts

Frequency: D
 Description: Philosophical problems in the arts. Nature of art and aesthetic value; aesthetic attitude and experience; description, interpretation, and evaluation of works of art among topics considered. Problems specific to music, film, literature, painting, and sculpture are also discussed.
Credits: 3

PHIL274 Existentialism

Frequency: D
 Description: 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

PHIL301 Intermediate Deductive Logic

Frequency: D
 Description: The development of a formal system of logic with relations and multiple quantifiers, identity and definite descriptions. Other topics may include modal logic (the logic of possibility and necessity), set theory, or results concerning the scope and limits of logical systems. PHIL 116 or permission of instructor.
 Prerequisite Course: PHIL 116
Credits: 3

PHIL310 Business Ethics

Frequency: C
 Description: 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

PHIL312 Current Moral Issues and Principles

Frequency: B

Description: 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***PHIL313 Sex and Love**

Frequency: B

Description: 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 we be concerned with analyzing love?

*Credits: 3***PHIL317 Philosophy of Science**

Frequency: C

Description: 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, and the distinction between science and non-science.

*Credits: 3***PHIL330 Libertarianism**

Frequency: C

Description: Libertarianism holds that the only proper function of the state is to protect its citizens from acts of force, fraud, or theft. We will explore libertarianism and evaluate the arguments for and against it. We 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***PHIL338 Marxist Thought**

Frequency: C

Description: 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 our material living conditions on our 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***PHIL345 The Meaning of Life**

Frequency: B

Description: This 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 I exist? does mortality rob human life of any significance it might have?

*Credits: 3***PHIL346 Human Happiness**

Frequency: B

Description: A critical evaluation of major theories of happiness. If we are rational and actively loving, what should we teach our 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***PHIL351 Metaphysics: Reality and Existence**

Frequency: C

Description: An examination of the fundamental categories of reality, such as existence, substance, property, identity, space, time, event, causation, necessity, essence, free will and mind. The philosophical questions in which these categories play a role will also be discussed; e.g., Is free will possible in a deterministic world? and How can something change its properties over time and still remain the very same thing?

Prerequisite: 3 credit hours in Philosophy.

*Credits: 3***PHIL353 Theory of Knowledge**

Frequency: C

Description: Inquiry into the nature of human knowledge and related concepts such as truth, belief and epistemic justification. Knowledge from experience and a prior knowledge. We address theories of justification such as foundationalism, coherentism and reliabilism. We also confront problems posed by Skepticism for the scope of human knowledge, especially knowledge about the external world. Prerequisite: 3 credit hours in Philosophy

*Credits: 3***PHIL362 Philosophy of Law**

Frequency: C

Description: This 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? We will also examine 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? We will then discuss the role of judges in interpreting both statutes and common law (judge-made law).

*Credits: 3***PHIL364 Justice, Law, and Economics**

Frequency: D

Description: The civil law system adjudicates contractual disputes and disputes involving claims to compensation for injury. This 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***PHIL369 Topics in Philosophy**

Frequency: D

Description: 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: 3***PHIL430 Philosophy of Mind**

Frequency: C

Description: 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***PHIL432 The Age of Analysis: Philosophy Since 1900**

Frequency: C

Description: 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.

*Credits: 3***PHIL441 Philosophy of Language and Semantics**

Frequency: D

Description: 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.

*Credits: 3***PHIL446-449 Selected Problems**

Frequency: D

Description: Advanced special topics and problems not treated thoroughly in other courses. Past examples: Environmental Ethics, Philosophy of War, Philosophy of History, Rationality, Renaissance Philosophy. Current topics specified in *Course Offerings Bulletin*.

Credits: 3

PHIL460-469 Major Philosophers

Frequency: C
 Description: Intensive study of thought of a major philosopher of historical or contemporary significance. Past examples: Socrates, Plato, Hume, Kant, Nietzsche, Wittgenstein, Locke, Berkeley, Russell. Current topics specified in *Course Offerings Bulletin*.
Credits: 3

PHIL481 Directed Study

Frequency: A
 Description: 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.
Credits: 1 - 3

PHIL485 Independent Study

Frequency: A
 Description: Student will pursue a course of independent study and present evidence of accomplishment at end of semester. Philosophy major and permission of instructor.
Credits: 1 - 3

PHYS101 Contemporary Physics for Non Scientists

Frequency: A
 Description: (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

PHYS104 Cosmology

Frequency: D
 Description: Non-mathematical presentation of selected topics regarding the latest theories of the formation of the universe including ideas from special and general relativity.
Credits: 1

PHYS107 Particles and Waves

Frequency: D
 Description: Unifying principles of particles and waves viewed from classical and modern physics.
Credits: 1

PHYS111 Introduction to Physical Sciences

Frequency: D
 Description: For non-science majors. Emphasis on laws of nature, principles, atomic and nuclear structure.
Credits: 3

PHYS121 College Physics I

Frequency: B
 Description: A non-calculus lecture sequence: motion, dynamics, conservation theorems, wave motion, heat, sound. Students requiring a laboratory component should include PHYS 123.
 Prerequisite Courses: MATH 106
Credits: 3

PHYS122 College Physics II

Frequency: B
 Description: A non-calculus lecture sequence: electromagnetic fields, circuits, optics, quantum phenomena. Students requiring a laboratory component should include PHYS 124.
 Prerequisite Courses: MATH 106
Credits: 3

PHYS123 College Physics Lab I

Frequency: B
 Description: One three-hour laboratory session per week treating topics covered in PHYS 121.
 Co-requisite Courses: PHYS 121
Credits: 1

PHYS124 College Physics II Lab

Frequency: B
 Description: One three-hour laboratory session per week treating topics covered in PHYS 122.
 Co-requisite Courses: PHYS 122
Credits: 1

PHYS200 Engineering Graphics

Frequency: D
 Description: Introduction to tools, language, and procedures basic to training of an engineering draftsman. Emphasis on drafting techniques, two-dimensional and isometric representation.
Credits: 2

PHYS206 Genesis of the Universe

Frequency: B
 Description: A non-mathematical course covering historical, philosophical, theological and scientific aspects concerning the genesis of the universe.
Credits: 3

PHYS230 University Physics I

Frequency: B
 Description: Calculus-based lecture sequence for science and mathematics majors who have completed a course or courses in University Calculus or the equivalent. Kinematics, dynamics, gravitation. A recitation is included.
 Prerequisite Courses: MATH 122
 Co-requisite Courses: PHYS 232
Credits: 4

PHYS231 University Physics II

Frequency: B
 Description: Calculus-based lecture sequence for science and mathematics majors who have completed a course or courses in University Calculus or the equivalent. Electricity and magnetism. A recitation is included.
 Prerequisite Courses: MATH 123
 Co-requisite Courses: PHYS 233
Credits: 4

PHYS232 University Physics I Lab

Frequency: B
 Description: One three-hour laboratory session per week treating topics covered in PHYS 230.
 Co-requisite Courses: PHYS 230
Credits: 1

PHYS233 University Physics II Lab

Frequency: B
 Description: One three-hour laboratory session per week treating topics covered in PHYS 231.
 Co-requisite Courses: PHYS 231
Credits: 1

PHYS234 Modern Physics

Frequency: B
 Description: Special relativity, wave motion, basic concepts of quantum mechanics, atomic structure, solid state, and nuclear physics, including a weekly three hour lab.
 Prerequisite Courses: PHYS 231
Credits: 4

PHYS311 Acoustics I

Frequency: B
 Description: Elements of physics bearing directly on production and assimilation of musical tones, wave motion, resonance, complex waves, physiology of hearing, musical scales, simple acoustical models of musical instruments.
 Prerequisite Courses: PHYS 121 or PHYS 230
Credits: 3

PHYS312 Acoustics II

Frequency: B
 Description: Psychoacoustics and architectural acoustics. A study of the mechanics and neurological foundations of the perception of pitch, loudness, timbre, and direction, followed by a contrasting study of the behavior, measurement, and evaluation of sound and music in a variety of environments, utilizing both objective techniques and the psychoacoustical insights gained from the first part of the course.
 Prerequisite Courses: PHYS 311
Credits: 3

PHYS318 Basic Electronics

Frequency: B
 Description: Introduction to electronic circuits, devices, and systems with practical applications to recording engineering and biomedical instrumentation. Non-majors only.
 Prerequisite Courses: MATH 120 or MATH 121 or MATH 122 or MATH 123 or MATH 223 or PHYS 122 or PHYS 231
Credits: 3

PHYS321 Engineering Mechanics I

Frequency: B
 Description: A tensor calculus treatment of applied mechanics including fundamentals of mechanics, vector algebra, equivalent force systems, equilibrium, structural mechanics, friction, surfaces, kinematics, dynamics, energy, momentum, relative motion, dynamics of rigid bodies, and Euler's equations.
 Prerequisite Courses: PHYS 230
Credits: 4

PHYS322 Engineering Mechanics II

Frequency: B
 Description: Continuation of PHYS 321 including stress, strain, mechanical properties of solids, multidimensional stress-strain relations, section forces in beams, stresses in beams, deflection of beams, torsion, stresses and strain relations at a point, Mohr's circle, energy methods, elastic stability, and vibrations.
 Prerequisite Courses: PHYS 321
Credits: 4

PHYS323 Circuit Analysis I

Frequency: B
 Description: A development of network analysis including Ohm's and Kirchoff's laws, operational amplifiers, nodal analysis, network theorems, trees and links, energy-storage elements, RC and RL circuits, and second order circuits.
 Prerequisite Courses: PHYS 231
Credits: 3

PHYS324 Circuit Analysis II

Frequency: B
 Description: Continuation of PHYS 323 including sinusoidal excitation and phasors, AC steady state analysis, three-phase circuits, complex frequency and network functions, frequency response, transformers, Fourier and Laplace transforms.
 Prerequisite Courses: PHYS 323
Credits: 3

PHYS325 Electronics

Frequency: C
 Description: Course treats analog electronics. AC and DC circuits and laws of network analysis. Elements of semiconductor physics. Diodes, rectifiers, filters and regulated power supplies. Bipolar and FET transistors and transistor amplifier circuits. Feedback and operational amplifiers. Discrete and integrated circuit oscillators, multivibrators, and waveshaping.
 Co-requisite Courses: PHYS 327
Credits: 3

PHYS326 Digital Logic

Frequency: B
Description: 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.
Co-requisite Courses: PHYS 328
Credits: 3

PHYS327 Electronics Lab

Frequency: C
Description: Laboratory to accompany and supplement PHYS 325.
Co-requisite Courses: PHYS 325
Credits: 1

PHYS328 Digital Lab

Frequency: B
Description: Laboratory to accompany and supplement PH 326.
Co-requisite Courses: PHYS 326
Credits: 1

PHYS330 Thermodynamics

Frequency: B
Description: Concepts of temperature, laws of thermodynamics, entropy, thermodynamic relations and potentials, processes, properties and cycles, applications to physical systems, introduction to statistical mechanics.
Prerequisite Courses: PHYS 230
Co-requisite Courses: MATH 223
Credits: 3

PHYS331 Theoretical Mechanics

Frequency: B
Description: Vector-tensor approach to classical mechanics including kinematics, dynamics, oscillations, Lagrange's and Hamilton's equations, transformations, central force, and rigid body motion.
Prerequisite Courses: MATH 224
Co-requisite Courses: PHYS 425
Credits: 3

PHYS333 Electricity and Magnetism

Frequency: B
Description: Mathematical theory of electrostatics and electromagnetism employing vector calculus. Applications of Maxwell's equations.
Prerequisite Courses: PHYS 425
Credits: 3

PHYS340 Optics

Frequency: C
Description: An introduction to geometrical, physical, and modern optics.
Co-requisite: PHYS 341.
Prerequisite Courses: PHYS 231
Credits: 3

PHYS341 Optics Laboratory

Frequency: C
Description: Laboratory to accompany and supplement PHYS 340.
Co-requisite Courses: PHYS 340
Credits: 1

PHYS400 Undergraduate Seminar

Frequency: B
Description: Presentations by students discussing topics in physics. Counted once for the 36 credit hour physics requirements.
Credits: 1

PHYS401 Special Relativity

Frequency: D
Description: Tensor calculus approach to relativistic kinematics, dynamics, optics, electrodynamics, and selected applied topics.
Prerequisite Courses: PHYS 234
Credits: 3

PHYS425 Mathematical Physics I

Frequency: B
Description: Applied methods including cartesian and noncartesian vector and tensor analysis, eigenvectors and eigenvalues, infinite series, complex functions.
Prerequisite Courses: MATH 224
Credits: 3

PHYS426 Mathematical Physics II

Frequency: B
Description: Applied methods including partial differential equations of physics, boundary value problems, Sturm-Liouville theory and eigenfunctions, special functions, Green's functions.
Prerequisite Courses: PHYS 425
Credits: 3

PHYS431 Introduction to Quantum Mechanics

Frequency: B
Description: 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.
Prerequisite Courses: PHYS 234
Co-requisite Courses: PHYS 425
Credits: 3

PHYS434 Solid State Physics

Frequency: D
Description: Crystal structure, conduction theory, binding and energy levels and other properties of conductors, semiconductors, dielectrics, and magnetics.
Prerequisite Courses: PHYS 431
Credits: 3

PHYS470-479 Special Topics

Frequency: A
Description: Area not covered in regular courses. Broad range of topics consistent with teaching and research interests of department.
Credits: 1 - 3

PHYS480 Laboratory Supervision in Physics

Frequency: A
Description: 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 hours credit 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

PHYS530 Kinetic Theory and Statistical Mechanics

Frequency: D
Description: Maxwell-Boltzmann collision theory. H-theorem, transport equation, quantum statistics, partition functions, equipartition theorem, applications to thermodynamic systems, ergodicity.
Credits: 3

PHYS531 Mathematical Physics I

Frequency: D
Description: Mathematical methods including eigen-functions and eigenvalues, variational principles, abstract vector spaces, integral equations, Green's functions, partial differential equations of physics.
Credits: 3

PHYS532 Mathematical Physics II

Frequency: D
Description: Mathematical methods including eigenfunctions and eigenvalues, variational principles, abstract vector spaces, integral equations, Green's functions, partial differential equations of physics.
Credits: 3

PHYS533 Electromagnetic Theory I

Frequency: D
Description: Potential theory and boundary value problems, electromagnetic field relations, magnetohydrodynamics, Leinard-Wiechert potentials.
Prerequisite Courses: PHYS 531
Credits: 3

PHYS534 Electromagnetic Theory II

Frequency: D
Description: Potential theory and boundary value problems, electromagnetic field relations, magnetohydrodynamics, Leinard-Wiechert potentials.
Prerequisite Courses: PHYS 531
Credits: 3

PHYS540 Modern Optics

Frequency: D
Description: Green's functions and linear theory, spatial filters, geometrical theory and aberrations, interference, diffraction and image formation, matrix and coherence theory, partial polarization, Fourier Methods.
Credits: 3

PHYS541 Advanced Dynamics

Frequency: D
Description: Lagrangian and Hamiltonian methods, variational principles, relativistic mechanics, transformation theory, oscillations, fields.
Prerequisite Courses: PHYS 531
Credits: 3

PHYS543 Quantum Mechanics I

Frequency: D
Description: Solutions to wave equations, approximation methods, time dependent problems, vector spaces, matrix formulation, identical particles, scattering, radiation, second quantization.
Prerequisite Courses: PHYS 531
Credits: 3

PHYS544 Quantum Mechanics II

Frequency: D
Description: Solutions to wave equations, approximation methods, time dependent problems, vector spaces, matrix formulation, identical particles, scattering, radiation, second quantization.
Prerequisite Courses: PHYS 531
Credits: 3

PHYS546 Reactor Physics

Frequency: D
Description: Nuclear reactions and radiations, reactor theory, instrumentation, control, fuel, shielding, heat transfer, and applications of nuclear reactors.
Prerequisite Courses: PHYS 432
Credits: 3

PHYS570 Special Topics

Frequency: D
Description: Areas not covered in regular courses. Broad range of advanced topics consistent with teaching and research interests of department.
Credits: 1 - 3

PHYS630 Advanced Nuclear Physics

Frequency: D
Description: Current experimental and theoretical topics including nuclear properties and systematics, nucleon scattering, nuclear forces and structure, reactions, decay processes, nuclear spectroscopy.
Prerequisite Courses: PHYS 432 and PHYS 531
Credits: 3

PHYS631 Atomic and Molecular Structure

Frequency: D

Description: Quantum mechanical treatment of atomic and molecular energy levels including transitions, fine and hyperfine structure, isotopic effects, beam methods, collision and ionization phenomena.

Prerequisite Courses: PHYS 543

*Credits: 3***PHYS690-691 Research**

Frequency: D

Description: Experimental or theoretical research in physics including a thesis.

*Credits: 3***POLI100 Freshman Seminar**

Frequency: D

Description: The Freshman Seminar in Political Science introduces you 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 you 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 you.

*Credits: 1***POLI120 American Politics**

Frequency: A

Description: Critical examination of key aspects of the American political system. What are the major institutions of political power? How is power obtained? Which groups or social classes tend to possess more power in these institutions and why? How does the political system manage change?

*Credits: 3***POLI121 American Public Policy**

Frequency: A

Description: Introduction to the political economy of policy formation. Emphasis is placed upon the questions of why government intervention in the economy is necessary and the cost-benefit evaluation of the intervention. Political failure is contrasted with market failure in evaluating government public policies. Substantive policy areas such as health care and education policies will be analyzed.

Prerequisite Courses: POLI 120

*Credits: 3***POLI150 U.S. and World Affairs**

Frequency: B

Description: Studies key reasons for how and why countries behave as they do in international politics. Emphasis upon the changing sources of international power, colonialism, the Cold War and U.S.-U.S.S.R. struggle for power, and contemporary issues such as the arms race, Middle East conflicts, and struggle for economic power between rich and poor countries. Close study of the usefulness and morality of U.S. interventions abroad from the Gulf War to Panama, Haiti, and Bosnia.

*Credits: 3***POLI200 Statistics**

Frequency: B

Description: Introduction to the substantive and technological methodology used in study of politics commonly employed by government and business offices. Attendance required. Note: Only one statistics 200 course can be taken for credit.

*Credits: 3***POLI210 Research Methods**

Frequency: C

Description: 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***POLI276 Law and Society**

Frequency: A

Description: Introductory examination of law as instrument of social control; philosophies regarding appropriate operations and functions of law and courts; and controversies surrounding questions of proper relationships between law, morals, and governmental policy.

*Credits: 3***POLI277 Introduction to Law**

Frequency: B

Description: An examination of Anglo-American legal principles based upon the analysis of leading court cases. A broad range of topics are covered, including criminal and civil law, legal remedies, punishment, torts, contracts and family law. This course will emphasize the development of legally defined rights and the methods involved in the legal resolution of disputes.

*Credits: 3***POLI280 Special Topics in Politics**

Frequency: D

Description: 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***POLI311 Fundamentals of Public Administration**

Frequency: B

Description: Examination of role of bureaucracy and administration in America. Initial focus on political setting of the bureaucracy as it interacts with other key actors and institutions. Then consideration of internal characteristics and processes, and examination of topics such as organization theory, decision-making, personnel, and budgeting.

Prerequisite Courses: POLI 120

*Credits: 3***POLI313 American Power Structures**

Frequency: C

Description: Examination of the power structures of the United States. Analysis of how factors such as economic class, race, or ethnicity influence who holds or controls political power in federal, state, and local governments. Contrasting theories of who governs are studied: pluralist, elite, and class-based models. Students will learn techniques of organizing people to exercise power in behalf of their common interests.

Prerequisite Courses: POLI 120

*Credits: 3***POLI321 Political Parties and Interest Groups**

Frequency: C

Description: The role of political parties and interest groups in the shaping of government policies and the ordering of society is analyzed. Internal structures and membership of both parties and groups is emphasized, especially how the collective action problem is solved. The influences of parties and interest groups upon public policies are evaluated. Proposals to reform parties and groups are presented.

Prerequisite Courses: POLI 120

*Credits: 3***POLI322 New York Government**

Frequency: C

Description: 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 NY state in the U.S. and global economy. Attention also to the idea of reinventing government techniques and models.

Prerequisite Courses: POLI 120

*Credits: 3***POLI323 Elections in America**

Frequency: C

Description: Critical examination of the social, psychological, and rational choice explanations of voting. Emphasis is placed on the evidence supporting the alternative explanations. In the process of evaluating the alternative explanations, the determinants of voting, the extent of ideological thinking, trends in turnout, the political business cycle and historical changes in voting patterns are examined.

Prerequisite Courses: POLI 120

*Credits: 3***POLI324 President and Congress**

Frequency: B

Description: Critical examination of the frequently overlapping and conflicting roles of the American President and Congress in making decisions about public policy in the U.S. Attention will be given to recruitment patterns and behavior while in office as well as the nature of the policy outputs. Analysis of institutional forms in other nations will be included to provide a comparative perspective.

Prerequisite Courses: POLI 120

*Credits: 3***POLI325 Public Opinion and Participation**

Frequency: D

Description: This course examines public opinion, political participation, and civic engagement in American democracy. Study of the formation and change in attitudes, preferences, values and identity. It also studies the influence of socialization, media, and the political and social context. Assesses trust in government and political behavior, including voting and protest. Provides theoretical and practical understanding through data gathering, measurement, and analysis.

Prerequisite Courses: POLI 120

*Credits: 3***POLI326 Media and Politics**

Frequency: D

Description: The study of mass media in American politics, investigating print, broadcast, and news media sources and technologies, content and effect. An examination of the media's watchdog role, ownership, regulation, freedom of the press, news reporting, 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.

Prerequisite Courses: POLI 120

Credits: 3

POLI329 Topics in American Politics

Frequency: D
Description: Examination in depth of current topic in American politics not falling within any other American politics course. May be taken more than once as topics change.
Prerequisite Courses: POLI 120
Credits: 3

POLI330 Western European Politics

Frequency: C
Description: 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 these nations in the context of the evolving European Community and the drive for European integration.
Prerequisite Courses: POLI 120 or POLI 150
Credits: 3

POLI331 Canadian Politics

Frequency: C
Description: Examination of the background and socioeconomic foundations of contemporary Canadian politics with special emphasis to the impact of linguistic, cultural and geographic divisions and their impact on the institutions and decision making processes in Canada. Attention will also be given to the influence of the U.S., the United Kingdom and France on Canada.
Prerequisite Courses: POLI 120 or POLI 150
Credits: 3

POLI332 Russian Politics

Frequency: C
Description: 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 twentieth century.
Prerequisite Courses: POLI 120 or POLI 150
Credits: 3

POLI334 African Politics

Frequency: C
Description: Study of contemporary African politics focuses upon processes of political change and conflict. This includes analysis of patterns of colonial rule, nationalist protest, modern political parties and political systems, ethnic conflict, problems of economic development, and the role of social groups, parties, the military, and ideology in the struggle for civil liberties and democracy. Studies of specific countries such as Nigeria, Ghana, South Africa.
Prerequisite Courses: POLI 120 or POLI 150
Credits: 3

POLI341 Political Economy of Development

Frequency: C
Description: Examines the ways political-economic factors and relationships condition the patterns of economic development and political change. The course explores: how do economies develop? does class power, domestic and international, determine economic growth patterns and which social groups benefit? Contrasting Marxist and non-Marxist analyses are used. Contemporary and historical studies of development in Europe, the Middle East, Latin America, and Africa are used.
Prerequisite Courses: POLI 120 or POLI 150
Credits: 3

POLI344 Comparative Public Policy

Frequency: C
Description: Survey and comparative analysis of public policies in advanced industrial democracies, with emphasis on the U.S., Western Europe, Japan, and Canada. Special emphasis on government-business relations, labor relations, regional trading blocs, industrial planning, public ownership of economic enterprises, privatization, tax policy, and government-delivered health care systems.
Prerequisite Courses: POLI 120
Credits: 3

POLI345 Film and Politics

Frequency: C
Description: This 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

POLI346 East Asian Political Economy

Frequency: C
Description: This course focuses on the political, social and economic institutions that have driven the economic development of these East Asian countries which are increasingly creating competitive problems for the United States. Extensive discussion of the role of government planning and group structures such as the keiretsu and chaebol. Also analyzed are the determinants and extent of the development of democratic government in Confucian societies.
Prerequisite Courses: POLI 120 or POLI 150
Credits: 3

POLI348 The European Union

Frequency: C
Description: 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. Taught on-line only (SUNY Learning Network).
Credits: 3

POLI349 Topics in Comparative Politics

Frequency: D
Description: Examination in depth of current topics in comparative politics not falling within any other comparative politics course. May be taken more than once as topics change.
Prerequisite Courses: POLI 120 or POLI 150
Credits: 3

POLI352 World Political Geography

Frequency: B
Description: Examination of the ways humans have arranged the territory of the Earth's surface, including how personal space, territoriality, and perception inform an understanding of politics; the analysis of countries within a geopolitical framework; case studies of how geography has impacted empires, civil divisions, and international relations; comparison of distribution of major political systems and their applications to territory.
Prerequisite Courses: HIST 102 and POLI 150
Credits: 3

POLI354 Politics of the Middle East

Frequency: C
Description: Analysis of Middle East politics, society, and international conflicts. Covers the historical and cultural background of Middle East states, the rise of Arab, Israeli, and other nationalisms, and the contemporary politics and political economy of major Middle East states. Assesses three entangled dimensions of conflict: inter-Arab struggles, the Arab-Israeli conflict, and the contest for influence by external powers.
Prerequisite Courses: POLI 120 or POLI 150
Credits: 3

POLI355 International Political Economy

Frequency: C
Description: 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. Interested 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.
Prerequisite Courses: POLI 150 and ECON 201. ECON 202 recommended.
Credits: 3

POLI356 U.S. Foreign Policy

Frequency: C
Description: Analysis of U.S. foreign policy in the post-World War II period. Assesses the corporate, ideological, institutional, and strategic influences in policy-making. Studies patterns of U.S. relations with the U.S.S.R., Europe, Latin America, and the Third World up to the present in the context of the Cold War, the arms race, Third World struggles, U.S. responses to revolutionary change, and U.S. efforts to maintain a world order.
Prerequisite Courses: POLI 150
Credits: 3

POLI359 Topics in International Politics

Frequency: D
Description: Examination in depth of current topic in international politics not falling within any other international politics course. May be taken more than once as topics change.
Prerequisite Courses: POLI 150
Credits: 3

POLI360 Classical Political Theory

Frequency: C

Description: Analytical treatment of main problems of political theory by examination of the writings of Plato and Aristotle. Discussion of contending theories of justice, equality, and political obligation.

Prerequisite Courses: POLI 120 or POLI 150 or POLI 276 or POLI 277

Credits: 3

POLI361 Modern Political Theory

Frequency: C

Description: Analytical treatment of main problems of political theory by examination of the writings of Machiavelli, Hobbes, Locke, Rousseau, Marx, Mill, and Rawls. Discussion of contending theories of individual rights and obligations, as well as the justification and limits of the state.

Prerequisite Courses: POLI 120 or POLI 150 or POLI 276 or POLI 277

Credits: 3

POLI363 Game Theory

Frequency: D

Description: The course will use rational choice theory to analyze how individuals and groups make decisions in strategic and non-strategic situations. Strategic situations are the result of the interdependent decisions of several individuals, e.g., nuclear deterrence or business competition. Problems covered include how computers beat humans at chess to the evolution processes of society. How do group norms arise where individual competition is the usual course of action? A low level of mathematical background is required.

Prerequisite Courses: POLI 200

Credits: 3

POLI365 American Political Thought

Frequency: C

Description: Critical examination of the development of American political thought, Colonial period to the present. Discussion of questions regarding the status of rights, the limits of the state, equality, and social justice. Includes analysis of the role in American politics of such ideologies as liberalism, conservatism, communitarianism, and socialism.

Prerequisite Courses: POLI 120

Credits: 3

POLI369 Topics in Political Theory

Frequency: D

Description: Examination in depth of topics in political theory not falling within any other political theory course. May be taken more than once as topics change.

Prerequisite Courses: POLI 120 or POLI 150 or POLI 276 or POLI 277

Credits: 3

POLI370 American Constitutional Law

Frequency: B

Description: Study of nature and limitations of judicial review and Supreme Court decisions regarding distribution of powers among national and state governments, division of powers between president and Congress, and limitations upon congressional and presidential powers.

Prerequisite Courses: POLI 120 or POLI 276

Credits: 3

POLI371 Civil Rights and Liberties

Frequency: B

Description: Study of judicial cases involving safeguarding of individual civil and property rights, special emphasis upon recent developments in interpretation of the due process and equal protection of the law clauses and First Amendment of the U.S. Constitution.

Prerequisite Courses: POLI 120 or POLI 276

Credits: 3

POLI379 Topics in Public Law

Frequency: D

Description: Examination in depth of topics in public law not falling within any other public law course. May be taken more than once as topics vary.

Prerequisite Courses: POLI 120 or POLI 150 or POLI 276 or POLI 277

Credits: 3

POLI380 Policy Evaluation

Frequency: C

Description: In-depth examination of the methods and techniques used to assess the success/failure of public policies. Students learn how to evaluate, acquiring skills that could be applied to any policy area. Topics include choice of goals, identification of measures, collection of data, interpretation of data and use of an appropriate yardstick of success. Familiarity with statistics not required. Student learning reinforced by use of several case studies of specific evaluations.

Prerequisite Courses: POLI 120

Credits: 3

POLI381 Urban Politics and Policy

Frequency: C

Description: Investigation of the events and processes that have shaped the development and decline of U.S. cities. Topics include the evolution of cities, urban form and design, theories of urban planning, urban politics and governance, urban policy and economics, racial and socioeconomic isolation, urban unrest, and the impact of technology.

Prerequisite Courses: ECON 201 or ECON 202 or POLI 120 or POLI 121

Credits: 3

POLI382 Social Welfare Policy

Frequency: B

Description: Examination of the politics and operation of the social welfare system in the United States. Emphasis on a policy analysis of current social welfare issues such as the Social Security crisis, welfare reform, the relationship between welfare and national economic policy, the functions of public welfare versus private charity, and the connections between direct service and social reform.

Prerequisite Courses: POLI 120 or POLI 121

Credits: 3

POLI383 Courts and Social Policy

Frequency: C

Description: Examines role of the Supreme Court and other courts in the shaping of public policies in such areas as school systems in desegregation cases, mental hospitals, prisons, and nursing homes. The course will choose from current cases involving major social policy issues such as abortion, prayer in public schools, affirmative action, and capital punishment in order to illustrate the dramatic and controversial role of the courts, especially the Supreme Court, in the shaping of policies in America.

Prerequisite Courses: POLI 276

Credits: 3

POLI387 Environmental Policy

Frequency: C

Description: A synthesis of the political, ecological, economic, historical and cultural events and issues shaping U.S. and international environmental policy. A broad range of topics are covered, including environmental history, population growth, the global commons, environmental justice, natural hazards, nuclear growth, the role of business, and regulations governing endangered species and habitats, waste disposal, water and air.

Prerequisite Courses: BIOL 111 or BIOL 115 or BIOL 141 or CHEM 107 or CHEM 113 or CHEM 114 or CHEM 115 or ECON 101 or ECON 102 or ECON 201 or ECON 202 or ESCI 115 or GEO 100 or GEO 140 or GEO 141 or GEO 142 or GEO 143 or GEO 144 or GEO 145 or GEO 146 or GEO 147 or GEO 148 or GEO 149 or GEO 160 or GEO 165 or GEO 180 or PHYS 101 or PHYS 111 or PHYS 121 or PHYS 230

Credits: 3

POLI389 Topics in Public Policy

Frequency: D

Description: Examination in depth of topics in public policy not falling within any other public policy course. May be taken more than once as topics vary.

Prerequisite Courses: POLI 120 or POLI 121 or POLI 150

Credits: 3

POLI401 Washington Seminar

Frequency: A

Description: Prior selection required.

Credits: 3

POLI402 Washington Internship

Frequency: A

Description: Prior selection required.

Credits: 3 - 12

POLI403 Independent Study (Washington)

Frequency: A

Description: Prior selection required.

Credits: 3

POLI405 Independent Study (Albany)

Frequency: A

Description: Prior selection required.

Credits: 3

POLI406 Seminar in State Politics - Albany

Frequency: A

Description: Prior selection required.

Credits: 3

POLI407 Albany Internship

Frequency: A

Description: Prior selection required.

Credits: 3 - 12

POLI419 Directed Study: Public Administration

Frequency: D

Description: Directed Studies courses are taken for individual work not available in regular courses, according to the field to be studied. Topics determined through prior consultation with instructor.

Prerequisite Courses: POLI 120 and POLI 311

Credits: 1 - 3

POLI429 Directed Study: American Politics

Frequency: D

Description: Directed Studies courses are taken for individual work not available in regular courses, according to the field to be studied. Topics determined through prior consultation with instructor.

Prerequisite Courses: POLI 121 and POLI 311 or POLI 313 or POLI 321 or POLI 322 or POLI 323 or POLI 324

Credits: 1 - 3

POLI439 Directed Study: Comparative Politics

Frequency: D

Description: Directed Studies courses are taken for individual work not available in regular courses, according to the field to be studied. Topics determined through prior consultation with instructor.

Prerequisite Courses: POLI 120 and POLI 150 and POLI 330 or POLI 331 or POLI 332 or POLI 334 or POLI 341 or POLI 344 or POLI 346 or POLI 352 or POLI 354 or POLI 355 or POLI 356

Credits: 1 - 3

POLI449 Directed Study: Political Economy

Frequency: D
Description: Directed Studies courses are taken for individual work not available in regular courses, according to the field to be studied. Topics determined through prior consultation with instructor.
Prerequisite Courses: POLI 120 and POLI 150 and POLI 334 or POLI 341 or POLI 344 or POLI 346 or POLI 354
Credits: 1 - 3

POLI459 Directed Study: International Politics

Frequency: D
Description: Directed Studies courses are taken for individual work not available in regular courses, according to the field to be studied. Topics determined through prior consultation with instructor.
Prerequisite Courses: POLI 120 and POLI 150 and POLI 341 or POLI 346 or POLI 354 or POLI 355 or POLI 356
Credits: 1 - 3

POLI469 Directed Study: Political Theory

Frequency: D
Description: Directed Studies courses are taken for individual work not available in regular courses, according to the field to be studied. Topics determined through prior consultation with instructor.
Prerequisite Courses: POLI 120 and POLI 150 and POLI 360 or POLI 361 or POLI 363 or POLI 365
Credits: 1 - 3

POLI479 Directed Study: Law

Frequency: D
Description: Directed Studies courses are taken for individual work not available in regular courses, according to the field to be studied. Topics determined through prior consultation with instructor.
Prerequisite Courses: POLI 120 and POLI 276 or POLI 277 or POLI 370 or POLI 371 or POLI 383
Credits: 1 - 3

POLI489 Directed Study: Public Policy

Frequency: D
Description: Directed Studies courses are taken for individual work not available in regular courses, according to the field to be studied. Topics determined through prior consultation with instructor.
Prerequisite Courses: POLI 121 and POLI 380 or POLI 381 or POLI 382 or POLI 383 or POLI 387
Credits: 1 - 3

POLI490 Internship in Local Politics and Government

Frequency: A
Description: 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: 3 - 6

POLI491 Seminar in Local Politics and Government

Frequency: A
Description: 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 research paper.
Prerequisite Courses: POLI 490
Credits: 3

POLI492 Legal Intern

Frequency: B
Description: 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

POLI494 Legal Internship Seminar

Frequency: D
Description: Discussion and reporting on selected readings and experiences encountered in legal internships. Also involves writing research paper.
Prerequisite Courses: POLI 492
Credits: 3

POLI499 Directed Study: Political Science

Frequency: D
Description: Directed Studies courses are taken for individual work not available in regular courses, according to the field to be studied. Topics determined through prior consultation with instructor.
Prerequisite Courses: POLI 121 and POLI 150 and POLI 200 and POLI 210
Credits: 1 - 3

PSY100 Freshman Seminar

Frequency: D
Description: 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

PSY129 Introduction to Psychology

Frequency: A
Description: 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

PSY130 Psychology Laboratory

Frequency: A
Description: 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.
Prerequisite Courses: PSY 129
Credits: 1

PSY200 Statistics

Frequency: A
Description: 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. Note: Only one statistics 200 course can be taken for credit.
Credits: 3

PSY207 Introduction to Computers in the Social Sciences

Frequency: B
Description: Basic and intermediate techniques of data analysis using SPSSPC or similar computer software.
Prerequisite Courses: PSY 200
Credits: 1

PSY210 Research Methods

Frequency: A
Description: Introduction to various research methodologies employed in the social sciences ranging from observational through experimental research. Students are familiarized with basic principles of research design, data collection, data analysis and manuscript preparation (APA format).
Prerequisite Courses: PSY 129 and PSY 200
Credits: 4

PSY227 Applied Psychology

Frequency: C
Description: Discussion of emerging areas in psychology and the application of psychological principles to real-world settings. Focus on relationship between psychology and various other areas, such as law, medicine, business, and mental health.
Prerequisite Courses: PSY 129
Credits: 3

PSY237 Sport Psychology

Frequency: C
Description: An introduction to the basic concepts, principles, and techniques employed in the field of sport psychology. Major topics include research methods, behavioral principles, personality and assessment, the social psychology of sport, the coach, exercise psychology, youth sport, the female athlete, the minority athlete and ethical issues.
Prerequisite Courses: PSY 129
Credits: 3

PSY243 Principles of Learning

Frequency: D
Description: Examination of classical and instrumental conditioning. Phenomena such as stimulus discrimination and generalization, effects of schedules of reinforcement upon responding, the partial reinforcement extinction effect, appetitive and aversive control of behavior, etc., are discussed. Additionally, various human learning paradigms and relevant memory systems are presented.
Prerequisite Courses: PSY 120
Credits: 3

PSY244 Cognitive Psychology

Frequency: A
Description: 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 processes of problem-solving, reasoning and decision-making, and cognitive development.
Prerequisite Courses: PSY 129
Credits: 3

PSY245 Social Psychology

Frequency: A
Description: Introduction to interpersonal behavior. Topics include attraction, prejudice and discrimination, attitudes, social influence, aggression, social perception, and group behavior.
Prerequisite Courses: PSY 129
Credits: 3

PSY246 Personality

Frequency: A
Description: Biological and social determinants of personality and its development. Methods of studying personality.
Prerequisite Courses: PSY 129
Credits: 3

PSY247 Health Psychology

Frequency: B
Description: Explores the role of psychological factors in the prevention of illness and maintenance of good health, the treatment of already existing illness, and the recovery from or adjustment to ongoing illness.
Prerequisite Courses: PSY 129
Credits: 3

PSY255 Psychology of Women

Frequency: C
 Description: An examination of the biological, psychological and sociological factors that shape women's lives. Attention to the intersection of gender with ethnicity, sexual orientation, and social class. Specific topics include theories of gender development, images of women in the media, work, childbirth and motherhood, violence, physical and mental health.
 Prerequisite Courses: PSY 129 or WOST 201
Credits: 3

PSY273 States of Consciousness

Frequency: A
 Description: 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 these various states of consciousness are considered.
Credits: 3

PSY276 Human Sexuality

Frequency: C
 Description: Introduction to theoretical explanations of empirical evidence regarding human sexual behavior. Consideration of reproductive anatomy and physiology; sexually transmitted diseases; sexual attitudes and behaviors throughout the life cycle; contraception; social issues related to sexuality; sexual dysfunctions; and communication in intimate relationships.
 Prerequisite Courses: PSY 129
Credits: 3

PSY286 Gender Differences

Frequency: C
 Description: Survey of physical, social-emotional, and cognitive sex differences revealed in research data and manifested in cultural stereotypes. Theoretical explanations for origins of these differences. Emphasis throughout on critical analysis of the data.
 Prerequisite Courses: PSY 129
Credits: 3

PSY289 Lifespan Human Development

Frequency: C
 Description: Survey of human life cycle, covering physical, mental, personality, and social development taking place during different periods (infancy, childhood, adolescence, adulthood). Attention to developmental issues and particular processes operating within and between specific periods (e.g., marriage, parenthood, career, death, and bereavement).
 Prerequisite Courses: PSY 129
Credits: 3

PSY300 Intermediate Statistics

Frequency: D
 Description: Application of statistical concepts to experimental design in psychological research.
 Prerequisite Courses: PSY 200
Credits: 3

PSY317 Tests and Measurements

Frequency: C
 Description: Introduction to the principles of testing including reliability and validity. The nature and application of different types of tests (measures of achievement, aptitude, intelligence, personality, and interests) are discussed. Both occupational and educational testing are covered.
 Prerequisite Courses: PSY 129 and PSY 200
Credits: 3

PSY339 Humanistic Psychology

Frequency: D
 Description: Evaluation of contributions of existential, phenomenological, and classical humanistic views. Place of humanistic psychology among existing psychological systems.
 Prerequisite Courses: PSY 129 and PSY 245 or PSY 246 or PSY 289
Credits: 3

PSY342 Perception

Frequency: A
 Description: An investigation of the mental operations involved in the process of obtaining information from one's everyday environment and constructing the psychological representations that form the basis of the capacity to adapt to that environment. Topics include the perception of space, motion, and form; perceptual constancies; perceptual organization; attention and search; learning and development.
 Prerequisite Courses: PSY 129
Credits: 3

PSY344 Psychology of Language

Frequency: C
 Description: The study of human language and thought processes. The course covers the following topics: speech perception, the role of memory systems in processing sentences and storing knowledge, the development of the language rule system in children, the influence of mother's language on the acquisition process, and second language acquisition.
 Prerequisite Courses: PSY 129
Credits: 3

PSY347 Industrial/Organizational Psychology

Frequency: B
 Description: Examination of the dynamic nature of interpersonal behavior within an organizational context. Topics include motivation, group processes, leadership, stress, decision-making, and communication. Personnel matters including selection, training, and appraisal are discussed.
 Prerequisite Courses: PSY 129
Credits: 3

PSY349 Child Psychology

Frequency: B
 Description: A review of research findings and normative data pertaining to children in such areas as perception, learning, cognition, and personality.
 Prerequisite Courses: PSY 129
Credits: 3

PSY351 Physiological Psychology

Frequency: A
 Description: Study of physiological basis of behavior.
 Prerequisite Courses: PSY 129
Credits: 3

PSY355 Group Dynamics

Frequency: B
 Description: Analysis and evaluation of concepts, hypotheses, techniques, and research in group dynamics.
 Prerequisite Courses: PSY 245 or SOC 204
Credits: 3

PSY356 Abnormal Psychology

Frequency: B
 Description: Introduction to behavior disorders including psychoses, neuroses, mental deficiencies, and character disorders.
 Prerequisite Courses: PSY 129
Credits: 3

PSY364 Cognitive Development

Frequency: B
 Description: A study of the conceptual changes which occur during childhood. Topics include theories of cognitive development, infant perceptual capabilities, the evolution of representations, memory systems, language acquisition, and reasoning. Focus is on current research and theory.
 Prerequisite Courses: PSY 129
Credits: 3

PSY365 Social Development

Frequency: B
 Description: Explores the process of socialization. Theories and research relating to social development in areas such as achievement, self-concept, aggression, altruism, and gender roles are covered. Emphasis on the impact of and linkage between various socialization agents (e.g., parents, peers, and school). Social issues (e.g., divorce, drug abuse, etc.) and intervention programs will be considered.
 Prerequisite Courses: PSY 129
Credits: 3

PSY366 Psychology of Adulthood

Frequency: D
 Description: Examination of data and theory having to do with psychological issues of importance in adult development (perception, cognition, identity, intimacy, socialization, life phases, etc.), and implications of these for adults and those working with them.
 Prerequisite Courses: PSY 129
Credits: 3

PSY370 Cross-Cultural Psychology

Frequency: B
 Description: An introduction to psychological theory and research from the perspective of other cultures. Investigates the origins of psychological thought and overviews the development of the discipline in various historical and political contexts. Focus will vary from semester to semester depending upon instructor.
 Prerequisite Courses: PSY 129
Credits: 3

PSY373 Human Factors

Frequency: B
 Description: The study of how humans perceive, think about, and interact with technology and machines. Includes evaluating human performance with technological systems, and designing such systems for reducing human error.
 Prerequisite Courses: PSY 129
Credits: 3

PSY379 Child Psychopathology

Frequency: C
 Description: Developmental approach to the disorders of childhood. Topics include the short-term and long-term consequences of inadequate attainment of developmental milestones and the developmental course of children at risk for psychological disorders, particularly schizophrenia and depression. Genetic risk, familial factors, and precursors of the disorders are discussed.
 Prerequisite Courses: PSY 129 and PSY 349 or PSY 356 or EDU 225
Credits: 3

PSY390 Special Topics

Frequency: D
 Description: Special topics in Psychology not covered in detail by regular courses and not offered on a regular basis.
 Prerequisite Courses: PSY 129
Credits: 3

PSY429 History and Systems of Psychology

Frequency: B
 Description: Historical study of psychology focusing on successive schools of thought that have had major influence on the discipline.
 Prerequisite Courses: PSY 210
Credits: 3

PSY430 Theories of Psychology

Frequency: B
 Description: A discussion of the principles, assumptions, construction, and application of various theories of human behavior. The specific theories covered will vary with the instructor, e.g. Anderson's cognitive theory, Bandura's social learning theory, Freud's psychoanalytic theory, Piaget's theory of development, Skinner's theory of learning.
 Prerequisite Courses: PSY 210
Credits: 3

PSY439 Senior Honors Seminar

Frequency: B
 Description: In-depth analysis of selected topics.
 Prerequisite Courses: PSY 210
Credits: 3

PSY447 Introduction to Counseling

Frequency: A
 Description: Introduction to counseling theory and techniques. Special emphasis given to the communication process involved in the counseling interview.
 Prerequisite Courses: PSY 129
Credits: 3

PSY454 Theories of Memory

Frequency: B
 Description: In-depth exploration of several theoretical approaches to the study of human memory. Past, present, and future implications of the theories will be evaluated and discussed.
 Prerequisite Courses: PSY 210 and PSY 244 or PSY 364
Credits: 3

PSY456 Theories of Personality

Frequency: B
 Description: Systematic analysis of the works of major contributors to personality theory.
 Prerequisite Courses: PSY 210 and PSY 246
Credits: 3

PSY458 Practicum in Teaching

Frequency: A
 Description: With supervision, teaching assistants (TAs) experience various aspects of teaching including class preparation, leading discussions, and student evaluation. Each TA is responsible for sections of PSY 130 Psychology Laboratory.
 Prerequisite Courses: PSY 210
Credits: 3

PSY479 Internship in Psychology

Frequency: A
 Description: 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: 3 - 6

PSY489 Independent Study

Frequency: A
 Description: Individual student research conducted under guidance of selected instructors, with permission of instructor.
Credits: 1 - 3

PSY510 Contemporary Issues in Psychology

Frequency: D
 Description: Critical review of recent contributions to the field, including topics such as motivation, learning, personality, perception, and social influence.
Credits: 3

PSY550 Studies in Psychology

Frequency: D
 Description: Exploration in depth of selected topics in psychology. Major focus varies from semester to semester.
Credits: 1 - 3

SDEG100 Humanities

Frequency: B
 Description: Students from specific area high schools earn general education credits for 4th year high school English. Students must pass the regents or earn a C or better if non-regents. For specific course description, contact 3-1-3 Program (4th Floor-Reed Library 716-673-3550).
Credits: 3 - 6

SDEG101 Mathematics

Frequency: B
 Description: Students from area high schools earn general education credits for 4th year high school Mathematics. Students must pass the regents or earn a C or better if non-regents. For specific course description, contact 3-1-3 Program (4th Floor-Reed Library 716-673-3550).
Credits: 3 - 6

SDEG102 Chemistry

Frequency: B
 Description: Students from specific area high schools earn general education credits for 4th 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 (4th Floor-Reed Library 716-673-3550).
Credits: 3 - 6

SDEG103 Physics

Frequency: C
 Description: Students from area high schools earn general education credits for 4th year high school Physics. Students must pass the regents or earn a C or better if non-regents. For specific course description contact 3-1-3 Program (4th Floor-Reed Library 716-673-3550).
Credits: 3 - 6

SDEG104 Social Science

Frequency: C
 Description: This course is part of the approved Fredonia 3-1-3 Program.
Credits: 3 - 6

SOC116 Introductory Sociology

Frequency: A
 Description: The methods, insights, and perspectives of sociology; how sociologists do their work; how individuals are influenced by society and its 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

SOC200 Statistics for Sociologists

Frequency: A
 Description: 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.
 Prerequisite Courses: SOC 116
Credits: 3

SOC201 Social Problems

Frequency: A
 Description: 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, over-population, as well as problems of vital institutions (familial, medical, political, economic).
 Prerequisite Courses: SOC 116
Credits: 3

SOC202 Social Analysis

Frequency: A
 Description: Seeks to orient students sociologically toward a broad range of social phenomena in such a way that they can begin systematically to question, analyze, and articulate a sociological point of view on any topic of sociological interest.
 Prerequisite Courses: SOC 116
Credits: 3

SOC204 Social Psychology

Frequency: B
 Description: The forms of social interaction that relate people to each other in everyday life and the consequences for individuals of their social experiences. Theoretical models applied and evaluated for their explanatory power in illuminating such issues as socialization into roles, attitude formation, development of self concept, conflict resolution, etc.
 Prerequisite Courses: SOC 116
Credits: 3

SOC205 Understanding People

Frequency: C
 Description: Using biographies, explores how key sociological factors such as age, gender, race, marital status, socio-economic status, occupation, religion and health affect the everyday life of people, their life chances and life choices, their perspectives on themselves and on their world, their values and their beliefs.
 Prerequisite Courses: SOC 116
Credits: 3

SOC210 Introduction to Gerontology

Frequency: C
 Description: An introduction to the field of gerontology and the different approaches taken by the natural and social sciences to the study of the aging process. Research on aging from disciplines such as biology, psychology, sociology, history, political science, and economics is discussed. Provides an overview of how gerontology is used by professionals working with the elderly.
Credits: 3

SOC218 Introduction to Social Work

Frequency: B
 Description: Introduction to theoretical and practical foundations of social work. Examination of values, knowledge, and skills underlying a generalist approach to social work. Analysis of role of social workers in such settings as hospitals, schools, mental health agencies, and family and child welfare agencies.
 Prerequisite Courses: SOC 116
Credits: 3

SOC240 Health and Society

Frequency: B
 Description: Examines the social psychology of health and illness, social epidemiology and the social correlates of illness, and the organization of health care, including the doctor-patient relationship, the health professionals, and health institutions.
 Prerequisite Courses: SOC 116
Credits: 3

SOC272 Exploring Community-Based Social Work

Frequency: B
 Description: Explores how communities and the social work profession respond to social problems. Traditional classroom-based learning is combined with service learning activities to increase student knowledge of the social service delivery system.
 Prerequisite Courses: SOC 218
Credits: 3

SOC300 Research Methods

Frequency: A
 Description: A course concerned with knowing; emphasis is placed on the evaluation of information and the research process: conceptualization, design, measurement, and data collections methods of survey, experiment and observation are discussed.
 Prerequisite Courses: SOC 116 and SOC 200
Credits: 3

SOC303 Social Class and Inequality

Frequency: B
 Description: Examines the sources, forms, and consequences of social inequality, with major emphasis on social stratification in the United States. Emphasis on social class, but also includes racial and ethnic stratification, and gender inequality. Also analyses on debate over the inevitability of inequality, and examines related issues in social policy.
 Prerequisite Courses: SOC 116
Credits: 3

SOC306 Sex and Gender

Frequency: B
 Description: 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.
 Prerequisite Courses: SOC 116
Credits: 3

SOC308 Foundations of Sociological Theory

Frequency: B
 Description: Critical examination of the modern grounding of sociological theory in the works of Durkheim, Marx, Weber and Simmel. Examines linkages of past with present in contemporary sociological enterprise. Considers developments through 1920.
 Prerequisite Courses: SOC 116 and SOC 202
Credits: 3

SOC309 Contemporary Sociological Theory

Frequency: B
 Description: Explores contemporary claims concerning what human beings are like, what society is, and what we can know about the two. The modern foundations of sociological theory are traced from functionalist, Marxist, and symbolic interactionist traditions through contemporary approaches grounded in phenomenological, critical, feminist, structuration and postmodern theories.
 Prerequisite Courses: SOC 116 and SOC 202
Credits: 3

SOC310 Sociology of Deviant Behavior

Frequency: B
 Description: Covers theoretical and empirical issues in the sociological understanding of deviant behavior. Research studies of several forms of career deviance analyzed and critiqued: suicide, skid row, addiction, prostitution, homosexuality, mental illness, physical handicaps.
 Prerequisite Courses: SOC 116
Credits: 3

SOC311 Sociology of Addiction

Frequency: B
 Description: Examination of all that behavior which has come to be identified as addiction including tobacco smoking, alcoholism, substance abuse, eating disorders and gambling. An analysis of competing theories of addiction and treatment. The political, economic and social ramifications of addiction control.
 Prerequisite Courses: SOC 116
Credits: 3

SOC312 Plagues and Peoples

Frequency: B
 Description: This course explores the impact of disease on human populations in terms of demographic, cultural and social changes. The rise of health care delivery systems is addressed as a response to epidemics. Examples include the bubonic plague of the 14th and 17th centuries, cholera, influenza, polio and AIDS. Note: Also listed as ANTH 301.
 Prerequisite Courses: SOC 116
Credits: 3

SOC316 Minority Groups

Frequency: A
 Description: Study of discrimination against ethnic groups (race, religion, national origins); major groupings within the U.S. such as blacks, Jews, Native Americans, Hispanics, and Asian Americans. Ethnic relations in countries throughout the world, with an emphasis on the impact of colonialism on ethnic relations.
 Prerequisite Courses: SOC 116
Credits: 3

SOC317 Sociology of Religion

Frequency: D
 Description: Religion in sociological perspective: the social functions of religion, its interaction with other social institutions and with social change processes and its organizational structure in America and other societies.
 Prerequisite Courses: SOC 116
Credits: 3

SOC319 Social Change and the Future

Frequency: C
 Description: A sociological perspective on the future including the nature and impact of population growth and the emergence and impact of new problems among the industrialized nations and the Third World nations. Prospects for developing a long-range planning view of the future which will allow people to cope effectively with the rapid pace of social change.
 Prerequisite Courses: SOC 116
Credits: 3

SOC320 Family Sociology

Frequency: B
 Description: Overview of sociological perspectives on the family; emphasis on current state of the family in society. Topics include premarital sexual behavior and attitudes; dynamics of mate selection; marriage as an institution; marriage and sex roles; family dynamics (parenthood, childhood, family politics, violence in the family, divorce, etc.); marriage and the family as a subjective reality; alternative family forms; and the future of the family. Relationship between family and other social institutions.
 Prerequisite Courses: SOC 116
Credits: 3

SOC321 Population and Society

Frequency: B
 Description: An introduction to social demography, this course provides an overview of the three basic demographic processes: fertility, mortality, and migration. It evaluates the relationships among these population processes and their interaction with population structures and characteristics, such as age, sex, marital status, race/ethnicity, social class and religion. It also examines contemporary social issues associated with the population processes, including equality, aging, urbanization, women and household structure, economic development and environmental concerns.
 Prerequisite Courses: SOC 116
Credits: 3

SOC322 Work and Society

Frequency: B
 Description: Work as an essential form of human behavior; division of labor, labor force, techniques of occupational analysis; impact of work on individual; professions; careers; work as a social problem.
 Prerequisite Courses: SOC 116
Credits: 3

SOC323 The Community

Frequency: B
 Description: Comparative nature of rural, urban, and suburban communities. Emphasis on difficulties in getting to roots of many community problems and nature of political process in dealing with these problems.
 Prerequisite Courses: SOC 116
Credits: 3

SOC325 Complex Organizations

Frequency: A
 Description: Social structure and social processes of formal organizations. Behavior within organizations. Comparison of major types of organizations: educational, military, business-industrial, hospital, and governmental.
 Prerequisite Courses: SOC 116
Credits: 3

SOC326 Human Relations in the Workplace

Frequency: D
 Description: Social values, work and the allocation of work roles. Management strategy and tactics in structuring and coordinating work roles in organizations. Work environments, work cultures and problematics of the work place. Analysis of case studies serves as a framework for course content.
 Prerequisite Courses: SOC 116
Credits: 3

SOC335 Sociology of Sport

Frequency: C
 Description: Introduction to sport as a social institution; social function of sport; sport and culture, schools, and socialization; sport and women, race, and ethnic groups; sport and mass media; sport and stratification and social change.
 Prerequisite Courses: SOC 116
Credits: 3

SOC337 Sociology of Aging

Frequency: C
 Description: In-depth overview of social gerontology, focusing on aging in modern societies. How major institutional changes affect the aged. Review of major problems: status as a minority, retirement adjustment, income, social attitude towards the aged, kinship and other roles.
 Prerequisite Courses: SOC 116
Credits: 3

SOC338 Sociology of Death and Dying

Frequency: C
 Description: Examines the growing body of sociological and social psychological literature on humankind's last major status passage. Institutions which structure death are considered and the processes accompanying dying are investigated. Cross-cultural as well as American death phenomena are included.
 Prerequisite Courses: SOC 116
Credits: 3

SOC339 Aging Policies and Programs

Frequency: D
 Description: Detailed examination of the major public programs and policies affecting the elderly in America. Analyzes the evolution of programs in a number of areas such as health care, economic support, housing, and transportation, and investigates their impact on the elderly and society. Explores in depth the federal/state/local network of services for the elderly and investigates the role such services play in the lives of the elderly.
 Prerequisite Courses: SOC 116; and SOC 210 or SOC 337
 Credits: 3

SOC343 Health Systems and Policy

Frequency: B
 Description: Examination of major functional areas of the health care delivery system, including primary care, acute care, long-term care, and mental health services; the role of the various institutions and groups involved in the organization and delivery of health services; and of administrative, legal, and financial concepts and issues related to planning and management of health services.
 Prerequisite Courses: SOC 116
 Credits: 3

SOC345 Women, Health and Society

Frequency: B
 Description: Examines ways in which health and illness for women are defined and managed. Topics include the medicalization of pregnancy and birth, adolescence and sexuality, addiction, mental health, menopause, body image, and, women as health care providers.
 Prerequisite Courses: SOC 116
 Credits: 3

SOC346 Mental Health and Society

Frequency: C
 Description: A study of the role of social factors in the definition, development, and distribution of mental illness, and of social responses to problems of mental health, with primary emphasis on understanding the role of various groups and institutions in prevention, diagnosis, treatment, and rehabilitation.
 Prerequisite Courses: SOC 116
 Credits: 3

SOC350 Special Topics

Frequency: D
 Description: Special topics in sociology not covered in detail by regular courses and not offered on a regular basis.
 Prerequisite Courses: SOC 116
 Credits: 3

SOC360 Criminal Justice System

Frequency: B
 Description: Comprehensive study of structure and functioning of the criminal justice system; its historical, philosophical, and political origins; comprehensive review of the system including the law, police, the courts, and corrections.
 Prerequisite Courses: SOC 116
 Credits: 3

SOC361 Law in the World

Frequency: C
 Description: Compares criminal law and justice systems of a variety of contemporary societies. Details characteristics of common law, civil law, and socialist law legal systems as contexts to explore the practices of specific countries. Examines crime patterns across countries.
 Prerequisite Courses: SOC 116
 Credits: 3

SOC362 Criminology

Frequency: B
 Description: An investigation of the nature and causes of crime. Issues covered include: the police, criminal law, criminal court system, epidemiology of crime, and criminal careers.
 Prerequisite Courses: SOC 116
 Credits: 3

SOC363 Victimology

Frequency: C
 Description: Introduction to the study of victim-criminal relationships. Issues of conceptual and empirical interest covered include: history of the status of victims of crime in Western criminal justice systems; sociological characteristics of victims; victim-risk; victim-precipitated crimes; and victim compensation programs.
 Prerequisite Courses: SOC 116
 Credits: 3

SOC364 Juvenile Delinquency

Frequency: B
 Description: An examination of delinquent behavior and its distribution in society. Topical issues discussed include the juvenile justice system, theories of delinquency, and methods of social control of this behavior.
 Prerequisite Courses: SOC 116
 Credits: 3

SOC366 Sociology of Corrections

Frequency: C
 Description: A study of societal reactions to crime from an historical, socio-political, social psychological and economic perspective. The functions of retribution, rehabilitation, incapacitation and deterrence are examined.
 Prerequisite Courses: SOC 116
 Credits: 3

SOC400 Senior Seminar

Frequency: B
 Description: A capstone course for sociology majors that encourages the integration and critical appraisal of sociological and social issues to promote reflection on the field of sociology as a whole and its relation to other fields of knowledge. While subject matter may vary from year to year, the seminar involves in-depth study and critical examination of major social issues and important and enduring sociological concerns. The seminar also involves a collective project in which students focus on developing strategies to help resolve these issues and concerns. Permission of instructor.
 Credits: 3

SOC442 Criminal Justice Seminar

Frequency: A
 Description: Designed for those students doing criminal justice internships. Selected readings and group discussions to assist students in organizing their field experiences and interpreting them in relation to major conceptual issues in criminal justice.
 Permission of instructor.
 Credits: 1

SOC470 Directed Study

Frequency: A
 Description: One to 3 credit hours of credit for individualized study under guidance of a member of the faculty. Permission of instructor.
 Credits: 1 - 3

SOC471 Field Research

Frequency: D
 Description: One to 3 credit hours assisting faculty members in research. May involve content analysis, interviewing, data processing, and gaining familiarity with computer operations.
 Permission of instructor.
 Credits: 1 - 3

SOC472 Sociology Internship

Frequency: D
 Description: 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 instructor.
 Prerequisite Courses: SOC 116
 Credits: 1 - 15

SOC473 Criminal Justice Internship

Frequency: A
 Description: Supervised placement in legal and/or criminal justice work settings. On a limited basis, opportunity to observe and engage in various facets of criminal justice system.
 Permission of instructor.
 Credits: 3

SOC477 Health Administration Internship

Frequency: A
 Description: Supervised internship in a health related agency. Internships provide students opportunities to observe and participate in the day-to-day activities involved in the administration of hospitals, nursing homes, and health care planning organizations, and in governmental administration of health programs.
 Credits: 3 - 6

SOC479 Social Gerontology Internship

Frequency: A
 Description: Supervised internship in a private or public agency that works directly with the elderly or is involved in policy and/or planning dealing with the aged. Provides students with the opportunity to participate in day-to-day activities of an agency and to develop skills useful for a career in gerontology.
 Permission of instructor.
 Credits: 3

SOC570 Directed Study in Sociology

Frequency: D
 Description: Individualized study under guidance of a member of the sociology faculty. Permission of instructor.
 Credits: 1 - 3

SOCW249 Social Welfare Institutions

Frequency: B
 Description: Introduces students to the basic public and private sector mechanisms of social welfare policy and services through the lens of history. The historical relationships between mutual aid, government, non-profit, and proprietary agencies are explored. The development of the social work profession is discussed.
 Prerequisite Courses: SOC 116 and SOC 218
 Credits: 3

SOCW315 Child Welfare

Frequency: C
 Description: 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

SOCW325 Social Work Practice Methods I

Frequency: B
 Description: The first of three sequenced social work practice courses in which students learn generalist social work theory and method. Application and integration of the person-in-environment perspective and problem solving method to intervene with micro systems is the focus. Social work roles, skills, and ethics are discussed and practiced. Cross-cultural issues and their practice implications are analyzed.
 Credits: 3

SOCW340 Human Behavior in Social Environment I

Frequency: B
 Description: Explores the theories and knowledge of human bio-psycho-social lifespan development.
 Prerequisite Courses: BIOL 110 and Advanced Status
Credits: 3

SOCW341 Human Behavior in Social Environment II

Frequency: B
 Description: Builds on the knowledge and theory learned in SOCW 340 by taking a social systems approach to analyze the impact of environmental forces upon individual and collective behavior. Family, group, organization, and community theories are discussed.
 Prerequisite Courses: SOCW 340
Credits: 3

SOCW370 Social Work Methods II: Skills for Practice

Frequency: B
 Description: Second course in the social work practice sequence builds on SOCW 325. Focus is on the skills needed to implement the generalist problem solving method within and between micro, mezzo and macro systems.
 Prerequisite Courses: SOCW 325
Credits: 3

SOCW390 Social Work Methods II: Advanced Practice

Frequency: B
 Description: Final course in the social work practice sequence challenges the students to increase their generalist problem-solving, communication, assessment, intervention skills through direct, student-led exercises and multi-system case application. Practice evaluation is stressed.
 Prerequisite Courses: POLI 328, SOC 300, SOCW 249, SOCW 341, and SOCW 370
 Co-requisite Courses: SOCW 480 and SOCW 485
Credits: 3

SOCW399 Selected Topics

Frequency: A
 Description: Variable-content course; topic will be announced in the *Course Offering Bulletin* each semester offered.
Credits: 3

SOCW400 Policy and Social Work Practice

Frequency: B
 Description: Advanced policy course which integrates policy analysis with social work practice principles. Students analyze current social policy and its impact on people. In a major writing assignment, students analyze a particular policy and propose micro, mezzo, and macro social work interventions to influence policy change and promote social justice.
 Prerequisite Courses: POLI 382, SOCW 249, SOCW 390, SOCW 480, and SOCW 485
 Co-requisite Courses: SOCW 490 and SOCW 495
Credits: 3

SOCW470 Directed Study

Frequency: A
 Description: Individualized study with a social work faculty member. Permission of instructor.
Credits: 1 - 3

SOCW480 Field Practicum I

Frequency: B
 Description: 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.
 Prerequisite Courses: POLI 382, SOC 300, SOCW 325, SOCW 340, SOCW 341, SOCW 370
 Co-requisite Courses: SOCW 390, SOCW 485
Credits: 3

SOCW485 Field Practicum I with Seminar

Frequency: B
 Description: An extension of SOCW 480: Field Practicum I allowing for the sectioning of practicum students into small peer groups for weekly group meetings. Students are divided into sections and assigned faculty field liaisons who assist students develop and implement an individualized professional learning contract for their practicum placements. Weekly meetings are held to analyze issues discovered through the practicum experience. Faculty liaisons monitor and evaluate student performance for the entire practicum experience (SOCW 480 and 485).
 Prerequisite Courses: SOCW 390, SOCW 480, and SOCW 485
 Co-requisite Courses: SOCW 390, SOCW 480
Credits: 3

SOCW490 Field Practicum II

Frequency: B
 Description: The continuation of the students' experiential learning at the same agency in which the student was placed in during SOCW 480. Students need to complete 250 or more hours of direct service practice and/or other duties expected of the beginning level social worker.
 Prerequisite Courses: SOCW 390, SOCW 480, and SOCW 485
 Co-requisite Courses: SOCW 480 and SOCW 495
Credits: 3

SOCW495 Field Practicum II with Seminar

Frequency: B
 Description: An extension of SOCW 490: Field Practicum II which allows for the sectioning of practicum students into small peer groups for weekly group meetings. Expectations for student performance increase and new learning contracts are constructed and implemented. Weekly meetings focus on the critical assessment of the student's use of skill, knowledge, and theory in their practicum placement. Faculty field liaisons facilitate group meetings and monitor the practicum experience, evaluating student performance for both SOCW 490 and 495.
 Prerequisite Courses: SOCW 480 and SOCW 485
 Co-requisite Courses: SOCW 490
Credits: 3

SPA115 Introduction to Sign Language

Frequency: B
 Description: 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

SPA150 Introduction to Communicative Disorders

Frequency: B
 Description: 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

SPA201 Voice/Articulation/Resonance

Frequency: D
 Description: 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

SPA208 Geriatric Communication Disorders

Frequency: D
 Description: 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

SPA215 Intermediate Sign Language

Frequency: B
 Description: Prior completion of an introductory course in sign language required. Intermediate Sign Language extends the three major areas introduced in Introduction to Sign Language. First, deaf culture is analyzed by reviewing selected literary works. Second, manual communications as a language is critically analyzed. Third, the practical application of sign language as a method of communication is stressed and practiced. The course emphasizes a transition from signing English to American Sign Language.
 Prerequisite Courses: SPA 115
Credits: 3

SPA250 Speech and Language Development

Frequency: B
 Description: 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

SPA316 Speech Science

Frequency: B
 Description: Study of the interrelationships between acoustic, physiological, and aerodynamic factors influencing voice and speech production, including study of processes of respiration, phonation, resonance, articulation, and their interrelationships.
 Prerequisite Courses: SPA 318 SPA 350
Credits: 3

SPA318 Speech/Hearing Mechanism

Frequency: B
 Description: 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

SPA321 Speech Pathology

Frequency: B
 Description: Organic and functional disorders differentiated and characterized as to etiology and incidence in terms of speech sounds and physical characteristics. It includes stuttering and voice disorders.
 Prerequisite Courses: SPA 250, SPA 318, and SPA 350
Credits: 3

SPA322 Hearing Problems and Tests

Frequency: B
 Description: Introduction to acoustics, anatomy, physiology and pathology of the auditory system. Study and performance of audiology as applied in clinical environments. Emphasis on theoretical and applied research to differentiate normal from abnormal audition.
 Prerequisite Courses: SPA 318
Credits: 3

SPA323 Phonological/Language Disorders

Frequency: B
 Description: Assessment and intervention principles and practices appropriate for working with articulation and language problems of children and adults.
 Prerequisite Courses: SPA 250
Credits: 3

SPA327 Organization and Administration of Speech and Hearing Programs

Frequency: B
 Description: Principles and practices necessary to the organization of programs for school systems; discussion of federal, state laws and regulations governing the state delivery system.
Credits: 2

SPA328 Clinical Methods: Speech and Hearing

Frequency: B
 Description: Study of diagnostic and therapeutic methodologies for management of the communicatively handicapped. Observation of clients in clinical and laboratory environments; experiences specific to provision of clinical services.
 Prerequisite Courses: SPA 250, SPA 318, and SPA 350
Credits: 3

SPA329 Clinical Practice: Communication Disorders

Frequency: A
 Description: Application of the student's knowledge from the classroom to a clinical situation. Student interns assigned to college clinic or off campus school sites provide speech/language testing and therapy to clients under faculty supervision. Required attendance at weekly staff meetings for case reviews and presentation of diagnostic and remedial materials. No less than a C grade in SPA 328 Clinical Methods, and a 2.0 GPA in SPA 250, SPA 318 and SPA 350.
 Prerequisite Courses: SPA 250, SPA 318, SPA 328, and SPA 350
 Co-requisite Courses: SPA 331
Credits: 3

SPA330 Clinical Practice

Frequency: D
 Description: As required.
Credits: 3

SPA331 Clinical Practice: Lecture and Staffing

Frequency: A
 Description: Weekly meeting with Clinic Coordinator for lectures on tests and procedures appropriate to the current clinical environment.
 Co-requisite Courses: SPA 329
Credits: 1

SPA350 Phonetics

Frequency: B
 Description: 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

SPA418 Stuttering and Voice Problems

Frequency: B
 Description: Study and analysis of normal and pathological voice production, etiology, and clinical management. Historical aspects and present-day concepts, definitions, descriptions, causes, development, and remediation of stuttering.
 Prerequisite Courses: SPA 318
Credits: 3

SPA419 Aural Habilitation and Rehabilitation

Frequency: B
 Description: Introduction to speech reading and auditory training to optimize speech perception. Study and performance of the visual and auditory system as applied in clinical environments. Emphasis on theoretical and applied research to normal from abnormal speech perception.
 Prerequisite Courses: SPA 322
Credits: 3

SPA420 Advanced Speech Pathology

Frequency: D
 Description: Seminar devoted to assigned readings and to approved individual research. Strengthens student knowledge in specific areas in preparation for more advanced studies.
 Prerequisite Courses: SPA 321 and SPA 418
Credits: 3

SPA432 Student Teaching

Frequency: A
 Description: Field-based practicum at public schools, BOCES facilities or community-based programs. Cooperating clinicians supervise students engaged in the provision of testing and therapy services to the speech/language and hearing impaired.
 Prerequisite Courses: SPA 329
Credits: 10

SPA450 Computer Applications in Communication Disorders

Frequency: D
 Description: Introduction to the use of microcomputers in speech-language pathology and audiology. Students are introduced to computer hardware and software and will explore diverse administrative, diagnostic, and therapeutic applications including assistive augmentative communicative systems.
Credits: 3

SPA490 Independent Study

Frequency: A
 Description: Study of a particular problem in speech pathology and audiology. Periodic meetings with instructor; writing a substantial paper.
Credits: 1 - 3

SPA495 Seminar in Speech-Language Pathology/Audiology

Frequency: C
 Description: 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

SPA500 Language Problems in Children

Frequency: B
 Description: Theoretical and practical background of intervention goals that can be applied to children with language/cognitive problems.
Credits: 3

SPA502 Clinical Practice, Communication Disorders

Frequency: A
 Description: An application of the student's knowledge from the classroom to a clinical situation. Students assigned to speech/language and audiological assessments and therapy at the college clinic under faculty supervision. Attendance at periodic staff meetings. Completion of three semesters or summer sessions of practicum required.
Credits: 3

SPA510 Pediatric Audiology

Frequency: B
 Description: An introduction to pediatric parameters as they relate to clinical audiology. Study and performance of audiology as applied in pediatric, clinical environments. Emphasis of the theoretical and applied research to differentiate normal from abnormal pediatric audition.
 Prerequisite Courses: SPA 550
Credits: 3

SPA520 Multicultural Issues in Communication Disorders

Frequency: D
 Description: 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

SPA525 Speech and Hearing Problems in the Classroom

Frequency: D
 Description: 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 Pathology and Audiology.
Credits: 3

SPA530 Augmentative Communication

Frequency: D

Description: Assess and remediate communication problems for individuals with multiple disabilities; assessment techniques of cognitive, sensory and motor abilities; communicative competence; intervention techniques with various augmentative systems.

*Credits: 3***SPA531 Industrial Audiology and Hearing Conservation**

Frequency: B

Description: An introduction to industrial parameters as they relate to clinical and industrial audiology settings. Study and performance of audiology as applied in clinical and field environments. Emphasis of theoretical and applied research to differentiate healthy from unhealthy environments and normal from abnormal audition in industrial employees.

Prerequisite Courses: SPA 550

*Credits: 3***SPA550 Advanced Audiology**

Frequency: B

Description: A graduate introduction to acoustics, anatomy and physiology, and pathology of the auditory system. Study and performance of audiology as applied in clinical environments. Emphasis of basic and advanced theoretical and applied research to differentiate normal from abnormal audition.

Prerequisite Courses: SPA 322

*Credits: 3***SPA560 Studies in Hearing Research**

Frequency: B

Description: Advanced study of acoustics, anatomy and physiology, and pathology of auditory system. Study 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.

Prerequisite Courses: SPA 550

*Credits: 3***SPA565 Instrumentation in Communicative Disorders**

Frequency: B

Description: 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***SPA570 Contemporary Issues with the Hearing Impaired**

Frequency: B

Description: 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***SPA575 Craniofacial Anomalies**

Frequency: B

Description: Etiology, symptomatology and management of communication disorders related to cleft lip, cleft palate and associated disorders. Focus on interdisciplinary management.

*Credits: 3***SPA580****Electronystagmography**

Frequency: B

Description: Designed to provide advanced level graduate students with documentation, observations and practical application of measuring vestibular reactions in normal and abnormal patients.

*Credits: 3***SPA581 Evoked Response Audiometry**

Frequency: B

Description: Designed to provide advanced level graduate students with documentation, observations and practical application of measuring responses to auditory evoked potentials, visually evoked potentials, somatosensory evoked potentials, and vestibular reactions in normal and abnormal patients.

*Credits: 3***SPA585 Central Auditory Processing Disorders**

Frequency: B

Description: Central Auditory Processing Disorders (CAPD) is a specialty area that remains novice to most professionals and students in speech pathology and audiology. This course will illustrate how CAPD impacts the accurate perception of auditory information, and reading/language skills. Course materials include the neurology of central auditory nervous system, definitions/etiologies of CAPD, 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***SPA598 Voice Disorders**

Frequency: B

Description: Course will cover assessment and treatment strategies for benign, malignant and neurogenic vocal pathologies. Case study format will be emphasized.

*Credits: 3***SPA599 Experimental Phonetics**

Frequency: B

Description: 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***SPA600 Phonological Theory and Disorders**

Frequency: B

Description: Intensive individualized study of the literature in speech, language, and related disciplines concerning normal and deviant phonology.

*Credits: 3***SPA601 Stuttering Research**

Frequency: B

Description: Intensive individualized study of the literature regarding stuttering, fluency, and related speech disorders.

*Credits: 3***SPA603 Neuropathologies of Speech and Language**

Frequency: B

Description: Lectures, films, assigned readings, supervised observation in neuropathologies of aphasia, cerebral palsy, hearing loss, and related pathologies.

*Credits: 3***SPA605 Advanced Clinical Methods and Practice**

Frequency: A

Description: Externship in speech-language pathology or audiology. Students assigned to a health care facility, rehabilitation center or speech and hearing clinic. Students perform diagnostics and therapy with patients at the facility under the supervision of a licensed and ASHA certified staff speech-language pathologist or audiologist. Students enrolled in SPA 605 must have completed 21 hours of academic credit and nine credits of SPA 502, for a total of 30 credit hours. Permission of department.

*Credits: 6***SPA606 Research Design in Speech Pathology and Audiology**

Frequency: B

Description: An introduction to research design and statistical treatment to critically read and generate research. Study of basic and special applications to communication disorders. Emphasis of applied research to the formation and development of communication disorders in clinical environments.

*Credits: 3***SPA607 Directed Studies in Research Methodology – Thesis Research**

Frequency: A

Description: One to 6 credits for thesis study. An enrollment in excess of 6 hours is acceptable for a Plan II master's degree, but no more than 6 hours are creditable toward the degree. The minimum acceptable for the degree is 3 hours.

*Credits: 1 - 6***SPA609 Independent Study**

Frequency: A

Description: 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: 3***SPA610 Dysphagia**

Frequency: B

Description: Swallowing and associated disorders. Etiologies: anatomical/physiological bases. Diagnostic and treatment approaches, including bedside evaluation, radiologic examination, feeding and nutrition. This course may be taken only once.

*Credits: 3***SPA620 Diagnostic Theories and Practices**

Frequency: B

Description: 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***SPA625 Topical Seminar in Speech Pathology and Audiology**

Frequency: B

Description: 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: 3***SPA630 Assistive Learning**

Frequency: B

Description: An introduction to assistive listening devices. Study acoustical, electroacoustical, anatomical and physiological considerations to optimize auditory reception and perception of speech. Emphasis on theoretical and applied research to assess the contribution of assistive listening devices in clinical and field settings.

Prerequisite Courses: SPA 550

Credits: 3

SPA632 Graduate Student Teaching

Frequency: D
Description: Field based clinical practicum in a public school, rehabilitation center, 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

SPAN115 Elementary Spanish I

Frequency: A
Description: For students with no previous preparation. Study of fundamental speech patterns. Initial stress on listening comprehension and oral ability. Progressively greater emphasis on reading and writing skills.
Credits: 3

SPAN116 Elementary Spanish II

Frequency: A
Description: 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

SPAN215 Intermediate Spanish I

Frequency: A
Description: Development of skills to understand written and spoken Spanish. Readings and grammar review.
Prerequisite Courses: SPAN 116
Credits: 3

SPAN216 Intermediate Spanish II

Frequency: A
Description: A continuation of SPAN 215 with gradually added emphasis on reading.
Prerequisite Courses: SPAN 215
Credits: 3

SPAN307 Special Topics

Frequency: D
Description: Topics in Spanish language and literature.
Prerequisite Courses: SPAN 116
Credits: 3

SPAN315 Introduction to Readings in Hispanic Literature

Frequency: B
Description: A study of literary works in the Spanish language in various genres, from Spain and Spanish-America, including poetry, short story, essay, short novel and/or excerpts from novels, and drama. Understanding of the literary works will include internal factors as well as external ones (the era, the place, the author's life and personality, etc.).
Prerequisite Courses: SPAN 216
Credits: 3

SPAN317 Spanish Conversation

Frequency: A
Description: Oral-aural drills, conversational exercises to provide practice in understanding and speaking Spanish. Emphasis on improving pronunciation and fluency.
Prerequisite Courses: SPAN 216
Credits: 3

SPAN318 Spanish Composition

Frequency: B
Description: Writing colloquial and formal Spanish. Translations and free compositions.
Prerequisite Courses: SPAN 216
Credits: 3

SPAN319 Survey of Spanish Literature I

Frequency: B
Description: Principal literary movements and writers studied against historical, social, and cultural backgrounds. Selected masterpieces through the 17th century. Outside readings.
Prerequisite Courses: SPAN 315
Credits: 3

SPAN320 Survey of Spanish Literature II

Frequency: B
Description: Principal literary movements and writers studied against historical, social, and cultural backgrounds. Selected masterpieces from the 17th century to the present. Outside readings.
Prerequisite Courses: SPAN 315
Credits: 3

SPAN325 Survey of Spanish-American Literature

Frequency: B
Description: Principal literary movements in Spanish America: Colonial period with emphasis on post-Independence literature.
Prerequisite Courses: SPAN 315
Credits: 3

SPAN328 Don Juan and Don Quixote

Frequency: D
Description: A defining characteristic of Spanish literature is the creation of supremely powerful personalities. The purpose of the course is to introduce the student to the development of two of these archetypes: Don Juan and Don Quixote. Discussion of the chronological development of these figures from the earliest representation to the present day, and discussion of those aspects which mark the works to be studied as products of particular cultures at specific historical moments.
Prerequisite Courses: SPAN 216
Credits: 3

SPAN377 Special Topics

Frequency: D
Description: Topics in Spanish language and literature.
Prerequisite Courses: SPAN 216
Credits: 3

SPAN388 Spanish Civilization and Culture

Frequency: D
Description: A comprehensive introduction to aspects of Spanish civilization and culture: geography, history, social customs, political movements, literature and art.
Credits: 3

SPAN400 Special Topics in Spanish

Frequency: B
Description: Special areas in Spanish language, literature, or culture and civilization not covered by regular courses.
Credits: 1 - 3

SPAN401 Imperial Spain

Frequency: D
Description: Analysis of main currents of Spanish culture in Siglo de Oro through readings in history, sociology, and literature.
Prerequisite Courses: SPAN 319
Credits: 3

SPAN408 Spanish for Educators

Frequency: B
Description: Course designed for anyone in education who communicates with Spanish speakers on a regular basis. Students will learn to converse in Spanish when dealing with issues of younger and older children, college and career guidance, discipline, educational administration, health care, parents and more. Students will gain an understanding of the Spanish vocabulary necessary to effectively and confidently speak in a classroom setting. The understanding of the historical, social, and cultural background of Mexican-Americans, Puerto Ricans, Cuban-Americans and Central/South Americans will be covered as well as understanding the issues that ESL students deal with on a daily basis.
Credits: 3

SPAN410 Directed Study

Frequency: D
Description: 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

SPAN421 Advanced Spanish Phonetics and Diction

Frequency: D
Description: Systematic study of Spanish phonetics and diction. Pronunciation drills, exercises in sound discrimination and transcription.
Prerequisite Courses: SPAN 216
Credits: 3

SPAN423 Senior Seminar

Frequency: B
Description: Allows upper-level students to supplement course offerings or probe more deeply into areas of their own interest.
Credits: 3

SPAN424 Spanish Creative Writing

Frequency: B
Description: Study of literary techniques. Direct composition in Spanish to encourage incorporation of these devices into student's own writing.
Prerequisite Courses: SPAN 315 or SPAN 318
Credits: 3

SPAN425 Spanish-American Fiction

Frequency: D
Description: Prose fiction in Spanish America with special emphasis on 20th century authors.
Prerequisite Courses: SPAN 324 or SPAN 325
Credits: 3

SPAN500 Special Topics

Frequency: D
Description: Special areas in Spanish not covered by regular courses.
Credits: 3

SPAN508 Spanish for Educators

Frequency: B
Description: Course designed for anyone in education who communicates with Spanish speakers on a regular basis. Students will learn to converse in Spanish when dealing with issues of younger and older children, college and career guidance, discipline, educational administration, health care, parents, and more. Student will gain an understanding of the Spanish vocabulary necessary to effectively and confidently speak in a classroom setting. Students will learn to understand the historical, social, and cultural background of Mexican-Americans, Puerto Ricans, Cuban-Americans and Central/South Americans. Understanding the issues that ESL students deal with on a daily basis will also be covered.
Credits: 3

SPAN510 Directed Study in Spanish

Frequency: D
Description: 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 a substantial paper. Permission of department required.
Credits: 1 - 3

SPST100 Freshman Seminar

Frequency: B
Description: Open to freshman students and offered in the fall semester.
Credits: 1

SPST101 Biology Study Skills

Frequency: B
 Description: This course, offered by the Educational Development Program, is designed to meet the needs of program participants enrolled in BIOL 111 Introduction to Biology. Intended for students with limited biological backgrounds, it enhances the understanding of biological skills in the following areas: Biological Chemistry, Energy, Genetics, Evolution, Physiology, Development, and Ecology.
 Co-requisite Courses: BIOL 111
Credits: 1

SPST107 Writing in the Arts and Sciences

Frequency: B
 Description: 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

SPST127 EDP Freshman Orientation I

Frequency: B
 Description: 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: 2

SPST132 Topics in Contemporary Science Recitation

Frequency: A
 Description: A one-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.
 Co-requisite Courses: PHYS 101
Credits: 1

SPST137 America Reads

Frequency: A
 Description: Designed to help students with the working requirements of being an America Reads tutor and to familiarize students with the public school setting, requirements, and expectations. The 15-hour training program is to help students develop the range of skill they may need to work with K-3 students.
 Prerequisite Courses: EDU 221 or EDU 250 or EDU 275 or ENGL 357 or SPA 250
Credits: 1

SPST138 Advanced America Reads

Frequency: D
 Description: Designed to meet the needs of continuing America Reads tutors. Tutors will learn more about the reading process, learn to establish a tutoring goal and develop an activity to achieve that goal, and continue to gain experience in public school classrooms.
 Prerequisite Courses: SPST 137
Credits: 1

SPST147 EDP Freshmen Orientation II

Frequency: B
 Description: 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

SPST150 Liberal Arts Freshman Seminar

Frequency: D
 Description: Entering freshmen with no major can take advantage of the opportunity to connect to the college, community, and their own learning styles in this two (1) credit seminar course. Students will journal, discuss, and read; meet with representatives from many on-campus agencies and get a chance to analyze their own particular ways of learning. Emphasis will be on sound decision-making and planning.
Credits: 1

SPST201 Advanced Leadership Development

Frequency: D
 Description: A course in the study of leadership, introducing the student to tasks, strategies, and skills of effective leadership. Course activities will move the student from theory to the practical processes of leadership through the use of experiential learning, oral expression and effective teamwork on several projects.
Credits: 3

SRT105 Recording Techniques for Music

Frequency: B
 Description: 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

SRT200-201 Recording Practicum

Frequency: B
 Description: 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

SRT250-251 Recording Techniques

Frequency: B
 Description: 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

SRT300-301 Recording Practicum

Frequency: B
 Description: Applied instruction in multi-track recording, sound reinforcement, and audio systems analysis techniques. Includes in-depth study of mixing consoles, tape recorders, and signal processors. Students will record assigned projects and assist seniors in production projects. Taken concurrently with SRT 350-351. Open to majors only.
 Prerequisite Courses: SRT 200 and SRT 201 and SRT 250 and SRT 251
Credits: 2

SRT310 Studio Installation and Maintenance

Frequency: D
 Description: 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

SRT320 Studio Installation and Maintenance Laboratory

Frequency: D
 Description: This one semester, one 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.
 Prerequisite Courses: MATH 121 and MATH 123 and PHYS 123
Credits: 1

SRT350-351 Technology and Practices of the Recording Industry

Frequency: B
 Description: A two-semester course in multi-track recording technology, and Digital Signal Processing (DSP). Open to majors only.
 Prerequisite Courses: SRT 200 and SRT 201 and SRT 250 and SRT 251
Credits: 3

SRT450-451 Senior Seminar/Project

Frequency: B
 Description: Each student will prepare a professional quality recording production and a research paper. In addition, the seminar will address areas of professional concern, including career development and survival skills, current studio developments, and elements of style in recording. Open to majors only.
 Prerequisite Courses: SRT 300 and SRT 301 and SRT 350 and SRT 351
Credits: 2

SRT460-461 Independent Study

Frequency: A
 Description: 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: 2

SRT470 Studio Supervision

Frequency: D
 Description: Students supervise recording studio inventory and use. Open to majors only. Permission of instructor required.
Credits: 2

SRT480 Internship

Frequency: A
Description: 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

STAT150 Statistical Ideas

Frequency: B
Description: Introduction to the field of statistics, including sampling, experiments, measurement, descriptive statistics, probability, inference, correlation, regression and prediction. Emphasis 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. Prerequisite: NYS Regents Course III or Math 104.
Credits: 3

STAT200 Fundamentals of Statistics

Frequency: B
Description: An introductory study of statistical methods with applications to business, economics, education, and the social sciences. Topics covered include: frequency distributions, measures of central tendency, measures of dispersion, probability, probability distributions, estimation, statistical inference, and simple linear regression.
Prerequisites: NYS Regents Course III or equivalent, or MATH 104.
Credits: 3

STAT250 Statistics for Scientists

Frequency: B
Description: Introduction to statistical methods with special emphasis on uses in the natural sciences. Topics will include descriptive statistics, data collection, probability, probability distributions, confidence intervals, hypothesis testing, regression, and analysis of variance. The course will include use of analytical labs and statistical computer packages.
Prerequisite: One semester of college mathematics.
Credits: 3

STAT350 Probability and Statistics

Frequency: B
Description: Basics of probability; descriptive statistics; discrete and continuous distributions; confidence intervals and tests of hypotheses concerning means, variances, and proportions; simple linear regression; statistical software.
Prerequisite: MATH 123. MATH 210 recommended.
Credits: 3

STAT351 Applied Statistics

Frequency: C
Description: Topics chosen from multiple regression; analysis of variance; sampling techniques; time series; nonparametric methods; applications to quality control. A statistical software package will be used extensively.
Prerequisite Courses: STAT 350
Credits: 3

STAT355 Mathematical Statistics

Frequency: C
Description: Moments and moment-generating functions, conditional expectations, multivariate binomial and normal distributions, functions of random variables, sampling distributions, decision theory, theory of estimation and hypothesis testing.
Prerequisite Courses: MATH 223 and STAT 350
Credits: 3

THEA101 Theatre Practice

Frequency: A
Description: Laboratory in performance or production involving applications of theatre techniques to the various aspects of departmental productions.
Credits: 1

THEA102 Theatre Practice

Frequency: A
Description: Laboratory in performance of production involving applications of theatre techniques to the various aspects of departmental productions.
Credits: 1

THEA110 Theatre Visiting Artists

Frequency: A
Description: Must be repeated every semester (.5 cr. each semester).
Credits: 0.5

THEA114 Introduction to the Performing Arts

Frequency: B
Description: Provides 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

THEA117 Script Analysis

Frequency: B
Description: Explores the process in evaluating/discovering production and performance values in a playscript.
Credits: 3

THEA121 Introduction to Technical Theatre

Frequency: B
Description: 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 by majors and minors strongly suggested. Written production critiques required.
Credits: 3

THEA123 Introduction to Technical Production

Frequency: B
Description: 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.
Prerequisite Courses: THEA 121
Credits: 3

THEA130 Acting for Non-Majors

Frequency: B
Description: Basic techniques of acting with emphasis on improvisation, script analysis and scene study. Attendance at campus theatrical events required.
Credits: 3

THEA131 Acting Studio: Improvisation

Frequency: B
Description: Introduction to basic craft skills of acting with emphasis on self-awareness and discovery, spontaneity, and improvisation. BFA Acting and Musical Theatre majors only.
Credits: 3

THEA132 Acting Studio: Character Study

Frequency: B
Description: Introduction to theory and practice of the basic principles of Stanislavski realism with emphasis on character exploration and analysis. BFA Acting and Musical Theatre majors only.
Prerequisite Courses: THEA 131
Credits: 3

THEA133 Introduction to Acting

Frequency: B
Description: Basic craft skills of acting with emphasis on improvisation, character study, analysis and scene work. Theatre Arts B.A. majors and minors only.
Credits: 3

THEA140 Stage Dialects

Frequency: B
Description: 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

THEA201 Theatre Practice

Frequency: B
Description: Continuation of THEA 101-102.
Credits: 1

THEA202 Theatre Practice

Frequency: B
Description: Continuation of THEA 101-102.
Credits: 1

THEA220 Makeup

Frequency: A
Description: Design, selection, application, and evaluation of stage makeup. Color theory and painting technique are stressed. Theatre Arts majors only.
Credits: 3

THEA221 Computer Drawing/Design

Frequency: B
Description: 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 Costume and lighting design. B.F.A. Production Design majors only.
Prerequisite Courses: THEA 121
Credits: 1

THEA222 Stagecraft I

Frequency: B
Description: Drafting and construction of soft goods, platforms and wagons, framed scenery, stairs, cornice and trim. Further refinement of shop skills. Practical work on productions may be required. Lab fee. B.F.A. Production Design majors only.
Prerequisite Courses: THEA 123
Credits: 3

THEA223 Lighting Design I

Frequency: B
Description: Mechanics of stage and television lighting, involving basic electricity, color theory, instrumentation, distribution and control. Possibility of practical application on departmental productions. Permission of instructor.
Prerequisite Courses: THEA 123
Credits: 3

THEA226 Scene Painting I

Frequency: B
Description: Color theory, preparation of painting surfaces, and basic painting techniques as they pertain to the theatre. B.F.A. Production Design majors only.
Prerequisite Courses: THEA 123
Credits: 3

THEA228 Costume Crafts

Frequency: B
Description: Laboratory exploration of basic costume construction techniques.
Prerequisite Courses: THEA 123
Credits: 3

THEA230 Introduction to Scene Study

Frequency: B
 Description: This course will present the fundamental principles of approaching the creation of a character on stage using the techniques of Stanislavski realism. Theatre Arts B.A. majors only.
 Prerequisite Courses: THEA 133
Credits: 3

THEA231 Acting Studio: Scene Study I

Frequency: B
 Description: Skills and techniques for role analysis and performance in realistic plays. B.F.A. Acting and Musical Theatre majors only.
 Prerequisite Courses: THEA 132
Credits: 3

THEA232 Acting Studio: Scene Study II

Frequency: B
 Description: Skills and techniques for role analysis and performance in realistic plays.
 Prerequisite Courses: THEA 231
Credits: 3

THEA242 Acting Studio: Introduction to Voice and Movement I

Frequency: B
 Description: Designed to support the performer in freeing the body/voice for creative response. Physical and vocal awareness are created through the exploration of alignment, mobility, flexibility, strength, breath support, articulation, resonance and projection. B.F.A. Acting and Musical Theatre majors only.
Credits: 3

THEA243 Acting Studio: Introduction to Voice and Movement II

Frequency: B
 Description: A continuation of THEA 242. Designed to support the performer in freeing the body/voice for creative response. Physical and vocal awareness are created through the exploration of alignment, mobility, flexibility, strength, breath support, articulation, resonance and projection. B.F.A. Acting and Musical Theatre majors only.
 Prerequisite Courses: THEA 242
Credits: 3

THEA301-302 Theatre Practice

Frequency: B
 Description: Continuation of THEA 201-202.
Credits: 1

THEA303 Rendering Technique I

Frequency: B
 Description: Explores the graphic media and drawing techniques used by the designer in preparing drawings for the theatre.
 Prerequisite Courses: THEA 123
Credits: 1

THEA304 Rendering Technique II

Frequency: B
 Description: Continuation of THEA 303. Explores the graphic media and drawing techniques used by the designer in preparing drawings for the theatre.
 Prerequisite Courses: THEA 123
Credits: 1

THEA305 Rendering Technique III

Frequency: B
 Description: Continuation of THEA 304. Explores the graphic media and drawing techniques used by the designer in preparing drawings for the theatre.
 Prerequisite Courses: THEA 123
Credits: 1

THEA320 Advanced Makeup

Frequency: C
 Description: Design and application of special effects, 3-D prosthetics, and selected advanced makeup techniques.
 Prerequisite Courses: THEA 220
Credits: 3

THEA322 Stagecraft II

Frequency: B
 Description: Drafting and construction of dimensional scenery. Planning, drafting and mounting the full production. Moving the multi-set show. Practical work on productions may be required. Lab fee. B.F.A. Production Design majors only.
 Prerequisite Courses: THEA 222
Credits: 3

THEA324 Lighting Design II

Frequency: B
 Description: Principles of lighting design and color use for stage and television through script analysis and practical projects. Opportunity to design a production as part of class work. B.F.A. Production Design majors only.
 Prerequisite Courses: THEA 223
Credits: 3

THEA325 History of Fashion

Frequency: B
 Description: Chronological survey of clothing and fashion: their sociological and artistic implications from the Egyptians to the 20th century.
Credits: 3

THEA326 Scene Design I

Frequency: B
 Description: Principles, procedures, and development of scene design; primary emphasis on technical aspects of design. Students must enroll in THEA 303, 304 or 305 simultaneously. B.F.A. Production Design majors only.
 Prerequisite Courses: THEA 322
Credits: 3

THEA327 Costume Design I

Frequency: B
 Description: Costume design methods and concepts. Students must enroll in THEA 303, 304 or 305 simultaneously. B.F.A. Production Design majors only.
 Prerequisite Courses: THEA 325
Credits: 3

THEA328 Costume Design II

Frequency: B
 Description: Continuation of TA 327: development of more complicated and sophisticated concepts. Students must enroll in THEA 303, 304 or 305 simultaneously. B.F.A. Production Design majors only.
 Prerequisite Courses: THEA 327
Credits: 3

THEA329 Flat Patterning

Frequency: B
 Description: Flat pattern techniques as apply to the costume cutter. Use of slopers, methodology, and interpretation of sketches are emphasized. B.F.A. Production Design majors only.
 Prerequisite Courses: THEA 228
Credits: 3

THEA331 Acting Studio: Styles

Frequency: B
 Description: Approaches to various non-realistic styles of acting with emphasis on language found in period text. B.F.A. Acting and Musical Theatre majors only.
 Prerequisite Courses: THEA 232
Credits: 3

THEA333 Acting Studio: Audition Techniques

Frequency: B
 Description: Intensive study of skills needed by actors to increase their marketability in today's theatre. B.F.A. Acting and Musical Theatre majors only.
 Prerequisite Courses: THEA 232
Credits: 3

THEA338 Special Topics

Frequency: D
 Description: Study of selected areas of theatre arts not covered in regular curricular program. May be repeated for credit. Permission of instructor required.
Credits: 1 - 3

THEA342 Acting Studio: Stage Voice I

Frequency: B
 Description: Explores methods for freeing the voice for creative response to produce controlled, vitalized speech in performance. B.F.A. Acting/Musical Theatre majors only.
 Prerequisite Courses: THEA 242 and THEA 243
Credits: 3

THEA343 Acting Studio: Stage Voice II

Frequency: B
 Description: Explores methods for freeing the voice for creative response to produce controlled, vitalized speech in performance. B.F.A. Acting/Musical Theatre majors only.
 Prerequisite Courses: THEA 342
Credits: 3

THEA353 History of Musical Theatre

Frequency: C
 Description: Development of the theatrical genre known as musical theatre. Special emphasis on musical comedy roots in nineteenth century America through the present.
Credits: 3

THEA361 Acting Studio: Stage Movement I

Frequency: B
 Description: Introduction to period movement including Elizabethan, Restoration and court manners leading to the organic creation of convincing characters. Other areas of study may include movement in High Greek and Farce. Study may also include various disciplines, such as stage combat, mask work and mime. B.F.A. Acting/Musical Theatre majors only.
 Prerequisite Courses: THEA 243
Credits: 3

THEA362 Acting Studio: Stage Movement II

Frequency: B
 Description: A continuation of THEA 361. Areas of study may include movement in High Greek and Farce. Study may also include various disciplines, such as stage combat, mask work and mime. B.F.A. Acting/Musical Theatre majors only.
 Prerequisite Courses: THEA 361
Credits: 3

THEA381 Technical Theatre Seminar

Frequency: A
 Description: 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: 0.5

THEA401-402 Theatre Practice

Frequency: B
 Description: Continuation of THEA 301-302.
Credits: 1

THEA420 Special Studies in Technical Theatre

Frequency: B
Description: Seminar and laboratory experience exploring a variety of processes and techniques in depth. B.F.A. Production Design majors only.
Credits: 3

THEA426 Scene Design II

Frequency: B
Description: Continuation of Scene Design I with specific emphasis on artistic requirements of the production. B.F.A. Production Design majors only.
Prerequisite Courses: THEA 326
Credits: 3

THEA427 Scene Painting II

Frequency: B
Description: An intensive laboratory experience exploring advanced techniques in painting, dimensional texture and surface treatments. May require practical work on productions. B.F.A. Production Design majors only.
Prerequisite Courses: THEA 226
Credits: 3

THEA432 Acting Studio: Musical Theatre Styles

Frequency: B
Description: Advanced scene study and techniques for integrating all resources of the singing actor in musical theatre. B.F.A. Musical Theatre majors only.
Prerequisite Courses: THEA 232
Credits: 3

THEA435 Rehearsal and Performance

Frequency: A
Description: Application of advanced techniques in preparation for studio and major productions.
Credits: 0

THEA436 Design/Technical Production

Frequency: A
Description: Application of advanced techniques in preparation for studio and major productions.
Credits: 0

THEA441 Directing I

Frequency: A
Description: 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. Theatre Arts majors only.
Credits: 3

THEA442 Directing II

Frequency: D
Description: 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. Theatre Arts majors only.
Prerequisite Courses: THEA 441
Credits: 3

THEA443 Acting Studio: Stage Voice III

Frequency: B
Description: Advanced training in the practical applications of vocal techniques for use in auditions and performance. Special attention is given to the students individual needs and artistic development at the senior level. B.F.A. Acting majors only.
Prerequisite Courses: THEA 342 and THEA 343
Credits: 3

THEA444 Acting Studio: Stage Voice IV

Frequency: B
Description: Continuation of THEA 443. Advanced training in the practical applications of vocal techniques for use in auditions and performance. Special attention is given to the student's individual needs and artistic development at the senior level. B.F.A. Acting majors only.
Prerequisite Courses: THEA 443
Credits: 3

THEA451 History of the Theatre I

Frequency: B
Description: 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

THEA452 History of the Theatre II

Frequency: B
Description: A survey of theatre history from 18th century to present. Performance and production elements in all ages will be covered. Junior or Senior standing.
Credits: 3

THEA460 Theatre Organization and Management

Frequency: B
Description: Theatre management including philosophy, management procedures, budgets, publicity/promotion, ticket office and house management procedures for educational, community and professional resident theatres. Theatre Arts majors or permission of instructor.
Credits: 3

THEA481 Senior Seminar

Frequency: D
Description: Topics vary from semester to semester. May be repeated for credit. Permission of instructor required.
Credits: 1 - 3

THEA482 Directed Study

Frequency: A
Description: 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

THEA490 Professional Theatre Intern

Frequency: A
Description: Approved and supervised work-training experience in professional theatre company. Permission of department required.
Credits: 1 - 15

THEA499 Performance/Production Seminar

Frequency: A
Description: Development and public presentation of a creative project as a senior recital. Senior standing; B.F.A. Acting/Production Design majors only.
Credits: 3

THEA530-531 Selected Studies in Theatre Arts

Frequency: D
Description: In-depth study of various specific areas in the theatre, either literature or production. Permission of department required.
Credits: 1 - 12

WOST201 Intro. to Women's Studies

Frequency: B
Description: 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

WOST203 Chicana Writers/ Visual Artists

Frequency: D
Description: Who is the Virgin of Guadalupe? When was the Mexican Revolution? What is a "Zootsuit"? Explore these questions and more in this interdisciplinary course taught in English. In this 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

WOST255 Psychology of Women

Frequency: D
Description: An examination of the biological, psychological and sociological factors that shape women's lives. Attention to the intersection of gender with ethnicity, sexual orientation, and social class. Specific topics include theories of gender development, images of women in the media, work, childbirth and motherhood, violence, physical and mental health.
Prerequisite Courses: PSY 129 WOST 201
Credits: 3

WOST301 Feminist Theory

Frequency: B
Description: In-depth critical exploration of selected theories to explain the sources of women's roles in society. A multidisciplinary approach will be employed to account for the social, economic, political and cultural status of women in contemporary societies.
Credits: 3

WOST302 Sex and Gender

Frequency: B
Description: 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/SOC 306.
Prerequisite Courses: ANTH 115 SOC 116
Credits: 3

WOST373 Gender and Communication

Frequency: D

Description: Using a variety of theoretical models and critical approaches, students examine everyday communication practices to identify how gender, communication, and culture create a complex and dynamic web of meaning with significant implications for individuals and society.

Prerequisite Courses: COMM 101

WOST 201

Credits: 3

WOST377 Special Topics

Frequency: D

Description: Variable-content, sophomore/junior level course.

Topics announced in *Course Offering Bulletin* when offered.

Credits: 3

WOST401 Feminist Practice

Frequency: A

Description: Directed study of student's own area of interest within women's studies, serving as a capstone to the interdisciplinary experience of the minor. The capstone may be a final project, undergraduate thesis, or community-based internship.

Credits: 3

WOST490 Independent Study

Frequency: A

Description: 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.

Student's must develop a proposal, obtain necessary approval of instructor and obtain final approval from the coordinator of Women's Studies.

Credits: 1 - 3

GENERAL ACADEMIC INFORMATION

The typical undergraduate program at SUNY Fredonia consists of four groups of courses: (1) the College Core Curriculum, consisting of courses in various branches of learning that are focused upon developing a range of skills and are required of all students, whatever their principal interest; (2) the courses required to complete a departmental or inter-departmental major; (3) supporting courses in subjects related to the major field, as well as courses which may be required for teacher certification; and (4) electives necessary to complete the minimum of 120 semester hours of credit required for the baccalaureate degree. The student may also take special concentrations, minors, and second majors.

The basic organizational unit of the college faculty is the academic department, which brings together people with similar academic backgrounds and related interests in teaching and research. For information on academic departments and majors, see the first section of this catalog.

On the graduate level, the college offers certification programs and master's degrees in a variety of fields. For details about post-baccalaureate work, see the Graduate section of this catalog.

College offices generally are open from 8:30 a.m. until 5 p.m. Monday through Friday during the fall and spring semesters, and from 8 a.m. until 4 p.m. during the summer. Exceptions to this are extended hours for some student service offices and Reed Library.

General Education

The State University of New York is charged with furthering human development and exploring and pursuing human potential in the broadest sense. In general, the university performs this function by acting as a center for the development and dissemination of knowledge, arts, and skills. In particular, it offers an opportunity for concentrated intellectual development and training. As part of the university, SUNY Fredonia pursues these goals with its own unique resources.

The college seeks to provide students with both a specialized and a general education. The specialized work prepares students in particular fields of knowledge for careers, professions, and other specific goals. But knowledge, like life, is a seamless fabric that cannot be cut into separate pieces. Any special area of knowledge requires a larger context to become fully meaningful. It is the purpose of general education to provide such a context, to help students find a sense of direction and become better able to cope with a changing world, regardless of their specializations.

The object of a general education is to further the development of a total human being who seeks to relate learning and living, ideas and actions. Seen in this way, general education seeks to provide the basis for responsible action, and to develop the habit of questioning and of using questioning as a creative tool.

The ability to discover and act upon their own values is a basic potential of human beings. In choosing the values by which they live, rather than having values thrust upon them,

individuals create themselves. However, the freedom to choose and create comes into being only for people who have developed self-awareness, an ability to think, a minimal body of knowledge, and aesthetic sensitivity. General education seeks to help students develop all of these. General education should help students understand human society and their relationship to it. But it should also enable students to develop as individuals with a fundamental philosophy or basic world view that is consciously personal, yet based on an awareness of culture, history, and society. Consequently, general education seeks to facilitate the development of a conscious philosophy or world view, and to develop the skills by which such fundamental beliefs can be articulated clearly.

Students complete the minimal general education requirements at SUNY Fredonia in the framework of the College Core Curriculum. The College Core Curriculum requirements apply to all freshmen admitted Fall 2001 and later and to all transfer students admitted Fall 2002 or later. Transfer students admitted on or before Spring 2002 meet their general education requirements through completion of the General College Program (for General College Program details, see the 1999-2001 Undergraduate Catalog). A description of the College Core Curriculum follows.

College Core Curriculum (CCC)

Approved courses, distributed as follows.

Category	Hours
1. Basic Written Communication	3
2. Mathematics/Quantitative Reasoning	3
3. Foreign Languages (Students who have scored 85 or above on a foreign language Regents Checkpoint B exam have fulfilled this requirement.)	3
4. The Arts	3
5. The Humanities	3
6. Social Sciences (Two courses from different disciplines: only one may be from Business Administration, Education, History, Communication, or Speech)	6
7. Natural Sciences (Two courses from different disciplines; only one may be from Mathematics or Computer Science)	6
8. American History (Students who have scored below 85 on the American History Regents Test must take History 105 or 106 or other American History narrative; all others may take any course in this category)	3
9. Western Civilization	3
10. World History or Non-Western Civilization	3
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11. * Upper Level Requirement – Capstone
(under consideration)

If required, guidelines and number of credits to be determined by May 2002.

* Beginning Fall 2001 for freshmen and Fall 2002 for transfers

Transfer students may receive credit in Categories 1 through 10 of the College Core Curriculum for similar courses taken at other colleges or approved advanced placement courses and exams. Any course approved for the SUNY General Education Requirements from a SUNY college or university will be accepted as a course in the corresponding Fredonia College Core Curriculum Category. Course(s) in Category 11 must be taken at SUNY Fredonia. Questions pertaining to the College Core Curriculum may be directed to Dr. Leonard Faulk, Associate Vice President for Academic Affairs, 810 Maytum Hall, (716) 673-3808.

Academic Advising

The variety of programs both in major departments and in interdisciplinary areas at SUNY Fredonia requires that every student meet with an academic advisor periodically to review progress and plan his or her academic future. It is particularly important for a student to be aware of requirements for graduation including College Core Curriculum requirements and those necessary to complete a chosen degree program.

Academic advisors can help students plan educational programs and keep up with new courses and programs, but students should not expect advisors to be knowledgeable about the content in detail of the many individual courses throughout the college and the teaching methods and evaluation procedures of the many individual teachers. Further, students are ultimately responsible for adhering to academic policies as stated in this catalog and determining that they have met degree requirements (including general education, major, and minor or concentration requirements).

At the orientation program, new students have an opportunity to discuss educational objectives with an advisor who will be knowledgeable in an area of preference and who will help students plan a schedule for the first semester. Shortly after the start of the first semester, students are assigned an academic advisor.

Students are required to make an appointment with their advisor prior to course selection, to discuss their academic future, review their mid-semester grade report, and plan a program of study for the second semester. After that meeting, students should meet with their academic advisor at least once each semester prior to course selection.

Academic advising will be successful and help students only if they actively seek advice about their education at SUNY Fredonia. Advising is one of the obligations of the college teaching profession. Students should not feel they are imposing on their advisors by discussing academic progress more than the minimum requirement of once each semester. Students are encouraged to seek advice as often as needed. It is one of the marks of a successful student.

Furthermore, if academic advising is to be successful, students should have confidence in their advisors. If students wish to change advisors, they should contact their

department chairperson who will make a new assignment mutually agreeable to students and their new academic advisor.

Questions pertaining to academic advising may be directed to the Academic Advising Center, 614 Maytum Hall.

Liberal Arts

Liberal Arts students are those students who are exploring the major options offered at Fredonia. Liberal Arts is not a major. Exploration will occur as the student takes courses that comprise the College Core Curriculum required of all students. Declaration of a major is not required until the second semester of the sophomore year, the semester in which one customarily completes 60 credit hours. Most students decide on their major during the sophomore year, prior to reaching 60 credit hours. The Associate Dean for Liberal Arts students is the Director of Academic Advising, 614 Maytum Hall. The Academic Advising Center assigns a student's advisor, who may be a faculty member or a qualified member of the staff.

The Liberal Arts Freshman Year Experience is a mandatory, year-long program designed to assist Liberal Arts students in their exploration and selection of a suitable major. The program has three major components: the Liberal Arts Advisement System, including Liberal Arts Liaisons; the Liberal Arts Freshman Seminar; and a Major and Career Exploration Course. For more information, contact the Associate Dean for Liberal Arts in the Academic Advising Center.

Fredonia in 4

Fredonia's formal response to students who require assurances that they will graduate in four years began with the freshman class entering in the fall of 1997.

Fredonia in 4 is a four-year guarantee program for first-time freshmen by which the college pledges to adhere to a commonly understood agreement with our 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 Academic Advising Center, 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 college'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 Academic Advising Center, 614 Maytum Hall.

3-1-3 Program

The SUNY Fredonia 3-1-3 program provides an opportunity for some high school seniors within driving distance of the college to take courses at Fredonia while they still have the close support of family and high school. The 3-1-3 program is a time-shortened, combined high school and college course of study which can lead to a B.A. or B.S. degree in three years after high school graduation. This is possible because the college gives credit for the successful

completion of selected high school courses and the high school allows successfully completed college English and social science courses to count toward the high school diploma. Therefore, the name 3-1-3 means three years of high school, three years of college and one transitional year during which the student is enrolled simultaneously at his/her high school and at the college.

3-1-3 students are selected by the SUNY Fredonia admissions staff on the same basis as regularly admitted students.

Pre-Professional Programs

Students may arrange pre-professional programs to prepare for specialized training in engineering; health related areas such as dentistry, medicine, and veterinary medicine; or law. Those students seeking admission into professional schools should obtain the catalog of the institution they hope ultimately to enter and develop their college program, insofar as possible, according to the listed entrance requirements.

Advisement on pre-medical, pre-dental, and other health related programs may be obtained from the Biomedical Professions Council through the Department of Biology, located in Jewett Hall. Students interested in these careers are encouraged to register with the council through the biology department as early as possible to insure appropriate advising on matters of course and major choices, and application procedures to professional school. For information on Pre-Medicine and Allied Sciences, see page 65. Information on law may be obtained from the Pre-Law Advisory Committee through the Department of Political Science (for information on Legal Studies, refer to the section on page 47); on engineering from the Director of the Cooperative Engineering Program; and on the Cooperative Agriculture Program, from the Director of the Cooperative Agriculture Program.

Internships

Internships are an opportunity for students to learn from, and receive credit for, experience gained by working with an appropriate agency or office in the public or private sector. Student interns are under the dual supervision of a faculty member or sponsor and a representative of the organization in which they are working. Internships offer a student the opportunity to explore career options, test theories learned in the classroom, develop an understanding of the discipline required in the world of work, and develop interpersonal skills.

Internships are open to any student registered at Fredonia who has completed at least 30 credit hours and has a minimum GPA of 2.0. Internships may be taken in a student's major or in another department.

Nearly all departments on the Fredonia campus offer internships. Placements are available in a variety of offices in Washington, D.C. through the Washington Semester program; in Albany, N.Y. through the Albany Semester Program; and with the New York State Assembly and Senate. Other placement areas include art and photography, biology and environmental science, business and accounting, chemistry, communication, computer science, counseling, law enforcement and legal offices, journalism and public relations, health administration, sound

recording technology, and theatre arts. The Internship Office has a number of sources of information regarding past placements held by Fredonia students and other potential internships locally, nationally, and internationally. Under guidelines approved by the Fredonia Faculty Council, an internship must be approved by a faculty sponsor and credit will be determined in part by the nature of the experience and the length of time involved. For further information, students should see the *Internship Handbook*.

Students may earn up to 15 hours of credit per semester for an internship and may count a maximum of 24 hours of internship credit toward the 120 hours required for an undergraduate degree. Students taking part in an internship must complete a Learning Contract and have it approved by their sponsor and the Internship Office. In addition, they must register for the appropriate course and pay the normal registration fee to receive credit. For more information, contact the Internship Office at (716) 673-3451.

Distance Learning

SUNY Fredonia is committed to making alternative learning opportunities available to its students either through the Internet via the World Wide Web or two-way interactive video. Additional information is available from the college's Office of Lifelong Learning, LoGrasso Hall.

International Education

Fredonia students interested in international study can choose from the Study Abroad or Student Exchange programs:

Study Abroad. The State University of New York offers 350 overseas programs in 60 different countries: in North and South America, Africa, Asia, Western and Eastern Europe, Australia and New Zealand. They range from two or three-week intensive courses to a semester or entire academic year abroad. Students can choose courses in over 100 subjects from aboriginal studies or aerospace engineering to western philosophy or women's studies. Many programs concentrate on language learning and are conducted in the host country's language, but others are offered partially or completely in English. Study Abroad programs are open, with some exceptions, to all SUNY and non-SUNY students, from first year to graduate level. Usually, undergraduates study abroad during their junior year, but well-prepared sophomores and occasionally freshmen are eligible. Interested students are encouraged to contact Fredonia's Director of International Education to help them to determine when and where to go.

Cost is comparable to other highly-rated study abroad programs in U.S. public and private colleges. Program costs are usually only slightly higher than on-campus costs of tuition, room and board (excluding international air fare). In some cases, expenses are actually less than they would be on campus. Students pay SUNY tuition (in-state or out-of-state, depending on the student's residency status) plus costs which vary from program to program. Most financial aid can be applied to overseas study except for some program costs and fees. Students are urged to check with Fredonia's Office of Financial Aid and also with the Director of International Education.

Student Exchange. These programs are offered by SUNY Fredonia in Europe and the Far East. Currently, Fredonia has formal student exchange agreements with Aichi University in Japan for an intersession, semester or academic year; with the American University in Bulgaria for a semester or academic year; with University of Oviedo in Oviedo, Spain, for a semester or academic year; and in the United Kingdom, for a five-week student teaching experience in Swansea Institute of Higher Education in Wales and Rolle Faculty College of Education, University of Plymouth, England.

In addition, the Office of International Education coordinates services for students from other countries who choose to study in Fredonia. Assistance with course selection and immigration matters, as well as acculturation, are provided.

One of the International Education office's top priorities is program development in other countries. The college is currently pursuing agreements in such locations as Europe, South America, and Asia. Also available are short-term, credit-free experiences; an example would be traveling to Japan for a few weeks for an intensive study of the language.

While Fredonia students are away, the International Education office helps coordinate course registration and on-campus housing needs for the semester following their return. Students also receive periodic mailings and the school newspaper.

To apply, students decide the country they would like to study in, talk to their academic advisor about classes they might want to take abroad for academic credit toward their major, and pick up application forms from the International Education Office.

A semester or full year studying abroad can be among the most rewarding experiences a student can have; living in a new culture, meeting people and learning their language. In addition, students discover how U.S. customs, traditions, and values appear from a foreign vantage point. Because of the increasing interdependence of the world's regions, an international education is becoming the indispensable hallmark of a well-educated person, preparing students for citizenship and a bright exciting career.

For more information, contact the Office of International Education at (716) 673-3451.

Army ROTC

SUNY Fredonia offers Army ROTC through Saint Bonaventure University. In the freshman and sophomore years, students can take at SUNY Fredonia basic military science courses taught by members of the Saint Bonaventure Military Science Department. Students who make a commitment to become a commissioned officer take the advanced ROTC courses in their junior and senior years by traveling to Saint Bonaventure. Interested students should call Captain William Snodgrass, (716) 375-2567; wsnodra@sbu.edu.

Grants Administration/Research Services Office

Fredonia's Grants Administration/Research Services Office helps to identify potential external sources of funding for research and special projects, assists with proposal and budget development and preparation, establishes audit and control procedures, monitors expenses, and aids in other ways necessary to obtaining and administering external grants and contracts.

Fredonia values the kind of faculty/student interactions that reveal the process of discovery and creativity which is basic to the scholarly process. The promotion of research experiences for undergraduates is part of Fredonia's mission. Increasing funding for faculty and student research is a basic element in the operations of the Grants Administration/Research Services Office. External funding not only makes possible support programs, such as the special fund in support of student presentations of scholarly papers at professional meetings, it provides funds which help to develop projects having the potential for future funding.

Summer Sessions at SUNY Fredonia

During the summer months, SUNY Fredonia offers a comprehensive program of undergraduate and graduate course work.

The availability of residence hall living and a wide range of recreational activities, along with a busy schedule of cultural events, enable the summer student to enjoy a full college life. The combination of intellectual stimulation in the classroom and a summer resort atmosphere on the campus can provide a very rewarding experience.

For additional information, students should contact the Summer Session Information Center at (716) 673-3177.



ACADEMIC AND STUDENT SUPPORT SERVICES

The college 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. These services are directed and implemented by a trained professional staff.

Reed Library

Reed Library plays a key role in the teaching and learning process at Fredonia as students and faculty make heavy use of over one million research materials comprised of nearly 400,000 volumes, more than 5,000 journals, and collections of microforms and videotapes. The Music Library houses more than 15,000 sound recordings and over 30,000 musical scores. New listening stations and a redesigned music lab are also housed on the Music Mezzanine. Special Collections include extensive materials related to local history, the college archives, the records of the Holland Land Company, and books and manuscripts of the noted Austrian author Stefan Zweig.

Librarians provide orientation classes, tours and instruction in the use of information sources to student groups and all academic disciplines. Reference librarians are available to answer specific questions and to advise students on research strategies. The Reed Library web pages contain extensive guides on the use of library resources.

Reed has a new online catalog, which allows students and faculty to search the library holdings and the holdings of other libraries as well. A wide variety of resources including encyclopedias, indexes, full text articles and online journals are available to the campus community 24 hours a day. Together with the online catalog our expanding selection of electronic information sources radically improve the way patrons of Reed Library gain access to information.

Reed Library is open at the following times during the academic year: Monday through Thursday, 8 a.m. to 11 p.m.; Friday, 8 a.m. to 10 p.m.; Saturday, 10 a.m. to 10 p.m.; and Sunday, 1 p.m. to 11 p.m. Hours are extended during the exam period at the end of each semester, and are reduced during intersessions and summer school. For more information on Reed Library and its services, students should call (716) 673-3222 or visit the library home page at <http://www.fredonia.edu/library/>.

Information Technology Services

The college provides a wide range of information technology services for students, faculty, and staff. A Unix-based electronic mail system provides secure and reliable e-mail service. The campus network provides local area network and Internet access for approximately 2,800 academic/administrative connections for classrooms, offices, and teaching/student laboratories as well as approximately 1,900 ResNet (student residential network) connections.

Access to personal computers is now an essential part of any college education. The college encourages students to purchase their own PCs for use on campus: however, recognizing that many students are not in a position to do this, there are a significant number of computer laboratories on campus with Intel-based and Macintosh computers available hardwired to the Internet. These computers run

standard web browsers, the Microsoft Office Suite, as well as software for data-analysis, programming and other course-related software.

Additional computer labs on campus are designed to be teaching facilities, optimized for classroom instruction. The Department of Communication houses the Sheldon Multimedia Laboratory and state-of-the-art facility dedicated to digital video processing. The Media Arts program also has a multi-media laboratory. Thirteen high-tech classrooms provide faculty access to multimedia technologies for instructional purposes.

Students are encouraged to utilize the Media Center, located in W203 Thompson Hall, which houses speech pathology and audiology materials, a student graphics lab, PC/Mac microcomputers and media equipment to support classroom projects.

Many academic departments provide student computer usage instruction. Instruction in computer science is provided by the Department of Mathematics and Computer Science, which also offers an undergraduate major and minor in Computer and Information Sciences. The department has operated a Computer Science Laboratory (CS Lab) in Fenton Hall since 1984. For more information on the hardware and software maintained by the department, refer to the Computer Science section on page 17.

The Office of Administrative Information Technology has converted the Student Information System to the Systems and Computer Technologies (SCT) Banner 2000 software running on a Dec Alpha 4100. This integrated system maintains student records for Admissions, Advising, Alumni/Development, Faculty Advising, Financial Aid, General Ledger/Finance, Institutional Studies, Registration, Residence Life, and Student Accounts/Receivables. Banner Web implementation during 2000-2001 will provide for web registration and additional on-line functionality.

Additional information about Information Technology Services is available at the department's website at <http://www.fredonia.edu/its>.

The Learning Center

The Learning Center provides tutoring in academic subjects to any member of the college population. The center's peer tutoring program is run on a drop-in basis, at no cost to the student. Subjects tutored include writing, math, computer science, business administration (including accounting), economics, statistics, biology, chemistry, physics, and foreign languages. Fredonia's Learning Center has been rated among the best in the SUNY system in recent Student Opinion Surveys administered by the American College Testing service.

Learning Center tutors are available to assist students with academic work using computer programs for calculus, business, computer science, and the natural and social sciences. Internet and electronic mail capabilities give students access to a world full of electronic research tools. The Learning Center encourages students to take full advantage of the computers whenever equipment is not

required for tutoring or workshops. For more information, visit the Learning Center on the fourth floor of Reed Library or call (716) 673-3550.

Applications are accepted for tutoring positions in March. Final decisions are made by the end of April after a series of interviews. Tutors are then hired for both semesters of the following academic year.

The Learning Center provides language support services for English as a second language (ESL) students and is also the home of Disability Support Services for Students and the Full Opportunity Program.

Educational Development Program

The Educational Development Program (EDP), known statewide as the Educational Opportunity Program (EOP), is an academic and financial support services program administered by the State University of New York. It is designed to provide a college education for talented students who have not had an opportunity to realize their academic potential. EDP serves students from diverse backgrounds with priority for admission given to the "historically disadvantaged."

Additionally, program graduates can receive 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. College level
 - b. Tutorial assistance
 - c. Supplemental instruction
 - d. Internships
2. Counseling Services
 - a. Academic advisement
 - b. Individual and group
 - c. Career
 - d. Freshmen seminar course
 - e. Personal and social
 - f. Peer advising
3. Financial Assistance
 - a. Financial aid for qualified students
 - b. Financial planning

Students should review the Educational Development Program eligibility and admissions criteria on page 195 of this catalog. Students interested in the program should look for the EDP homepage at <http://www.fredonia.edu/edp>.

Career Development Office

www.fredonia.edu/cdo

The Career Development Office provides a link between the campus and the world of work. The professional staff helps freshmen through alumni to:

- explore options and make career/major/job choices
- plan strategies to gain experience and identify skills to become competitive
- develop skills to implement a successful job search
- learn how to apply to graduate or professional school
- locate information and opportunities to help you make decisions or implement your plans
- get connected to employers and graduate schools

Outline of Services

Individual Counseling. Students are urged to make an appointment early in their college experience to examine the expectations they may have for a degree program, major, and possible occupations. Computer programs, paper and pencil inventories, career information, and information interviewing are used to supplement counseling appointments. A counseling appointment is also recommended to identify strategies and find information to implement a job search.

Drop-in Hours. A counselor is available without an appointment to help locate information, critique resumes and cover letters, and answer questions about internships, summer jobs, or applying to graduate or professional school. Current Drop-in Hours are Monday through Thursday from 2 to 4:30 p.m. when classes are in session.

Workshops. The staff makes presentations to student clubs, classes and residence halls about career options, internships, summer jobs, resume writing, job searching (including Internet searching), interviewing, and graduate or professional school application issues.

Career Information. Books, magazines, pamphlets, articles and videotapes about careers are arranged for easy browsing. They contain information about work tasks, preferred academic background, personal qualities and experiences, salary, hiring organizations, and job market. They are also available for overnight sign-out.

Career Guides. These self-help guides are written on a number of topics related to career choice, job search, resumes and cover letters.

Job Search Information. Writing a resume, job search strategies, writing cover letters, and interviewing techniques are covered in books and videotapes. Registration bulletins and test dates for the NYSTCE for teacher certification are also available in the office.

Videotaped "Practice" Interviews. A staff member will conduct a brief interview. The interview will be videotaped, played back and discussed, with suggestions being made for improvement.

Employer Directories. Directories containing names and addresses of organizations to contact are arranged by the following categories: geographic location; business and industry; education; health, human services and non-profit; government; arts and media; and summer jobs and internships.

Recruiting Literature. Large organizations and many school districts often produce brochures describing their career opportunities. Links to related Internet sites are available through *CDO Online*.

Credentials File. Students about to complete a degree program are eligible to establish a file which includes a resume, course list, transcript, and letters of recommendation to be sent to prospective employers or graduate admissions personnel to support an application.

Job Vacancy Listing. Vacancies received are posted, compiled weekly for those desiring to receive them by mail, and are accessible electronically through *CDO Online*.

Recruitment Calendar. Each year organizations visit the campus to interview students about to complete a degree program. In addition, students can participate in special annual programs such as Teacher Recruitment Days, Human Services Career Fair, Career Night with Fredonia Alumni, Business Career Fair, online virtual job fairs, and Graduate and Professional School Week.

Alumni Career Connection. This network of alumni volunteers assists students with career-related concerns.

Graduate and Professional School Information. Directories of graduate programs, graduate catalogs on CD-ROM, books on financial aid and how to write an application essay, as well as registration bulletins and test dates for the GRE, GMAT, MCAT and LSAT are available in the office. Preparation software, books and videos are also available.

Follow-up Study on Graduates. Each year the office contacts the graduates of the college to determine their plans for the first year after graduation. Members of each class choose to accept diverse opportunities for further study and employment.

The information is collected in the fall, with an approximate response rate of 60 percent. Business and industrial organizations are the most frequent first-time employers of Fredonia graduates, followed by education; social service, non-profit and 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.

The office is located on the second floor of Gregory Hall and can be reached by phone at (716) 673-3327 or by fax at (716) 673-3593.

Counseling Center

www.fredonia.edu/counseling/index.html

Philosophy

The Counseling Center seeks to support the SUNY mission by helping students gain the most for their education. A team of multidisciplinary professional counselors, with a minimum of a master's degree, is available to assist students with typical life transitions as well as serious, complex life problems. The philosophy of the Counseling Center is based upon a wellness model which incorporates emotional, physical, social, occupational, spiritual, intellectual, cultural, and environmental aspects. The development of personal insight, interpersonal skills, and strength of character, expected of an educated person, are encouraged through counseling.

Services

Free, confidential mental health counseling services are available to all registered students. A variety of counseling services including individual and group psychotherapy, crisis intervention, mental health assessment, referral, and informational services are offered. Counseling services for individuals or groups typically address such issues as test anxiety and time management, substance use, eating disorders, sexual identity, social relationships, roommate conflicts, family problems, dating relationships, career decisions, sexual abuse, assertiveness training, communication skills training, and depression.

Consultation and Workshops

Professional counselors are also available for consultation, workshops, and inservices to students, faculty, and staff in the college community on topics such as group interaction, study skills, conflict resolution, residential living transitions, and sexual misconduct.

The Fredonia C.A.R.E.S. (Commitment to Alcohol Responsibility and Education for Students) Workshop is an interactive course facilitated by the Counseling Center. This workshop is designed for students who would benefit from examining their alcohol/other drug use. Fred – A.L.E.R.T. (A Learning Experience of Responsibility and Treatment) is an in-depth course offered in addition to the C.A.R.E.S. program. It includes experiential and psychoeducational components related to alcohol and substance use/abuse.

Information

The Counseling Center is located in LoGrasso Hall. Appointments can be made in person at the reception desk or by telephone at (716) 673-3424. Information about services being offered by the Counseling Center for the current semester including groups, workshops, and wellness ideas and links can be assessed through our website.

Center for Multicultural Affairs

www.fredonia.edu/departments/Maffairs

The Center for Multicultural Affairs is dedicated to the premise that all cultural heritages and practices can be celebrated on the SUNY Fredonia campus. Combining talents and resources with the Black Student Union; Latinos Unidos; Women's Student Union; Gay, Lesbian, Bi-Sexual Student Union; Jewish Student Union; Gospel Choir; Native American Student Organization; Solutions; and the Brother to Brother/Sisters Supporting Sisters discussion groups. Multicultural Affairs staff members offer a comprehensive array of support programs that address the areas of cultural appreciation, gender equity, homophobia elimination, prejudice reduction, and multicultural harmony.

Additional services provided by the Center for Multicultural Affairs include academic, personal, group, and career assistance; student advocacy; leadership development; mentoring programs; and various other campus-wide diversity initiatives. For more information about the Center for Multicultural Affairs, students should call (716) 673-3398.

STUDENT LIFE ON CAMPUS

Housing/Residence Life

www.fredonia.edu/reslife/halls/index.htm

On Campus. Because the college realizes that an important part of students' total educational development is the housing unit in which they live during their stay in Fredonia, the Office of Residence Life attempts to provide students with facilities conducive to adequate study. Through the learning experience of group living, resident students acquire a greater awareness and understanding of themselves and their ideas, and a greater concern for and consideration of the other members of the community.

Although on-campus housing is reserved for matriculated undergraduate students, the college will accommodate single graduate students if space is available.

Freshmen and sophomores who do not live with parents or spouses are required, as a matter of policy, to live in college housing for the full academic year. Any exemption to this regulation such as permission to live with relatives other than parents must be granted, in writing, by the Director of Residence Life. The housing license agreement is for the *entire academic year* and cannot be canceled during this period as long as the student is registered. There is a \$200 fee for *approved* termination of the housing contract.

Assignment to a residence hall is first-come-first-served, based on the date of submission of a completed housing packet. The packet includes an application, a contract, and housing information.

There are 13 residence halls on the SUNY Fredonia campus, including corridor and suite-style, as well as apartments. Residence hall activities attempt to integrate resident living experiences with the total educational program of the college. The residence halls are modern, comfortable, and convenient and allow a student the

opportunity to establish independence and experiment with a variety of activities and experiences. Through hall government, students have opportunities to participate with other students in programs of their own choosing, to work on projects of interest to themselves and of service to others, and to communicate students needs and concerns to the college. Although much of the responsibility for governing the halls lies with the student, an experienced and professionally trained staff member is in charge of each residence hall. The residence director, whose major concern is student welfare, is assisted by several undergraduate students. They work with and advise students within the residence halls to develop broadly based educational and social programs which serve to offer opportunities for growth and involvement within the living situation.

The Office of Residence Life continually reviews the interests and objectives of students in an effort to provide facilities that will assist them in the educational process. Recent additions to the program include computer labs in Grissom, Kasling, Hemingway, Alumni and most other halls, as well as an Aerobics Center in Hemingway Hall and a Wellness Center in Schulz Hall.

Detailed information about college housing facilities for single students will be provided upon request by the Office of Residence Life, Gregory Hall, State University of New York at Fredonia, Fredonia, NY, 14063.

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 section on Expenses (page 197).

Off Campus. Files of available off-campus housing are maintained in the Student Association Office located in the Williams Center.

Faculty Student Association

The Faculty Student Association (FSA) is a not-for-profit corporation governed by a board of directors composed of seven students, three college administrators, three faculty, one classified staff member, and one alumni member. It operates under a contract with SUNY Fredonia in conformance with guidelines established for all SUNY campuses. 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 college by supporting campus programs. FSA administrative and food services offices are located in Gregory Hall. For general information, students should call (716) 673-3417 or view the FSA website at www.fredonia.edu/fsa.

Food Service Operations

The FSA Dining Centers feature all you can eat self-service of a variety of traditional and specialty menu items.

In addition, the *Connections Food Court*, located on the lower level of the Williams Center, offers a variety of fast food selections.

For customer convenience, *Signature Café*, with several units located across campus, specializes in espresso based coffee and other upscale beverages, gourmet pastries and cakes, soup, salads, and sandwiches.

Café G, on the first floor of the Williams Center, is a weekday luncheon restaurant. This facility is also available for catering.

In addition, full catering services ranging from coffee breaks to banquets are available. Customers should contact the FSA office at 673-3417, ext. 227 for further information.

Other Services

ID Cards - A college ID card is required of all enrolled SUNY Fredonia students. These cards are issued at no 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. A service charge is assessed for lost cards.

The **Connections Bookstore** provides new and used textbooks as well as a variety of reference and study aids. Located in the lower level of the Williams Center, the bookstore also offers school and art supplies, health and beauty aids, imprinted items, clothing, greeting cards and a unique array of gift items. The store's computer department features hardware, software and a wide range of peripherals. The bookstore also offers convenience store items.

The **Bookstore Campus Account** is a prepaid taxable debit account. This account offers the convenience of purchasing any bookstore item without carrying cash.

Opening the Bookstore Campus Account also entitles students 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 Bookstore Campus Account. When the student arrives on campus they simply go to the pre-pack area, show their SUNYCard and pick up their books.

The FSA provides **check-cashing** services on campus. Students who possess a valid Fredonia college I.D. card may cash checks in the bookstore. Fees for check cashing may apply. In addition, electronic banking machines are available on campus.

FSA's **vending program** on campus includes snacks and beverages. In addition, it also provides the vended washers and dryers in the residence halls.

The **Herbert C. Mackie Memorial Camp** (College Lodge) in Brocton, located 12 miles from the campus on Route 380, is a 193-acre refuge featuring a beautiful and rustic lodge and hiking trails. This facility is available by reservation for parties, cross-country ski outings, and other events. The camp also has a sleeping lodge which will accommodate up to 75 people.

Student Employment - FSA provides jobs ranging from 10 to 20 hours per week for approximately 400 students. A variety of student jobs are available, with the majority being in the food service areas. These jobs are not based on financial need.

Student Health Center

The Student Health Center located in LoGrasso Hall is under the direction of the college physician, nurse practitioner, and a staff of registered nurses, providing health service delivery to all registered students. The health service is funded by the mandatory health fee paid each semester. Services and most medications are covered with the exception of allergy injections and certain vaccines.*

The outpatient clinic cares for minor illnesses, injuries, referrals, wellness counseling, health education and laboratory services. This well-equipped modern health center provides 8 a.m. to 6 p.m. coverage Monday through Friday, and Saturday from 10 a.m. until 1 p.m. Urgent care and some laboratory procedures are also available in the health center.

Emergency coverage is available at Brooks Memorial Hospital in Dunkirk.

Health and accident insurance is essential for all students. Experience indicates that students not covered under a personal comprehensive health plan should arrange to purchase the health plan made available to all registered students through the college. A comprehensive group policy is provided through the Office of Student Affairs at modest cost for those not otherwise covered.

When necessary, referrals will be made with private physicians in the area by the health center staff.

A van service is available certain hours for transportation to local physicians, the hospital, or the Chautauqua County Health Department.

Birth Control Information Center - Staffed by trained student volunteers, the Birth Control Information Center is open to SUNY Fredonia students, male or female. Located in LoGrasso Hall, the gynecological clinics are staffed by qualified physicians, nurses, a lab technician, and student volunteers. Students can use the BCIC for information on contraceptives, human sexuality, and to receive gynecological services.

* Subject to change on a yearly basis.

University Police Department

The University Police Department, located on the second floor of Gregory Hall, is responsible for all law enforcement related issues on campus.

Members of the department are trained in a community policing environment where students and the campus community share in keeping the college 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.

Inspection of all buildings for fire and safety codes and the maintenance of fire extinguishers are also the responsibility of the department.

The chief is assisted by three lieutenants and 12 officers. The office maintains a close working relationship with the Fredonia Police Department and other law enforcement agencies in Chautauqua County.

Office of Veterans Affairs

Veterans and their dependents who receive educational benefits through the Veterans Administration are assisted by this office, located in McGinnies Hall, first floor (716 673-3423). Applications are processed through this office and students experiencing problems with benefits can receive assistance or referrals (see also page 207). This office also serves as the campus liaison with the V.A. Regional Office in Buffalo.

FREDONIA ORGANIZATIONS AND ACTIVITIES

Campus Life Office

www.fredonia.edu/campuslife

The Campus Life Office, located in the Williams Center, provides a variety of exciting activities enlisting student participation 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 provides are:

- Advisement to student organizations
- Providing a meeting place, by reservations, for groups and organizations
- Maintaining leadership development programs and workshops for students, organizations and advisors
- Facilitating advertisement for campus/organization events

In addition to the above services, the Campus Life Office plans Family Weekend, Summer Orientation, Winterfest, and works closely with Residence Life events, Homecoming, Commencement, Admissions Open Houses, Superdance, and the conference committee.

For student leisure and recreation, Campus Life also offers The Spot. Featured in The Spot is the Campus Grind Café, which serves a variety of specialty coffees, granitas frozen drinks, pastries, and daily luncheon items. Adjacent to the Campus Grind is a facility complete with staging for small concerts and the latest in sound equipment for dancing. Also located in The Spot is the Side Pocket game room, offering pool tables, foosball, bubble hockey and air hockey and the latest in video games.

The Williams Center lobby is open Monday through Thursday, 8 a.m. until midnight; Friday, 8 a.m. until 1:30 a.m.; Saturday, 11 a.m. until 1:30 a.m.; and Sunday, 11 a.m. until midnight when classes are in session. The Spot remains open on the weekend until 1:30 a.m. for dancing and special events. For more information, students should contact the Campus Life Office at (716) 673-3143.

Central Box Office

The Central Box Office is a full-service outlet located on the main floor of the Williams Center. Its main function is in providing tickets for events on campus and the outlying communities. Tickets for theater, musical concerts, graduation, plus bus transportation to all areas of the United States are available to students. In addition, the Central Box

Office offers students charter bus service during holidays, to the Southern Tier, New York City and Long Island. Greyhound, Empire Transit and Trailways charters, schedules and tickets are also available. Amtrak schedules and tickets are now available on 48 hours notice. Other services offered include Western Union incoming money transactions. The Central Box Office is open during the academic year from Monday through Friday from 9 a.m. until 5 p.m., and on Saturday from 1 until 5 p.m.

Student Association:

All fee-paying students at SUNY Fredonia are members of the Student Association. The Representative Assembly, which is the governing body, is divided into the five classes (freshman through graduate) and has one elected representative for every 100 students in the class.

These 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. Legal Services, Off-Campus Housing, and Public Relations offer students a way to help each other and to get practical experience in fields in which they are interested.

Elections for the office of president and vice president of the Student Association are held every November for a one-year term that runs from January to December. The Student Association President has the privilege of appointing a comptroller. The Speaker of the House is nominated and elected annually by Assembly.

Students are encouraged to become involved with the Student Association. The association determines how the resources (activity fee) of the students are allocated and released over the year and submit for approval by the College President an annual budget.

The Student Association Office is located on the main floor of the Williams Center. 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 a.m. until 5 p.m.

Art Forum

The Art Forum presents programs that broaden the awareness of the visual arts; gives interested students the opportunity through participation to develop student and community appreciation for the visual arts; and helps to develop an effective and informal network of professional assistance that is a resource to the profession and the public. The group participates in many activities ranging from exhibitions to weekend trips to New York City.

Black Student Union (BSU)

The Black Student Union, which has been in existence for over 25 years at Fredonia, is an organization that seeks to promote a feeling of unity and pride among students of African descent as well as provide a sense of cultural

awareness throughout the campus community. The BSU contributes to the richness and diversity of student life by sponsoring lectures, artists, dancers, poets and musical productions throughout the year. Some of the organization's annual events include the People of Color Concerns Conference, the Black Achievement Awards Dinner, a fashion show, and Kwanzaa, an African-American celebration that is an affirmation of cultural self-determination. Such people as Dr. Na'im Akbar, Kwami Toure, Dr. Bruce Bridges, Dr. Ivan van Setima, Jill Nelson, Bill Bellamy and Dr. Ali Rashad Umrani, are just a few of the many who have joined the BSU family at Fredonia.

Ethos

The purpose of Ethos is to set and maintain a standard of excellence in music composition; to create an environment within which composition at Fredonia can flourish; to create a vehicle for the performance of student compositions; and to organize two music festivals a year including, as well as student compositions, works by other composers. Activities include attending theory and composition conferences.

Fredonia Jazz Ensemble

The purpose of the Fredonia College Jazz Workshop is to provide a source of education in jazz for the campus community, as well as educational and musical experiences in jazz to the local community through concerts and campus sponsored dances.

The Leader

The Leader is the student-run newspaper of SUNY Fredonia. It is published each Monday, except for exam periods or breaks, and is supported by advertisers and a portion of each student's mandatory Student Services and Program Charge. *The Leader* is run by a student editorial board. All editorial positions are open for election in December, and again in April, if there are any new vacancies. Besides the writing staff at *The Leader*, there are marketing and sales staffs, as well as photographers. Some of these are paid positions.

Positions are open to any qualified students. Students interested in journalism, English, business administration (sales, marketing, advertising), photography and graphic arts are strongly urged to join the staff and attend *The Leader* meetings.

Student Opera Theatre Association (SOTA)

The purpose of Opera Theatre is to provide a source of education in the production and performance aspects of opera. The opera is represented through live performances, guest speakers and artists, lectures, master classes and other forms of the opera. Membership is open to all fee-paying students, faculty and staff.

Orchesis

Orchesis is a club dedicated to the appreciation of dance as an art form. Classes are held daily in the late afternoon. Three concerts are presented annually; an informal fall and spring concert featuring choreographed work of participating students, and a formal concert in the spring semester presenting dances choreographed by faculty and students.

In addition, the club sponsors various master classes and performances by guest artists throughout the year.

Performing Arts Company (PAC)

The Performing Arts Company is the student-run theatre group at SUNY Fredonia. PAC presents two productions a year, one per semester, and also funds student experimental theatre and sponsors workshops ranging from performances to technical theatre. It is a creative outlet for interested theatre students and is frequently the stepping stone to Mainstage shows.

Spectrum Entertainment Board

Spectrum Entertainment Board is an organization dedicated to enriching the college curriculum by presenting stimulating arts, entertainment, and cultural programs for the campus community. Members of Spectrum are educated on negotiating contracts, dealing with agents and artists, and coordinating large, campus wide events. Programs include lectures, films, concerts, weekly music series, comedy, and special events such as Activities Night, Family Weekend entertainment, Hanging of the Greens, and Fredonia Fest. Past performers have included Jon Stewart, Davy Jones, Dr. Hunter "Patch" Adams, Less Than Jake, and the MTV Campus Invasion Tour with Third Eye Blind and Eve 6.

Fredonia Radio Systems

Fredonia Radio Systems includes both WDVL-Cable and Internet 89.5 FM and WCVF 88.9 FM. These two stations provide SUNY Fredonia students and Northern Chautauqua County with radio programming designed to inform as well as entertain. They also provide valuable training for those interested in any aspect of broadcast communication.

WDVL, "The Inferno," began operations as WCVF-AM in the early 1940s and is the oldest radio station in the SUNY system. This commercial station programs contemporary rock as well as campus news and sports to its on-campus audience of students. WCVF, "The Voice," went on the air in 1978, broadcasting to Fredonia and surrounding communities. It is a non-commercial station licensed by the FCC to the SUNY Board of Trustees, and features a variety of public affairs, news (both local and National Public Radio), sports, and a progressive blend of alternative music styles from jazz, folk and blues, to reggae, techno, world beat and rock, with an emphasis on new music.

Fredonia Radio Systems offers all students, regardless of major, the opportunity to work in the following departments: management, business, promotion, sales, traffic, music, production, news, sports, community service, and engineering. The station is managed and staffed by volunteers. Its offices and studios are located in McEwen Hall.

WNYF-TV

WNYF-TV is a completely student-operated cable television station located in the lower level of Hendrix Hall, equipped for studio and field production and editing, with some of the latest digital technology. WNYF gives its student members an intense professional experience in television production, and fosters a real *esprit de corps* as a fun, hard-working campus group. The station cablecasts a variety of

award-winning programming to the village of Fredonia, the city of Dunkirk, and the college campus.

Absolutely no experience is required to join the staff of WNYF, and all majors are welcome. Students can gain experience in all production areas by producing, writing, directing, and editing, or taking on-air roles from news and sports to drama. Members have the opportunity to create, develop, and produce their own programs, as well as join the decision making board. An Oscars-style awards ceremony (The Freddy's) is held each year to honor the best of station production.

Interested students should look for the first general meeting announcement at the beginning of each semester, or call 673-3571, or stop by the station.

Writer's Guild/Promethean Society

The Writer's Guild/Promethean Society is a student group organized to enhance student writing. It publishes the only literary magazine at SUNY Fredonia, including student poetry, fiction and photography. The guild sponsors poetry readings and workshops. In 1992, the guild brought Gwendolyn Brooks, a major American poet, to campus for a workshop and poetry reading and in 1993 "Black Mountain" poet Robert Creeley. The guild meets twice a month to discuss writing and general business and is open to any student who has an interest in writing or poetry.

Other Student Clubs and Interest Groups

Student life is enriched by the availability of a wide variety of formal and informal group activities, some of long standing, some only newly established. In addition to honor societies, there are service groups, clubs relating to specific majors and career fields, a growing social fraternity and sorority system, and interest groups involved with sports, hobbies, areas of social concern, etc. It is not possible to give more than a sampling here; students who have a specific interest or just want to find out the full range of possibilities may write to the Office of Campus Life (Williams Center, State University of New York at Fredonia, Fredonia, NY 14063) or stop by the office when on campus for the latest guide to Student Organizations. The following list should suggest the range of additional activities available. 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
Alpha Pi Omega
American Choral Directors
American Marketing Association
Applied Communication Association
Audio Engineering Society
BACCHUS
Beta Beta Beta
Birth Control Information Center
Blackhorse Rugby
Business Club
Cheerleaders
Coed Volleyball Club
Computer Science Club
Dance Team
Delta Chi Fraternity
Delta Phi Epsilon Sorority

Economics Club
Field Hockey Club
French Club
Gay Lesbian Bisexual Student Union
Geology Club
Geophysics Society
Golf Club
Guitar Society
Habitat for Humanity
Information Tech Support
Interfraternity Council
Inter-Varsity Christian Fellowship
Jewish Student Union
Lacrosse Club
Latinos Unidos
Leadership Corps
Martial Arts Club
Media Arts Club
Medieval Re-enactment club
Men's Volleyball
Music Educators National Conference (MENC)
Music Therapy Club
Mutual Investment Club, Inc.
Native American Student Association
Newman Club
Panhellenic Council
Paranormal Research
Phi Kappa Sigma Fraternity
Philosophical Society
Political Science Association
Project Environment
Psychology Club
Resident Assistant Advisory Board
Rock Stars Anonymous
Rocky Horror Fan Club
Sigma Alpha Iota
Sigma Kappa Sorority
Sigma Phi Epsilon Fraternity
Sisters Supporting Sisters
Ski Club
Social Work Club
Sociology Club
Solutions
Sound Services
Student Teaching Equals Positive Sexuality (STEPS)
Speech Pathology & Audiology Society
Teacher Education Club
Tonemeisters
Unitarian Universalist Campus Ministry
Upper Class Buddy Systems
War Gamers Club
Wilderness Club
Women's Student Union

The formal and informal activities mentioned above are further supplemented by some traditional events in student campus life which normally involve large groups of students. They include the following: Activities Night, All-College Events, Superdance, and Homecoming.

Other Campus Activities

The groups and activities previously mentioned are joined by some other non-classroom events and activities in student campus life. This section lists a sampling of these other activities.

Alumni Association

Membership in the Alumni Association of the State University of New York College at Fredonia is open to enrolled students, graduates of the college, and present and retired faculty members.

Supported by alumni gifts and student dues, the association provides all its constituents and parents with its quarterly 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. These \$500 awards are annually given to those UAC members who are in good academic standing and have shown an interest in improving the quality of campus life by their extra-curricular involvement.

Art Exhibitions

Each season, many art exhibits are presented on campus. The 2,000 square-foot Michael C. Rockefeller Arts Center Gallery hosts several traveling contemporary art exhibits sponsored by Art Forum, a student organization. The emphasis of these shows is on contemporary work in painting, printmaking, photography, sculpture and graphic design. The gallery also hosts exhibits by the visual arts department faculty and students. All exhibits feature a public reception open to students, faculty, and community residents.

The Emmitt Christian Gallery on the second floor of the arts center is used to exhibit class projects, solo student shows, visiting artist work, and other small exhibits throughout the year.

Department of 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 100 collegiate All-Americans and a plethora of team championships at the division, conference and regional level. Fredonia's coaches also serve on advisory committees throughout the east and have held top positions in a number of state-wide, regional and national organizations.

Offering a wide range of programs for students wishing to participate at a competitive level, SUNY Fredonia sponsors athletic teams for men in the following sports: baseball, basketball, cross country, hockey, soccer, tennis, and track and field. Offerings on the women's side include: basketball, cross country, lacrosse, soccer, softball, tennis, track and

volleyball. A co-educational cheerleading team competes successfully as a varsity sport while junior varsity teams are available for men in basketball and soccer.

All full-time undergraduate students are eligible to try out for Fredonia's athletic teams. Athletic eligibility is determined through the office of the Director of Athletics. Varsity athletes must comply with all appropriate rules and regulations of SUNY Fredonia, as well as those of all playing conferences with which Fredonia is affiliated. In addition to being certified eligible to participate through the Athletic Director's office, each prospective student-athlete must receive clearance from the Student Health Center prior to participating in team activities including practice, staff-supervised pre-season conditioning, and contests. All student-athletes are encouraged to enroll in the college's insurance program or provide the Director of Athletics with evidence of personal health and accident insurance coverage.

The athletic policies of SUNY Fredonia are developed by the Director of Athletics in conjunction with the Intercollegiate Athletic Board, an advisory board to the College President composed of faculty, students and administrators. Athletic affiliations are maintained with the NCAA, ECAC, NYSWCAA and SUNYAC. While programs range in strength from national level competition to competitive conference play, the college encourages students try out for teams if their ability warrants.

Intramural and Recreational Activities

The Intramural and Recreational Activities Program is conducted under the direction of the Department of Health, Wellness, and Recreation, and is funded by the State of New York and Student Association fees.

An extensive intramural and recreational activities program is conducted in mens', womens', and co-ed sports. Activities include basketball, broomball, softball, soccer, racquetball, touch-football, wallyball, beach volleyball, tennis, and volleyball.

Facilities include Dods Hall, with classrooms, gymnasias, the Blue Devils Fitness Center, dance studio, and racquetball courts, and Steele Hall, which contains an indoor ice skating rink, track-basketball arena, and natatorium. There are also outdoor tennis courts and outdoor track and playing fields.

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 Concord 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 players present a series of concerts on campus and is also active in presenting concerts and educational events throughout the area. The orchestra is comprised of faculty, other area professional musicians, and outstanding School of Music students, with repertoire spanning all stylistic periods.

Michael C. Rockefeller Arts Center and Visiting Artists, Ensembles and Speakers

The Michael C. Rockefeller Arts Center, a magnificent performing and visual arts facility, includes the 1,200-seat King Concert Hall, the 400-seat Marvel Theatre, the Bartlett Theatre, and two art galleries.

Over 220 public events are presented each season for the benefit of campus and community audiences.

SUNY Fredonia has a rich cultural life, not only because of the many artistic events produced on campus, but also because of a full schedule of visiting artists and speakers, many brought to campus by the arts center or the Spectrum Entertainment Board.

Each season, the center presents the *Someplace Special Pops Series*, three evenings of musical relaxation and enjoyment. Guest ensembles on the series have included the Glenn Miller Orchestra, Keith Brion and the New Sousa Band, and the Epic Brass. Also appearing on this series has been the Western New York Chamber Orchestra with programs spotlighting students and faculty from the School of Music and musical theatre program.

Student Music Activities

The following music activities provide opportunities for development of proficiency in performance and for personal enjoyment for the performer, the college, and the community. Activities which music majors may elect for the music ensemble participation requirement are indicated by an asterisk (*).

* *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 of performance, it performs several times each year.

* *The College Chamber Orchestra* is a more select ensemble comprised of principal players from the College Symphony Orchestra. Recent performances have been of Mozart's Symphony No. 25, Bach's Orchestral Suite No. 3, and Milhaud's *La Creation du Monde*, among other important works.

* *The Fredonia Wind Ensemble* is the premier wind/percussion ensemble in the School of Music. This highly select ensemble consists of 45 of the most outstanding wind and percussion players at the college. 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 size and instrumentation of the Wind Ensemble is dictated by the demands of the music being performed. The Wind Ensemble concertizes extensively both on and off campus and is open to all students by audition, regardless of major.

* *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 Wind Symphony is open to all students by audition, regardless of major.

* *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. This 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. All-College Band performs music from the traditional band and wind ensemble repertoire. The All-College Band is open to all students, regardless of major and no audition is required for participation.

* *The Fredonia Chamber Singers*, a group of 24 mixed voices selected by individual auditions for musical ability, flexibility, quality, and rhythmic sense, performs frequently both on and off campus. The chamber singers is a touring ensemble.

* *The College Choir*, with approximately 60 selected mixed voices, studies and performs major choral works in addition to standard sacred and secular music. It has appeared with the Buffalo Philharmonic Orchestra and has performed at Philharmonic Hall, Lincoln Center in New York City, and with the Utica and Syracuse Symphony and Rochester Philharmonic orchestras. The College Choir is a touring ensemble.

* *The Womens Chorale* studies and performs sacred and secular literature from all style periods. An audition is required.

* *The Festival Chorus*, the college's largest musical ensemble, performs masterpieces of choral literature, usually with orchestra, such as Beethoven's Symphony No. 9, Handel's *Messiah*, Mozart's *Requiem*, Orff's *Carmina Burana*, Rachmaninoff's *The Bells*, Vaughan Williams' *Hodie* and Verdi's *Requiem*. The group has performed with the Buffalo Philharmonic Orchestra, Fredonia Chamber Players, and College Symphony Orchestra.

* *Ensembles*. The School of Music offers several ensembles for interested students:

Flute Ensemble - performs music composed or arranged for 12 flutes.

Guitar Ensemble and Guitar Quartet - ensemble of 12 guitar majors and quartet, both touring groups, perform transcriptions and original music. Quartet is a select ensemble.

Percussion Ensemble - performs mainly contemporary works.

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.

Membership and guidance are determined by the School of Music faculty.

* The *Lyric Theatre Workshop* provides a workshop situation for students to deal with repertoire which has limited production requirements. The wide range of possible experiences provided includes performing, conducting, directing, design and management.

The *Opera Theatre* provides experiences with a variety of types of full-scale musical theatre works presented in cooperation with the Department of Theatre Arts. Recent musical productions include *Brigadoon*, *Company*, *Cabaret*, *Hair*, and *On The Twentieth Century*. Recent opera productions include Humperdinck's *Hansel and Gretel*, Floyd's *Susannah*, Menotti's *Amahl and the Night Visitors*, Mozart's *Così fan tutte*, Puccini's *The Mikado*, and Gilbert and Sullivan's *HMS Pinafore*.

The *Jazz Workshop* is structured to foster wider understanding of and the ability to perform different styles of jazz. The jazz ensemble, the major performance group in the workshop, has produced several records and won many national and international awards at festivals. Other ensembles in the Jazz Workshop program serve as training groups to familiarize musicians with jazz rhythms, improvisation, arranging, and other basics of jazz.

Student Recitals are presented throughout the academic year on weekday evenings and Saturday and Sunday afternoons and evenings. These recitals are a curricular requirement for many music majors.

The *Music Educators National Conference*, Student Chapter 151 at the SUNY Fredonia, is affiliated with the New York State School Music Association. The activities of the chapter encourage professional interests and ideals.

Ethos was founded to promote the performance of twentieth century music on the campus and sponsors a minimum of two concerts per semester featuring the works of student, faculty, and other twentieth century composers. It also sponsors field trips to concerts in adjoining major metropolitan centers and the scheduling of guest composers' visits to the campus. Involvement in the activities of *Ethos* is open to all students enrolled in the college.

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.

The *Audio Engineering Society* student chapter at SUNY Fredonia was organized to promote the professional growth of students. The chapter arranges for guest speakers, field trips and other activities addressing the audio industry.

Student Theatre Activities

Mainstage 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.

HONORS

Maytum Lecture

The Maytum Lecture each year presents a major scholar of national reputation to the campus community. Students, faculty, staff, and community guests gather in King Concert Hall for an address on a major subject by a prominent figure such as anthropologist Richard Leakey, musician Sarah Caldwell, biologists James Watson and Ruth Hubbard, philosopher Robert Nozick and historian Christopher Lasch. A panel discussion on a related topic follows in the afternoon.

Honors Program

Within the framework of the general education program, SUNY Fredonia has a freshman/sophomore Honors Program open to well-prepared students who enjoy intellectual challenges and are excited by ideas. The program consists of a series of four seminars on topics that change from semester to semester. Seminar topics have included "Politics and the Novel," "The Dilemmas of Institutionalized Evil," and "Yuck...Chemicals!" Students take one seminar each semester, and the four seminars replace four general education courses. Questions pertaining to the Honors Program may be directed to Theodore Steinberg, director, at 275 Fenton Hall, or at (716) 673-3529.

In addition to participating in the seminars and working closely with faculty members distinguished both for scholarship and teaching ability, honors students plan a number of extra-curricular activities and meet regularly to discuss the program in relation to their own developing perceptions of themselves, their values, and their future lives.

Opportunities in Honors are also available for students at the junior and senior levels in the form of departmental honors in a number of programs and the Honors Thesis.

Students who complete the program graduate with Honors in Liberal Education.

Application to the Honors Program is separate from application to the college. While most Honors Program applicants are high school seniors, qualified juniors who are considering early entry to college are encouraged to inquire about the Honors Program.

Graduation With Honors

Students whose cumulative quality point average indicates high scholastic attainment will be awarded their degree as follows:

1. *Summa Cum Laude* - Quality Point Average 3.7 or higher.
2. *Magna Cum Laude* - Quality Point Average between 3.50 and 3.69.
3. *Cum Laude* - Quality Point Average between 3.30 and 3.49.

Students may graduate with honors only when they have completed at least 45 hours of graded work at SUNY Fredonia. Graded work includes all courses which carry quality points and excludes courses which are graded

“satisfactory-unsatisfactory” or “pass-fail.” Only those credits earned at SUNY Fredonia will be computed in the final average.

Dean's List

About one month after the end of each semester, the college announces the names of students who are recorded on the Dean's List. The list includes all students who have earned a quality point average of 3.30 or higher for that semester with a course load of at least 12 credit hours. Courses with P or S grades are not included in the 12 hours.

Lanford Prize

The Lanford Presidential Prize 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 college's ideals. Criteria for selection include a high degree of personal honesty and integrity, substantial intellectual growth and achievement during college years, a minimum grade point average of 3.0, and exemplary service to SUNY Fredonia, including active participation in more than one area of college life. The award is named for President Emeritus Oscar Lanford.

Other Academic Honors

SUNY Fredonia has many honor societies, some for students majoring in particular fields, and some for students at large (see below for a current list). In addition, students in the School of Music may qualify for a large number of awards and may be chosen to offer honors recitals. Students in chemistry may choose to conduct honors research projects. Students in art may qualify to present honors exhibitions of their work. Prizes and honors for outstanding work are also offered to students in English, history, psychology, and the natural sciences. In addition, a good number of scholarships and partial scholarships are available to high-achieving students. (See list on page 200.)

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 college community as a whole during their college 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 Psi Omega. A national dramatic society for students in theatre arts at the junior or senior level who have attained an over all 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.

Delta Mu Delta. A national honor society in business administration and accounting.

Kappa Delta Pi. A national educational honorary society. 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 hours of history and who has achieved prescribed standards of academic proficiency.

Phi Beta Kappa Club of Fredonia. Composed of faculty and community members of Phi Beta Kappa, the club makes annual awards to a few outstanding graduating seniors with a QPA of 3.50 or more who have earned at least three-fourths of their college credits in a broad range of the liberal arts and sciences.

Phi Eta Sigma. A national honor society recognizing superior academic achievement in either the first semester or first year of college. Open to any student who achieves a quality point average of 3.5 or better in his/her first semester or first year. The chapter was installed at Fredonia in 1974.

Phi Mu Alpha Sinfonia. Rho Chi Chapter of Phi Mu Alpha Sinfonia Fraternity of America was installed at Fredonia in May 1966. As a national professional music fraternity for men, Sinfonia endeavors to advance the cause of music in America and to foster the mutual welfare and brotherhood of students of music.

Pi Delta Phi. A national French honor society whose local chapter, Epsilon Rho, was installed in May 1968. The society recognizes outstanding scholarship in French and strives to stimulate cultural activities that will lead to deeper appreciation of France and its people. Members are nominated in recognition of academic achievement.

Pi Kappa Lambda. A national music honor society, first organized in 1918. The society's primary objective is “the recognition and encouragement of the highest level of musical achievement and academic scholarship.” Initiates are elected by the society's membership on the basis of this objective. Fredonia's chapter of Pi Kappa Lambda is Delta Omega.

Pi Mu Epsilon. A national honorary society for the promotion of scholarly activity in mathematics among students in academic institutions. Members are elected on an honorary basis according to their proficiency in mathematics.

Pi Sigma Alpha. The political science department is a member of Pi Sigma Alpha, the national political honor society. Outstanding undergraduates majoring in political science are admitted to membership.

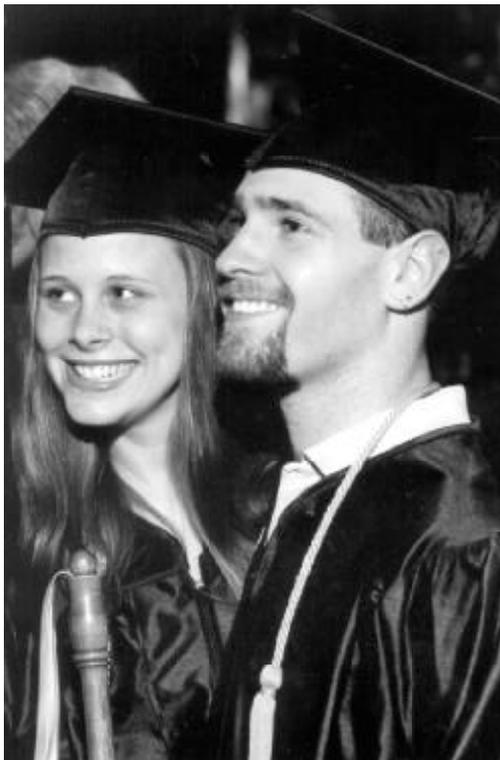
Psi Chi. A national honor society recognizing academic achievement of students with majors or minors in psychology. The purpose is to advance the science of psychology and to encourage scholarship among members.

Sigma Alpha Iota. Incorporated as a woman's international music fraternity whose purposes are to foster interest in music and to promote social contact among persons sharing a general interest in that art form. Delta Lambda Chapter was installed at Fredonia in 1964.

Sigma Delta Pi. National Spanish honor society whose local chapter, Eta Alpha, was installed in May 1968. The society promotes the understanding and appreciation of Hispanic culture. Members are selected from advanced students who exhibit outstanding ability and interest in Spanish studies.

Sigma 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 Xi. National organization for the promotion of scientific research. It has an active club at Fredonia with membership open to both faculty and students who have done publishable work.



UNDERGRADUATE ADMISSIONS

www.fredonia.edu/fredweb/admission.asp

Submitting the Application

The State University of New York at Fredonia participates in the common SUNY application procedure. If you are a resident of New York State you may obtain a copy of the common application form from any high school guidance office or SUNY campus. As a transfer student or out of state resident, please contact the Office of Admissions, Fenner House, State University of New York College at Fredonia, Fredonia, NY, 14063 to make your request for an application. You may apply on-line at www.fredonia.edu/admissions/applying.html

Mail your completed application to the Application Processing Center in Albany in the envelope included with the application packet. (Freshman applicants turn applications in at the guidance office.) APC processes your application and forwards it to Fredonia for review. Processing time in Albany is no more than 48 hours from the date received. Upon arrival at Fredonia we acknowledge your application and send you Part II, the Supplemental Data Form. Return this information to us as quickly as possible as this part of the application provides more individualized information about you. Your request for admission will be reviewed individually by our Admissions Committee. While there is no stated application deadline, we recommend that you submit your request for admission as soon as possible, as there are a limited number of openings in some academic programs. Consider November 1 for the spring semester and March 1 for the fall semester as recommended deadlines.

The Campus Visit

A campus visit is extremely important. It is your opportunity to learn more about the college from those directly involved in the educational process at Fredonia.

You are invited to visit the campus to discuss your application with an admissions counselor, meet with a faculty member in your chosen field of study, and tour the facilities. We offer small group information sessions and campus tours weekdays while classes are in session. There are a number of special visitation programs throughout the academic year, including holiday open house programs on Columbus Day, Veterans Day and Presidents Day. You may visit during the summer as well. Request information about specific dates and times for arranging an appointment by writing the Office of Admissions, calling (716) 673-3251, dialing toll-free at (800) 252-1212, or accessing our web site at www.fredonia.edu/admissions/visiting.html.

We schedule an open house for accepted students during the spring semester. At this program, members of the college 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 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.

The Decision Process

We offer you the opportunity to declare your major program of study when you enroll at Fredonia. Approximately three-quarters of all new freshmen select a specific academic major, although the decision to choose your program of study is optional. You must select a major by the end of your sophomore year. Since some programs are highly specialized and require careful academic planning, you may wish to discuss declaring your major with an admissions counselor. Transfer students who have earned more than 45 credit hours must make application to a specific academic program. You will be notified by mail of an official decision after the Office of Admissions receives all required credentials. All acceptances are conditional upon receipt of a high school or college transcript indicating successful completion of courses in progress, submission of your medical history, and evidence of appropriate immunization. You must submit an advance deposit to reserve your place in the entering class.

Advance deposits secure a place in the class and room in a residence hall for a specific semester and are not transferable to another semester. Requests for refunds must be made in writing to the Director of Admissions prior to May 1 (for fall enrollment) and November 1 (for spring enrollment), or 30 days after acceptance, whichever is later.

Early Decision: The Early Decision option provides you with an opportunity to identify Fredonia as your college of choice. This admissions program permits you to tell us of your interest in pursuing your studies here. Colleges participating in an early decision program anticipate that those candidates who are accepted through Early Decision will submit an admission deposit and withdraw all other college applications. Early Decision allows you to finalize your college plans early in your senior year of high school. To be eligible APC must receive your application and all supporting credentials by November 1. By December 15 we notify all early decision applicants and begin to review all other requests for admission.

Freshman Admission: The Admissions Committee considers a variety of criteria when reviewing applications, evaluating quality of academic preparation including depth and breadth of course work, academic achievement, and the results of your SAT or ACT. Our college is committed to a liberal education for all undergraduates, and preference is given to those applicants who present strong academic programs in English, social studies, mathematics, science and foreign languages. We ask that you send us the results of your SAT or ACT for review. Admission to college is a matter of meeting the competition among applicants, and a comprehensive, challenging college preparatory program combined with good achievement will help ensure that your application is competitive. The Admissions Committee also reviews supporting credentials including special talents, activities, individual accomplishments, and recommendations, which you may choose to submit. Appropriate faculty evaluate the results of a required audition if you seek admission into our music or B.F.A. theatre programs. As an Art applicant and in some options in Media Arts you must present a portfolio (or slides) for review.

Fredonia in 4

Graduation rates of our entering freshmen are among the highest in the nation. To ensure that our success continues, we have implemented Fredonia in 4, a program for first time freshmen which stipulates that the college 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.

Transfer Admission: SUNY Fredonia considers all requests for admission from transfer students in good standing at both two- and four-year colleges and universities, including SUNY and non-SUNY institutions. The admission review process focuses upon an evaluation of academic achievement, program of study, and the major program of study which you request. There are special audition requirements for music and B.F.A. theatre programs, as well as portfolio requirements for Art and certain Media Arts specializations. Admission to our certification programs in teacher education requires at least a 2.50 grade point average to be eligible for consideration.

We require an official transcript from each college you previously attended, and a high school transcript and SAT or ACT results if you have completed less than 30 credit hours when you apply.

We include an estimate of transfer credit hours with your acceptance letter. You may transfer up to 75 hours of college credit from your previous college(s). Your academic department chairperson or designee determines the distribution of specific courses in fulfillment of departmental requirements in your chosen field of study and provides information about which courses you will need to complete degree requirements in a timely manner. Our college consistently attains one of the highest graduation rates of transfer students in the SUNY system. An official review of transfer credit occurs when we receive your final transcript showing all course work completed. It is most helpful if this information arrives prior to our summer orientation and advising program for transfer students in June.

Fredonia awards transfer credit for academic courses successfully completed at a fully accredited college or university, reserving the right to determine what constitutes academic credit. Your grade point average does not transfer; only credit hours are awarded. You must fulfill all college and departmental requirements for the baccalaureate degree, including a residency requirement of 45 semester hours of credit at Fredonia. As a prospective transfer student we encourage you to visit the college to discuss transfer credit and graduation requirements with a departmental academic advisor or our admissions transfer counselor.

SUNY Two-Year Transfer Applicants

SUNY Fredonia is committed to providing an opportunity for further study to SUNY two-year college graduates. We have established articulation agreements and joint admissions programs with many two-year schools. For further information, contact our Office of Admissions.

If you are admitted to Fredonia and complete an Associate in Arts and Associate in Science degree prior to transfer you will enter Fredonia with a minimum of 60 semester hours of transfer credit and junior standing.

Special Admissions Programs

Full Opportunity Program: Through the Full Opportunity Program an effort is made to identify and recruit students from underrepresented groups, students with special talents in the fine and performing arts and athletics, those who have participated extensively in school and community affairs, or have strong personal recommendations. The Full Opportunity Program provides you with a chance to enhance your academic credentials with a description of your individual talents and accomplishments.

Acceptance into the program provides you with access to support services designed to help you make a successful transition from high school to college, and to help guide you toward successful completion of your academic and career goals.

If you wish to identify yourself as a special talent applicant you should include a personal statement and resume as well as three letters of recommendation to supplement Part II of our application.

Students accepted through the Full Opportunity Program are guided through their first year at Fredonia, beginning with academic advising which takes place during Summer Orientation. In cooperation with the student's academic advisor, an advisor in our Learning Center has the responsibility for designing programming to meet the academic needs of the students in the program. Some of the services offered include: mentoring programs, free assigned tutoring, workshops by faculty members, e-mail workshops, and assistance with course selection.

Educational Development Program: Applicants who demonstrate potential for completing a degree program, meet financial and academic guidelines and have historically experienced educational and economic disadvantages may seek admission through the Educational Opportunity Program (called the Educational Development Program at Fredonia). To be eligible for consideration you must be a New York State resident and have earned a high school diploma or its equivalent.

To be considered "financially eligible," you must meet the economic criteria established by the New York State Education Department. Check the current *SUNY Application Guidebook* for the updated economic criteria listed under Educational Opportunity Programs in the booklet.

You are required to submit appropriate financial aid applications and verification of family income to supplement your request for admission as an EDP student. We may request additional information from you, as needed. A SUNY EOP Information form mailed to you from 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:

- a. Your family receives payment through the New York State County Department of Social Services;
- b. You live with foster parents who do not provide support for college, and your natural parents provide no financial support to you, or;
- c. You are a ward of the state or county.

To be considered "educationally eligible" means you do not meet the usual Fredonia admissions standards. However, you must demonstrate academic potential, proper motivation, and a strong desire for a college education. You apply for our EDP program by checking "yes" when answering the EOP question on the SUNY application. Transfer applicants receive consideration if they have previously been enrolled in a similar EOP/HEOP/College Discovery/SEEK program.

If you attended a college that does not have a EOP-type program, then we attempt to determine whether you would have been deemed eligible for EOP at the time of your acceptance to the other college.

For more information about the Educational Development Program support services, please refer to page 182 of this catalog.

Joint Admission: SUNY Fredonia has implemented joint admission agreements with several two-year colleges, both public and private. Joint admission program students request admission to Fredonia by applying to the admissions office at the two-year college and completing requirements for the associate degree.

You must meet all requirements as stated in our college 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.

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 college are incompatible with the time-shortened degree, counseling from an academic or admissions counselor is advisable. The following options are available:

1. **Early Admission.** Accelerated high school juniors who wish to enroll as college freshmen without a high school diploma, may apply for early admission. We expect applicants to have completed four units of study in college preparatory mathematics and sciences and a sequence in foreign languages with above-average academic achievement and SAT or ACT scores. Your high school counselor must submit a recommendation in support of your request for early admission. Since Fredonia does not award you a high school diploma you must make arrangements to receive high school credit for your college course work in lieu of the courses you would have taken in your senior year.

2. **3-1-3 Program.** Local area high school juniors interested in beginning college during the senior year of high school may wish to explore this opportunity. 3-1-3 stands for three years of high school, one year cooperatively taught by an area high school and SUNY Fredonia, and three years at the college. As a 3-1-3 applicant you must present above-average test results on the PSAT, SAT or ACT, and a B high school average.

A counselor recommendation is required. Submit the SUNY application available in your guidance office and select curriculum code 0199. A conference with you and your high school counselor will develop your joint college and high school class schedule. For more information, see page 178.

Advanced Standing Credit

Credit by Examination. The college welcomes the opportunity to allow you to complete graduation requirements at an accelerated rate by submitting the results of proficiency examinations for credit evaluation. You may earn up to 30 semester hours of credit by examination through the following programs:

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. These examinations fulfill requirements in the College Core Curriculum Program (liberal arts core courses).

College-Level Examination Program. CLEP General Examinations substitute for some of the College Core Curriculum requirements. Subject Examinations substitute for specific course requirements. To determine which examinations are acceptable for credit, check with the Office of Admissions before scheduling one of the tests. We accept most, but not all, examinations for credit toward graduation. You must score at the fiftieth percentile in order to receive credit.

College Course Work. A number of freshman applicants seek transfer credit for college courses successfully completed while enrolled in high school. Submit an official transcript from the college awarding credit indicating that you have successfully completed course work. While credit hours may be awarded toward graduation, your grades do not transfer to Fredonia as part of your Fredonia grade point average.

Military Service Experience. Credit for military service experience and education is evaluated on an individual basis according to the guidelines established by the American Council on Education. Forward official transcripts and documents to the Office of Admissions for evaluation.

International Students

SUNY Fredonia welcomes applications for admission from international students. We provide assistance in matters of orientation, housing, personal concerns, and immigration. American students, the faculty, and the Fredonia village community take special interest in students from other countries, whose contribution to campus life is recognized and valued.

As an international student you must initiate your application well in advance of your intended first semester at Fredonia. Request your application by writing to the Office of International Education. If your native language is not English you must submit the results of the Test of English as a Foreign Language (TOEFL). All your academic records should be accompanied by certified translations if they are presented in a language other than English. Include brief course descriptions of subjects successfully completed (and an explanation of the grading system) with your credentials. We require certified verification of sufficient financial resources as part of the application process.

Readmission/Reinstatement

Students who have withdrawn from the college and wish to return may obtain an application for readmission/reinstatement from the Office of Admissions. Requests are reviewed by the appropriate Dean (readmission) or the Vice President for Student Affairs (reinstatement). Students who withdrew in good standing are generally eligible for reinstatement if space is available in the requested major. Individuals who were required to withdraw for academic reasons are not eligible for consideration until at least one academic semester has elapsed, and should present evidence of successful achievement at another college. The Dean's office evaluates current academic achievement, potential for academic success, and work experience when reviewing applications for readmission.

Students with a cumulative quality point average of less than 2.00 who have been readmitted to the college may return with their original cumulative academic record or with a readmission petition.

Under the readmission petition, a new quality point average is established from the time of readmission to graduation. The total academic record achieved from the time of initial enrollment at SUNY Fredonia will be entered on the transcript, but no credit will be awarded for "D" grades earned prior to readmission. The cumulative quality point average will reflect only the average since readmission, and a minimum of 45 additional credit hours of graded work must be completed at SUNY Fredonia prior to graduation and after readmission.



EXPENSES

This section presents an estimate of the cost of attending SUNY Fredonia for one year. College 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.

Estimated expenses per year for a full-time (12 or more credit hours) *undergraduate*:

Annual College Charges Applicable to All Students

*Tuition	
In-State	\$3,400
Out-of-State	\$8,300
College Fee	\$25
Student Services & Programs Charge	\$800

Additional Charges for Residents in College Residence Halls

Room Rent.	\$3,200-4,650
Board (Food Service).	\$1,910-\$2,370

Estimated Additional Costs

Books and Supplies	\$640
Personal	\$710
Transportation	\$525

New students who have paid a \$50 Advance Admission Deposit will have this amount deducted from the tuition charge for their initial semester at SUNY Fredonia.

Part-Time Study

*In-State Tuition	\$137 per credit hr.
*Out-of-State Tuition	\$346 per credit hr.
College Fee	\$.85 per credit hr.
Student Services & Programs Charge	\$33.25 per credit hr.

* 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. Contact the Office of Student Accounts for complete information governing residency requirements.

All rates and fees are subject to change. See the Student Accounts web page for the current college charges at www.fredonia.edu/admin/student_accounts/

College Fee

This is a uniform, mandatory charge for all students, established by the State University.

Student Services and Program Charge

The Student Services and Program Charge combines all college fees for student services, programs and activities in one composite amount for all students. As a result, there are no general college fees; there are no additional

mandatory fees once a student arrives on campus (although some departments may assess individual departmental fees). The Student Services and Program Charge includes support for the following programs and activities:

Advanced Technologies for Classroom Use
 AIGA/Art Forum
 Alumni Affairs
 Bicycle Use on Fredonia Campus
 Birth Control Information Center
 Blue Devil Fitness Center
 Campus Community Bus
 Campus Internet Access
 Campus Microcomputer Labs
 Campus Fine Arts
 Central Box Office
 College Events Commission
 College Special Events
 College Transcripts
 Counseling Center
 Coupons for Discounts at Area Merchants
 Cross Country Skis at College Lodge
 Fredonia College Jazz Workshop
 Intercollegiate Athletic Sports Program
 Intramural and Recreational Program
 Legal Services
 Homecoming Weekend Events
 Microcomputer Support
 On-Campus Student Employment
 On-site Medical Care
 Health Education Programs
 Medical Laboratory Work
 Over-the-Counter Medications
 Prescription Medications
 Wellness Checkup
 Orientation Program
 Parents Weekend Events
 Parking Services
 Parking Shuttle Service
 Student Government
 Student Organizations and Clubs
 Student Scholarships
The Leader (College Newspaper)
 Upper Class Buddy Program
 Van Service to Hospital/Clinic
 Fredonia Radio Systems
 WNYF-TV

Student Group Health Insurance

All students are advised to obtain the Student Health Insurance provided by the college unless covered by comparable insurance. The health insurance covers a major portion of hospitalization costs not provided under the student health program.

Room Rent

The standard rate when two persons are assigned to a room is \$1,635 per semester. If a single room is requested and if one is available, the cost is \$2,325 per semester. Apartments, where available, are \$1,800 per semester. Inquiries as to charges and accommodations should be addressed to the Office of Residence Life, Gregory Hall. (Figures reflect 2000-01 rates.)

Students who have paid the \$50 Advance Room Deposit will have this amount deducted from their room rental charge upon payment of charges.

The rates indicated above are subject to change on a yearly basis. Please contact the Office of Residence Life for current charges.

Board (Food Service)

College policy requires all on-campus residents to select from a variety of full board plans if they are residing in non-apartment style residence halls. Seniors, and residents of Disney and Eisenhower apartments and selected dorms are not required to maintain a meal plan, however, they may choose any plan.

FSA offers both declining balance (points) and traditional meal plans to suit the needs of each student. The costs for meal plans are estimated per semester and are subject to change. Costs begin at \$955 for resident students required to participate in a meal plan. Special meal plans are available for commuter students.

Unused points from the fall semester may be rolled over to the spring semester adhering to the college 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) 673-3417, Ext. 228, or see the FSA web page at www.fredonia.edu/fsa.

Miscellaneous Fees, Fines or Deposits

All of the major college expenses have been outlined. However, individual courses may require payment of a lab fee. Please consult the *Course Offerings Bulletin* for specific courses and charges. Students majoring in Music Education, Music Applied Studies, Theory of Music, Performance, Music Composition, Sound Recording Technology, Music Therapy, Music History/Literature and Musical Theatre (B.F.A.) are assessed a \$100 Music Fee each semester.

In addition, the State University authorizes charges for such items as returned checks, late registration, rebilling and drop/add fees. Fines are authorized for parking violations, the late return or loss of library materials, and failure to return physical education or infirmary equipment. All fees are subject to change.

State University Refund 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 case of withdrawal for reasons beyond the control of the student and with approval of the College 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 College President or his/her designee.

Tuition. A student withdrawing from college or individual courses during the semester is eligible for the following tuition refunds:

- 100% for withdrawal during the first week of classes
- 70% for withdrawal during the second week of classes
- 50% for withdrawal during the third week of classes
- 30% for withdrawal during the fourth week of classes
- 0% 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 College President or his/her designee.

The *College Fee* is not refundable after registration.

Refunds for the *Student Services & 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 college-operated residence, no refund may be made except in cases of withdrawal beyond the control of the student and with approval of the College 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 \$200 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 college.

Refund/Repayment of Financial Aid Due to Discontinuance of Study

This policy is utilized when a student has received Title IV federal funds (such as: Subsidized/Unsubsidized Stafford loans, Perkins loan, Plus loan, Pell grant, SEOG grant) and discontinues study prior to the completion of the semester for which the Title IV funds were disbursed.

A student's charges will be reduced based on the SUNY policy stated above. 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 overawarded 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 is eligible for 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. However, 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 apply toward their charges for the semester they withdrew.

Now 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 onto 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 overawarded due to their discontinuance of study. When a student has been overawarded, the amount of earned aid is subtracted from the amount of disbursed aid to determine the amount that the student is not eligible for. Any Title IV federal aid that the student is not eligible for must be returned to the appropriate federal program. Title IV federal aid is returned in the following order: Unsubsidized Stafford loan, Subsidized Stafford loan, Perkins loan, Plus loan, Pell grant, Federal SEOG grant, and other Title IV program aid excluding Federal Work Study.

For additional information regarding the repayment of Title IV federal aid, please contact the Student Accounts Office.

BILLING PROCEDURES AND PAYMENT REQUIREMENTS

Billing Procedures

Students who have course selected prior to the start of a semester will receive a bill from the college approximately five weeks prior to the start of the semester. A student must send in the required payment prior to the billing deadline date. Failure to make payment will result in a re-billing charge. It is the responsibility of the student to notify the Student Affairs office if they are not returning so that the charges may be removed and courses may be dropped.

Students are billed for each semester individually. The college bill lists the following mandatory charges: Tuition, College Fee, and Student Services and Programs Charge. Charges for Residence Hall Room Rental and Food Service may also be included on the bill. 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 college charges is not permitted except for approved, deferrable financial aid. Estimated financial aid awards may not be used as deferments. Financial aid awards which may be used as deferments against college charges include:

- Tuition Assistance Program (TAP Awards)
- Stafford Student Loans
- Veterans' benefits
- PELL Awards
- Supplemental Education Opportunity Grants (SEOG)
- Perkins Loan
- Aid for Part-Time Study (APTS)
- Private Scholarships (only when they are payable directly to the college)
- Academic Management Services (AMS)
- Parent Loans
- Alternative Student Loans

College Work Study Awards and personal loans are not deferrable against college charges.

Payment Requirements and Distribution of Financial Aid

Full payment, less approved deferrable financial aid and pre-payments, must be made by the deadline date. Cash, personal checks, money orders, VISA, MasterCard and Discover are all acceptable forms of payments.

Students attending In-Person Registration will have a bill mailed to their home and local address at or near the end of the first week of classes. The due date for payment will be approximately two weeks later. A Re-billing charge of \$30 will be added to an account outstanding as of the close of business on the due date.

The majority of financial aid is distributed during the third and fourth week of classes. Tuition Assistance Program (TAP) funds are not distributed until after mid-semester.

Students who file for their financial aid late will receive their aid later in the semester.

All financial aid received by the college 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 (may be somewhat later at the beginning of the semester). Checks which are not picked up in the college Office of Student Accounts are mailed to home addresses.

Failure to Pay College Charges

Due to changes in a student's registration status, residence hall occupancy, food service selection or a reduction in financial aid, the Office of Student Accounts will bill students monthly throughout the semester. Students who fail to make timely payments will be assessed a \$30 Re-billing charge each time their account is billed.

A student who fails to pay any college 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 the college "hold" list. A student whose name appears on the "hold" list will not: receive grades at the end of a semester, receive his/her diploma at graduation, be permitted to register for additional semesters at SUNY Fredonia or receive a copy of his/her college transcript.

A student who fails to make payment to the college at the end of the semester will be referred for further collection to the New York State Attorney General's Office in Albany or to a collection agency contracted by the college. Accounts transferred to these agencies will be subject to additional charges for interest and collection costs of up to 22 percent.

SCHOLARSHIP OPPORTUNITIES

Newly Accepted Students

SUNY Fredonia awards merit based scholarships to academically qualified students who have been accepted to the college. Scholarship applications are sent to all accepted students. Competition is keen, and students are encouraged to apply early for scholarships that match their achievement levels.

Scholarship recipients will be notified of an award on April 1, with a response date of May 1.

Scholarships awarded and minimum criteria for consideration:

Foundation Freshman Award:

- \$3,000 *one-time* award
- 91 high school average (unweighted)
- SAT 1250 or ACT 28

Fredonia Achievement Award:

- \$1,000 *one-time* award
- 87 high school average (unweighted)
- SAT 1150 or ACT 25
- 3.0 college GPA for transfers
- MUST live in college residence hall

- available to freshman and transfer students
- involvement in varied extracurricular activities

Fredonia Award for Excellence:

- \$2,500 *renewable* award
- 92 high school average (unweighted)
- SAT 1250 or ACT 28
- MUST live in college residence hall
- must achieve minimum 3.25 GPA to retain award

Scholar Incentive Award for Out-of-State Students:

- \$2,500 *renewable* award
- 90 high school average (unweighted)
- SAT 1250 or ACT 28
- MUST live in college residence hall
- must achieve minimum 3.25 GPA to retain award
- Non New York State Resident

New York State Empire Minority Honors Award:

- \$1,000 *renewable* award
- offered to students from an under-represented group
- minimum 87 high school average (unweighted) to be considered

Transfer Award

In the spring of each year, scholarships are awarded to transfer students who have demonstrated outstanding academic achievement and who have earned an associate degree from a SUNY two-year college. There is no application, students are evaluated by their college transcript and notified in late spring.

Enrolled Students

In February of each year, students with a minimum 3.50 cumulative grade point average are automatically invited to apply for scholarships. The awards range from \$100 to \$1,500 and are based on academic achievement.

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 for more information.

For information on scholarships open to all majors, contact the College Scholarship Committee, Office of Student Affairs, sixth floor Maytum Hall, (716) 673-3271.

Departmental Scholarships/Awards

Following is a list of scholarships that are awarded through the academic departments. These 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 these awards.

Art

Alford Bjurlin Scholarship
 George Booth Visual Arts Scholarship
 Chautauqua Craft Alliance Fund
 Fredonia Potter's Co-op Scholarship
 Marano/Gnirke Scholarship
 Robert W. Marvel Award

Biochemistry

Mary J. Marletta Scholarship

Biology

Constantine Barker Fund for Biology
 Biology Department Scholarship
 Bruce and Nancy Garlapow Memorial
 Holmberg Research Fellowship
 1929 Graduate's Bioethics Award
 Willard Stanley Memorial Scholarship
 Alice Sam Biology Scholarship

Business Administration

Donald C. Brandt Memorial Scholarship
 M.R. Poummit Achievement Award

Chemistry

David Dingley Award
 Roy Keller Award
 Gilbert and Ruth Moos Outstanding Senior Award
 Outstanding Senior Award

Communication

Louis C. and S. David Adler Scholarship
 Anne Bernstein Memorial Award
 Edward S. Edelman Scholarship
 Arthur R. Maytum Scholarship
 Arlie Muller Parks Award

Computer Science

Arthur R. Maytum Scholarship
 John Beck Memorial Scholarship

Cooperative Engineering

Herbert P. Carlyon Scholarship
 Cooperative Engineering Scholarship Award

Dance

1929 Graduate's Classical Ballet Fund
 Trent Illig Memorial Award for Dance
 Orchesis Dance Scholarship

Economics

Hart-Gorman Economics Award
 Arthur R. Maytum Scholarship

Education

Fanny Bartlett Award
 Helen Buderkin Award
 Anthony M. Deulio Memorial Scholarship
 Helen Kelly Lillie Award
 Floyd and Mabel Smith Melvin Scholarship
 Carol Scrace Pierce Award
 Louis E. Raths Scholarship
 Byron and Carrie Record Award
 Gustave and Geraldine Werner Scholarship
 Wolfenden Scholarship
 Marjorie E. Woods Scholarship

English

1929 Graduate's Fund - Nineteenth Century Literature Award

John and Eleanor Courts Scholarship
 Crescence Ehmke Graham Scholarship
 Freshman, Advanced and Graduate Writing Awards
 Howard and Hildegard Maytum Strong Scholarship

Environmental Science

Herbert Clark Mackie and Marion C. Mackie Award

Foreign Language

Robert Rie Foreign Language Scholarship

Geosciences

Walther M. Barnard Geosciences Scholarship
 Geosciences Textbook Scholarships provided by:
 Fahnestock Memorial Fund
 Geosciences Alumni Fund
 Roy A. MacDiarmid Award
 Susan Mara Scholarship
 Mark D. and April Hoefner Orgren Scholarship
 Paul D. Willette Scholarship

History

William and Helen Chazanof Award
 MacPhee Scholarship

Mathematics

Earl G. Mathewson Scholarship
 Frank R. Olson Mathematics Scholarship

Music

Carol Hepp Adragna Music Education Scholarship
 Charles D. Arnold Scholarship
 Lucia Gracia Bolton Scholarship
 Bromeley Piano Scholarship
 Lisa Nielsen Burkett Piano Scholarship
 Elizabeth S. Carlyon Piano Scholarship
 Max and Anne Davis Piano Scholarship
 David Evans Voice Scholarship
 Frazeur Percussion Scholarship
 Fredonia School of Music String Scholarship
 Herbert W. Harp Memorial Scholarship
 Hillman Scholarships
 Kilduff Voice Scholarship
 Harry King Memorial Award
 Brigitte Larson Award for Excellence in Instrumental Music Education
 John A. Maier Memorial Scholarship
 Elizabeth Marsh Memorial Scholarship
 Howard Marsh Memorial Scholarship
 Robert W. Marvel Award
 Virginia Whipple Maytum Music Scholarship
 Monroe-Poummit Big Band Award
 Vincent Morette Memorial Scholarship
 N.Y.S. Federation of Home Bureaus/
 Elizabeth Marsh Scholarship
 Sid Olshein Memorial Scholarship
 Poummit Concert Master Award
 Lawrence Schaufler Scholarship
 Isaac Stern String Scholarship
 Anthony S. Strychalski Memorial Scholarship
 A.L. Van Keuren Memorial Award
 Luverne Winkler Memorial Music Education Award

School of Music Scholarships are awarded to qualified new and returning students. Factors considered in awarding scholarships are financial need, music talent, academic achievement and service to the School of Music. Students

wishing to be considered for scholarship assistance must submit the Free Application for Federal Student Aid. Prospective students must also audition prior to March 15 for fall semester scholarship consideration. Questions regarding music scholarships should be directed to Director, School of Music, Mason Hall

Physical Education

Ken Depledge Basketball Award for Graduating Senior
Sandra Haight Memorial Scholarship
Doris Newman Memorial Scholarship
Greg and Linda Prechtl Scholarship

Physics

Hack Arroe Memorial Scholarship
John J. Connelly Physics Scholarship
Physics Department Scholarship Award

Political Science

Erna G. and J. Murdoch Dawley Award
John R. Quatroche Jr. Political Science Scholarship
J.R. Soukup Pi Sigma Alpha Awards

Psychology

Psychology Merit Award

Science

Dr. Lawrence A. Patrie Science Scholarship

Sociology

Outstanding Senior Award

Speech Pathology/Audiology

Constantine Barker Research Fellowship
Esau A. and Susan S. Sam Scholarship
Schaffer Family Scholarship
Rebecca Snyder Memorial Scholarship
Lt. Gen. Louis E. Woods Scholarship
Henry C. Youngerman Memorial Award

Theatre Arts and Dance

1929 Graduate's Classical Ballet Award
Alice Bartlett Award
Harry John Brown Memorial Scholarship
Jack L. Cogdill Award
Jack L. Cogdill Scholarship
Keith Cronin Memorial Award
Gary C. Eckhart Technical Production Award
Trent Illig Memorial Award for Dance
Howard E. Marsh Award in Musical Theatre
Robert W. Marvel Award
Gertrude Prushaw Maytum Scholarship
John S. Mintun Scholarship
New York State Federation of Home Bureaus/
Sally Bulger Scholarship
Orchesis Dance Scholarship
President's Award
Jean Schoener Meritorious Service Award
Bea Ullman Scholarship

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 College Scholarship Committee. Separate applications are not always required. In some cases qualified students are automatically considered for

selected scholarships and awards based on pre-established criteria.

Alumax Scholarship
Alumni Association Scholarships
Children of Alumni Scholarship
Transfer Award
Undergraduate Alumni Award
AAUW Scholarship (Preference given to women)
Alice Bartlett Award (international students)
Annual Dallas K. & Elizabeth W. Beal Award
Beaver Club Scholarship (Fredonia High School senior)
Borzilleri-Gugino Scholarship
Roland C. Burton Scholarship
Ruth Tice Callahan Award (outstanding freshmen)
Carnahan-Jackson Scholarship
Class of 1939 (Preference given to children of alumni)
Class of 1942 and 1943 Scholarship (Preference given to children of alumni)
Class of 1950 Scholarship
Laura B. Cole Scholarship
Evelyn Lawson Coleman President's Scholarship
Robert E. Coon Recognition Award (Junior)
Council for Women's Concerns/Marion Sonnenfeld Scholarship (Preference given to women)
Deming Family International Study Scholarship
Dunkirk/Fredonia Lions Club Scholarship (Dunkirk/Fredonia high school senior)
Kelly Early Scholarship
Faculty/Staff Scholarship
Faculty Student Association Awards
Foundation Scholarships
Fredonia Rotary Scholarship (Fredonia High School seniors)
Malcolm J. French Memorial Award
Maureen Fries Scholarship
Joseph T. Gallagher Scholarship (Preference to minority students pursuing teaching careers)
Zola Graf Scholarship (Northern Chautauqua County residents)
Robert and Elinor Grennell Scholarship
Lena M. Harmon Award (Sinclairville, NY residents)
Velyne and Lynn A. Hawkins Scholarship (Forestville High School students residing in Sheridan)
Fanny A. Hayward Award
S.C.W. Hom Parent Scholarship (Student who is a parent)
International Student Assistance Fund
Mamie and Ira Jordan Minority Scholarship
George and Elane King Award
Raymond Lai Scholarship (Preference given to student from Hong Kong)
Lake Shore Savings Scholarship (Eligible dependents of Lake Shore Savings employees)
Charlotte Putnam Landers Award
Lanford Presidential Prize
Horace O. Lanza Scholarship
Learning Center Scholarship
Michael Lemieux Balanced Man Scholarship
Dorothy French Manley Scholarship
Maytum Family President's Scholarship
Vivian R. McCullor Scholarship
Jeanette Wheeler Mills Scholarship (Preference given to women)

Jenny Crecraft Olsen Award
(Preference given to women)
Anthony Patti Memorial Award
Robert Rie Scholarship (Vietnam-era
veterans or descendants)
Barbara Rose Memorial Scholarship
Betty Norr Saveth Scholarship
Kurt and Sibylla Sonnenfeld Scholarship
Steele Family Scholarships
Thomas Stocky Memorial
John R. Symans Memorial Award
Wal-Mart Scholarship (Preference given to Northern
Chautauqua County residents)
Wilma Watson Memorial Scholarship (Cattaraugus
County residents)
Welch's/National Scholarship
Louise E. Wilder Scholarship
Yvonne Wilensky Scholarship
Winch Scholarship (Preference given to study abroad)
Dr. Nelson C. Wood Scholarship
Woods and Earl Memorial Award

FINANCIAL AID

The primary objective of college financial aid is to assist degree students with college expenses.

Students are encouraged to check the World Wide Web site (<http://www.fredonia.edu/finaid>) for current information.

How Do I Apply? What Form Do I Use?

If you applied for federal student aid for the current school year, you probably will be able to file a Renewal Free Application for Federal Student Aid (FAFSA). This preprinted Renewal FAFSA will be mailed directly to your home address by the Department of Education.

If you are a new financial aid applicant or did not apply for federal student aid during the current school year, you can apply for federal aid by completing and submitting the Free Application for Federal Student Aid (FAFSA) using SUNY Fredonia's school code of 002844.

You may submit a FAFSA

- through the Internet by using FAFSA on the Web
- by mailing a paper FAFSA

FAFSA on the Web is a free U.S. Department of Education web site where you can complete your FAFSA online and submit it via the Internet using a personal computer (PC) that is equipped with certain versions of Netscape. The address is www.fafsa.ed.gov

To apply for the New York State Tuition Assistance Program (TAP) grant, you must complete the NYSHESC generated preprinted Express TAP Application (ETA) using Code 0915 for state assistance. Mid-year Transfer students must request a Financial Aid Transcript from any school previously attended.

Where Do I Get These Applications?

The paper Free Application for Federal Student Aid application (FAFSA) is available from any high school guidance office or any financial aid office.

The Renewal Free Application for Federal Student Aid application is mailed directly to prior aid recipients by the Department of Education.

The preprinted Express TAP application (ETA) is mailed directly to students by the New York State Higher Education Services Corporation (NYSHESC).

It is the student's responsibility to submit the FAFSA and the Express TAP Application (ETA) each year. Financial aid awarded for the freshman year or any other year does not guarantee aid for subsequent years.

When Do I Apply?

Early application is strongly encouraged. Applications cannot be submitted before Jan. 1, but you should be applying in January and February if at all possible. Since funds are limited, early applications are given first consideration. For additional information concerning the application process, check our web site at www.fredonia.edu/finaid/

When Will I Hear About My Financial Aid?

1. Starting in March, prospective students will receive a Financial Aid Award Letter that will list all federal, state, and institutional aid that the applicant is possibly eligible to receive.
2. These awards will be estimates, and will provide each applicant with an idea of the semesterly awards from each federal and state aid program.
3. To change these estimated awards to an actual award, applicants may be required to go through a process called Verification. Federal tax returns of the student and the parents must be submitted, if requested, to verify the accuracy of the data submitted on the original financial aid applications.
4. Through the summer the financial aid office processes student aid paperwork with the intention of making aid actual for credit on the college bill by mid-July.

Students must submit paperwork on a timely (as early as possible) basis.

How is Aid Awarded?

Applicants for aid are considered based on all of the following criteria:

1. Funds available to the college from governmental sources.
2. Financial eligibility as determined by the FAFSA processing.
3. Date of receipt of FAFSA results from the Federal Central Processor.

Verification

Many financial aid applicants will be required to verify the information that is reported on the FAFSA/Renewal FAFSA. Financial data such as income, taxes paid, and non-financial data such as family size and dependency status will be verified. For this reason, it is extremely important that the figures you report when completing the FAFSA/Renewal FAFSA are accurate. If there are any

discrepancies in the data that was submitted on the FAFSA/Renewal FAFSA, the aid originally awarded will be revised (either increased or decreased). Save copies of student's and parent's signed tax returns, since these documents may be requested. A verification worksheet will also be sent to you for completion. You should be aware that by not submitting the required tax forms (W-2 Forms are not acceptable) and verification worksheet as requested, all aid is placed on hold, including loans.

College Costs

	N.Y.S. Resident	Out-of-State Resident
Tuition and Fees	\$4,225	\$9,125
Room and Food	\$5,600	\$5,600
	\$9,825	\$14,725

Although every effort is made to keep college cost as low as possible, the cost can change during the year. The above figures are subject to change but were accurate at the time of printing.

Satisfactory Academic Progress and Receipt of Undergraduate Financial Aid

Requirements

State and federal regulations require that all financial aid recipients maintain program pursuit and make satisfactory progress toward completion of degree program requirements (referred to as Satisfactory Academic Progress). The Financial Aid Office at SUNY Fredonia evaluates student aid recipient progress according to *State requirements* for TAP and APTS at the completion of each semester and according to Federal requirements for SEOG, PELL, Work Study, Perkins, Stafford and Parent Loans at the completion of the academic year. *All* three criteria in the charts below must be met in order to retain financial aid for the following semester. If a student withdraws from a

SATISFACTORY ACADEMIC PROGRESS CHART FOR STATE AID (TAP, APTS)

Before receiving this TAP payment you must meet all 3 criteria below	1	2	3	4	5	6	7	8	* 9	* 10
Receive passing/failing grade for this percent of credit hours attempted during last semester	0	50% ft=6 pt=3	50% ft=6 pt=3	75% ft=9 pt=6	75% ft=9 pt=6	100% ft=12 pt=6	100% ft=12 pt=6	100% ft=12 pt=6	100% ft=12 pt=6	100% ft=12 pt=6
Must have accrued at least this many total credits	0	3	9	18	30	45	60	75	90	105
Maintain at least this Grade Point Average	0	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00

course, it may effect his/her aid for the next semester.

ft = full-time pt = part-time

* Only students in approved five year programs (EOP and Medical Technology) are eligible for 10 semesters of undergraduate TAP. All other students are limited to eight semesters of undergraduate TAP.

Examples of requirements at different TAP payment levels follow:

1. A student who has received seven payments of TAP must complete at least 12 credit hours during the fall, maintain at least a 2.00 cumulative GPA, and have accrued at least 75 total credit hours to receive his/her eighth TAP payment in the spring
2. A student who has received four TAP payments must complete at least 9 credit hours during the fall, maintain at least a 2.00 cumulative GPA and have accrued at least 30 total credit hours to receive his/her fifth TAP payment in the spring.
3. A student who has received three TAP payments must complete at least 9 credit hours during the fall, maintain at least a 1.00 cumulative GPA, and accrue at least 18 total credit hours to receive his/her fourth TAP payment in the spring.

SATISFACTORY ACADEMIC PROGRESS CHART FOR FEDERAL AID (PELL, Perkins, SEOG, Work Study, Stafford, Parent Loan)

Before receiving Federal aid at this grade level, you must meet all 3 criteria below	Grade Level 1	*Grade Level 2	Grade Level 3	Grade Level 4	Grade Level 5	Grade Level 6
Receive passing/failing grades for this percent of credit hours attempted during the last two semesters	0 ft=0 pt=0	50% ft=12 pt=6	75% ft=18 pt=9	100% ft=24 pt=12	100% ft=24 pt=12	
Must have accrued this many total credits	0	12	30	54	78	102
Maintain at least this cumulative Grade Point Average	0	1.00	1.60	1.80	1.90	2.00

ft = full-time pt = part-time

Receipt of federal aid is limited to 12 semesters (for students enrolled full-time), according to Federal Regulation 34CFR PART 668.16.

* *Example:* A first semester sophomore this fall, must have completed a total of 12 credit hours during his/her first two semesters and have a total of at least 12 hours and have at least a 1.00 cumulative GPA to receive federal aid this semester. The student must also complete a total of 18 credit hours and have at least a 1.60 cumulative GPA at the end of the spring semester to continue receiving federal aid for the next fall semester.

Students should be aware that course repeats *do not* count as a completion in determining Satisfactory Academic Progress.

Example: Two years ago a student received a failing grade for a course and during the current semester repeated it as a junior. To meet progress standards, the student must complete 12 new credit hours during the current semester in addition to the repeated course credit hours.

Part-time students enrolled beyond 12 semesters (up to 24 semesters maximum) must continue to complete 100 percent of hours attempted *and* maintain a 2.0 GPA.

Notification Procedure

The financial aid office will notify the student between two and four weeks after the conclusion of the fall semester if Satisfactory Academic Progress Standards were not met while the student received state aid and between two to four weeks after the spring semester if Satisfactory Academic Progress Standards were not met while the student received federal and/or state aid. The letter will inform the student of loss of aid for the semester *immediately following* the one in which program pursuit and progress standards were not met and will also apprise the student of the appeal procedure to follow if the student feels financial aid should be reinstated.

Appeal Procedure

A request to reinstate federal or state aid for the next semester at Fredonia will be evaluated and granted only if exceptional circumstances (i.e. family illness or death, personal illness, personal emotional disturbances, changes in education objective) can be documented by the student. Waivers of the 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 the "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 Appeal Process to reinstate aid the next semester at Fredonia should complete and submit the waiver form (with appropriate documentation) to the Office of Student Affairs for evaluation.

TYPES OF AID

Scholarships

For information on Scholarship Opportunities available to students, refer to the section preceding Financial Aid on page 200.

Federal PELL Grant Program

A student may apply for a Federal PELL Grant if enrolled or accepted for enrollment as a degree student for at least 3 credit hours as a citizen or permanent resident of the United States.

The college will notify the student of the amount of the Federal PELL Grant as well as develop the remainder of a financial aid package, which may include awards through such programs as Federal SEOG, Federal Work Study, Federal Perkins and Federal Stafford Loans (see page 205-209).

The maximum grant which may be awarded is currently \$3,750. Grant amounts are determined by the Federal Legislative process each year.

Federal Work-Study Programs

The Federal College Work-Study Program (CWSP) is a federally funded source of financial assistance used to offset education costs. Eligible colleges administer the

program, which provides jobs for eligible students. A full-time student can expect to work up to eight hours a week (on or off campus), at a salary based on local market conditions and current minimum wage standards. At Fredonia, work skills are determined based on a survey of eligible students, and job assignments are made by the Financial Aid Office. Work-Study earnings are paid bi-weekly directly to the student. Students must meet with their assigned supervisors during the first two days of the semester or the award is canceled and offered to another student.

The "America Reads Program" was implemented at Fredonia during the 1997-98 academic year (the first year of the program's national implementation). This program allows students who meet certain work-study eligibility and tutor/training criteria to be assigned as tutors to area public school districts. The "America Counts Program" was implemented for the 2000-2001 academic year. This program allows students, with a concentration in mathematics, to serve as math tutors in grades kindergarten through nine.

Federal Perkins Loan

This loan program is available to part-time (6 to 11 credit hours) or full-time (12 or more credit hours) undergraduate degree students. On July 23, 1992, the Reauthorization of the Higher Education Act was signed into law, putting into effect the following information:

1. Interest Rate

All loans made after 10/1/80 continue to be assessed at a 5 percent interest rate.
2. Loan Limits

Annual loan limits are established at \$4,000 for undergraduates and \$6,000 for graduate students. In actual practice, the amount varies according to need, dependency status, date of receipt of a complete FAFSA, and generally does not exceed \$1,000 per year. The total amount you can borrow as an undergraduate is \$20,000.
3. Repayment Conditions

Repayment of loans begins nine months after a student graduates, leaves school, or drops below half-time student status. Repayment is made to the Student Loan Service Center in Albany, N.Y. on a monthly or quarterly basis. You may be allowed up to 10 years to repay.
4. Cancellation and Deferment Provisions

For loans made on or after July 23, 1992, part or all of the loans may be canceled for full-time service as:

 - special education teacher
 - teachers of mathematics, science, foreign languages, bilingual education
 - employees of public or private non-profit child or family service
 - agencies providing services to high-risk children from low income communities
 - nurse or medical technician

Effective for loans disbursed on or after July 1, 1993, loan payments may be deferred while the borrower is:

- enrolled on at least a half-time basis in an approved college, university, or post secondary institution
- for up to three years during which the borrower is seeking and unable to find full-time employment
- for up to three years for economic hardship
- engaged in service described under the cancellation provisions

Federal Supplemental Educational Opportunity Grant (SEOG)

This grant, which does not have to be repaid, ranges from \$200 to \$1,000 for an academic year. It is awarded on a yearly basis according to a calculated "Expected Family Contribution."

Federal Subsidized Stafford Loan Program

Applicants must complete the Free Application for Federal Student Aid (FAFSA) to be eligible for all Stafford loans.

The interest for the Subsidized Stafford loan is paid by the federal government during in-school, grace and deferment periods and is based on need. A student must be in attendance or accepted as at least a half-time degree student (6 credit hours per semester) and must either be a U.S. citizen or permanent resident of the U.S. Upon receipt of FAFSA data from the Federal Central Processor, the Fredonia Financial Aid Office determines loan eligibility and NYSHESC mails a preprinted master promissory note directly to first time Stafford loan borrowers for completion. This MPN is the only loan application you will need to complete for your federal Stafford loan while enrolled at SUNY Fredonia.

Federal Unsubsidized Stafford Loan Program

The difference between the Unsubsidized Stafford loan and the Subsidized Stafford loan is that the student has the option to either pay on the interest during their in-school, grace and deferment period or allow it to capitalize and pay the interest when repayment begins. We recommend that the student pay the interest if at all possible. This loan was designed to supplement the expected family contribution and is computed by subtracting any actual or estimated financial aid from the cost of attendance. If you are an independent undergraduate or graduate student you are eligible for additional Unsubsidized Stafford. The maximum additional Unsubsidized Stafford loan that can be requested is \$4,000 per year for the first two years of attendance, \$5,000 per year during both the junior and senior years, and \$10,000 per each graduate year.

The Subsidized and Unsubsidized Stafford Loans are similar in the following ways:

Students must complete the Free Application for Federal Student Aid to be eligible to apply for a Stafford loan.

Eligibility for each loan program is determined by the Financial Aid Office and is printed on your Financial Aid Award letter.

Repayment on principal begins six months after enrollment on at least a half-time basis ends.

The interest rate is a variable interest rate based on the 91 day Treasury Bill plus 1.7 percent, capped at 8.25.

Annual Maximums for Subsidized and Unsubsidized Stafford Loans Combined:

\$2,625 for Freshmen
\$3,500 for Sophomores
\$5,500 for Juniors
\$5,500 for Seniors
\$8,500 for Graduates

Aggregate Limits:

\$23,000 for dependent undergraduates
(sub & unsub combined)

\$46,000 for independent undergraduates with Subsidized Stafford loans comprising no more than \$23,000 of the total limit

\$138,500 for Graduates with Subsidized Stafford loans comprising no more than \$65,500 of the total limit

Electronic Funds Transfer: Loan approvals are sent electronically in two separate disbursements (minus a 3 percent origination fee) by the lender to the college.

The first disbursement normally arrives at the Office of Student Accounts one to two weeks after the loan approval by NYSHESC during the academic year. The second disbursement is made at the midpoint of the loan period (for the majority of students this is just prior to the spring semester).

Federal Parent Loan

For purposes of obtaining a PLUS loan, an eligible parent borrower is a student's natural or adoptive mother or father or the student's legal guardian. A stepparent may obtain a PLUS loan only if he or she is also an adoptive parent or legal guardian. The spouse of a parent who remarried is eligible to borrow a PLUS loan if the spouse's income and assets would have been taken into account when calculating a dependent student's expected family contribution. Any two eligible parents may borrow separately to provide for the educational expenses of the student provided the combined borrowing of the parents does not exceed the calculated cost of attendance minus other aid. PLUS loan applications can be obtained directly at a parent's student's bank. The completed loan application should be submitted to the financial aid office for processing.

The interest rate for a PLUS loan is the 91 day Treasury Bill, plus 3.1 percent, capped at 9 percent.

Alternative Loans

Various banks are making available a new "breed" of loans that are not federally subsidized. These loans are normally a higher interest rate than the Stafford Loan but are available to a student or to a student and co-signer depending on credit history. Students should contact the financial aid office for more information.

Federal Consolidation Loan Program

Students having problems repaying several student loans each month may want to consider Loan Consolidation. By consolidating loans, students reduce their monthly payment to one, more manageable payment over an extended period of time. Students should be aware, however, that by consolidating loans, they may trade an attractive lower interest rate on the combined loans. The total interest paid will also most certainly increase because it will take longer to repay the loan. Eligible student loans include Stafford, SLS, and Perkins. Consolidation loans will bear interest at an annual rate which is equal to the *weighted* average of the interest rates on the consolidated loans, rounded up to the nearest whole percent, but not less than 9 percent. Depending on the amount of the consolidated loan, the repayment period will range from 12 to 30 years. The repayment terms established by the lender may include graduated or income sensitive repayment schedules. If the sum of the consolidation loan *and* amount outstanding on the other student loans is:

- equal to or greater than \$7,500, but less than \$10,000, that loan shall be repaid in *not more than 12 years*.
- equal to or greater than \$10,000 but less than \$20,000, shall be repaid in *not more than 15 years*.
- equal to or greater than \$20,000, but less than \$40,000, shall be repaid in *not more than 20 years*.
- equal to or greater than \$40,000, but less than \$60,000, shall be repaid in *not more than 25 years*.
- equal to or greater than \$60,000, shall be repaid in *not more than 30 years*.

Students should contact their bank or lender for further information and applications.

Tuition Assistance Program

Students may apply for TAP if they have been legal residents of New York State for one year, are citizens or permanent residents of the United States, and are enrolled or accepted for enrollment full-time in a degree program at an approved institution in New York State. Application is made by completing the FAFSA (using Code 002844) and the FAFSA generated Express TAP Application (using Code 0915).

Within eight weeks of application, the student should receive an award certificate from NYSHESC in Albany, stating how much money he/she will receive for each semester.

Undergraduate and graduate students can receive TAP for eight semesters (per degree). Depending on the family's net taxable income, students may be eligible to receive grants ranging from \$137 to \$1,542 per semester.

Aid For Part-time Study

Funds to help pay tuition costs are only available in this program to undergraduate students enrolled on a part-time basis. Applications are available in the financial aid office. To be eligible a student must:

- be a legal resident of New York State
- be a U.S. citizen or permanent resident
- enroll for at least 3 but less than 12 credit hours
- meet the income limits established by the APTS program

Child of Veteran Award Program

Application Procedures: A Child of Veteran Award Supplement, along with appropriate documentation, must be filed initially with the New York State Higher Education Services Corporation for students who have never been previously approved for the award, are attending a college or post secondary school in New York State and meet the eligibility requirements. An application for payment is required for each subsequent year that the award is requested. These forms (supplements, applications) can be obtained from your high school guidance counselor or directly from the New York State Higher Education Services Corporation, 99 Washington Ave., Albany, NY 12255 or by calling (518) 473-7087.

These forms must be filed by May 1 of the academic year for which the student is applying.

Selection of Recipients and Allocation of Awards: The applicant must be: (1) the child or stepchild (if student is dependent of stepparent) of a New York State Veteran who died, suffered disability of 40 percent or more, was a prisoner of war, or is currently classified as missing in action resulting from service in the U.S. Armed Forces during one of the following periods:

- April 6, 1917 - Nov. 11, 1918
- Dec. 7, 1941 - Dec. 31, 1946
- June 27, 1950 - Jan. 31, 1955
- Dec. 22, 1961 - May 7, 1975
- June 1, 1983 - Dec. 1, 1987 and be a recipient of an expeditionary medal for service in Lebanon
- Oct. 23, 1983 - Nov. 21, 1983 and be a recipient of an expeditionary medal for service in Granada
- Dec. 20, 1989 - Jan. 31, 1990 and be a recipient of an expeditionary medal for service in Panama
- Aug. 2, 1990 - through the end of hostilities in the Persian Gulf
- Dec. 7, 1941 - Aug. 15, 1945 and served in the Merchant Marines

and (2) a New York State resident at the start of the term for which payment is requested. The veteran also must currently be a New York State resident or have been a resident at the time of death (if death occurred during or as a result of service).

Funding Procedure: Awards are made for full-time undergraduate study at an approved New York State school. Recipients of this award receive \$450 per year without consideration of income or tuition costs. The award may be granted for up to five years, depending on the normal length of the program of study. In addition, recipients may also be eligible for TAP awards, however, the combined Child of Veteran award and TAP cannot exceed tuition charges.

Vietnam Veterans Tuition Awards

Vietnam Veterans Tuition Awards (VVTA) provide up to \$1,000 per semester for full-time study or \$500 per semester for part-time study, but cannot exceed \$10,000 for the life of the award. Vietnam veterans must be matriculated at an undergraduate or graduate degree-granting institution, or in an approved vocational training program in New York State. For further information regarding study requirements and amounts, please contact the Veterans Affairs Office on the first floor of McGinnies Hall (716) 673-3423.

Persian Gulf Veterans Tuition Award Supplement

The Persian Gulf Veterans Tuition Award (PGVTA) Program provides financial assistance to eligible veterans matriculated in undergraduate and graduate degree programs or enrolled in approved vocational training programs on either a full or part-time basis. To be eligible under this program, the veteran must: (1) have served in the armed forces of the United States in the hostilities that occurred in the Persian Gulf from Aug. 2, 1990 to the end of such hostilities as evidenced by receipt of the Southwest Asia Service Medal; (2) have been discharged from the service under other than dishonorable conditions; (3) be a New York State resident; (4) apply for a Tuition Assistance Program (TAP) award and a Federal PELL Grant if applying as a full-time undergraduate student or for the Federal PELL Grant only if applying as a part-time undergraduate student. The veteran must establish eligibility for a PGVTA before September 1, 1998.

Full-time awards are \$1,000 per semester or tuition, whichever is less. If the veteran also receives a TAP award, the combination of the two awards cannot exceed tuition. Part-time awards are \$500 per semester or tuition, whichever is less. The total of all undergraduate and graduate awards for full and/or part-time study received cannot exceed \$10,000.

For more information on applying for the award and deadlines contact the Office of Veterans Affairs on the first floor of McGinnies Hall or call (716) 673-3423.

Veterans Administration Educational Benefits

Those veterans or dependents who are, or feel they are, eligible for federal financial assistance through the Veterans Administration should contact the Coordinator, Veterans Affairs (McGinnies Hall, 716 673-3423) or complete appropriate forms. Students are urged to begin their VA paper work before the beginning of the school term in order to hasten processing. To further facilitate the start of benefits, the veteran, or children, spouses, and survivors of veterans whose deaths or permanent total disabilities were service-connected should present pertinent data, such as the service number, social security number, VA claim

number, dates of service, discharge papers, and any other VA claim information.

The Veterans Affairs office is staffed by the coordinator and a veteran work-study student and provides routine certification of enrollments. The staff also monitors student progress, and is available for information and referral for problems which might arise. Policy among various administrative offices, as it relates to VA recipients, is also coordinated through the Veterans Affairs office. The coordinator is in liaison with the Regional Office in Buffalo for those situations which might need special attention.

State Aid To Native Americans

Application Procedures: Application forms can be obtained from the Native American Education Unit, New York State Education Department, Education Building Annex - Room 478, Albany, NY 12234 or call (518) 474-0537. Required application materials: (1) completed application form; (2) one of the following: (a) Official High School Transcript, (b) copy of General Equivalency Diploma, (c) College Transcript (if student has completed one or more semesters at the college level); (3) an Official Tribal Certification Form issued by the tribe; (4) copy of college acceptance letter. *Note:* Minor Applicants must have the signature of parent/guardian approving educational plans. These 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: (1) 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; (2) have a High School diploma, GED, or be enrolled in a special program at an approved post secondary institution which will lead to a high school equivalency diploma; (3) be enrolled in an approved program offered by a New York State college, university, technical, business, nursing or trade school.

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 \$1,550 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 Bureau of Indian Affairs Higher Education Grant Program

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 Affairs (Education Line Officer). An application is required for each year of study. An official needs analysis (obtained from your college financial aid office) is also required. This analysis is provided after the student completes the Free Application for Federal Student Aid (FAFSA).

Each first-time applicant must obtain tribal enrollment certification from the bureau agency which records enrollment for the tribe.

Selection of Recipients and Allocation of Awards: The applicant must: (1) be a member of, or at least one-quarter degree Indian blood descendent of a member of an American Indian tribe which is eligible for the special programs and services provided by the United States through the Bureau of Indian Affairs; (2) be accepted for admission to a nationally accredited institution of higher learning which provides a course of study conferring an associate or bachelor's degree; (3) demonstrate financial need.

Responsibilities of Recipients: For subsequent grants, the applicant must make satisfactory progress towards a degree and demonstrate financial need. Depending on the availability of funds, grants may also be made to graduate students and summer session students. Eligible married students may also receive living expenses for dependents.

For additional information about any aspect of expenses or financial aid, please refer to the *Financial Aid Guide*, a publication of the Financial Aid Office.

EDUCATIONAL COMMUNITY OUTREACH

The Native American SUNY: Western Consortium

SUNY Fredonia continues to support the endeavors of the Native American SUNY: Western Consortium, which focuses upon educational access, opportunity, and development for Native American students and communities. The consortium is comprised of representatives of four Native Nations and 11 SUNY campuses in the Western and Central New York area. For more information, students should contact the office at (716) 673-3170 or 1-800-851-5020.

Lifelong Learning and Economic Research and Development

The Office of Lifelong Learning and Economic Research and Development, headquartered in LoGrasso Hall, brings together a unique combination of college and community support services.

Sponsored and Non-sponsored Credit-free Conferences, Institutes, and Workshops. The office works with representatives from community groups and industrial organizations to identify and provide for the specialized educational needs of their memberships.

Lifelong Learning. The college, through this program, makes educational opportunities available to working adults and non-traditional students who wish to explore college study on a part-time basis. Students seeking admission through the Lifelong Learning program may apply using a simplified application procedure. No college entrance examinations are required; however, applicants must submit a high school transcript or GED score report. Applications for admission are available in the Office of Admissions, 178 Central Avenue (Fenner House), or the Lifelong Learning office in LoGrasso Hall.

Qualified students are eligible to enroll in regular day or evening courses, including a number scheduled in the late afternoon and early evening. The Lifelong Learning program is especially appropriate for those who wish to pursue non-degree college studies on a part-time schedule - for personal growth, job advancement, or other reasons. Students will be assigned an academic advisor to assist with course selection. In addition, the college will offer Lifelong Learning programs in the form of seminars, workshops, and symposia in four major categories: education, health care, human and social services, and business and industry.

The college awards a certificate to Lifelong Learning students who successfully complete 30 credit hours of course work. 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 college.

A student with prior experience who is seeking degree study on a full-time or part-time basis should pursue admission as a transfer applicant (see Transfer Admissions, page 194).

Visiting Student Program. Students presently enrolled at another college or university who wish to pursue academic study at SUNY Fredonia for one or two semesters may apply for admission through the Visiting Student Program. Advantages of the program, in addition to expanding academic options, include getting to know other new students, faculty and geographic areas, as well as having an opportunity to see oneself, one's education, and future plans from a new perspective. To qualify for the program, students must receive approval for a proposed academic program from an appropriate official at their present college. Applications are reviewed following the procedures used in evaluating requests for admission from transfer applicants. Registration in specific courses is offered on a space-available basis.

For information on any of the above, call (716) 673-3177, or visit LoGrasso Hall.

School of Education

The School of Education has direct implications for change and innovation in teacher education and for health care providers. The campus-wide nature of the school involves the integration of early childhood, elementary, and secondary education components as well as the initiation of a comprehensive field-based approach to educational studies. In addition, the school assumes responsibility for supporting teaching effectiveness, educational research, child studies, development of grant proposals, and international education programs. The further development of needed links and partnerships with the public schools in the SUNY Fredonia service area, the Fredonia-Hamburg Teacher Education Center, and the Office of Field Experiences is fostered and enhanced through the School of Education. The school offers international programs in both preservice and in-service education. Through cooperative efforts with the Swansea Institute of Higher Education in Wales, and Plymouth University, Rolle School of Education in Exmouth, England, students are afforded the opportunity to engage in a five-week student teaching experience. In-service teachers are provided a two-week experience in England and/or Wales to observe British

education. As a result of reciprocal agreements between SUNY Fredonia and these British institutions, students from England and Wales visit the Fredonia campus at selected times each year. For more information, see the section on International Education on page 179.

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 Speech Pathology and Audiology, 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 speech pathology and audiology participate as observers and as clinicians under the supervision of fully licensed and certified speech pathologists and audiologists.

The Fredonia College Foundation

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 college's commitment to public service for western New York and the state, the college 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 college and community which cannot be supported by state funds.

Contributions from alumni, parents, friends, faculty/staff, business and industry, the professions, foundations, and

other public and private sources have strengthened many college programs. Gifts of cash, appreciated stock, real estate and insurance, gifts in kind, works of art, books, equipment, teaching materials, as well as planned gifts such as bequests and gift annuities, have enabled the college to move forward, even in times of budgetary restraint.

Center for Rural Regional Development and Governance

The Center for Rural Regional Development and Governance, headquartered at the Office of Lifelong Learning and Economic Research and Development in LoGrasso Hall, promotes the college's service to the region through economic development and government efficiency projects.

The mission of the center is to foster and enhance a spirit of regional cooperation and collaboration that will enhance the quality of life of all residents in the region.

The center sponsors analytical research reports to assist government decision-makers in moving toward more cost-effective and efficient service delivery in the region. Center Fellows, SUNY Fredonia faculty, and student researchers provide the expertise for these research projects. In addition, the center works in partnership with local governments, labor unions, and the private sector to provide process re-engineering and performance management skills to governments in the region. The center is also a repository for regional statistical information and regional governance best practices. Finally, the center is involved in the development of a regional growth strategy through technology transfer from the college to the private sector.

For more information about the center, call (716) 673-3449.



ACADEMIC POLICIES

Academic Policy and Procedures in Regard to Students With Disabilities

SUNY Fredonia is in compliance with federal laws that require colleges to make reasonable accommodations for otherwise qualified students with disabilities admitted, including students with learning disabilities. It is college policy that such students fulfill the same degree and program requirements as all other students, but that they be given all reasonable help in doing so. Such help may include, but is not limited to, scheduled tutoring, special counseling, extended time for examinations, permission to tape lectures, readers or scribes for tests, and other assistance.

It is the responsibility of students to identify themselves as having a disability upon entrance to the college, by notifying the Coordinator of Disability Support Services for Students. The student and coordinator will meet and discuss the student's needs, on the basis of the clinical diagnosis that has established the existence of the disability, and will decide on the kinds of assistance the student need to gain equal access. The coordinator will also be responsible for facilitating tutorial appointments, if necessary, and appointments with the Counseling Center, if necessary. It will be the student's responsibility to see the coordinator on whatever regular basis they may jointly determine.

Students requiring accommodations should contact the Disability Support Services office at the start of each semester. Since student needs might change each semester, the Disability Support Services office must be notified of student's schedules and academic needs.

With the student's written permission, the coordinator will inform the relevant professor(s) of the student's accommodation needs on either a semester or a need-to-know basis. This will confirm the diagnosis and indicate the general needs of the student. It is incumbent upon the student to identify him/herself to the professor and discuss the specific modifications which are requested. If mutually agreeable adjustments cannot be made, the Coordinator of Disability Support Services for Students will act as mediator. It is strongly recommended that students wishing their professors to be informed do so at the beginning of the semester, rather than immediately prior to the dates that exams or other assignments are due.

SUNY Fredonia is prepared to respond to the needs of students with disabilities. For specific information about services and facilities for students with disabilities, please contact: Carolyn L. Boone, coordinator of Disability Support Services for Students, Reed Library Fourth Floor, (716) 673-3270 (v), (716) 673-4763 (tty).

Declaration of a Major Program

In order to complete the college requirements for a baccalaureate degree, every student must complete an approved departmental or interdepartmental major program by satisfactory performance in the courses specified by the program. Students may declare a major before earning 30 semester hours of credit, except in some professional programs, and must make the declaration of program prior to earning 60 semester hours of credit. Information on the

declaration of major can be obtained at the Academic Advising Center, 614 Maytum Hall.

Certain major programs have a minimum quality point average requirement for admission. A minimum 2.50 quality point average is required for admission to the major in Elementary Education; and a minimum 2.80 cumulative quality point average is required for admission to the Cooperative Engineering program.

The declaration of major program, as well as changes in the major, should be made well in advance of course selection. The appropriate form is available in the Office of the Registrar and in department offices. The chairperson responsible for departmental programs or the coordinator responsible for interdepartmental programs will assign students an advisor and will certify at the appropriate time that all program requirements have been completed.

Declaration of a Dual Major

Students who are interested in completing more than one major program must obtain the appropriate form from the Office of the Registrar and secure written approval from the department chairperson or interdisciplinary coordinator of the intended second major.

Additional majors must be declared at least one semester prior to the date of graduation.

Declaration of a Minor

Students who are interested in declaring a minor must obtain the appropriate form from the Registrar's office, then contact the office of the department in which the minor is requested. Students who are interested in declaring more than one minor program are to follow the procedure outlined above for each one. Minors must be declared at least one semester prior to the date of graduation.

75-hour Audit

During the semester in which a student completes 75 cumulative semester hours, the Academic Advising Center will mail students preliminary degree audit materials which will help determine progress toward completing degree requirements. It is the student's responsibility to meet with his/her academic advisor to identify any degree deficiencies.

Early Registration

Early Registration is held during the latter part of the regular spring and fall semesters preceding the semester for which enrollment is sought. The exact dates of early registration will be announced by the Registrar through the mail and in campus publications.

Students wishing to register must obtain the necessary form from their advisors, who must approve the courses selected. Students will then register according to published guidelines.

Registration

In addition to participating in the Early Registration period, all students must confirm registration according to the directions issued by the offices of the Registrar and 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 college will not be permitted to register.

Registration must be completed by the end of the first week of classes. A service charge of \$30 is imposed for registrations taking place after the third day of classes.

Student Schedule Changes

Changes in student class schedules must be filed in the Office of the Registrar within the period prescribed by that office.

Students may drop courses through the first week of the semester. Those courses dropped will be removed from the student's permanent record. After the drop deadline, students must withdraw, except for first semester freshmen, who may drop up to Monday following Early Registration for the following semester.

A fee of \$15 will be assessed for each course added after the second full week of classes. This includes transactions involving a switch from one section to another.

Beginning with the second week and ending with the withdrawal date published by the Registrar each semester (generally, the seventh week), a student may withdraw from a course with advisor or department chairperson approval. A grade of "WC" is assigned. The withdrawal grade will be recorded on the student's permanent record but will not be counted in the student's quality point average.

During the second full week of the semester, an instructor may petition the Registrar to have a student dropped from a course. This may be done because 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, but will be urged to contact the instructor immediately.

A fee of \$15 will be assessed for each course drop or withdrawal that takes place after the drop deadline published by the Registrar's office.

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 college calendar and in the appropriate *Course Offerings Bulletin* and apply to all full-semester courses.

Significance of Course Numbers

Courses numbered from 100 to 499 are open to undergraduates. In general, courses numbered 100-199 are taken in the freshman year, courses 200-299 in the sophomore year, courses 300-399 in the junior year, and courses 400-499 in the senior year. There are, however, some variations in this placement according to curriculum and other factors.

Courses numbered from 500 to 599 are graduate courses open to qualified seniors for undergraduate credit by permission of the appropriate chairperson and the Graduate Dean.

Permission to Take Graduate Courses While an Undergraduate

Undergraduates who have completed 90 credits 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 Graduate Dean. The forms for this purpose may be found in the Registrar's office. Students may use such graduate courses either to meet undergraduate degree requirements or to meet degree requirements in a SUNY Fredonia graduate program they enter at a later time. In the latter case, a student will be charged the difference between undergraduate and graduate tuition when the credit is applied to the graduate transcript. No course may be used for both purposes by the same person. In no case will an undergraduate be allowed to enroll in a course numbered 600 or above.

Unit of Academic Credit

The semester hour is the unit of academic credit and represents one hour of lecture or recitation or a minimum of three hours of laboratory work each week for one semester.

Course Load

For most undergraduate programs, the normal class load is 15 to 16 semester hours. A student who wishes to carry a class load of more than 17.5 semester hours must secure the approval of the chairperson of his/her major department. The minimum class load to be considered a full-time student is 12 semester hours.

Course Prerequisites

Many courses offered by the college are open to any interested student, space permitting. However, some courses have *prerequisites* - other courses a student must have had before taking the course in question, in order to understand it. For other courses there are recommendations regarding courses or experiences that might be beneficial, but not necessary, to have. A few courses have *corequisites*, which must either be taken before or together with the course in question. Information about pre- and corequisites, and recommendations, is given in the course descriptions in this catalog. Students are responsible for having fulfilled any prerequisites before enrolling for a course. Instructors may exclude students who have not done so.

Course Auditing

Course auditors will not be enrolled or listed on the course's roster. Audited courses offer no credit, impose no requirements, and require no fees. No person may be an auditor in any foreign study program or course. Interested persons should contact the instructor to secure permission to audit a course.

Class Attendance

At Fredonia students will experience a variety of educational styles and opportunities. Attendance is expected in all classes. Some courses will require attendance. Some courses will base a part of the grade on attendance and participation. Other courses will have no formal

requirements concerning attendance. Instructors will indicate as a part of the course syllabus what the attendance policy will be.

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 college is concerned about the welfare of its students and wishes to provide assistance in case of absence for valid reasons, students are encouraged to notify the Office of Student Affairs in the event of an unusual series of absences due to health or personal reasons. The office will then notify instructors.

Each instructor is responsible for establishing a policy concerning cases in which regularly scheduled graded work is missed and for determining whether the reason for having missed such work is valid. The instructor may make that determination based on discussion with the student or may request that the student obtain a note from the Office of Student Affairs attesting to the reason for missing the work. 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 college-sponsored program that takes him/her away from classes, 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 may offer the student an opportunity to make up the work 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 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 misses the final examination for a course because of illness or some other cogent reason, and a make-up cannot be scheduled in time, the student will receive a grade of incomplete.

If a student must be absent due to religious beliefs, he/she has the right to make up examinations, etc. For full details, see page 226.

Final Examinations

Final Exam Schedule – A tentative schedule of final examinations is published in the *Course Offerings Bulletin*. Requests from instructors for deviations from this schedule (group examinations, room changes, or time changes) must be approved by the Registrar. The Registrar's office will publish an updated schedule 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 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 college 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.

1. If the conflict arises due to an individual professor rescheduling his/her final examination from the time initially scheduled in the semester's *Course Offerings Bulletin*, 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.
2. 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.
3. If a conflict arises from neither of the above reasons and if a student is taking one of the three courses in his/her major field, it is the responsibility of that instructor to arrange for an equivalent examination to be given to the student at a suitable time during examination week. If a suitable time is not agreed to, the student may appeal to the department chairperson.

Students should resolve any three-finals-in-one-day conflicts before the beginning of examination week.

Assessment Examinations or Questionnaires

SUNY Fredonia regularly assesses its academic programs as part of its constant effort to improve them. Program assessment often involves testing students to measure their accomplishments in relation to program goals, or questioning them about their experiences and reactions. Usually, the results of the tests and questionnaires do not become part of the student's record, but rather help the college measure the success of its teaching and course requirements. In other words, student views and outcomes provide information that is essential if the college is to help students learn more effectively. Accordingly, all students are expected to take assessment examinations or answer assessment questionnaires if they are chosen to do so.

Pass-Fail Option

The Pass-Fail Option permits a student, with the advisor's approval, to take certain courses beyond the program major requirements without competitive grade and quality point risk.

The following courses may NOT be taken Pass-Fail:

- Courses at the 100-level
- Courses which are part of the professional semester
- Courses required for a major, a minor or the College Core Curriculum

Departments may designate other courses as not applicable to the pass-fail option; such courses are identified in the *Course Offerings Bulletin*.

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. 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.
3. 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.
4. In the event a student transfers to a department in which he or she has taken a pass-fail course, the new major department may set forth additional requirements in order to establish a relative grade for the course.
5. Pass-fail applications are available in the Office of the Registrar. A student who decides to enroll on a pass-fail basis is required to obtain his or her advisor's signature on the application within the three-week period following the beginning of the semester. He or she may not thereafter change status in the course(s).

Course Repeat Option

A student may apply to repeat a course, under this option, and have the first grade replaced with the code letter "R." The cumulative quality point average will be computed using the grade for the second attempt. This option may be exercised only once for a given course. A course originally taken for a grade cannot be retaken on a pass-fail basis.

A student who wishes to take a course at another college and have the credit substitute for a course already taken at SUNY Fredonia must secure prior approval from the chairperson of his or her major program (or department of advisement) and have the chairperson certify that the course to be taken is the equivalent of the course the student wishes to repeat. For this option, transfer credit is accepted only if the student earns a "C" or better for the course being repeated and transferred. In that case, the credit (not the grade) will be noted on the transcript, and the last SUNY Fredonia grade for the equivalent course will be changed to an "R."

The Course Repeat Option may not be exercised by students who have been required to withdraw, unless the student is subsequently readmitted and enrolled in courses leading to a degree program at SUNY Fredonia.

Course repeat forms are available in the Office of the Registrar and should be filed after the mid-point of the semester and prior to the final three weeks of the semester.

Course Challenge Option

Students may enter college already possessing the skills or knowledge taught in a particular college course. If such a course is required or is a prerequisite for other courses, and if the students can prove to the satisfaction of the department offering the course that they indeed possess the skills or knowledge in question, the requirement will be waived or the students will be placed in the course for which they qualify, without receiving credit for the prerequisite or required course.

In unusual cases, academic departments may be willing to grant college credit for a given course to students who can demonstrate prior knowledge of the course materials or skills. The course in question will not be one in which the classroom process itself is an important focus, as it is in courses dependent on small group discussion or problem-solving, computer work, laboratory experiments, group projects, and the like. To "challenge" a suitable course by demonstrating that one can pass the course without taking it, a student must first apply to the chairperson of the department offering the course. The application should include a detailed description of the manner in which the student has already met the goals and objectives of the course. If the chairperson deems the course available for challenge and if he or she believes the student's application to have merit, the department will determine the manner in which the student is to demonstrate his or her knowledge and/or proficiency. If, in the department's opinion, the student's performance is adequate, the chairperson will recommend to the Registrar that the student be awarded credit for the course. No grade will be given, and the student's quality point average will not be affected.

Credit by Examination

The college participates in three examination programs: the College Proficiency Examination Program of the New York State Education Department, Albany, NY; the Regents College Examination Program; and the College Level Examination Program of the College Entrance Examination Board, Northeastern Regional Office, 475 Riverside Drive, New York, NY. Enrolled students must obtain prior approval before scheduling an examination. Students should contact the testing agency directly for more information.

Transfer Credit

Enrolled students must secure prior approval from the chairperson of their major program (or department of advisement), from the chair of their minor, if applicable, and from the Registrar, before credit taken at another college or university will be transferred to the student's record at Fredonia. Students applying for such approval should provide the chairperson and Registrar a copy of the course description from the other college catalog. Transfer Credit Approval forms are available in the Office of the Registrar.

Students who have been required to withdraw from the college may not complete degree requirements by taking courses at another college, unless they are subsequently readmitted and enrolled in courses leading to a degree program at SUNY Fredonia.

Credit for non-collegiate sponsored instruction will be awarded upon the recommendation of the appropriate Dean, following consultation with department chairpersons as appropriate. Where applicable, the guidelines found in *College Credit Recommendations* (published by the Board of Regents/State Education Department) should be followed.

Credit will be subject to these limitations:

1. It is to be considered transfer credit.
2. It is elective credit.
3. A maximum of 12 hours may be counted toward graduation.
4. Consistent with college policy, physical education credit should be limited to 4 hours.

Student Classification

Students are given class designation according to the number of credit hours successfully completed, as follows:

Freshman	Less than 24 hours
Sophomore	24-56 hours
Junior	57-88 hours
Senior	89+ hours

Grading System

Each student's progress is evaluated and reported four times a year — at mid-semesters (October and March), and at the end of semesters (December and May). The symbols used to record achievement on the permanent record card of the student at the end of each semester are as follows:

A	Superior
A-	

B+	
B	Very Good
B-	
C+	
C	Fair
C-	
D+	
D	Passing
D-	
E	Failing
F	Failing while electing Pass-Fail Option
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 E 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. If the instructor determines that an I grade is appropriate, then the instructor will consult with the student and determine the deadline for completing the work for the course. Once the work for the course has been completed, and received by the instructor, the instructor should submit the student's revised grade for the course to the Registrar's office within two weeks.
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 requirements.
R	Indicates course has been repeated.
S	Satisfactory completion of requirements.
U	Unsatisfactory performance or failure. The letters S and U are used for student teaching and certain other courses, including some independent study and skill courses. The S does not count as part of the cumulative quality point average or total; the U, however, reflects hours carried with zero quality points. 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 college.
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 E grade.
Y	Indicates a passing grade in a course taken in a semester accepted for "academic bankruptcy."
Z	Indicates a failing grade in a course taken in a semester accepted for "academic bankruptcy."

Student Appeals of Grades

A student who feels that a grade reported for him/her is incorrect has the right of appeal by the following procedure:

1. He or she first discusses the grade with the instructor.
2. If, after this discussion, the student is still unsatisfied, he or she may take his or her case to the chairperson of the department.
3. If the chairperson decides that the student's case merits further investigation, he or she 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. The committee reviews the case, interviews the student and the instructor separately, and reaches a judgment by majority vote. This judgment is communicated to the chairperson, who, in turn, reports it to the student and the instructor.
5. If a change of grade is recommended by the committee, the instructor may initiate a change, or the committee's recommendation is forwarded to the appropriate dean and the Vice President for Academic Affairs for their consideration. The Vice President for Academic Affairs may modify the grade if the committee so recommends.

A student or alumna/nus must initiate the appeal process within one calendar year after receiving a final transcript.

Plagiarism

To plagiarize is "to steal and pass off as one's own the ideas or words of another" (*Webster's Seventh New Collegiate Dictionary*). Examples of plagiarism include presenting the ideas of another in one's own words without crediting the source, copying sentences, paragraphs, or pages from a source without explicit reference to the pages from which the words were taken, and, of course, presenting another's entire work as one's own. If a student is not certain whether a particular practice may be considered plagiaristic, it is his/her responsibility to consult the instructor for whom he/she is writing the paper, exercise, or examination. SUNY Fredonia strongly condemns plagiarism and takes severe action against those who plagiarize. For procedures, see page 226.

Quality Point Average

The quality point system is used to indicate a student's overall academic average.

Each course grade of:

- A carries 4.0 quality points per semester hour
- A- carries 3.7 quality points per semester hour
- B+ carries 3.3 quality points per semester hour
- B carries 3.0 quality points per semester hour
- B- carries 2.7 quality points per semester hour
- C+ carries 2.3 quality points per semester hour
- C carries 2.0 quality points per semester hour
- C- carries 1.7 quality points per semester hour
- D+ carries 1.3 quality points per semester hour
- D carries 1.0 quality points per semester hour
- D- carries 0.7 quality points per semester hour

Course grades of E, F, P, R, S, X, and U carry no quality points.

The quality point average for a semester is determined by dividing the total quality points earned by the number of hours carried that semester; the cumulative quality point average, by dividing the total quality points accumulated to this point in the student's college career by the total number of hours carried, including courses failed.

Hours earned for courses with P, X, and S grades are not included in figuring the semester or cumulative average; hours failed (grade of E, F, and U) are.

Consult each individual department on its policy for calculating quality point average in the major or minor.

Dean's List

About one month after the end of each semester, the college announces the names of students who are recorded on the Dean's List. The list includes all students who have earned a quality point average of 3.30 or higher for that semester with a course load of at least 12 credit hours. (Courses with P or S grades are not included in the 12 hours.)

Academic Standing and Probation

The term "in good academic standing" means that a student is eligible or has been allowed to register for and undertake academic course work for the term in question. The mechanism of academic probation, including any accompanying constraints upon a student's activities, is intended merely as an educational device to encourage greater effort on the part of students who appear to be having difficulty in meeting certain academic standards. Placement on academic probation *may* precede denial of the right to register for academic course work if certain conditions are not met, but a student on academic probation is considered to be in good academic standing. Any question concerning whether or not an individual student is in good academic standing will be determined by the campus committee on academic standards.

The Academic Standings Committee has adopted the following regulations governing academic standing:

- (1.) A student will be placed on probation if the cumulative quality point average falls below a 2.00.

A student on academic probation is required to meet with a probation advisor (generally the chairperson of the student's major department) a minimum of three times during the probationary semester.

- (2.) Probationary status is determined in accordance with the above standards and is not dependent upon official notification.

(3.) "Good academic standing" is defined as maintaining a cumulative quality point average at or above the appropriate level in (1) above or being on probationary status. Students should also refer to the financial aid section (page 204) on academic standing and its relationship to financial aid eligibility.

- (4.) A student normally will be required to withdraw if at the end of a semester of probation the cumulative quality point average is still below the level stated above.

(5.) Students whose record of achievement becomes academically irreparable may be dismissed without a semester of probation.

At the close of each semester the Academic Standings Committee reviews the record of each student whose cumulative quality point average places him/her within the range of Academic Dismissal or Probation. The Academic Standings Committee is comprised of the Vice President for Academic Affairs (or designee), the Academic Deans, the Vice President for Student Affairs (or designee), the Director of Academic Advising, and the Registrar. The chairpersons and directors of those departments and special programs whose students are being considered assist in this review. A student may appeal the decision of the Academic Standings Committee to the Academic Dean.

Leave of Absence Policy and Continuing Enrollment

A student who has maintained a 2.0 or better overall cumulative quality point average and a 2.0 or better average in courses required in his/her major may apply for a leave of absence, usually at the end of the semester. A leave of absence form can be obtained in the Office of Student Affairs. Approval of leaves of absence must be made by the appropriate department chairperson and the Office of Student Affairs. Ordinarily, a leave is for one semester or one academic year. Students wishing to return after a leave of absence must contact the Registrar's office at least a month before registration. Students wishing to course select should consult with the Registrar's office for pertinent dates (usually November and April). A student who voluntarily terminates enrollment at the college but fails to formally apply for a leave of absence will be required to apply for re-admission or reinstatement if he or she wishes to resume enrollment at the college.

Withdrawal and Honorable Dismissal

A student who finds it necessary to leave the college before the end of a semester must withdraw officially through the Office of Student Affairs. Students may withdraw for any reason up to the period of three weeks prior to the end of the semester. **STUDENTS WILL BE PERMITTED TO WITHDRAW DURING THE FINAL THREE WEEKS OF THE SEMESTER ONLY DUE TO ILLNESS OR OTHER COGENT REASONS AS DETERMINED BY THE OFFICE OF STUDENT AFFAIRS.** Failure to follow the required procedure may prejudice the right to an honorable dismissal and to any refunds. Those enrolled in any federal program of veterans benefits must also notify the Veterans' Affairs Office (McGinnies Hall) of their withdrawal.

A student withdrawing during a term may be eligible for certain refunds as described on page 198.

Academic Bankruptcy

Prior to graduation, an undergraduate student may petition the Office of the Vice President for Academic Affairs for one semester of "academic bankruptcy." The student must have a minimum quality point average of 2.00 at the time the petition is filed and must have accumulated at least one semester after the semester for which academic bankruptcy is sought. If the petition to bankrupt a semester is granted, the student's grades for the chosen semester will be converted to "Y" for grades of D- or better, and to "Z" for E grades. This policy may be applied only to one semester of work completed at the college. Academic bankruptcy is intended to assist the student who normally maintains adequate academic standards and whose grades have suffered for one semester due to unusual or unfortunate circumstances. Although the Y grade does not carry any quality points, the credit hours for courses receiving Y grades will count toward the total needed for graduation and may apply toward the totals needed for the requirements for the major, minor or concentration. The student is advised to consult with the appropriate department before requesting this option.

Readmission and Reinstatement

Students who have withdrawn from the college and wish to return may obtain an application for Readmission/Reinstatement from the Office of Admissions. Applications are reviewed by the appropriate academic dean, department chairperson, and the Vice President for Student Affairs or designee. Students who have withdrawn in good standing are generally eligible for Reinstatement if space is available in the requested major. Individuals who were required to withdraw for academic reasons are not eligible for consideration until at least one academic semester has elapsed, and must request that the appropriate dean develop a contract.

Students with a cumulative quality point average of less than 2.00 who have been readmitted to the college may request to be reinstated with their original cumulative academic record or with a readmission petition.

Under the readmission petition, a new quality point average is established from the time of readmission to graduation. The total academic record achieved from the time of initial enrollment at SUNY Fredonia will be entered on the transcript, but no credit will be awarded for "D" grades earned prior to readmission. The cumulative quality point average will reflect only the average since readmission, and a minimum of 45 additional credit hours of graded work must be completed at SUNY Fredonia prior to graduation and after readmission.

COLLEGE CALENDAR 2001-2003

FALL 2001

Aug. 27 (M)
Aug. 28 (Tues.)
Sept. 3 (M)
Included in Fall Break
Sept. 27-28
Nov. 19-23 (M-F)
Dec. 14 (F)
Dec. 17-21 (M-F)

Registration
First Day of Classes
Labor Day Break
Yom Kippur - No Classes
Fall Break
Thanksgiving Break
Last Day of Classes
Exams

FALL 2002

Aug. 26 (M)
Aug. 27 (Tues.)
Sept. 2 (M)
Sept. 16 (M)
Oct. 10-11 (Th-F)
Nov. 25-29 (M-F)
Dec. 13 (F)
Dec. 16-20 (M-F)

SPRING 2002

Jan. 23 (W)
Jan. 24 (Thurs.)
March 22-April 1 (F-M)
N/A
May 10 (F)
May 13-17 (M-F)
May 18 (Sat.)

Registration
First Day of Classes
Spring Break - No Classes
Travel Day - No Classes
Last Day of Classes
Exams
Commencement

SPRING 2003

Jan. 22 (W)
Jan. 23 (Thurs.)
March 14-21 (F-F)
April 21 (M)
May 9 (F)
May 12-16 (M-F)
May 17 (Sat.)



Requirements for the Bachelor's Degree

Graduation from the college 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 College Core Curriculum, 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. See department sections for any variation from this requirement.
3. Except for certain programs, students pursuing the B.A. degree must earn a minimum of 75 hours in credits from disciplines other than their major discipline. For the B.S. degree, the minimum is 66 hours. For either the B.A. or B.S., students in multi-discipline major programs may not apply more than 45 hours in any one discipline toward credits needed for graduation.
4. All students must take a minimum of 45 semester hours at SUNY Fredonia.
5. Under ordinary circumstances, students will have 10 consecutive years during which to complete the requirements for the undergraduate degrees in effect at the time they began their studies. If they wish to complete the degree after 10 years, their record of studies will be reviewed by the chairperson of the academic department in which their major falls, and by their Academic Dean, to determine how much of their earlier credit is still applicable. This rule applies not only to credit earned at SUNY Fredonia, but also to credit transferred to Fredonia from other colleges. In addition, after 10 years, students will generally be required to complete the current College Core Curriculum requirements. The CCC Director will review the student's record of studies to determine how much of his/her earlier general education credit is still applicable.

This policy notwithstanding, to the extent that certifying agencies change the requirements for a particular degree within the student's original 10-year period or later, students will be bound by the new requirements of the agency.
6. Candidates in a program leading to certification to teach in New York State must satisfactorily complete all student teaching requirements. No grade less than S gives credit in student teaching.
7. Music students must meet certain accompanying and performance standards, and secondary instrument competencies. Details on these requirements may be secured from the School of Music.
8. Students must meet all their financial obligations to the college and any or all of its supporting agencies.
9. A student who expects to graduate at a given date must make application through the Registrar's office, not later than the third full week of classes of the final semester of attendance.

Notes:

Only 4 credit hours of physical education activities courses (100-level courses) may count toward the total number of credit hours needed for graduation. Accounting majors may not use any health/physical education courses toward the 120 hours required for graduation.

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. SUNY Fredonia students wishing to earn two degrees concurrently must complete a minimum of 150 semester hours and complete the requirements for the two degrees during the semester in which they have applied for graduation. The two degrees may not be of the same type as registered by the New York State Education Department. For example: a B.A. and a B.S. would be appropriate, but two B.A. degrees would not, as the latter can be accomplished in the declaration of a second major.
2. SUNY Fredonia graduates seeking an additional bachelor's degree must take a minimum of 30 semester hours at the college and must successfully complete the requirements of their additional major or program.
3. New students seeking an additional bachelor's degree must take a minimum of 45 semester hours at SUNY Fredonia 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. See the department sections for any variation from this requirement.
6. Students must meet all their financial obligations to the college 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.
8. State University of New York policy requires that a second baccalaureate degree be markedly different from the first baccalaureate degree; e.g., a student could not receive degrees in both accounting and business administration. However, such a student could be readmitted to the college to pursue a second major.

Graduation With Honors

Students whose cumulative quality point average indicates high scholastic attainment will be awarded the degree as follows:

1. *Summa Cum Laude* - Quality Point Average 3.7 or higher.
2. *Magna Cum Laude* - Quality Point Average between 3.50 and 3.69.
3. *Cum Laude* - Quality Point Average between 3.30 and 3.49.

Students may graduate with honors only when they have completed at least 45 hours of graded work at SUNY Fredonia. Graded work includes all courses which carry quality points and excludes courses which are graded "satisfactory-unsatisfactory" or "pass-fail."

Only those credits earned at SUNY Fredonia will be computed in the final average.

Transcripts of Record

Upon request by the student, the Registrar will forward an official transcript to another college or university, a school system, a government agency, or a corporation. A fee of \$5 is charged for each transcript requested. Students are urged, because of the large number of requests, to make application for transcripts well before the date on which they are needed. Three weeks should be allowed during peak periods. Transcripts are not issued during the week prior to registration, during registration week, or during final examination periods. (For information on changes to transcripts, see Student Appeals of Grades, page 216.)

Name Changes

A student whose name is changed should report the change in writing to the Registrar.

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, pages 222-232.

Liability

The college is not responsible for loss or damage to personal property by fire, theft, or any other cause on college property or in any off-campus housing facility.

Student Retention

It is important to recognize that students withdraw from college for various reasons; academic, medical, personal, social and financial problems are among those reasons. Completion of degree requirements in more than four years does not necessarily mean continuous enrollment during this interval, but rather reflects the time span measured from the student's initial entering date to graduation and, where appropriate, includes interruptions in attendance. SUNY Fredonia has undertaken retention studies to determine entering freshmen cohort return and graduation rates. At the end of the first year, 82 percent of the freshmen remained enrolled for the second year. Most recent data reflect the proportion of freshmen completing their baccalaureate degree at SUNY Fredonia to be 46 percent within four years, 61 percent within five years, and 63 percent within six years from initial date of entrance.

Approximately 46 percent of transfer students entering the college at the upper division level (junior year) completed their bachelor's degree requirements on time, within two years after entering.

Detailed outcomes are available from the Office of Institutional Research and Planning, Room 203, Maytum Hall.

Program Registration

SUNY Fredonia's baccalaureate and graduate programs are registered by the New York State Education Department. For information, contact the New York State Education Department, Office of Higher Education and the Professions, Cultural Education Center, Room 5B28, Albany, NY 12230, or call (518) 474-5851.



STUDENT RIGHTS AND RESPONSIBILITIES

Regulations Governing Student Conduct and Community Standards of Behavior

Pursuant to the Resolution of the Board of Trustees of the State University of New York, dated May 11, 1967, and Section 356 of the State Education Law, and after consultation with the President, representatives of the faculty, and students, the Council of the State University of New York at Fredonia established and promulgates the following regulations covering the conduct and behavior of students.

Attendance at this college 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 college and to continue as a student has been entrusted by the Board of Trustees of the State University to the President and his/her staff.

General Policy

Students seeking knowledge and understanding also need freedom to inquire, to exchange ideas through discussion, publication and public presentations. These opportunities are basic to education in and for a democratic society. To insure these freedoms the college 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 college, to the state and the nation, and to society in general. Orderly and dignified expression and conduct are expected.

In protection of these freedoms the college must establish certain standards of personal and group conduct. The college 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 greater community, the maintenance or protection of property, the provision of living accommodations and other services, and the sponsoring of non-classroom activities such as lectures, concerts, athletic events, and social functions.

Counseling, guidance, and rehabilitation are the preferred means for resolving behavior problems. Although disciplinary proceedings play a secondary role in resolving such problems, violation of the Standards of Behavior listed below may result in privilege restriction, suspension, or dismissal.

In the legitimate interest of the college in protecting property and the safety and welfare of specific individuals or the general public, The College President or his/her designee may temporarily suspend an individual pending a decision by the hearing body.

Alleged Violation Of Any Of The Following Will Result In Charges Being Filed Against You.

Specific Standards of Behavior

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 may make one subject to separation from the community. Prohibited are:

(a) Willfully furnishing false information to college offices, officials, or judicial boards.

(b) Willfully providing incomplete information (with the intent of deceiving) to college offices, officials, or judicial boards.

(c) Willfully failing to appear before a college official or judicial board when properly notified to appear.

(d) Making, forging, printing, reproducing, copying, or altering any record, document, writing, or identification used or maintained by the college when done with intent to injure, defraud, or misrepresent.

(e) Willfully refusing to identify one's self when requested by an authorized college official having just cause. Students are expected to carry their college identification cards at all times.

(f) Transferring one's own college identification card to another person for the purpose of obtaining college services or privileges.

(g) Acting to obtain a college privilege or service to which the student is not entitled.

(h) Willfully providing erroneous information concerning a change in status concerning financial refunds or financial independence from parents or legal guardian.

2. Interference with Health, Safety or Rights of Other Persons

All members of the college community share the responsibility for protecting and maintaining community health and safety and the rights of other persons. Students are required to obey the statutes and laws of the nation and state, as well as the ordinances and laws of the village of Fredonia, city of Dunkirk, and towns of Pomfret and Dunkirk.

Conviction of a violation of such laws, statutes, or ordinances may be grounds for suspension or dismissal. Specifically prohibited are:

(a) Failing to comply with instructions of college or town officials having just cause to issue the instructions (e.g., faculty, staff, university police, safety, or fire officials carrying out properly assigned responsibilities).

(b) Willfully failing to comply with the final decision of a judicial board or administrative action.

(c) Misusing safety equipment or procedures including but not limited to tampering with fire equipment, fire alarms, exit lights; refusal to obey a fire alarm, initiating a false fire alarm, or submitting a bomb threat.

(d) Fighting and threats to, physical abuse of, or harassment which threatens to or does endanger the health, safety, or welfare of a member of the college community or any person. Breaching the peace; obstructing

or disrupting teaching, administrative or public service functions of the college; obstructing or disrupting disciplinary proceedings or authorized college activities.

(e) Engaging in any action or situation which recklessly or intentionally endangers the mental or physical health of a member of the college community; creating a situation that results in harassment of or excessive ridicule of a member of the college community or any person. (Education Law, section 6450 prohibits any individual or organization from engaging in any form of hazing, which recklessly or intentionally endangers the mental or physical health or involves the forced consumption of alcohol or drugs for the purpose of initiation or affiliation with any organization.)

(f) Participation in any form of non-consensual sexual intimacy and unwanted physical sexual conduct.

(g) Possessing firearms, explosives (including firecrackers), articles or substances usable as weapons or as a means of disrupting legitimate campus functions, activities, or assemblies, or with the intention to disrupt.

(h) Illegally using, possessing, selling, or distributing narcotics, stimulants, depressants, hallucinogens, marijuana or its derivatives.

(i) Participating in illegal activities such as gambling, games of chance, or those involving alcoholic beverages.

(j) Use of loudspeakers or other sound amplifying equipment without clearance as to time and place from the Office of Student Affairs.

(k) Posting of posters, handbills, or notices without permission of the appropriate college official.

(l) Smoking in non-smoking areas so designated by the college President or his/her designee.

(m) Willfully ignoring reasonable standards of cleanliness, and appropriate behavior.

(n) Engaging in cheating, plagiarism, or collusion on any examination or on assigned work.

(o) Willfully refusing to accept financial obligations incurred as a student enrolled at the college. (The college is empowered to refuse to register, graduate, or release records of any student who is delinquent in his/her obligations to the college.)

3. Care of College and Personal Property

Maintaining and preserving college grounds, academic buildings, resident and dining facilities, and other associated structures is an obligation of all members of the college community. Similarly, maintaining and preserving personal property is also an obligation. Prohibited are:

(a) Vandalism, theft, or embezzlement of, destruction of, damage to, unauthorized possession of, or inappropriate use of property belonging to the college, a member of the college community, or a campus guest.

(b) Destruction, mutilation, and defacement of or tampering with books, magazines, or other library materials or equipment.

(c) Unauthorized occupancy of or trespassing on college property or facilities.

4. Demonstration or Other Group or Individual Action

The campus must be open to a free exchange of ideas; therefore, all members of the community are expected to conduct dialogues with mutual respect and courtesy. Prohibited are:

(a) Willfully denying to other students, officials, employees, or invited guests of the college lawful freedom of movement on the campus, lawful use of the property or facilities of the college, or the right of lawful entrance to and exit from any of the college's facilities.

(b) Willfully impeding the staff or faculty of the college in the lawful performance of their duties, or willfully impeding any student of the college in the lawful pursuit of his or her legitimate educational or social activities, through the use of restraint, coercion, or intimidation, or when force and violence are presented or threatened.

(c) Engaging in any intentional overt activity resulting in the obstruction to, disruption of or interference with any of the legitimate missions, processes, procedures, or functions of the college.

(d) Refusing to vacate a building, street, sidewalk, driveway, or other facility of the college when directed to do so by an authorized official of the college having just cause to order such vacation.

(e) Making unnecessary noise or causing noise to be made with objects and instruments which disturb classes, meetings, study, sleep, or authorized activities.

College Judicial Board

The Judicial Board is the judicial court appointed by the President of the college and is the designated body which provides all members of the student body with the facilities for the adjudication of charges or violations.

The Judicial Board is composed of seven members. Five students and two faculty/staff are appointed for a term of one year. Members are nominated by the Student Affairs Committee and appointed by the college President.

Note: In order to be nominated, a student must have attained sophomore status (24 credit hours). All members must have been a member of the college community for at least one semester before taking office. No student may serve if he or she is on probation at the time of the appointment. No member of the Judicial Board may be a voting member of the Student Association, College Senate, or the Student Affairs Committee.

The Judicial Board has traditionally attracted students interested in the legal profession, but all students interested in campus governance are welcome to participate.

Community Standards of Behavior are designed to promote student growth and to preserve the atmosphere of learning necessary to the well-being of all students. These standards and procedures shall be implemented only through the Office of Student Affairs.

Any member of the college may make a complaint directly to the Office of Student Affairs, which administers the judicial system. If you are charged with a violation of the rules and regulations, the options exist; you may choose administrative action or have the right to a college judicial board hearing. Specific procedures to be followed if a case is referred to the Judicial Board are:

1. Any charge for violations may be placed against any student or any member of the college community by giving written notice of the charge, signed by the complainant, to the Office of Student Affairs.
2. The Office of Student Affairs shall give notice of the specific charges against the student, in writing, to insure that he/she may adequately prepare for his/her hearing. The notice shall clearly indicate the offense with specific reference to the violated regulation, and shall indicate the time and place of the hearing. The notification shall be presented to the accused at least five (5) days before the hearing. In cases where immediate relief has been requested, the five-day notification may be waived if deemed necessary with the concurrence of the Associate Vice President or his/her designee.
3. The Office of Student Affairs shall ensure that any student charged with a breach of university or college 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.
4. The Judicial Board shall examine all relevant acts and circumstances presented at the hearing and reach an equitable decision. A sufficient record of the proceedings shall be kept to enable review thereof and every reasonable attempt shall be made to keep the matter appropriately confidential.
5. The Judicial Board members shall not discuss or review matters under consideration outside of the hearing itself. Failure to observe this provision renders such member subject to impeachment procedures by the Faculty-Student Committee of Student Affairs. 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.
6. At the hearing, the student shall have ample 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, to respond to written statements submitted against him/her and to respond to questions. The Judicial Board shall also have the right to call and question witnesses, and to review material.
7. The student shall have the right to have an advisor of his/her choice. The advisor may not openly participate in the hearing.
8. No member of the Judicial Board shall be either a witness before the court or a person previously engaged in formulating the charge or in presenting materials related to the case.
9. All hearings shall be open unless requested by the defendant to be closed. The hearing may be closed by the chairperson of the Judicial Board if he/she feels it necessary

for orderly conduct of the hearing. A closed hearing shall mean that the public, including the press, shall not be allowed to attend the proceeding.

10. The student shall be notified, in writing, by the Office of Student Affairs of the final decision of his/her case. The student shall have the right to appeal the decision of the Judicial Board to the College President or his/her designee in writing within 5 days after the mailing of such notification.
11. Judicial Board records shall be filed with the Office of Student Affairs and released only in accordance with existing laws and statutes. Records shall be kept for five years.
12. The official student newspaper may be used periodically to inform the campus of action taken by the Judicial Board. Such notification shall be in the form of summary.
13. The student may waive, in writing, the requirements of a hearing. In such cases, a hearing body will consider the evidence. If the student does not waive the requirements of a hearing and does not appear for such a hearing, his/her case will be considered by the hearing body and a decision will be rendered in his/her absence.
14. Certain cases of student misconduct may require that official college action be taken. Although a variety of less formal action may be taken in many cases, the following are the official disciplinary actions.
 - a) Disciplinary Warning, which shall be issued to indicate to a student that his/her behavior is in violation of the college or university regulations.
 - b) Disciplinary Probation, which is a more stringent warning for a more serious or frequent violation. The probationary status shall be issued for a stated period of time and may include specific restrictions on the student.
 - c) Disciplinary Suspension, which separates the student from the college for a stated period of time. At the end of this period, the student may apply for readmission.
 - d) Disciplinary Dismissal, which permanently separates the student from the college.
15. In cases involving suspension or dismissal, the Judicial Board shall recommend such action to the President of the college or his/her designee, in which cases the College President's decision shall be final.
16. In all other cases, the decisions made by the Judicial Board will be final unless as they are reversed or altered by the written decision of the College President or his/her designee.
17. The Judicial Board may not adopt bylaws inconsistent with these rules and regulations upon the affirmative vote of not less than six members.
18. The Judicial Board shall have the power temporarily to suspend any or all activities, including financial transactions of any body, which fall under the jurisdiction of the board. In all matters involving this section, the President of the college or his/her designee shall be informed of and approve any action of this type before a decision is publicly rendered and implemented.

Policies on Hazing and Initiation or Affiliation With any Organization

The purpose of this policy is to specifically clarify those behaviors and activities which constitute a violation of college regulations and New York State Laws pertaining to hazing and to provide some guidance to student organizations in designing new member activities which serve to protect the human dignity of all persons which will be permitted by the college. This policy applies to all members of the student organization including alumni members. No organization may engage in any form of hazing as defined by the following:

Hazing in the First Degree

A person is guilty of hazing in the first degree when, in the course of another person's initiation into or affiliation with any organization, he/she intentionally or recklessly engages in conduct that creates a substantial risk of physical injury to such other person or third person and thereby causes injury. Hazing in the first degree is a Class "A" misdemeanor.

Hazing in the Second Degree

A person is guilty of hazing in the second degree when, in the course of another person's initiation into or affiliation with any organization, he/she intentionally or recklessly engages in conduct that creates a substantial risk of injury to such other person or a third person. Hazing in the second degree is a violation.

Hazing is defined as engaging in any action or creating a situation intentionally or unintentionally designed to produce mental or physical discomfort, harassment or excessive ridicule in the course of another person's initiation into an affiliation with any organization.

SUNY Fredonia reserves the right to revoke recognition of any student organization or club that is found to have violated these rules. Appropriate review of alleged violations may include review by the Vice President of Student Affairs and the college Judicial Board. Member organizations of the Panhellenic Council and Inter Fraternity Council may also be reviewed by their Judicial Boards/Standard Boards. Revocation of recognition may not preclude the imposition of the college Judicial Board; but when considered by the Vice President of 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.

Policies on Sexual Assault

The Fredonia campus will not tolerate sexual assault in any form, including acquaintance rape. Where there is probable cause to believe that the campus' regulations prohibiting sexual assault have been violated, the campus will pursue strong disciplinary action through its own channels. This discipline includes the possibility of suspension or dismissal from the college.

A student charged with sexual assault can be prosecuted under New York State criminal statutes and disciplined under the campus' code of student conduct. Even if the criminal justice authorities choose not to prosecute, the campus can pursue disciplinary action.

A student may be charged under Section 2 (d) of the Regulations Governing Student Conduct and Community Standards of Behavior.

Policies on Alcoholic Beverages

College philosophy is that alcohol, a drug socially accepted by many, can be used abusively. Members of the college community will be held accountable for inappropriate behavior while under the influence of alcohol. Supportive services will be made available for those whose consumption is abusive to themselves or to others.

The policies listed below, to be followed for consumption and use of alcoholic beverages at SUNY Fredonia, are not totally inclusive and do not cover all possible legal implications of the possession, consumption and sale of alcoholic beverages. College policies and applicable state laws are outlined on the next page:

1. Possession of alcoholic beverages is limited to individuals of legal purchase age in New York State. Any person who misstates or misrepresents his or her age through the presentation of false documents is in violation of the law and of college policy.
2. Possession of alcoholic beverages in any college building on the campus is prohibited except as hereafter provided.

(a) The President of the college or his/her designee is authorized to grant permission for the serving and consumption of alcoholic beverages for specified events and under such conditions as in his/her discretion he/she may determine. The exercise of such authority is wholly discretionary and may be suspended at any time by the President of the college or his/her designee.

(b) As allowed by the Alcoholic Beverage Policies and Guidelines for Events, adopted by the College Council in April 1980, and modified January 1990 and October 1994, all organizations, clubs, or groups sponsoring events in college facilities where alcoholic beverages will be served must adhere to the rules and regulations stated in this document. Copies of the Guidelines are available upon request through the Office of Student Affairs or the Campus Life Office in the Williams Center.

(c) Alcoholic beverages sold pursuant to the New York State Liquor Law License granted to the Faculty Student Association.

(d) **Students and guests who are of legal purchase age or older** may possess alcoholic beverages in moderation in their private rooms, subject to all regulations that may be established by the Office of Residence Life.

Fredonia C.A.R.E.S. Workshop

The Fredonia C.A.R.E.S. (Commitment to Alcohol Responsibility and Education for Students) Workshop is a 3-hour course led by the Alcohol and Substance Abuse Counselor at SUNY Fredonia. This workshop has been designed for students who have violated any alcohol/other drug-related college regulation or other college policies while under the influence. Additionally, students who would benefit from examining their alcohol/other drug (AOD) use or are interested in AOD education may also participate in this workshop.

Consensual Relationships (Faculty/Staff and Students)

The college does not encourage intimate consensual relationships between faculty/staff and students, and has a policy prohibiting intimate relationships between faculty and students in their classes, and faculty/staff and students they are directly supervising. The *Faculty Handbook* provides guidelines regarding this type of relationship and states the following:

“It is the sense of faculty through its College Senate that intimate consensual relationships between college personnel and students create the potential for abuses of authority and for both actual and apparent conflicts of interest.”

Students should be aware that if they enter into this type of relationship with college personnel, there may be consequences that impact on their educational experience. This may mean a student thus involved would be unable to take a course from this person or in any way be subject to their supervision authority.

Students with concerns in this matter are encouraged to contact the Office of Student Affairs, Sixth Floor Maytum Hall, 673-3271 or the Office of Academic Affairs, Eighth Floor Maytum Hall, 673-3335.

Policies on Cheating, Plagiarism, and Collusion

A Committee of the Faculty shall review cases of cheating, plagiarism, or collusion on any examination or assigned work and shall recommend to the President such action as they may deem necessary. (COLLEGE COUNCIL 1960)

A hearing body made up of faculty, administration and students shall review cases of alleged cheating, plagiarism, or collusion. This body shall be appointed by the Academic Vice President and shall include: the chairperson of the department in which the charge arises, two faculty members from that department (other than any faculty members involved), one from another discipline, one professional staff member from the Office of Student Affairs, the dean of the appropriate area, and two students who shall be upper level students, appointed by the President of the Student Association. The dean shall chair this hearing body and recommend to the Vice President for Academic Affairs such action as may be deemed necessary.

Procedures

1. The student charged with cheating, plagiarism, or collusion shall be entitled to a hearing before this body but may waive the right to a hearing.
2. The student charged shall be given a written notice of the specific charges stating the time, date and place of the hearing – sufficiently in advance to permit preparation of a defense – together with statements of the maximum penalty in the event such charges are proved. The student may waive in writing the requirement of written notice.
3. The student shall be given full opportunity to present to the hearing body his/her defense against the charges, and to produce oral testimony, written affidavits, and/or witnesses in his/her behalf.

4. The hearing body shall be impartial. No member of the hearing body shall be a witness for or against the student nor have been previously engaged in formulating the charge. The hearing body shall examine all relevant facts and circumstances without regard to the technical rules of evidence.

5. A sufficient record of the proceedings shall be kept to enable review thereof.

6. A written record of the committee’s determination with any recommendations for action shall be made and a copy provided to the student. Such report shall be submitted to the Vice President for Academic Affairs for review and such disciplinary action as he/she determines to be appropriate. The student shall be informed, in writing, of the vice president’s decision within a reasonable period of time.

Penalties

Disciplinary action may extend to suspension from privileges or expulsion from college.

Statement Regarding SUNY at Fredonia’s Celebration of Diversity

The college welcomes the experience, talent, and surge of energy that comes from a culturally diverse campus. It has pledged to ensure that everyone is treated fairly, without degradation of race, religion, ethnicity, gender, affection orientation, physical/mental challenge, or any other characteristic not germane to a person’s rights or human worth. Campus specifically prohibits:

- Fighting and threats to, physical abuse of, or harassment which threatens to or does endanger the health, safety, or welfare of a member of the college...
- Engaging in any action or situation that which recklessly or intentionally dangers the mental or physical health of a member of the college community; creating in a situation that results in the discomfort of, or harassment or excessive ridicule of a member of the college community.

All members of the campus community are expected to live, learn and work with a foundation of understanding and appreciation of differences. Faculty and staff, as mentors and educators, are encouraged to support this policy through personal interactions with students, classroom discussion, and careful selection of curricular materials and content.

Policy Statement on Religious Absences

The Education Law of New York says, in part:

1. No person shall be expelled from or be refused admission as a student to an institution of higher education for the reason that he/she is unable, because of his/her religious beliefs, to attend classes or to participate in any examination, study, or work requirement on a particular day or days.
2. Any student in an institution of higher education who is unable, because of his/her religious beliefs, to attend classes on a particular day or days shall, because of such absence on the particular day or days, be excused from any examination or any study or work requirements.

3. It shall be the responsibility of the faculty and of the administrative officials of each institution of higher education to make available to each student who is absent from school, because of his/her religious beliefs, an equivalent opportunity to make up any examination, study, or work requirements which he/she may have missed because of such absence on any day or days. No fees of any kind shall be charged by the institution for making available to the said student such equivalent opportunity.

4. If registration, classes, examinations, study or work requirements are held on Friday after four o'clock post meridian or on Saturday, similar or makeup classes, examinations, study, or work requirements shall be made available on other days, where it is possible and practicable to do so. No special fees shall be charged to the student for these classes, registration, examinations, study, or work requirements held on other days.

5. In effectuating the provisions of this section, it shall be the duty of the faculty and of the administrative officials of each institution of higher education to exercise the fullest measure of good faith. No adverse or prejudicial effects shall result to any student because of his/her availing himself/herself of the provisions of this section.

6. Any student, who is aggrieved by the alleged failure of any faculty or administrative officials to comply in good faith with the provisions of this section, shall be entitled to maintain an action or proceeding in the Supreme Court of the county in which such institution of higher education is located for the enforcement of his/her rights under this section.

(a) It shall be the responsibility of the administrative officials of each institution of higher education to give written notice to students of their rights under this section, informing them that each student who is absent from school, because of his or her religious beliefs, must be given an equivalent opportunity to register for classes or make up any examination, study or work requirements for which he or she may have missed because of such absence on any particular day or days. No fees of any kind shall be charged by the institution for making available to such student such equivalent opportunity.

7. As used in this section the term "institution of higher education" shall mean any institution of higher education, recognized and approved by the Regents of the University of the State of New York, which provides a course of study leading to the granting of a post-secondary degree or diploma. Such term shall not include any institution which is operated, supervised or controlled by a church or by a religious or denominational organization whose educational programs are principally designed for the purpose of training ministers or other religious functionaries or for the purpose of propagating religious doctrines. As used in this section, the term "religious belief" shall mean beliefs associated with any corporation organized and operated exclusively for religious purposes, which is not disqualified for tax exemption under Section 501 of the United States Code.

Policies on Motor Vehicles

All members of the college 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 (673-3465) 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.

The booklet, *Regulations Governing Motor Vehicle Use and Campus Parking Facilities*, is available at the University Police office in Gregory Hall and the Office of Student Accounts on the third floor of Maytum Hall.

Students, faculty and staff shall comply with all traffic and parking regulations in all campus areas and shall comply with all published regulations or be subject to fines. Failure to comply can result in the loss of campus driving, parking and vehicle registration privileges.

Computer and Network Usage Policy

I. Introduction

Access to modern information technology is essential to the state university mission of providing students, faculty and staff of the State University of New York 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 use of computing systems and software, internal and external data networks, as well as access to the World Wide Web, be made available to all those of the SUNY 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.

To assist and ensure such compliance, SUNY Fredonia establishes the following policy which supplements all applicable SUNY policies, including sexual harassment, patent and copyright, and student and employee disciplinary policies, as well as applicable federal and state laws.

II. General Principles

1. Authorized use of Fredonia-owned or operated computing and network resources shall be consistent with the education, research and public service mission of the State University of New York, and consistent with this policy.

2. Authorized users of Fredonia computing and network resources include faculty, staff, students, and other affiliated individuals or organizations authorized by SUNY Fredonia. Use by non-affiliated institutions and organizations shall be in accordance with SUNY Administrative Procedures Manual 007-1: Use of Computer Equipment or Services by Non-affiliated Institutions and Organizations.

3. This policy applies to all Fredonia computing and network resources, including host computer systems, Fredonia-sponsored computers and workstations, software, data sets, and communications networks controlled, administered, or accessed directly or indirectly by the

college's computer resources or services, employees, or students.

4. SUNY Fredonia reserves the right to limit access to its networks when applicable campus or university policies or codes, contractual obligations, or state or federal laws are violated, but does not monitor or generally restrict the content of material transported across those networks.

5. SUNY Fredonia reserves the right to remove or limit access to material posted on university-owned computers when applicable campus or university policies or codes, contractual obligations, or state or federal laws are violated, but does not monitor the content of material posted on university-owned computers.

6. SUNY Fredonia does not monitor or generally restrict material residing on Fredonia computers housed with a private domain or on non-Fredonia computers, whether or not such computers are attached to campus networks.

7. SUNY Fredonia reserves the right, upon reasonable cause for suspicion, to access all aspects of its computing systems and networks, including individual login sessions to determine if a user is violating this policy or state or federal laws.

This policy may be supplemented with additional guidelines by campus units that operate their own computers or networks, provided such guidelines are consistent with this policy.

III. User Responsibilities

Privacy: No user should view, copy, alter or destroy another's personal electronic files without permission (unless authorized or required to do so by law or regulation).

Copyright: Written permission from the copyright holder is required to duplicate any copyrighted material. This includes duplication of audiotapes, videotapes, photographs, illustrations, computer software, and all other information for educational use or any other purpose. Most software that resides on Fredonia computing-network(s) is owned by the University, SUNY Fredonia, or third parties, and is protected by copyright and other laws, together with licenses and other contractual agreements. Users are required to respect and abide by the terms and conditions of software use and redistribution licenses. Such restrictions may include prohibitions against copying programs or data for use on Fredonia computing network(s) or for distribution outside the University; against the resale of data or programs, or the use of them for non-educational purposes or for financial gain; and against public disclosure of information about programs (e.g., source code) without the owners authorization.

Personal Software: Installation of personal software is not allowed in campus computing labs.

Harassment, Libel and Slander: No user may, under any circumstances, use Fredonia computers or networks to libel, slander, or harass any other person.

Access to Computing Resources:

- *Accounts:* Accounts created by a system administrator for an individual are for the personal use of that individual only.

- *Sharing of Access:* Computer accounts, passwords, and other types of authorization are assigned to individual users and should not be shared with others. You are responsible for any use of your account. If an account is shared or the password divulged, the holder of the account will lose all account privileges and be held personally responsible for any actions that arise from the misuse of the account.
- *Permitting Unauthorized Access:* You may not run or otherwise configure software or hardware to intentionally allow access by unauthorized users.
- *Termination of Access:* When you cease being a member of the campus community (e.g., withdraw, graduate, terminate employment, or otherwise leave the university), or if you are assigned a new position and/or responsibilities with the State University system, your access authorization may be reviewed or terminated. You must not use facilities, accounts, access codes, privileges or information for which you are not authorized in your new circumstances.

Circumventing Security: Users are prohibited from attempting to circumvent or subvert any system's security measures. Users are prohibited from using any computing program or device to intercept or decode passwords or similar access control information. Creating your own fence around campus security is also prohibited.

Breaking Security: Deliberate attempts to degrade the performance of a computer system or network or to deprive authorized personnel of resources or access to any Fredonia computer or network is prohibited. Breach of security includes, but is not limited to, the following:

- Creating or propagating viruses.
- Hacking.
- Password grabbing.
- Disk scavenging.

Abuse of Computer Resources: Abuse of Fredonia computer resources is prohibited and includes, but is not limited to:

- *Game Playing:* Installing and/or playing recreational games on equipment in student labs is prohibited. Limited recreational game play, using other resources, which is not part of authorized and assigned research or instructional activity, is acceptable, but computing and network services are not to be used for extensive or competitive recreational game playing. Recreational game players occupying a seat in a public computing facility must give up the use of the terminal when others who need to use the facility for academic or research purposes are waiting.
- *Chain Letters:* The propagation of chain letters is considered an unacceptable practice by SUNY and is prohibited.
- *Unauthorized Servers:* The establishment of a background process that services incoming requests from anonymous users for purposes of gaming, chatting or browsing the Web is prohibited.

- *Unauthorized Monitoring:* A user may not use computing resources for unauthorized monitoring of electronic communications.
- *Flooding:* Unauthorized posting of a message to multiple list servers or news groups with the intention of reaching as many users as possible is prohibited.
- *Private Commercial Purposes:* The computing resources of Fredonia shall not be used for personal or private commercial purpose or for financial gain.
- *Political Advertising or Campaigning:* The use of Fredonia computers and works shall be in accordance with University policy on use of University facilities for political purposes (SUNY Administrative Procedures Manual Policy 008, Attach. A).

IV. Limitations on Users' Rights

1. The issuance of a password or other means of access is to assure appropriate confidentiality of Fredonia files and information and does not guarantee privacy for personal or improper use of university equipment or facilities.

2. SUNY Fredonia provides reasonable security against intrusion and damage to files stored on the central facilities. Fredonia also provides some facilities for archiving and retrieving files specified by users, and for recovering files after accidental loss of data. However, SUNY Fredonia is not responsible for unauthorized access by other users or for loss due to power failure, fire, floods, etc. Fredonia makes no warranties with respect to Internet services, and it specifically assumes no responsibilities for the content of any advice or information received by a user through the use of Fredonia's computer network.

3. Users should be aware that Fredonia computer systems and networks may be subject to unauthorized access or tampering. In addition, computer records, including e-mail, are considered "records" which may be accessible to the public under the provisions of the New York State Freedom of Information Law.

V. Web Policy

The SUNY Fredonia World Wide Web Home Page is an official publication of Fredonia. Unless otherwise indicated, all materials, including text and photographs, appearing on the Home Page or subsequent official home pages of specific departments are copyrighted and should not be reproduced without written permission from [campus officer]. Home pages linked to Fredonia's Home Page may be created by academic departments, programs, centers or institutes, administrative departments, or recognized student groups. Individual members of the faculty and staff may create their own, but must link them through their department's home page.

Individual students may create their own home page. Each student home page shall include the disclaimer that neither the page contents nor the link identifiers are monitored, reviewed, or endorsed by SUNY Fredonia.

VI. Sanctions

Violators of this policy will be subject to the existing student or employee disciplinary procedures of SUNY Fredonia. Sanctions may include the loss of computing privileges. Illegal acts involving Fredonia computing resources may also subject users to prosecution by state and federal authorities.

Approved May 1998 by Faculty Council.



SEXUAL DISCRIMINATION AND SEXUAL HARASSMENT

The College Policy

Sexual discrimination in the form of sexual harassment, defined as the use of one's authority and power to coerce another individual into sexual acts or relations or to punish the other for his/her refusal, shall be a violation of the policy of SUNY Fredonia.

What Is Sexual Discrimination?

"No person in the United States shall on the basis of sex be excluded from participation in, be denied the benefits of, or be subject to discrimination under any education program or activity receiving Federal financial assistance." Title IX of the Educational Amendments of 1972.

What Is Sexual Harassment?

Sexual harassment may include repeated unwelcome sexual advances, requests for sexual favors and other verbal or physical conduct of a sexual nature carried out by someone in the workplace or educational setting. Such behavior may offend the recipient, cause discomfort or humiliation and interfere with job or school performance.

Peer Harassment - Students have a right to an environment free from sexual harassment, not only by persons in positions of power, but by any member of the university community. Sexual harassment constitutes a serious threat to the free interaction and exchange necessary for educational and personal development.

Sexual harassment may range from inappropriate sexual innuendos to coerced sexual relations. It can happen to both men and women, but a woman is more often the victim.

What Can Be Done About Sexual Discrimination/Harassment?

What can a student do when he/she believes that . . .

- course material ignores or depreciates a student because of his/her sex?
- an adviser does not take a student's career and educational goals seriously because she/he appears to believe them inappropriate for members of his/her sex?
- a student is denied resources, such as financial aid, teaching assistantships, or admission to a program for sexist reasons?
- a student is pressured by a professor or staff person to participate with him/her in social and/or sexual activities?

Students often feel powerless in such situations but there are people on campus who are willing to talk to them about those problems without any obligation on the part of either party. Such situations as those described above are not condoned by SUNY Fredonia nor the teaching profession. In some instances they occur out of ignorance and misunderstanding and need only to be brought to the attention of the professor. In other instances they can be considered unethical and subject to professional reprimand.

Actions A Student Can Take

(In suggested order)

1. The student can talk to the professor or staff person, carefully explaining why he/she views the particular comment, joke, course reading, action taken, etc. as sexist. The student should regard the meeting as a kind of consciousness-raising session where he/she can help him/her understand how he/she feels. Sometimes people aren't aware of how their remarks or actions affect someone else, and communicating their feelings to the professor might be the most helpful to him/her in avoiding such actions in the future. The student is to be sure to prepare for the meeting ahead of time with documentation (e.g., class notes, tapes, specific comments he/she made and a logical presentation). Sometimes people don't understand how sexist remarks can hurt; it might help the student to draw the analogy of racist or anti-ethnic remarks - "Would you make fun of a person's skin color or ethnic background? Then why do so with sex?"

To get support the student should consider going to see the professor with several other people from class. If he/she can't find others in the class (and discussing the issues with other students in itself may help raise consciousness), he/she should take friends along who aren't in the class. The student might also seek help from those listed below.

2. The student should contact college people and groups who are concerned about sexual discrimination. These people are willing to listen, discuss specific incidents, and provide help and advice if wanted:

Sandra Lewis, Affirmative Action (ext. 3358)
Ann McCarron Burns, University Police (ext. 3465)
L. Michael Dimitri, Student Affairs (ext. 3271)
Leanna Jardin, Counseling Center (ext. 3424)
Laura Stonefoot, Student Affairs (ext. 3271)
Monica Brown, Multicultural Affairs (ext. 3398)



3. If a student has talked to the professor and staff person and sexual discrimination continues, the student should write a letter to him/her documenting the incidents and explaining why they are offensive. The student should state that he/she has not obtained results from previous discussion(s) and note the date(s) of the discussion(s). The student should send a carbon copy to the head of his/her department or unit and to one of the above-listed people. Students who fail to receive a satisfactory answer from the staff members and/or head, should request a meeting with the two of them and take along an objective third party (another professor or perhaps one of the people in the above list).

4. Students should not enroll in classes which are sexually discriminatory, and should let the professor know why they haven't enrolled. In filling out course evaluation forms, a student should make it known why he/she has been offended by such discriminatory comments or actions. If the professor has responded to earlier complaints and has made efforts to change, support those efforts in the evaluation. Students are asked to remember to always give full support to professors who are fair and who treat students as human beings regardless of sex.

5. It may be necessary to file a formal grievance or complaint. This is a very serious step and should not be undertaken without discussion and counsel with a staff member who understands established grievance procedures at SUNY Fredonia. Once again, students are asked to consult with one of the people on the above list.

FAMILY EDUCATIONAL RIGHTS AND PRIVACY ACT OF 1974

The Family Educational Rights and Privacy Act of 1974 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 defined as: the student's name, address, telephone listing, date and place of birth, major field of study, participation in officially recognized activities and sports, weight and height of members of athletic teams, dates of attendance, degrees and awards received, and the most recent previous educational agency or institution attended by the student.

Inquiries or complaints may be filed with the Family Educational Rights and Privacy Act Office, Department of Health, Education and Welfare, 330 Independence Avenue, S.W., Washington, D.C. 20201.

Copies of the SUNY Fredonia compliance policy and the Family Educational Rights and Privacy Act are available at the Office of Student Affairs.

RULES AND REGULATIONS FOR MAINTENANCE OF PUBLIC ORDER ON CAMPUS

Rules and regulations for maintenance of public order on premises of state-operated institutions of the State University of New York adopted by the State University Board of Trustees on June 18, 1969, and amended on July 10, 1969, April 9, 1970, April 29, 1970, and during the 1982-83 academic year.

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 nor 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. These rules may be supplemented by additional rules for the maintenance of public order heretofore or hereafter adopted for any individual institution, approved and adopted by the State University Trustees and filed with the Commissioner of Education and Board of Regents, but only to the extent that such additional rules are not inconsistent herewith. The rules hereby adopted shall govern the conduct of students, faculty, and other staff, licensees, invitees, and all other persons, whether or not their presence is authorized, upon the campus of any institution to which such rules are applicable and also upon or with respect to any other premises or property, under the control of such institution, used in its teaching, research, administrative, service, cultural, recreational, athletic, and other programs and activities, provided however, that charges against any student for violation of these rules upon the premises of any such institution other than the one at which he/she is in attendance shall be heard and determined at the institution in which he/she is enrolled as a student.
3. *Prohibited conduct.* No person, either singly or in concert with others, shall:
- Willfully cause physical injury to any other person, nor threaten to do so for the purpose of compelling or inducing such other person to refrain from any act which he/she has a lawful right to do or to do any act which he/she has a lawful right not to do.
 - Physically restrain or detain any other person, nor remove such person from any place where he/she is authorized to remain.
 - Willfully damage or destroy property of the institution or under its jurisdiction, nor remove or use such property without authorization.
 - Without permission, express or implied, enter into any private office of an administrative officer, member of the faculty, or staff member.
 - Enter upon and remain in any building or facility for any purpose other than its authorized use or in such manner as to obstruct its authorized use by others.
 - Without authorization, remain in any building or facility after it is normally closed.
 - Refuse to leave any building or facility after being required to do so by an authorized administrative officer.
 - Obstruct the free movement of persons and vehicles in any place to which these rules apply.
 - Deliberately disrupt or prevent the peaceful and orderly conduct of classes, lectures, and meetings or deliberately interfere with the freedom of any person to express his/her views, including invited speakers.
 - Knowingly have in his/her possession upon any premises to which these rules apply, any rifle, shotgun, pistol, revolver, or other firearm or weapon without the written authorization of the chief administrative officer whether or not a license to possess the same has been issued to such a person.
 - Willfully incite others to commit any of the acts herein prohibited with specific intent to procure them to do so.
4. *Freedom of Speech and Assembly: Picketing and Demonstrations.*
- No student, faculty, or other staff member or authorized visitor shall be subject to any limitation or penalty solely for the expression of his/her views nor for having assembled with others for such purpose. Peaceful picketing and other orderly demonstrations in public areas of ground and building will not be interfered with. Those involved in picketing and demonstrations may not, however, engage in specific conduct in violation of the provisions of the preceding section.
 - 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 institutions 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 supplementing or implementing these rules) shall:
- If he/she is a licensee or invitee, have his/her authorization to remain upon the campus or other property withdrawn and shall be directed to leave the premises. In the event of his/her failure to do so, he/she shall be subject to ejection.
 - If he/she is a trespasser or visitor without specific license or invitation, be subject to ejection.
 - If he/she is a student, be subject to expulsion or such lesser disciplinary action as the facts of the case may warrant, including suspension, probation, loss of privileges, reprimand, or warning.
 - If he/she is a faculty member having a term or continuing appointment, be guilty of misconduct and be subject to dismissal or termination of his/her employment or such lesser disciplinary action as the facts may warrant including suspension without pay or censure.
 - If he/she is a staff member in the classified service of the civil service, described in Section 75 of the Civil Service Law, be guilty of misconduct, and be subject to the penalties prescribed in said section.
 - If he/she is a staff member other than one described in subdivisions (d) and (e), be subject to dismissal, suspension without pay, or censure.
6. *Procedure.*
- The chief administrative officer or his/her designee shall inform any licensee or invitee who shall violate any provisions of these rules (or of the rules of any individual institution supplementing or implementing these rules) that his/her license or invitation is withdrawn and shall direct him/her to leave the campus or other property of the institution. In the event of his/her failure or refusal to do so, such officer shall cause his/her ejection from such campus or property.
 - In the case of any other violator, who is neither a student nor faculty or other staff member, the chief administrative officer or his/her designee shall inform him/her that he/she is not authorized to remain on the campus or other property of the institution and direct him/her to leave such premises. In the event of his/her failure or refusal to do so, such officer shall cause his/her ejection from such campus or property. Nothing in this subdivision shall be construed to authorize the presence of any such person at any time prior to such violation nor to affect his/her liability to prosecution for trespass or loitering as prescribed in the Penal Law.
 - 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 9 of this Part.
 - 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 138 of the policies of the Board of Trustees.
 - 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.
 - 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.*
- 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 he/she 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.
 - It is not intended by any provision herein to curtail the rights of students, faculty, or staff to be heard upon any matter affecting them in their relations with the institution. In the case of any apparent violation of these rules (or of the rules of any individual institution supplementing or implementing these rules) by such persons, which, in the judgment of the chief administrative officer or his/her designee, does not pose any immediate threat of injury to person or property, such officer may make reasonable effort to learn the cause of the conduct in question and to persuade those engaged therein to desist and to resort to permissible methods for the resolution of any issues which may be presented. In doing so, such officer shall warn such persons of the consequences of persistence in the prohibited conduct, including their

ejection from any premises of the institution where their continued presence and conduct is in violation of these rules (or of the rules of any individual institution supplementing or implementing these rules).

(c) In any case where violation of these rules (or of the rules of any individual institution supplementing or implementing these rules) does not cease after such warning and in other cases of willful violation of such rules, the chief administrative officer or his/her designee shall cause the ejection of the violator from any premises which he/she occupies in such violation and shall initiate disciplinary action as hereinbefore provided.

(d) The chief administrative officer or his/her designee may apply to the public authorities for any aid which he/she deems necessary in causing the ejection of any violator of these rules (or of the rules of any individual institution supplementing or implementing these rules) and he/she may request the State University counsel to apply to any court of appropriate jurisdiction for an injunction to restrain the violation or threatened violation of such rules.

8. *Communication.* In matters of the sort to which these rules are addressed, full and prompt communication among all components of the institutional community, faculty, students, and administration, is highly desirable. To the extent that time and circumstances permit, such communication should precede the exercise of the authority, discretion, and responsibilities granted and imposed in these rules. To these ends each state-operated institution of the State University shall employ such procedures and means, formal and informal, as will promote such communication.

9. *Notice, Hearing and Determination of Charges Against Students.*

(a) The term "chief administrative officer," as used in these rules, shall be deemed to mean and include any person authorized to exercise the powers of that office during a vacancy therein or during the absence or disability of the incumbent and for purposes of this section shall also include any designee appointed by said officer.

(b) Whenever a complaint is made to the chief administrative officer of any state-operated institution of the University of a violation by a student or students of the rules prescribed in this Part (or of any rules adopted by an individual institution supplementing or implementing such rules) or whenever he/she has knowledge that such a violation may have occurred, he/she shall cause an investigation to be made and the statements of the complainants, if any, and of other persons having knowledge of the facts reduced to writing. If he/she is satisfied from such investigation and statements that there is reasonable ground to believe that there has been such a violation, he/she shall prepare or cause to be prepared charges against the student or students alleged to have committed such violation which shall state the provision prescribing the offense and shall specify the ultimate facts alleged to constitute such offense.

(c) Such charges shall be in writing and shall be served on the student or students named therein by delivering the same to him/her or them personally, if possible, or, if not, by mailing a copy of such charges by registered mail to such student or students at his/her or their usual place or places of abode while attending college and also to his/her or their home address or addresses, if different.

(d) The notice of charges so served shall fix a date for hearing thereon not less than 10 nor more than 15 days from the date of service which shall be the date of mailing where necessary to effect service by mail. Failure to appear in response to the charges on the date fixed for hearing, unless there has been a continuance for good cause shown, shall be deemed to be an admission of the facts stated in such charges and shall warrant such action as may then be appropriate thereon. Before taking such action the Hearing Committee, hereinafter referred to, shall give notice to any student, who has failed to appear, in the manner prescribed in paragraph (c), of its proposed findings and recommendations to be submitted to the chief administrative officer and shall so submit such findings and recommendations 10 days thereafter unless the student has meanwhile shown good cause for his/her failure to appear, in which case a date for hearing shall be fixed.

(e) Upon demand at any time before or at the hearing the student charged or his/her representative, duly designated, shall be furnished a copy of the statements taken by the chief administrative officer in relation to such charges and with the names of any other witnesses who will be produced at the hearing in support of the charges, provided, however, that this shall not preclude the testimony of witnesses who were unknown at the time of such demand.

(f) The chief administrative officer may, upon the service of charges, suspend the student named therein from all or any part of the institution's premises or facilities, pending the hearing and determination thereof, whenever, in his/her judgment, the continued presence of such student would constitute a clear danger to

himself/herself or to the safety of persons or property on the premises of the institution or would pose an immediate threat of disruptive interference with the normal conduct of the institution's activities and functions, provided, however, that the chief administrative officer shall grant an immediate hearing on request of any student so suspended with respect to the basis for such suspension.

(g) There shall be constituted at each state-operated institution a Hearing Committee to hear charges against students of violation of the rules for maintenance of public order prescribed by or referred to in this Part. Such committee shall consist of three members of the administrative staff and three members of the faculty, designated by the chief administrative officer, and three students who shall be designated by the members named by the chief administrative officer. Each such member shall serve until his/her successor or replacement has been designated. No member of the committee shall serve in any case where he/she is a witness or is or has been directly involved in the events upon which the charges are based. In order to provide for cases where there may be such a disqualification and for cases of absence or disability, the chief administrative officer shall designate an alternate member of the administrative staff and an alternate member of the faculty, and his/her principal designees shall designate an alternate student member, to serve in such cases. Any five members of the committee may conduct hearings and make findings and recommendations as hereinafter provided.

At any institution where the chief administrative officer determines that the number of hearings which will be required to be held is, or may be, so great that they cannot otherwise be disposed of with reasonable speed, he/she may determine that the Hearing Committee shall consist of six members of the administrative staff and six members of the faculty to be designated by him/her and of six students who shall be designated by the members so designated by him/her. In such event the chief administrative officer shall designate one of such members as chairperson who may divide the membership of the committee into three divisions each to consist of two members of the administrative staff, two faculty members, and two students and may assign charges among such divisions for hearing. Any four members of each such division may conduct hearings and make recommendations as hereinafter provided.

(h) The Hearing Committee shall not be bound by the technical rules of evidence but may hear or receive any testimony or evidence which is relevant and material to the issues presented by the charges and which will contribute to a full and fair consideration thereof and determination thereon. A student against whom the charges are made may appear by and with representatives of his/her choice. He/she may confront and examine witnesses against him/her and may produce witnesses and documentary evidence in his/her own behalf. There may be present at the hearing: the student charged and his/her representatives and witnesses; other witnesses; representatives of the institutional administration; and, unless the student shall request a closed hearing, such other members of the institutional community or other persons, or both, as may be admitted by the Hearing Committee. A transcript of the proceedings shall be made.

(i) Within 20 days after the close of a hearing the Hearing Committee shall submit a report of its findings of fact and recommendations for disposition of the charges to the chief administrative officer, together with a transcript of the proceedings, and shall at the same time transmit a copy of its report to the student concerned or his/her representative. Within 10 days thereafter the chief administrative officer shall make his/her determination thereon. Final authority to dismiss the charges or to determine the guilt of those against whom they are made and to expel, suspend, or otherwise discipline them shall be vested in the chief administrative officer. If he/she shall reject the findings of the Hearing Committee in whole or in part he/she shall make new findings which must be based on substantial evidence in the record and shall include them in the notice of his/her final determination which shall be served the student or students with respect to whom it is made.

NEW YORK STATE EDUCATION DEPARTMENT POSTSECONDARY COMPLAINT NOTICE

Please note that the State University at Fredonia administers internal procedures to receive, investigate and resolve student complaints concerning requirements established in this catalog. Informal and formal means by which students can seek redress of grievances are identified through this document. Students are assured of a reasonable and appropriate time frame for investigating and resolving a formal complaint, that final determination of each formal complaint will be made by a person or persons not directly involved in the alleged problem, that assurances that no adverse action will be taken against a student filing a complaint and that notice to students about the state consumer complaint process has been made.

Informal and formal complaints should be initiated in the appropriate departments. In the absence of a timely response or resolution, a student should contact one of the following offices:

Office of the Vice President for Academic Affairs, 8th floor, Maytum Hall (Ext. 3335)

Office of the Vice President for Student Affairs, 6th floor, Maytum Hall (Ext. 3271)

Office of the Vice President for Administration, 5th floor, Maytum Hall (Ext. 3109)

Office of Human Resources, 5th floor, Maytum Hall (Ext. 3434)

In addition, in New York State, a complaint may be filed by any person with reason to believe that an institution has acted contrary to its published standards or that conditions at the institution appear to jeopardize the quality of the institution's instructional programs or the general welfare of its students. Any person who believes he or she has been aggrieved by an institution on or after May 4, 1994, may file a written complaint with the department within three years of the alleged incident.

How to File a Complaint

1. The person should first try to resolve the complaint directly with the institution by following the internal complaint procedures provided by the institution. An institution of higher education is required to publish its internal complaint procedure in a primary information document such as the catalog or student handbook. (The department suggests that the complainant keep copies of all correspondence with the institution.)

2. If a person is unable to resolve the complaint with the institution or believes that the institution has not properly addressed the concerns, he or she may send a letter or telephone the Postsecondary Complaint Registry to request a complaint form. Please telephone (212) 951-6493 or write to:

New York State Education Department
Postsecondary Complaint Registry
One Park Avenue, 6th Floor
New York, NY 10016

3. The Postsecondary Complaint Registry Form should be completed, signed, and sent to the above address. The completed form should indicate the resolution being sought and any efforts that have been made to resolve the complaint through the institution's internal complaint processes. Copies of all relevant documents should be included.

4. After receiving the completed form, the department will notify the complainant of its receipt and make any necessary request for further information. When appropriate, the department will also advise the institution that a complaint has been made and, when appropriate, the nature of the complaint. The complainant will also be notified of the name of the evaluator assigned to address the specific complaint. The evaluator may contact the complainant for additional information.

5. The department will make every effort to address and resolve complaints within 90 days from receipt of the complaint form.

Complaint Resolution:

Some complaints may fall within the jurisdiction of an agency or organization other than the State Education Department. These complaints will be referred to the entity with appropriate jurisdiction. When a complaint concerns a matter that falls solely within the jurisdiction of the institution of higher education, the complainant will be notified and the department will refer the complaint to the institution in question and request that the matter receive a review and response.

Upon conclusion of the department's complaint review or upon a disposition of the complaint by referral to another agency or organization, or to the institution of higher education, the department will issue a written notice to the complainant describing the resolution of the complaint. The complainant may contact the department evaluator directly for follow-up information or for additional assistance.



GENERAL STATEMENT

State University of New York

State University of New York's 64 geographically dispersed campuses bring educational opportunity within commuting distance of virtually all New Yorkers and comprise the nation's largest comprehensive system of public higher education.

When founded in 1948, the university consolidated 29 state-operated but unaffiliated institutions whose varied histories of service dated as far back as 1816. It has grown to a point where its impact is felt educationally, culturally and economically the length and breadth of the state.

As a comprehensive public university, SUNY provides a meaningful educational experience to the broadest spectrum of individuals. Nearly 367,000 students are pursuing traditional study in classrooms and laboratories or are working at home, at their own pace, through such innovative institutions as the SUNY Learning Network and Empire State College, for over 25 years a leader in non-traditional education, distance learning, and assessment of prior learning.

Of the total enrollment, approximately 36.6 percent of the students are 25 years of age or older, reflecting State University's services to specific constituencies, such as training courses for business and industry, continuing educational opportunities for the professional community, and personal enrichment for more mature persons.

SUNY's students are predominantly New York State residents. Representing every one of the state's 62 counties, they make up more than 96 percent of the university's undergraduate student population. SUNY students also come from every other state in the United States, from four U.S. territories or possessions, and from more than 160 foreign countries.

SUNY enrolls 35 percent of all New York State high school graduates, and its total enrollment of just under 370,000 (full-time and part-time) is approximately 37 percent of the state's entire higher education student population. Between 1976 and 1997, the university recorded a 167 percent increase in the enrollment of African, Asian, Hispanic and Native Americans, compared with a 63 percent average increase among colleges and universities across the state.

Because of its structure and comprehensive programs, SUNY offers students a wide diversity of educational options: short-term vocational/technical courses, certificate programs, baccalaureate degrees, graduate degrees and post-doctoral studies. The university offers access to almost every field of academic or professional study somewhere within the system - some 5,180 programs of study overall.

Curricula range from those in the more conventional career fields, such as business, engineering, medicine, teaching, performing arts, social work, finance and forestry, to those concerned with tomorrow's developing and societal needs in the areas of environmental science, urban studies, immunology, information systems, biotechnology, telecommunications, microbiology and health services management.

As part of the university's commitment to bring to the students of New York the very best and brightest scholars, scientists, artists and professionals, SUNY's distinguished faculty is recruited from the finest graduate schools and universities throughout the United States and many countries around the world, and includes nationally and internationally recognized figures in all the major disciplines. Their efforts are regularly recognized in numerous prestigious awards and honors, including the Nobel Prize.

State University's research contributions are helping to solve some of today's most urgent problems. At the same time, contracts and grants received by university faculty directly benefit the economic development of the regions in which they are located.

SUNY researchers pioneered nuclear magnetic resonance imaging and the supermarket bar code scanner, introduced time-lapse photography of forestry subjects, isolated the bacteria that causes Lyme disease, and developed the first implantable heart pacemaker. Other university researchers continue important studies in such wide-ranging areas as breast cancer, immunology, marine biology, sickle-cell anemia, and robotics, and make hundreds of other contributions, inventions and innovations for the benefit of society.

The university's program for the educationally and economically disadvantaged, consisting of Educational Opportunity Programs (EOP) and Educational Opportunity Centers (EOC), has become a model for delivering better learning opportunities to young people and adults traditionally bypassed by higher education. Over the past 30 years, almost 482,000 New York State residents have been served.

EOPs currently serve 11,225 students at 46 SUNY campuses, providing counseling and tutoring to improve scholastic performance, and support services in such areas as academic planning, housing and financial aid. At EOCs in 10 locations across the state, an additional 13,000 students are

improving educational competencies, preparing for college entry, or learning marketable skills and occupations.

The 30 locally-sponsored two-year community colleges operating under the program of SUNY offer local citizens programs that are directly and immediately job-related as well as degree programs that serve as job-entry educational experience or a transfer opportunity to a baccalaureate degree at a senior campus. In the forefront of efforts to meet the accelerating pace of technological developments and the requirements of continuing educational opportunity, they provide local industry with trained technicians and help companies and employees in retraining and skills upgrading.

In 1998, the Governor and the State Legislature approved a multi-year, \$2 billion capital construction program for the university. This investment in critical maintenance will protect the university's infrastructure, valued at nearly \$11 billion, and enable the university to keep pace with modern technology for the benefit of its students and faculty.

As a public university, SUNY has a special responsibility to make its rich and varied resources accessible to all. By focusing its educational system on the needs of the state, the university becomes a valuable resource for meeting those needs for today and tomorrow.

SUNY believes efficiencies in instructional delivery and administrative transactions can be achieved while preserving affordable, quality higher education for its students. In 1995, the Board of Trustees developed the document, "Rethinking SUNY," in response to a call from the State Legislature for a "multi-year, comprehensive system-wide plan to increase cost efficiency." Underlying "Rethinking SUNY" is the theme of increasing efficiency by empowering campuses to manage directly more of their academic and financial affairs and by eliminating disincentives to the prudent use of campus and system resources.

SUNY's involvement in the health sciences and health care is extensive and responsive to the rapid changes in society and the growing needs identified by the state's public health community. Hundreds of thousands of New York's citizens are served each year by medical and health sciences faculty and students in university hospitals and clinics or affiliated hospitals.

The university's economic development services programs provide research, training and technical assistance to the state's business and industrial community through Business and Industry Centers, the New York State Small Business Development Center, the Strategic Partnership for Industrial Resurgence, Rural Services Institutes, the Trade Adjustment Assistance Center, Technical Assistance Centers, Small Business Institutes, Centers for Advanced Technology, and international development.

SUNY's libraries, the major resource which supports the teaching and research activities of its students and faculty, are an important community resource too. Nearly 6 million items were circulated by campus libraries in fiscal year 1995-96, another 3 million items were used in-house and almost a quarter million items were made available to the wider community through interlibrary loan. Increasingly, the circulation methods reflected in these traditional statistics are supplemented by electronic and Internet access. Annual attendance at the university's libraries is more than 21 million students, faculty and public citizens. More than 20 million volumes and government documents are available, as well as nearly 14,000 CD-ROMS and other computer files. More than 2 million reference questions were answered, many consisting of requests for help with CD-ROM and online database searches.

The university passed a major milestone in the mid-1980s when it graduated its one-millionth alumnus, and currently numbers 1.9 million graduates on its rolls. The majority of SUNY's alumni reside and pursue careers in communities across New York State, contributing to the economic and social vitality of its people.

State University of New York is governed by a Board of Trustees, appointed by the Governor, which directly determines the policies to be followed by the 34 state-supported campuses. Community colleges have their own local boards of trustees whose relationship to the SUNY Board of Trustees is defined by law.

The university's motto is, "To Learn - To Search - To Serve."

STATE UNIVERSITY OF NEW YORK

UNIVERSITY CENTERS

State University of New York at Albany
State University of New York at Binghamton
State University of New York at Buffalo
State University of New York at Stony Brook

UNIVERSITY COLLEGES

State University College at Brockport
State University College at Buffalo
State University College at Cortland
State University Empire State College
State University College at Fredonia
State University College at Geneseo
State University College at New Paltz
State University College at Old Westbury
State University College at Oneonta
State University College at Oswego
State University College at Plattsburgh
State University College at Potsdam
State University College at Purchase

HEALTH SCIENCE CENTERS

State University Health Science Center at Brooklyn
State University Health Science Center at Syracuse

COLLEGES OF TECHNOLOGY

State University College of Technology at Alfred
State University College of Technology at Canton
State University College of Agriculture and Technology
at Cobleskill
State University College of Technology at Delhi
State University College of Agriculture and Technology
at Morrisville

SPECIALIZED COLLEGES

State University College of Environmental Science and
Forestry
State University Maritime College
State University College of Optometry
State University Institute of Technology at Utica/Rome
State University College of Technology at Farmingdale

STATUTORY COLLEGES

New York State College of Ceramics at Alfred University
New York State College of Agriculture and Life Sciences
at Cornell University
New York State College of Human Ecology at Cornell
University
New York State School of Industrial and Labor Relations
at Cornell University
New York State College of Veterinary Medicine at
Cornell University

COMMUNITY COLLEGES

Adirondack Community College at Glens Falls
Broome Community College at Binghamton
Cayuga County Community College at Auburn
Clinton Community College at Plattsburgh
Columbia-Greene Community College at Hudson
Corning Community College at Corning
Dutchess Community College at Poughkeepsie
Erie Community College at Williamsville, Buffalo and
Orchard Park
Fashion Institute of Technology at New York City
Finger Lakes Community College at Canandaigua
Fulton-Montgomery Community College at Johnstown
Genesee Community College at Batavia
Herkimer County Community College at Herkimer
Hudson Valley Community College at Troy
Jamestown Community College at Jamestown
Jefferson Community College at Watertown
Mohawk Valley Community College at Utica
Monroe Community College at Rochester
Nassau Community College at Garden City
Niagara County Community College at Sanborn
North County Community College at Saranac Lake,
Malone and Ticonderoga
Onondaga Community College at Syracuse
Orange County Community College at Middletown
Rockland Community College at Suffern
Schenectady County Community College at
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SUNY Fredonia Office/Telephone Directory (all Area Code 716)

College President's Office	138 Fenton Hall	673-3456
Vice President for Academic Affairs	818 Maytum Hall	673-3336
Vice President for Administration	501 Maytum Hall	673-3109
Vice President for Development and College Relations	2148 Fenton Hall	673-3321
Vice President for Student Affairs	611 Maytum Hall	673-3271
Associate Vice President for Academic Affairs and Graduate Dean	810 Maytum Hall	673-3808
Associate Vice President for Administration and Executive Director Faculty Student Association	1st Floor Gregory Hall	673-3417, Ext. 221
Associate Vice President for Development and College Relations	2148 Fenton Hall	673-3251
Associate Vice President for Student Affairs	608 Maytum Hall	673-3271
Service Offices		
Academic Advising	614 Maytum	673-3188
Admissions	Fenner House	673-3251
Athletic Facilities Information		673-3232
Bookstore	Lower Level, Williams Center	673-3417, Ext. 249
Campus Life Office	G117 Williams Center	673-3143
Career Development Office	219 Gregory Hall	673-3327
Central Box Office	1st Floor, Williams Center	673-3501
Counseling Center	LoGrasso Hall	673-3424
Educational Development Program	E286 Thompson Hall	673-3317
Facilities Management	Services Complex	673-3452
Faculty Student Association (Food Services)	1st Floor Gregory Hall	673-3417, Ext. 232
Field Experiences (Student Teaching)	E262 Thompson Hall	673-3443
Financial Aid	214 Maytum Hall	673-3253
Fredonia College Foundation	2158 Fenton Hall	673-3251
Graduate Studies	810 Maytum Hall	673-3808
Health Center	LoGrasso Hall	673-3131
Human Resources	510 Maytum Hall	673-3434
International Education	LoGrasso Hall	673-3451
Internships	LoGrasso Hall	673-3451
Intramurals and Recreation	154 Dods Hall	673-3590
Learning Center	4th Floor Reed Library	673-3550
Lifelong Learning	LoGrasso Hall	673-3177
Media Relations	214 Fenton Hall	673-3323
Multicultural Affairs (Center for)	E125 Thompson Hall	673-3398
Native American Consortium	E116 Thompson Hall	673-3170
Reed Library (Information)		673-3222
Registrar	108 Maytum Hall	673-3171
Residence Life	2nd Floor Gregory Hall	673-3341

Rural Regional Development and Governance (Center for)	44 LoGrasso Hall	673-3449
Student Accounts	309 Maytum Hall	673-3236
Student Affairs	608 Maytum Hall	673-3271
University Police	2nd Floor Gregory Hall	673-3465
Youngerman Center for Communication Disorders	W121 Thompson Hall	673-3202

Academic Departments/Programs

Accounting	W301 Thompson Hall	673-3505
Biochemistry	204 Houghton Hall	673-3248
Biology	203 Jewett Hall	673-3282
Business Administration	W301 Thompson Hall	673-3505
Chemistry	207 Houghton Hall	673-3281
Communication	326 McEwen Hall	673-3410
Cooperative Engineering/Agriculture	116 Houghton Hall	673-3302
Computer Science	223 Fenton Hall	673-3243
Economics	E366 Thompson Hall	673-3509
Education	E268 Thompson Hall	673-3311
English	277 Fenton Hall	673-3125
Geosciences	106 Houghton Hall	673-3303
Health Services Administration	W375 Thompson Hall	673-4612
Health, Wellness and Recreation	116 Dods Hall	673-3101
History	E332 Thompson Hall	673-3277
Industrial Management	116 Houghton Hall	673-3302
Interdisciplinary Studies	810 Maytum Hall	673-3808
Mathematics	223 Fenton Hall	673-3243
Media Arts	316 McEwen Hall	673-4723
Medical Technology	112 Jewett Hall	673-3283
Modern Languages and Literatures	2111 Fenton	673-3380
Music	1004 Mason Hall	673-3151
Musical Theatre	1004 Mason Hall/ 213 Rockefeller Arts Center	673-3151/ 673-3596
Philosophy	2111 Fenton Hall	673-3495
Physics	118 Houghton Hall	673-3301
Political Science	E366 Thompson Hall	673-3207
Pre-Medicine and Allied Areas	203 Jewett Hall	673-3282
Psychology	W357 Thompson Hall	673-3129
Recombinant Gene Technology	203 Jewett Hall	673-3282
Social Work	W377 Thompson Hall	673-3570
Sociology/Anthropology	W363 Thompson Hall	673-3205
Sound Recording Technology	1004 Mason Hall	673-3151
Speech Pathology and Audiology	W121 Thompson Hall	673-3202
Theatre and Dance	213 Rockefeller Arts Center	673-3596
Visual Arts	216 Rockefeller Arts Center	673-3537