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BUFFALO STATE COLLEGE

UNDERGRADUATE CATALOG

2011–2012

Buffalo State College

1300 Elmwood Avenue
Buffalo, NY 14222-1095

www.buffalostate.edu

Buffalo State College is an affirmative action/equal opportunity institution that subscribes to all federal, state, and SUNY legal requirements and does not discriminate against applicants, students, or employees on the basis of race, sex, ethnicity, national origin, sexual orientation, gender identity, religion, age, disability, or marital or veteran status. Any violation of this policy should be reported to the Equity and Campus Diversity Office, Cleveland Hall 415, (716) 878-6210. It is the policy of Buffalo State College that no otherwise qualified person with a disability shall, solely by reason of the disability, be excluded from participation in employment or access to programs of the college. The Buffalo State College TTY/TDD phone number is (716) 878-3182.

This catalog is current as of May 2011. The college reserves the right to cancel any course described in this catalog and to change any rules governing curriculum, administration, tuition, fees, admissions, regulations affecting students, dates, and course content. Each student is expected to have knowledge of the information contained in this catalog and in other college publications. This catalog describes all undergraduate programs of the college. For graduate programs, consult the graduate catalog. For programs offered during the summer, consult the summer session schedule.

This publication was funded by an appropriation made available to Buffalo State College. The offices of the vice presidents supplied copy for their respective areas of responsibility. The Academic Affairs Office coordinated the collection of data for this catalog.

This publication is available in large print or other accessible formats upon request; contact the Academic Affairs Office.

CONTENTS

Buffalo State College Undergraduate Programs.....	3
Accreditations.....	4
Buffalo State College.....	5
Facilities, Services, and Special Programs.....	7
Admissions	17
Finances.....	21
Financial Aid.....	24
Academic Policies.....	31
Academic Organization.....	47
Collegewide Degree Requirements for Baccalaureate Degrees	48
Undergraduate Programs	53
Course Listings	136
Administration	238
Faculty.....	240
Staff.....	247
Index.....	254

BUFFALO STATE COLLEGE UNDERGRADUATE PROGRAMS

Anthropology	57
Applied Mathematics	105
Applied Sociology	127
Art	57
Art Education (K–12)	58
Art History	59
Arts and Letters	59
Biology	60
Biology Education (7–12)	61
Biology Education (7–12; 5–6 Extension)	61
Business Administration	63
Business and Marketing Education	64
Career and Technical Education	65
Ceramics	66
Chemistry	67
Chemistry Education (7–12)	68
Chemistry Education (7–12; 5–6 Extension)	69
Childhood Education (Grades 1–6)	72
Communication Design	79
Communication Studies	80
Computer Information Systems	81
Criminal Justice	81
Dietetics: Coordinated Program	83
Dietetics: Didactic Program	83
Earth Science Education (7–12)	85
Earth Science Education (7–12; 5–6 Extension)	86
Earth Sciences	87
Economics	88
Electrical Engineering Technology (Electronics)	89
Electrical Engineering Technology (Power and Machines)	90
English	90
English Education (7–12)	91
Exceptional Education	93
Fashion and Textile Technology	93
Fibers	95
Forensic Chemistry	96
French Education (7–12)	97
French Language and Literature	99
Geography	99
Geology	100
Health and Wellness	100
History	101

Hospitality Administration	101
Individualized Studies	102
Industrial Technology	102
Interior Design	103
Journalism	103
Mathematics	105
Mathematics Education (7–12)	106
Mathematics Education (7–12; 5–6 Extension)	107
Mechanical Engineering Technology	108
Media Production	108
Metals/Jewelry	109
Music	110
Music Education (Pre-K–12)	111
Painting	111
Philosophy	112
Photography	112
Physics	113
Physics Education (7–12)	114
Physics Education (7–12; 5–6 Extension)	115
Political Science	116
Printmaking	118
Psychology	118
Public Communication	120
Sculpture	121
Social Studies Education (7–12)	121
Social Studies Education (7–12; 5–6 Extension)	123
Social Work	126
Sociology	126
Spanish Education (7–12)	127
Spanish Language and Literature	129
Speech-Language Pathology	130
Technology Education	130
Television and Film Arts	131
Theater	132
Urban and Regional Analysis and Planning	132
Wood/Furniture	133
Writing	134

ACCREDITATIONS

Buffalo State is accredited by the Commission on Higher Education of the Middle States Association of Colleges and Schools, 3624 Market Street, Philadelphia, PA 19104; (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 Accreditation. Buffalo State also is accredited by the Board of Regents, University of the State of New York. In addition, the following professional organizations have determined that Buffalo State programs meet their accreditation requirements:

Accreditation Association for Ambulatory Health Care (Weigel Health Center)

Accreditation Board for Engineering and Technology (ABET)*

Accrediting Council on Education in Journalism and Mass Communications (ACEJMC)

American Association of Museums (Burchfield Penney Art Center)

American Speech-Language-Hearing Association Council on Academic Accreditation (ASHA)

American Dietetic Association, Commission on Accreditation for Dietetics Education (CADE)**

Council for Interior Design Accreditation (CIDA)

Council on Social Work Education (CSWE)

International Association of Counseling Services (Counseling Center)

National Association of Industrial Technology (NAIT)

National Association of Schools of Art and Design (NASAD)

National Association of Schools of Music (NASM)

National Association of Schools of Theatre (NAST)

National Council for Accreditation of Teacher Education (NCATE)***

**Accreditation Board for Engineering and Technology, 111 Market Place, Suite 1050, Baltimore, MD 21202, (410) 347-7700.*

***The didactic program in dietetics at Buffalo State is currently granted initial accreditation by the Commission on Accreditation for Dietetics Education of the American Dietetic Association, 120 South Riverside Plaza, Suite 2000, Chicago, IL 60606-6995, (312) 899-5400. The coordinated program in dietetics at Buffalo State is currently granted*

continuing accreditation by the Commission on Accreditation for Dietetics Education of the American Dietetic Association, 120 South Riverside Plaza, Suite 2000, Chicago, IL 60606-6995, (312) 899-5400.

****The professional education programs at Buffalo State are accredited by the National Council for Accreditation of Teacher Education, 2010 Massachusetts Avenue, NW, Suite 500, Washington, DC 20036, (202) 466-7496. The accreditation includes the initial teacher preparation and advanced levels of professional education offered at the college.*

Accreditation papers may be reviewed in the Provost's Office, Cleveland Hall 519.

Honor Societies

Alpha Kappa Delta
sociology

Alpha Sigma Lambda
adult students

Epsilon Pi Tau
career and technical education

Kappa Delta Pi
education

Omicron Delta Epsilon
economics

Phi Alpha Theta
history

Phi Delta Kappa
education

Phi Upsilon Omicron
nutrition and food science

Pi Delta Phi
French

Pi Sigma Alpha
political science

Psi Chi
psychology

Sigma Delta Pi
Spanish

Sigma Pi Sigma
physics

BUFFALO STATE COLLEGE

A Place to Learn, Grow, and Prepare for Your Future
Students find that Buffalo State provides the best of both worlds—a suburban-like campus in a vibrant, metropolitan neighborhood. The stimulating intellectual and cultural environment offers many informal social and recreational opportunities. The focus is on academics, with an emphasis on applied, marketable skills grounded in a strong liberal arts education. Buffalo State is large enough to offer a tremendous variety of educational programs, yet small enough to offer personal attention in small classes.

Excellent, Comprehensive Academic Offerings

Buffalo State's 166 major and minor undergraduate programs include several unavailable at any other State University of New York (SUNY) institution: communication design, creative studies, fashion and textile technology, fibers, forensic chemistry, metals/jewelry, urban and regional analysis and planning, and wood/furniture design. The college's visual arts program is one of the largest and most comprehensive within SUNY. Building on its historical foundation as a teachers college, Buffalo State continues to earn national recognition for the quality of its teacher-preparation programs.

Quality Learning Environment

Buffalo State fosters a learning environment that focuses on advancing each student's potential. With one faculty member for every 17 students, students interact directly with qualified, committed instructors—four out of five hold the highest degrees in their fields.

Support programs assist students through mentoring, tutorials, workshops, and independent learning experiences. Honors curricula provide enrichment opportunities for advanced students. Campus resources address the specific needs of minority students, students with disabilities, and adult learners.

Diverse Student Body

Buffalo State's 11,000-plus students represent the largest and most diverse student body of the SUNY colleges. The college enrolls significant proportions of nontraditional (adult), first-generation, and disadvantaged students with demonstrated potential.

Hands-on Career Preparation

Buffalo State and the Western New York community offer plenty of convenient opportunities for students to "learn by doing" through internships with local organizations.

Students gain valuable skills through involvement with applied research and community service programs sponsored by campus centers.

Students preparing to be teachers are involved in classrooms early in their academic careers, and they learn in a variety of educational settings—urban, rural, and suburban. Undergraduate students are encouraged to engage in original research, with assistance from faculty mentors.

Those who wish to learn by experiencing distant places and cultures can earn college credit by participating in a variety of study abroad and national student exchange opportunities.

Convenient, Attractive Campus

The college's park-like setting features landscaped green space and outdoor gathering spots, along with an eclectic mix of modern and traditional architecture. With 38 buildings on one campus, every destination is within easy walking distance. Forming a "town square" for the college community, four core buildings, including E. H. Butler Library and the Campbell Student Union, are situated around a central, open quadrangle.

Vibrant, Metropolitan Neighborhood

Home to the Burchfield Penney Art Center and the Performing Arts Center at Rockwell Hall, Buffalo State's campus is a featured attraction of Buffalo's Elmwood Museum District. Nationally recognized cultural and recreational amenities are within easy walking distance, including the Albright-Knox Art Gallery and the historic 367-acre Delaware Park. Distinctive shops and restaurants help give "the Elmwood strip" its characteristic flavor.

Buffalo and Beyond

Buffalo State students enjoy all the advantages of living in New York State's second-largest metropolitan area. Downtown Buffalo features national touring productions at Shea's Performing Arts Center, AAA minor-league baseball at Coca-Cola Park, Sabres hockey and major concerts at HSBC Arena, and trendy night life along Chippewa Street. Niagara Falls—one of the world's most visited natural wonders—is a half-hour away; cosmopolitan Toronto, Canada's largest city, is about a two-hour drive from campus.

The State University of New York

As a comprehensive public university, the State University of New York provides a meaningful educational experience.

rience to the broadest spectrum of learners. More than 414,000 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.

The Covenant

Buffalo State Is Committed to Providing:

Superb Teaching Faculty

Buffalo State faculty members are:

- Dedicated teachers.
- Nationally renowned scholars who bring the latest research to the classroom.
- Degreed professionals, not teaching assistants.
- Among the best in SUNY—more than 50 have received the SUNY Chancellor's Award for Excellence.

Innovative and Relevant Programs

- The Intellectual Foundations or core curriculum ensures that students have a broad-based education.
- The professional curriculum—the academic major—prepares students for career success.
- Accredited professional programs.*
- State-of-the-art technologies, facilities, and library.

An Excellent Learning Environment

- The only SUNY campus in a major metropolitan area, offering exceptional cultural and recreational opportunities—all within walking distance.
- A dynamic and diverse faculty, staff, and student body.
- Strong student support and academic services, delivered by a committed professional staff.
- Outstanding library, with a strong technical and computing infrastructure.

The Buffalo State Student Is Committed to:

First and Foremost, Being a Student

Academics is the driving, paramount goal of student life. It means a dedication to study and being fully prepared for classroom, laboratory, or studio.

Making Progress Toward a Degree

Advance through your program at the expected pace, whether you are a full-time, part-time, day, or evening student.

Graduating

*Copies of accreditation papers are on file and may be viewed upon request.

Oath of Matriculation

As a new student to Buffalo State College, being now admitted to the rite of matriculation in baccalaureate studies, I do pledge to be an exemplary learner; to place the highest value on my intellectual, personal, and professional growth; and to respect learning and knowledge.

My priority is to be an educated person, to make significant progress in my program of study, and to graduate. As a student at Buffalo State College, I will conduct myself with dignity, honesty, and civility, respecting the views and diverse backgrounds of my teachers and peers, enhancing the quality of life of my community, and promoting the welfare and esteemed reputation of Buffalo State College. This I pledge to myself.

FACILITIES, SERVICES, AND SPECIAL PROGRAMS

Academic Opportunities Cluster

University College
South Wing 510, (716) 878-3093

All College Honors Program

The All College Honors Program, a special admissions program, rewards students with opportunities for applied internships, scholarships, and research. Participants engage in special seminars and have access to their own residence hall and lounge.

Campus Academy for the Scholarship of Teaching and Learning (CASTL)

Buffalo State is a participant in the Teaching Academy Campus Program, designed to foster a network of campuses that provides the structure and support for promoting the scholarship of teaching and learning. Both faculty and staff benefit from the research conducted at Buffalo State. The work of faculty who study the improvement of college teaching is reflected in relevant, meaningful learning experiences for students.

Undergraduate Research Office South Wing 510

The Undergraduate Research Office coordinates campus efforts to encourage and support undergraduate research and creativity in ways that build on scholarly and creative interaction between students and faculty.

Academic Standards and Intervention

University College
Twin Rise 100, (716) 878-5222

Academic Intervention

South Wing 110, (716) 878-3734

The Academic Intervention program provides guidance and support to undeclared students who have been placed on academic probation (GPA below 2.0).

Academic Standards Office

The Academic Standards Office assists in upholding the academic policies of Buffalo State and maintaining the academic integrity of the college. The office provides as-

sistance to students in interpreting academic policies and compliance standards that may affect their academic status or financial aid eligibility. Faculty and staff are encouraged to contact the Academic Standards Office for assistance in resolving academic appeals and probationary student issues.

Barnes & Noble at Buffalo State Bookstore

Campbell Student Union, (716) 878-5509
<http://buffalostate.bncollege.com>

The bookstore carries a wide range of merchandise, including new, used, rental, and digital textbooks; trade books; special-order books; emblematic clothing; art, school, and office supplies; greeting cards; gifts; and computer supplies. The store features a coffee shop with computers and wireless access. The store accepts cash, personal checks, credit cards, and Bengal Bucks. A bookstore deferment program is available. The bookstore is a service of Barnes & Noble College Bookstores Inc.

Burchfield Penney Art Center at Buffalo State College

(716) 878-6011
www.burchfieldpenney.org

In November 2008, the new Burchfield Penney Art Center opened to the public. The \$33 million structure is the first new art museum to be built in Buffalo in more than a century and is the first "green" art museum in New York State. The museum is home to more than 7,800 works by more than 600 artists from Western New York, including the largest public collection of works by Charles E. Burchfield. The Burchfield Penney is accredited by the American Association of Museums. General admission to the Burchfield Penney is free to faculty, staff, and students of Buffalo State College. Gallery hours are Tuesday, Wednesday, Friday, and Saturday from 10:00 a.m. to 5:00 p.m., Thursday from 10:00 a.m. to 9:00 p.m., and Sunday from 1:00 to 5:00 p.m. The Museum Store, offering one-of-a-kind gifts by Western New York artisans and merchandise celebrating Burchfield, is open during gallery hours. Moura's NY Deli and Café is open during gallery hours and features New York deli-style sandwiches, salads, homemade soups, and desserts.

Campbell Student Union

Student Life Office

Campbell Student Union 400, (716) 878-4631

www.buffalostate.edu/studentlife

The Campbell Student Union is located in the center of campus and houses an exciting blend of student services, activities, and recreation. The Barnes & Noble Bookstore, USG Game Room, and Campbell Student Union Information Center are located in this facility, as are the offices of the Dean of Students, the Associate Vice President for Campus Life, Campus Dining Services, United Students Government (USG), the International Student Affairs Office, and the Student Life Office. The campus radio station, WBNY-FM 91.3, makes its home here, along with 19 other student organization offices. The Student Union offers a variety of programming space for the campus community, along with several informal lounge, café, and study areas, and the new state-of-the-art Residential and Retail dining facilities.

Campus Dining Services

Campbell Student Union 223, (716) 878-5214

www.buffalostate.edu/offices/dining

Campus Dining Services, located in the Student Union, is committed to providing meal services and programs that are nutritional and healthy. Many dining options are available, which include several retail venues, an all-you-care-to-eat dining hall, and two satellite locations in academic buildings.

Meal plans are available for both residents and commuter students. Meal plans are convenient, flexible, and economical, as they are tax free and deferrable against financial aid. Meal plans are required for resident students who have not reached junior status (60 credits). All dining locations accept tax-free declining balance funds, cash, credit cards, and Bengal Bucks. To purchase a meal plan or to add funds to your student account, go to www.dineoncampus.com/bsc, visit E. H. Butler Library 108, or call (716) 878-5152.

Career Development Center

Cleveland Hall 306, (716) 878-5811

The Career Development Center

<http://www.buffalostate.edu/offices/cdc> (CDC) provides a full range of services, including comprehensive career counseling, to help students choose a major, plan a career, apply to a graduate program, and identify internship and employment opportunities. A career information center, assessment and exploration programs, and alumni mentors are among the resources available to help students explore careers and majors. In addition to hosting a website listing full-time, summer, and part-time jobs, as well as internships, the CDC sponsors job fairs, on-campus interviews, employer information sessions, and job-search workshops; it also maintains reference files. The CDC houses the Volunteer and Service-Learning Center,

<http://www.buffalostate.edu/offices/cdc/vslc/>, where students can find one-time and long-term community volunteer opportunities and can identify service-learning coursework options.

Center for Excellence in Urban and Rural Education

Caudell Hall 107, (716) 878-3610

www.buffalostate.edu/centers/ceure

CEURE—the Center for Excellence in Urban and Rural Education—is committed to the enhancement of high-need urban and rural schools through the recruitment, retention, and continuing education of highly qualified teachers, as well as the support of reform efforts and research about effective schools. To support educational reform and school improvement, CEURE partners with schools, community groups, foundations, and other institutions of higher education across Western New York.

CEURE offers a variety of programs and services to school partners and campus colleagues. Partnerships are developed in conjunction with our undergraduate and graduate teacher-education programs, and include such collaborative efforts as

- specialized staff-development programs for teachers and administrators;
- alternative certification opportunities for high-need subject-area teachers;
- internship opportunities;
- future and nascent teacher mentorship and support programs;
- school partnership projects that employ teacher-education majors as tutors;
- grant submission and program implementation.

Child Care Center (Buffalo State College Child Care Center)

Campus West, (716) 878-5335

www.buffalostate.edu/offices/bscchild

The Buffalo State College Child Care Center is open to the children of Buffalo State students, faculty, and staff. Accredited by the National Academy of Early Childhood Programs and licensed by the New York State Office of Children and Family Services, the center accepts children between the ages of 6 weeks and 5 years on a first-come, first-served basis. A summer school-age program is also available for children (up to age 12). The center is committed to providing developmentally appropriate programs in a safe, predictable environment, where children can develop socially, emotionally, cognitively, and physically. Tuition is based on a sliding-fee schedule.

College Writing Program

South Wing 130, (716) 878-5451

www.buffalostate.edu/writingprogram

The College Writing Program provides oversight for the writing courses required of all Buffalo State students, CWP 101 and CWP 102, as well as the non-credit-bearing CWP

099, which is sometimes required to prepare students for those writing courses. The College Writing Program also provides support for the Intellectual Foundations Writing Across the Curriculum requirement.

Computing and Technology Services

Twin Rise 206, (716) 878-4611
www.buffalostate.edu/cts

Computing and Technology Services supports computing hardware, software, and networking for instruction, research, and administrative activities on campus. Many public and department-specific networked labs and wireless hotspots can be found across campus. Labs are equipped with up-to-date computers and a variety of standard and curriculum-specific state-of-the-art software to support the educational needs of the campus. Campus computing- and technology-related questions can be directed to the Computing Help Desk, chd@buffalostate.edu, located in E. H. Butler Library. Visit the CTS website www.buffalostate.edu/cts for additional information and supporting materials.

Continuing Professional Studies

Cleveland Hall 210, (716) 878-5907
www.buffalostate.edu/continuingstudies
<http://www.buffalostate.edu/continuingstudies>

Continuing Professional Studies is responsible for recruitment, admissions, and advisement of adult student cohorts at Buffalo State College on and off campus. These students typically seek degree completion opportunities using experiential learning options. These options include CLEP and course by contract. Continuing Professional Studies enrolls students in the nontraditional adult student degree, Individualized Studies undergraduate degree, as a part of this option. INS300W portfolio assessment is offered as an opportunity to earn up to 30 credits for learning from life experiences.

Continuing Professional Studies manages online programming and development, coordination of Summer Session, January Term, the Veterans Services/Certification Office, Individualized Studies, Evening and Weekend programs for adult students, conference planning, and non-credit programming.

Counseling Center

Weigel Health Center, Second Floor, (716) 878-4436

The Counseling Center provides professional psychological services to students experiencing developmental or situational difficulties that may interfere with their ability to take advantage of the educational opportunities at Buffalo State. The staff includes licensed psychologists, licensed clinical social workers, a case manager, and a part-time psychiatrist. Information shared in counseling is confidential and is protected to the full extent of the law.

For more information and resources, visit the Counseling Center website <http://www.buffalostate.edu/depts/counsel>.

Dean of Students and Student Judicial Affairs

Campbell Student Union 306, (716) 878-4618

The Dean of Students Office, www.buffalostate.edu/deanofstudents, and the Student Judicial Affairs Office provide leadership for defining and promoting campuswide expectations for student conduct and behavior. These are expressed in the Compact for a Civil and Caring Academic Community <http://www.buffalostate.edu/deanofstudents/x577.xml>, a set of principles that describes how those who live, study, and work together as members of our college community should treat each other: with civility and respect, with care and concern, and with a commitment to the academic purpose for which Buffalo State College exists. The compact is meant to foster conversation, interaction, and reflection on behavior as a way to promote understanding of self and others in the context of a shared community. Use of the compact is encouraged to help promote the expectations arising from its premise that Buffalo State is and should be a civil and caring academic community.

The dean of students works closely with students and student groups to further their intellectual, emotional, and social development. The dean serves as an advocate for the rights of students; offers individual student support; provides programs, services, and co-curricular opportunities; and contributes to policy development. The dean's office sponsors the Violence Intervention and Victim Advocacy <http://www.buffalostate.edu/deanofstudents/viva.xml> (VI-VA) program to assist victims of sexual violence and assault and helps ensure compliance with victim rights under Title IX of the Civil Rights Act. The dean also provides parents with information about college policies and procedures, along with referrals for assistance to both on- and off-campus resources.

The dean convenes a Students of Concern Care Team <http://www.buffalostate.edu/deanofstudents/x618.xml> to respond whenever a student's behavior appears troubled or disturbed, creating cause for concern. The Care Team will investigate reports and determine appropriate action or referral. Emergency concerns must be directed to University Police at (716) 878-6333. The Care Team works closely with faculty to provide awareness and support for dealing with students in difficulty in a compassionate and humane manner while ensuring safety for the campus community.

The Code of Students' Rights, Freedoms, and Responsibilities <http://www.buffalostate.edu/studentaffairs/x527.xml> is Buffalo State's code of student conduct. The code is administered by the Student Judicial Affairs Office to provide students with a due process review of any complaints made by or against them. Hearing boards composed of students, faculty, and staff consider evidence and issue findings to respond to disciplinary violations.

Disability Services Office

South Wing 120, (716) 878-4500

Buffalo State ensures access to its academic programs, services, and activities on campus to otherwise qualified

individuals with disabilities in accordance with guidelines established by the Rehabilitation Act of 1973, Section 504, and by the Americans with Disabilities Amendment Act of 2009. Disability Services

<http://www.buffalostate.edu/disabilityservices> provides advocacy and coordinates appropriate accommodations for students with disabilities. To receive services, students should contact Disability Services and provide appropriate disability-related documentation. If you believe you may have an undiagnosed disability, please feel free to contact the office and you will be referred to the correct resource.

If you are in need of academic tutoring, please contact the Academic Skills Center

<http://www.buffalostate.edu/academicsupport/x491.xml>.

Educational Opportunity Program

University College

South Wing 710, (716) 878-4225

www.buffalostate.edu/eop

The Arthur O. Eve Educational Opportunity Program (EOP) was established in 1967 to fulfill New York State's commitment to access to higher education. The program is for students of all racial and ethnic backgrounds who have the talent and ability to succeed in college but have been placed at a disadvantage for access by financial and academic circumstances. See EOP admission 17 for more information.

First-Year and Academic Support Programs

Academic Advisement Center

South Wing 110, (716) 878-5223

www.buffalostate.edu/academicsupport

The Academic Advisement Center assists students in making the academic and personal choices that help them identify and accomplish their educational, professional, and personal goals. The Academic Advisement Center serves all Buffalo State students, but regards undeclared students as its primary constituency.

Academic Skills Center

South Wing 330, (716) 878-4041

www.buffalostate.edu/academicsupport

The Academic Skills Center provides free tutoring and workshops for all Buffalo State students seeking supplemental instruction in their courses. Its team of professional tutors is ready to address questions regarding both coursework and scholarship. Tutors meet with students one-on-one or in small groups, handling an array of subjects that include business, humanities, languages, math, science, statistics, and writing.

Academic Support Programs

South Wing 310, (716) 878-5303

www.buffalostate.edu/academicsupport

The Academic Support Programs unit offers services that are designed to help ensure successful study at Buffalo State. Units include the Academic Advisement Center, the

Academic Skills Center, Collegiate Science and Technology Entry Program (C-STEP), developmental college success courses, and Credit for Experiential Learning.

Collegiate Science and Technology Entry (C-STEP) Program

South Wing 220A, (716) 878-4197

The Collegiate Science and Technology Entry Program (C-STEP) seeks to increase access to careers in science and technology for academically superior students who are economically disadvantaged or members of groups traditionally underrepresented in higher education.

Credit for Experiential Learning

South Wing 310B, (716) 878-5303

Buffalo State recognizes college-level experiential learning and regards such potential academic credit as similar to transfer credit. Students demonstrate that their experiential learning is comparable to specific Buffalo State credit-bearing courses. Such equivalence can be demonstrated through the course-challenge process or through portfolio preparation. Both options are ultimately reviewed by the appropriate academic department. Students may receive as many as 30 credit hours through experiential learning review. Any credit awarded will be recorded as credit (cr) on students' transcripts, rather than by letter grade. Credit for experiential learning is limited to matriculated students at Buffalo State.

First-Year Programs

Twin Rise 100, (716) 878-5906

www.buffalostate.edu/firstyearprograms

Buffalo State offers several courses and programs designed to help new students develop academic skills that will serve as a basis for success. These courses offer entering students access to small classes.

Learning Communities

Twin Rise 100, (716) 878-5906

www.buffalostate.edu/firstyearprograms

Learning Communities (LC) provide a cluster of courses that incoming first-year students take in common around a central theme or concept. These courses fulfill Intellectual Foundations general education requirements. In addition, LC students who are campus residents live in a shared residential area. All LC students—residential and commuter—have access to their own gathering places with computers and kitchens. They meet with other students, faculty, and professional staff members at special LC events.

Great Lakes Center

Science Building 261 and Porter Avenue, Buffalo, (716) 878-4329

www.buffalostate.edu/greatlakescenter

The Great Lakes Center brings together more than 25 affiliated faculty from eight academic departments at Buffalo State to conduct research in aquatic ecology, fisheries, en-

environmental toxicology and chemistry, urban ecology, watershed dynamics, and environmental education.

The center consists of a complex of laboratories on the main campus and an aquatic research laboratory on the 4.5-acre site at the junction of Lake Erie and the Niagara River. The Great Lakes Center also maintains two 28-foot vessels, a 25-foot heavy lifting work boat, several Boston Whalers, an electrofishing boat, johnboats, and a number of smaller boats for near-shore work, as well as a variety of sampling instruments.

Instructional Design Office

Instructional Resources

Bulger Communication Center 113, (716) 878-3877

www.buffalostate.edu/offices/ir/E-Learning

<http://www.buffalostate.edu/offices/ir/E-Learning>

The Instructional Design Office provides support for the design and development of online and hybrid courses. The office can assist faculty in identifying appropriate online resources for use in such courses. The office coordinates training for the current campus-supported course management system, ANGEL, and trainings provided by the SUNY Learning Network. The office also serves students by providing assistance with ANGEL and will assist students in locating online courses within the SUNY system.

Intellectual Foundations

University College

Twin Rise 100, (716) 878-5906

www.buffalostate.edu/intellectualfoundations

The Intellectual Foundations program is the general education program at Buffalo State. Serving as the college's liberal arts curriculum since fall 2006, the Intellectual Foundations program promotes an understanding of the continuity of human history, the depth of inherited knowledge, the validity of diverse modes of inquiry, the value of artistic expression, and the richness of our collective experience. Its purpose is to develop the skills and habits of the mind required for a life of intellectual curiosity and civic engagement.

International and Exchange Programs

University College

South Wing 410, (716) 878-4620

www.buffalostate.edu/universitycollege

Center for China Studies

South Wing 430D, (716) 878-6328

www.buffalostate.edu/centers/ccs

The Center for China Studies promotes and coordinates research, scholarly exchanges, academic programs, and economic development with China. Center activities advance the intellectual, personal, and professional growth of students, faculty, staff, and the general community by providing an international perspective regarding China in the context of an ever-changing and diverse world.

International Education Office

South Wing 410B, (716) 878-4620

www.buffalostate.edu/studyabroad

International study is available in more than 50 countries overseas through Buffalo State and SUNY-sponsored programs. The International Education Office coordinates Buffalo State-sponsored international study in Australia, Canada, China, England, Italy, the Netherlands, Puerto Rico, Romania, and Spain. Faculty and staff may develop short-term study sessions in other countries as well.

International Graduate Programs for Educators

South Wing 430, (716) 878-6832

www.buffalostate.edu/ilsc

International Graduate Programs for Educators fosters lifelong academic, intellectual, and personal success through the promotion and dissemination of research, information, publications, and other resources focusing on learning, teaching, and productivity styles. The center delivers overseas master's, graduate, and professional development programs taught by faculty members in the Computer Information Systems, Creative Studies, Educational Foundations, and Elementary Education and Reading departments. The program's office is an affiliated center of the International Learning Styles Network.

International Student Affairs Office

Campbell Student Union 400, (716) 878-5331

www.buffalostate.edu/internationalstudentaffairs

Various services are available to international students through the International Student Affairs Office, including academic advisement and personal counseling. In addition, the office helps students regarding visas, work permits, and regulations of the Department of Homeland Security. A one-day international orientation program is provided for new international students at the beginning of each semester. The office distributes numerous publications, including Information for New Students from Abroad, International Student/Scholar Orientation Guidebook, Directory of Faculty and Staff with International Qualifications, Guide to Businesses and Attractions in Western New York, and Newsletter International. The office also administers English-language competency and placement exams. International Student Affairs coordinates the American Host Family and International Friendship programs, pairing international students with American families. It coordinates a Global Perspectives program in the Western New York community, an English Conversation program, a Residence Hall Peer Mentor program, a Faculty/Staff Resource program, and the college's International Alumni program. The office organizes international cultural events, workshops, and seminars throughout the year on campus.

Global Studies (minor program)

South Wing 420B, (716) 878-6116

The global studies minor is designed to provide students with an international perspective, encouraging the study of issues based around international themes, as well as the advanced study of another language.

Special Programs Office
South Wing 420C, (716) 878-4328

The Special Programs Office administers National Student Exchange and the Visiting Student Program.

National Student Exchange
South Wing 420
www.nse.org

National Student Exchange is designed to expand the scope and variety of academic, social, and cultural experiences available to students. It enables qualified students to spend a semester or a year at one of more than 200 colleges and universities in the United States, its territories, and Canada. The program, organized through the National Student Exchange Consortium, provides an inexpensive means of studying in another state by paying tuition at Buffalo State or at the host school at the resident rate. To be eligible, a student must be in good academic standing and have a minimum GPA of 2.5.

Visiting Student Program

Buffalo State students may attend participating colleges and universities for a semester or a year and transfer credit hours to Buffalo State. Students should consult with their academic advisers about institutions that best meet their educational goals. Departmental approval is required as part of the application process, which is coordinated by the Special Programs Office. Deadlines are May 1 for the fall semester and November 1 for the spring semester. There is no visiting student status during the summer.

Library (E. H. Butler Library)

(716) 878-6300
library.buffalostate.edu <http://library.buffalostate.edu>

E. H. Butler Library is committed to supporting the scholarship, research, and creativity of the Buffalo State academic community with more than a million research materials, including more than 670,000 printed books, a growing number of electronic books, and access to full-text articles from thousands of periodicals.

Butler Library's Information Commons brings together important services to help you successfully complete your academic projects. Librarians are available at the Research Help Desk to provide expert research assistance. The Writing Help Center, a partnership with the College Writing Program, is available to assist students with writing and composition of all kinds. The Application Support Desk is the central point of service for software-related assistance and Equipment Loan. Computing Help Desk staff members provide technical assistance with campus computers, printers, and network issues.

Computer labs are located on the first floor of the library, and wireless access is available throughout the library building. StudyQuad and QuietQuad, open 24 hours a day during the fall and spring semesters, feature computers

with a variety of software applications, an assistive technology room, quiet study space, and group study rooms.

Our specialized collections include the Curriculum Materials Lab, which contains books for children and adolescents, and textbooks for elementary and secondary grades; Archives/Special Collections, which houses the official and historical documents of the college dating from the 1860s to the present; Media Services, which houses non-book items; and the Creative Studies Library, a noncirculating collection that supports the International Center for Studies in Creativity at Buffalo State.

The Bengal ID Card Office provides support in all areas of operation relating to the official card used for dining, printing, vending machines, and library services. The Academic Advisement Center has established an auxiliary office in the library to provide academic advisement for undeclared students and advisement assistance for all Buffalo State students.

E. H. Butler Library's lobby is a popular place for study breaks. The café offers gourmet coffees and teas, as well as a variety of snacks. The lobby also features monthly exhibits and works of art from our permanent collection.

Orientation and New Student Programs Office

Porter Hall 14J, (716) 878-5336
www.buffalostate.edu/orientation

First-year and transfer students actively engage in the enriching educational experiences offered at Buffalo State during their orientation session. Interacting with faculty, confirming course schedules, learning about student services, and a variety of social activities are included in orientation. First-year students meet on campus for a three-day orientation program the week before classes start. Transfer students receive academic advisement throughout the summer, and come to campus for a one-day program the week before classes start to better understand the collegiate environment of Buffalo State. Both orientation programs offer an opportunity to form relationships with faculty, staff, upper-class students, and incoming peers inside and outside academic majors. Parent/family member programs are offered as an optional program, and run concurrently with the new student orientations. Attendance is mandatory and a program fee is required.

Performing Arts Center

Rockwell Hall 210, (716) 878-3032
Box Office: (716) 878-3005
www.buffalostate.edu/pac

The Performing Arts Center (PAC) at Rockwell Hall is an 856-seat multipurpose theater that enhances the cultural vitality of the campus and Western New York community. The PAC hosts a variety of events each year. Lectures, concerts, musicals, and more highlight the annual calendar of more than 150 events. The Great Performers Series showcases world-class artists from a wide range of performance genres. The Artsplorations Series offers Western

New York schoolchildren the opportunity to attend a live theater performance. The Buffalo State Music Department presents more than 50 concerts each year at the PAC, featuring the Philharmonia, Wind and Jazz Ensembles, Chamber Music Ensembles, and Choral presentations.

Pre-Law Advisement

School of Natural and Social Sciences, Dean's Office
Classroom Building A113, (716) 878-6674
School of Natural and Social Sciences <http://www.buffalostate.edu/naturalandsocialsciences/x461.xml>

Buffalo State provides pre-law advisement to assist students who plan to attend law school. Faculty members knowledgeable of the legal profession are available for consultation on such matters as recommended undergraduate courses, LSATs, and law school admissions practices. Students interested in pre-law advisement should contact the chair of the Pre-Law Advisement Committee early in their Buffalo State studies for consultation and a copy of the pre-law handbook.

Pre-Medical and Pre-Health Professional Advisement

School of Natural and Social Sciences, Dean's Office
Classroom Building A113, (716) 878-6674
School of Natural and Social Sciences <http://www.buffalostate.edu/naturalandsocialsciences/x461.xml>

Health professions schools require a strong undergraduate preparation in the sciences. Buffalo State offers all the courses (biology, chemistry, mathematics, and physics) required for admission to medical, dental, osteopathic, veterinary, optometry, podiatry, chiropractic, and other health professions schools. Individual schools have their own requirements, and Buffalo State offers a course of study that should meet the requirements of any health professions school. The entrance examinations for medical, dental, and other health professions schools test for mastery of material from these courses.

It is very important that students who are interested in the health professions contact the pre-health adviser as soon as possible (freshman or sophomore year) to begin the advisement process and to plan the application process. The pre-health professions adviser and the Pre-Health Advisory Committee assist students who are interested in entering one of the health professions by providing advice about the application process and preparing supporting materials for students' applications.

Reserve Officer Training Corps

U.S. Army Reserve Officer Training Corps (ROTC) classes are offered at Buffalo State through Niagara University. Military science classes are 1 credit hour each semester and are intended to introduce students to Army leadership principles and basic military concepts. A 2-credit-hour military lab also is available to Buffalo State students. The lab meets once a week at either Niagara Uni-

versity or the University at Buffalo South Campus. Military science classes are offered free of charge to all interested, and no commitment or obligation is required. Students may enroll in any of these courses during the Buffalo State registration period. Contact Major Peter B. Wilson at (716) 286-8235.

Residence Life Office (On-Campus Housing)

Porter Hall, (716) 878-3000
www.buffalostate.edu/residencelife

A variety of on-campus housing options are available at Buffalo State, including traditional-style housing (Neumann, Perry, Porter, and Cassety halls) for first-year students; suite-style facilities (Towers 1-4, North Wing) for sophomores, juniors, seniors, and international students; and fully furnished apartments (Moore Complex and the Student Apartment Complex) for juniors and seniors. Several units in Moore Complex are designated for students with dependent children (under the age of 18). Other housing options include honors student housing, Native American, Diversity, Music and Theater suites. Year-round housing is provided for students with dependent children (Moore Complex), international students, and students enrolled in summer classes on a space-available basis. All residence halls are smoke free.

The residence hall staff guides students in their living environment, promotes student health and safety, and provides encouragement, support, and assistance when needed.

Buffalo State College Housing Residency Requirement

All full-time students are required to live on campus until they have earned junior-level standing (completion of 60 credit hours). Students who are married, single parents, veterans, age 21 or older, or commuting from the home of a parent or relative (aunt, uncle, brother, sister, etc.) within a 35-mile radius of the Buffalo State campus are exempt from this policy. Verification is required for students who wish to apply for an exemption from this requirement; contact the Residence Life Office.

Parking Information for Freshmen and Sophomore Resident Students

Freshmen (first-year college students) and sophomore (second-year college students) who reside in Buffalo State residence halls are not permitted to register or park a vehicle on campus. All students, regardless of level (including freshmen and sophomore), who reside off campus may register a vehicle for on-campus parking.

Pre-college credits, advanced placement credits, CLEP credits, and similar credits are not relevant to this regulation. Any credit awarded for coursework taken prior to high school graduation or during the summer does not change student status as it relates to being a first- or second-year college student.

Students entering their third year (i.e., fifth semester) at Buffalo State are eligible to register a vehicle on campus even if they have not completed enough credits to obtain junior standing. They are no longer considered first- or second-year college students. Students who begin as so-

phomores in the spring semester of an academic year are permitted to register a vehicle on campus for the coming fall semester, even though they may not have accumulated sufficient credits to attain junior standing.

Exceptions to Freshmen and Sophomore Parking Rules
Exceptions to parking registration rules for resident freshmen and sophomores will be considered for the following reasons:

Medical: Requires a letter from a licensed physician indicating a legitimate medical need. This letter should explain in detail the nature of the problem, the reason(s) for the student to have ready access to his/her own transportation, and the time frame being projected for this need.

Employment: Freshmen and sophomores are strongly encouraged to find employment either on campus or in the local community. Appeals for employment purposes should include a signed letter on company letterhead from the employer stating days and hours of employment. Letter must include employer's telephone number. A current payroll stub may also be required.

Academic: Requires a legitimate written justification from a faculty member stating the reason for exception; a description of approved off-campus credit-bearing program must be included.

Other exceptional circumstances will be considered by the Parking Appeals Committee. Requests for exceptions to this policy are to be submitted in writing by the student to Director of Parking Services, Buffalo State College, 1300 Elmwood Avenue, Buffalo, NY 14222. Requests will be reviewed by the Parking Appeals Committee. Decisions of this board are final and not subject to further appeal.

All waivers to this policy will be issued for a specific period of time as determined by the committee. If a student who has been issued a waiver to this policy receives a violation to the campus parking policy, the waiver will be revoked.

Speech-Language-Hearing Clinic

Caudell Hall, (716) 878-3530
www.buffalostate.edu/speech

The Speech-Language-Hearing Clinic provides speech, language, and hearing services to individuals of all ages. Services are provided by graduate students in the Speech-Language Pathology Department under the direct supervision of faculty and professional staff members who are licensed by New York State and hold the Certificate of Clinical Competence from the American Speech-Language-Hearing Association.

State-of-the-art equipment aids clinic staff in the diagnosis and remediation of a variety of disorders, including articulation and phonological disorders; language impairments in children; aphasia; hearing, voice, and fluency disorders; and traumatic brain injury. The staff also works with people who wish to modify their accents. Services are free to Buffalo State students.

The Buffalo State College Speech-Language-Hearing Clinic does not discriminate in the delivery of clinical services

on the basis of race or ethnicity, gender, age, religion, national origin, sexual orientation, or disability.

Student Government (United Students Government)

Campbell Student Union 402, (716) 878-6701
www.usgbuffstate.org

USG is the United Students Government, representing the students of Buffalo State College since 1971. USG is headed by students who are elected each year by the student body. USG is maintained with the support of a professional staff and funding through a mandatory student activity fee. In addition to the activities of the student government, USG supports over 60 funded and recognized student organizations, each providing general and specialized events and activities for students with diverse interests.

USG consists of three operating branches of governance: the executive branch, responsible for establishing long-term goals for student government; the senate, the legislative branch of USG; and the judicial council. All undergraduate students are members of USG and are eligible to run for any elected position for which they are qualified.

Student Life Office

Campbell Student Union 400, (716) 878-4631
www.buffalostate.edu/studentlife

The Student Life Office provides support, encouragement, and resources to students and student organizations as they pursue extracurricular activities. Opportunities for students to participate in more than 80 recognized student organizations, student leadership roles, college committees, United Students Government, community service programs, and diversity programs collectively enhance the campus community as well as the collegiate experience for each student.

The Student Life Office encompasses the following areas: Campbell Student Union (Information Center, facility operation, meeting rooms, Barnes & Noble at Buffalo State Bookstore, Chartwells food outlets); campus activities, including Weeks of Welcome and Union Bash; Greek Affairs, overseeing 25 fraternities and sororities; LEAD (Leadership Education and Development Programs) Center; Commuter Student Services, including the Commuter Assistance Program (CAP); and Minority Student Services programming. The Student Life Office also provides cultural, educational, and social activities that encourage student excellence and support racial and cultural understanding through such programs as the Nurturing Initiative and Achievement (NIA) Mentoring Program, Dr. Anna P. Burrell Diversity Scholars Program, and the National Coalition Building Institute campus team.

University Police

Chase Hall 100, (716) 878-6333
www.buffalostate.edu/offices/police

The State University Police Department at Buffalo State is the law-enforcement agency responsible for crime preven-

tion and control, criminal investigations, traffic and parking supervision, physical plant security, disaster coordination, community policing, and the maintenance of public order. The department offers many special services, including personal-safety awareness education, a motorist-assistance program, a safety escort service, a property-identification system, and a found-property department. To make arrangements for lectures or special programs, call (716) 878-6332 or (716) 878-6612 between 8:00 a.m. and 4:00 p.m.

Crime Statistics Availability

A copy of the Buffalo State College campus crime statistics, as reported annually to the U.S. Department of Education, will be provided upon request. Please direct requests to the Chief of University Police, Chase Hall, Buffalo State College, 1300 Elmwood Avenue, Buffalo, NY 14222; (716) 878-6332. Information also can be obtained from the U.S. Department of Education website at <http://ope.ed.gov/security> or from Buffalo State's website at www.buffalostate.edu/offices/police/safety.

Parking Rules and Regulations

The rules governing motor vehicles on campus are intended to ensure maximum pedestrian and vehicular safety, and to establish the most convenient arrangements possible for students, staff, and visitors. Motor vehicles may park in any of the designated areas shown on the campus map. Only vehicles with special permits authorizing them to park in spaces designated for persons with disabilities are allowed to park in such spaces. All vehicles parked on the grounds of Buffalo State must display valid college parking permits. Maps and parking permits are available in the Student Accounts Office, Moot Hall 260.

Parking is prohibited

- on all roadways;
- in all fire lanes;
- on lawns, grass, or grounds;
- on or over painted lines in parking areas or crosswalks;
- in such a way as to interfere with free and proper use of a roadway or pedestrian crossings.

Parking services may authorize towing of any vehicle found to be in violation of the college's rules and regulations. Violations will result in parking fines and/or summonses. The college assumes no responsibility for automobiles and/or their contents. Rules regarding parking for persons with disabilities are strictly enforced. Parking tickets may be paid in the Student Accounts Office, Moot Hall 260. For more information, call Parking Services at (716) 878-3041.

Veterans Services/Certification Office

Cleveland Hall 210, (716) 878-5907

www.buffalostate.edu/continuingstudies/veterans
<http://www.buffalostate.edu/continuingstudies/veterans>

The Veterans Services/Certification Office provides one-stop support services for veterans entering college. The

office coordinates support services for current and prospective students who are veterans, service persons, or dependents or survivors of veterans with Veterans Affairs educational benefits. Support services include recruitment and advisement, admissions and financial aid counseling, 9/11 bill packaging, and liaison to student veterans organization. The office also provides information regarding free parking, securing in-state status for active duty military and reservists, and orientation fee billing.

Information on current regulations affecting educational benefits, tutorial assistance, and dependency allowance also is provided. The attendance form can be found at www.buffalostate.edu/continuingstudies/veterans
<http://www.buffalostate.edu/continuingstudies/veterans>.

Weigel Health Center

(716) 878-6711

The Weigel Health Center

<http://www.buffalostate.edu/weigel/> provides health and wellness services for all registered students. In addition to diagnosing and treating illnesses and injuries, the professional staff promotes health education and preventive medicine. Students are seen on an appointment basis or on a walk-in basis, and there is no charge for most services. Some laboratory services are available at Weigel Health Center. Insurance copays may apply.

The Health Promotion Program

<http://www.buffalostate.edu/weigel/x477.xml> offers workshops on topics such as wellness, stress management, sexuality, violence, smoking cessation, and alcohol- and other drug-abuse prevention. Educational resources also are available for student research or classroom projects.

All students must be in compliance with New York State law regarding immunizations. Measles, mumps, and rubella (MMR) immunization is provided at no charge at the health center for those students who are unable to provide records. Students must be in compliance to register for classes. Buffalo State College and the New York State Public Health Law require that all enrolled students complete and return the online Meningitis Information Response Form
<http://bscintra.buffalostate.edu/weigel/MeningitisForm.htm>
to Weigel Health Center.

All full-time students are required to have health insurance. Students will be charged for the college's student health insurance unless they provide proof of existing coverage. Proof of coverage can be submitted only through the online waiver
<https://consolidatedhealthplan.com/group/82/waiver/1>
process that must be completed by stated deadlines. Students who lose their existing insurance coverage at any time after receiving a waiver are NOT automatically enrolled in the student health insurance plan. Once waived, students must request enrollment to be covered under the college's student health insurance plan. Part-time students are not automatically enrolled but may request coverage. All students may use the services at Weigel Health Center regardless of the type of insurance they carry. Contact

Weigel Health Center at (716) 878-6711 for more information.

Whitworth Ferguson Planetarium

Science Building 115, (716) 878-4911

Department of Earth Sciences and Science Education

Whitworth Ferguson Planetarium <http://www>.

The Whitworth Ferguson Planetarium is a teaching tool for the college and the community where visitors can learn about the planets, stars, constellations, Earth's atmosphere, and recent advances in the exploration of the universe.

Students taking astronomy and other courses use the planetarium as a laboratory to view the night sky in a realistic setting. The planetarium also offers programs for school and scout groups and weekly public programs that are attended by thousands of visitors annually.

ADMISSIONS

Admission to Buffalo State College is based on the academic and personal qualifications of the applicant, and is granted without regard to race, sex, ethnicity, national origin, sexual orientation, religion, age, disability, or marital or veteran status of individuals. Detailed information regarding procedures is available at www.buffalostate.edu/admissions. Questions and requests for applications should be directed to the Admissions Office, Moot Hall 110, (716) 878-4017; admissions@buffalostate.edu.

Freshman Admission

Admission is based on high school grades, strength of program, class rank, standardized test scores, an essay or untimed writing sample of at least 250 words, and academic recommendations. Special attention is given to grades in math, English, science, history, and foreign language. Standardized test scores are used in conjunction with the overall high school record to project first-year performance. Enrolling freshmen must hold a high school diploma, GED, or New York State-recognized equivalent.

Early Decision

Early Decision is an early-application, early-notification option at your first-choice college. Students who apply for Early Decision to Buffalo State are allowed to apply regular decision to other colleges. Accepted students are expected to make a tuition deposit at Buffalo State and to withdraw all applications to other institutions. Please refer to the Buffalo State website for deadline information, www.buffalostate.edu/admissions.

Early Admission

Well-qualified high school juniors may apply to Buffalo State for full- or part-time study during their senior year in high school under the early admission option.

The college offers several options:

- Enrollment on a part-time basis while attending high school.
- Enrollment as a full-time freshman during the last semester of the senior year.
- Enrollment as a freshman for the entire academic year instead of completing the senior year of high school.

The college arranges with the high school to have remaining diploma requirements fulfilled by taking appropriate

freshman courses; therefore, high school diploma requirements are met while college credit is earned. Early-admission students are not eligible for federal financial aid.

Educational Opportunity Program

The Arthur O. Eve Educational Opportunity Program (EOP) is designed to provide special admission and counseling to individuals who are academically disadvantaged and in need of financial assistance. Applicants must be New York State residents with a high school diploma or its equivalent. They must show academic promise but not qualify for admission under general admission standards. Candidates must have a family income equal to or less than published standards. EOP candidates may not apply for Early Decision. Refer to the Buffalo State website for income guidelines, guidelines and application instructions <http://www.buffalostate.edu/admissions/eop.xml>.

International Students

Applicants should possess the equivalent of 12 years of elementary and secondary education, and must provide evidence of proficiency in the English language and the ability to meet the financial costs of attending college. Accepted students receive an I-20 form or a DS-2019 form enabling them to obtain, respectively, an F-1 (student) visa or a J-1 visa from the U.S. Embassy or Consulate in their home country.

All international students must enroll in a group health insurance plan available through the college unless they carry a health insurance policy that provides comparable coverage and the plan is approved by the medical director of the Weigel Health Center. The premium was \$1,144.50 per year for August 2011 through August 2012. There also are rates for coverage during any semester. The premium is subject to change each year. The insurance premium must be paid to the Student Accounts Office, Moot Hall. International students must take their receipts to the International Student Health Insurance Office in Weigel Health Center 201 to prove they have paid for the College Student Health Insurance and to have their enrollment in the plan processed. Failure to do so will automatically cancel registration.

Approximately \$26,500 a year will be necessary to cover all expenses. Students are to make arrangements prior to entering the country. International students who reside on campus may live in the international residence hall, which

remains open during the holidays, or in any other residence hall, provided they move out of the residence hall during holidays. (See International Student Services <http://www.buffalostate.edu/internationalstudentaffairs/index.xml> section for additional information regarding international students.) This college is authorized under federal law to enroll non-immigrant alien students.

Transfer Students

A student who has completed at least 12 credit hours of college-level work after receiving a high school diploma (or its equivalent) will be considered a transfer applicant. Transfer admission is based on academic performance in college and on space availability. If 24 or more credit hours have been completed at the time of application, the previous college academic record is reviewed; if fewer than 24 credits have been completed, a high school transcript and other supporting documents (e.g., standardized test scores) may be requested.

A minimum GPA of 2.0 out of 4.0 is necessary for consideration, although some programs are very competitive and will require a higher minimum GPA for admission. Transfer students with 60 or more credit hours must apply for and be admitted to specific programs. Those with 59 or fewer credit hours may apply for undeclared status. No student who is on academic probation at another institution or who has been academically dismissed in the past year will be accepted.

Previously earned credit (including military credit) will be evaluated for all transfer students after acceptance, and accepted students will be apprised regarding transferable credit. A maximum of 88 credit hours may be transferred from regionally accredited four-year institutions with no more than 66 credit hours from two-year regionally accredited colleges.

All students transferring into Buffalo State must complete the general education Intellectual Foundations Program. Students with an A.A. or A.S. degree are exempt from 3 credits only in each of the following areas: technology and society, arts, social science, natural science, and humanities. A student with an A.A. or A.S. degree is still responsible for all of the Buffalo State College requirements, such as diversity, foreign language, basic writing, Writing Across the Curriculum, and math/quantitative reasoning.

It is important to note that only credit is transferable. Credit is granted only from institutions listed on the application for admission. Grades, quality points, and cumulative averages do not transfer. Additional information on transfer credit policies is available 43 in the Academic Policies section. Students dissatisfied with credit evaluations may formally request a review from the Admissions Office or may submit a petition to the Academic Appeals Committee.

Undergraduate Admissions assists transfer students in their enrollment and transition to Buffalo State. Services include information regarding enrollment through the Dual Admissions and Joint Teacher Preparation Programs with local community colleges and assistance with resolving transfer-

credit issues. The Admissions Office also serves as a resource in facilitating transfer articulation agreements between Buffalo State academic departments and programs at other two- and four-year colleges. Buffalo State reserves the right to evaluate all credit-bearing courses. Credit courses from institutions with other than regional accreditation are evaluated for transfer purposes on a case-by-case basis.

Special Credit

In addition to credit awarded for traditional college work, up to 45 credit hours may be accepted from the following combined sources:

Source	Maximum Credit Hours
1. Published examinations	30
No more than 18 credit hours may be in general examinations	
2. Course challenge	30
3. Noncollegiate institutions	15
4. Proprietary institutions	15

Further details may be found in the section on Academic Policies, page 31.

State University of New York Transfer Guarantee

An opportunity to continue full-time study at a four-year State University college is guaranteed to all New York State residents who transfer directly from a SUNY or CUNY two-year college with an A.A. or A.S. degree. To be eligible, students must:

- File an application with the Application Services Center by March 1 for fall admission or October 1 for spring admission.
- Provide four-year campuses with an official two-year college transcript, showing three semesters of completed studies, by March 15 for fall admission or by October 15 for spring admission.
- Complete any required supplemental application materials by April 15 for fall admission or by November 15 for spring admission.

The transfer guarantee becomes effective if applicants are denied admission at all SUNY four-year college choices. All applications at baccalaureate campuses must be complete.

Dual Admission Programs

Erie Community College
 Genesee Community College
 Jamestown Community College
 Mohawk Valley Community College
 Monroe Community College
 Niagara County Community College
 Onondaga Community College

First-time freshmen who expect to receive an A.A. or A.S. degree from Erie Community College, Genesee Community College, Jamestown Community College, Mohawk Val-

ley Community College, Monroe Community College, Niagara County Community College, or Onondaga Community College and are in a parallel program may file a single application for simultaneous admission to one of the two-year colleges and to Buffalo State. These students follow a definitive curriculum at the two-year college, and receive counseling and advisement that will facilitate enrollment into a parallel program at Buffalo State upon completion of the associate's degree. They will matriculate at Buffalo State as juniors and must meet current admissions requirements into their choice of major. They can expect to earn the baccalaureate degree for most programs in four additional semesters of full-time study. Students planning to pursue programs requiring certification (e.g., education) may require more than four semesters of full-time study to finish.

The admission, Intellectual Foundations, and major requirements for the bachelor's degree at Buffalo State will be those in effect at the time of the student's application for dual admission at the two-year college. Further details are available from the Undergraduate Admissions Office at Buffalo State or the transfer counseling office at the participating two-year college.

Admission Procedures

The college uses the state's common application form or the national common application, which may be completed and submitted online at www.suny.edu/student, www.buffalostate.edu/admissions, or www.commonapp.org. Admission decisions are made on a rolling basis beginning in mid-September for spring applicants and mid-December for fall applicants. Processing continues until new-student enrollment goals have been met. Applicants are encouraged to submit their application and supporting materials as early as possible to receive timely consideration.

All matriculating students born on or after January 1, 1957, must submit proof of immunity to measles, mumps, and rubella. Students who cannot show proper proof of immunity will not be permitted to register. A completed health report and physician's certificate must be on file at the college's Weigel Health Center.

With the exception of EOP participants, all accepted students must submit a \$125 advance tuition deposit. This deposit is applied to the fall or spring semester tuition bill (whichever is appropriate).

Refunds of the tuition deposit are made only under the following circumstances:

1. A refund request must be made within 30 days after the date of acceptance, or by May 1 for summer/fall terms or November 1 for spring term, whichever is later, but prior to the first day of registration.
2. If the college withdraws a conditional acceptance.
3. If the student withdraws to enter military service.
4. If the college comptroller deems that conditions beyond the student's control warrant a refund and appropriate documentation is provided.

Requests for tuition deposit refunds must be received in writing and include the appropriate documentation.

Non-degree Status

Non-degree status enables individuals to take college courses for credit without working toward a degree. Students may enroll in up to 11 credit hours of coursework each semester on a space-available basis. Credits earned may be applicable to a degree at the college if the student applies and is accepted as a formally matriculated student. The only entrance requirement is a high school diploma or its equivalent. Students who have been academically dismissed from any institution must wait one full year from the time of dismissal before enrolling under non-degree status. To register, complete a one-page application <http://www.buffalostate.edu/admissions/nondegree.xml>, available from the Admissions Office. Non-degree students are not eligible for financial aid.

Adult learners without college experience who do not qualify for matriculated study may also enroll as part-time, non-degree students. After completing 15 credit hours of college-level coursework with a minimum GPA of 2.0, they are eligible for degree study pending a completed application. The credit hours that they have earned will be applicable to their degree.

Students are responsible for completing the degree requirements in effect at the time they reach matriculated status.

Readmission

Students who attended Buffalo State previously in a matriculated status and wish to re-enroll must apply for a specific program and have their applications reviewed by the appropriate department. If other courses have been taken at other institutions since leaving the college, official transcripts must be submitted.

Undergraduate and graduate students who discontinue attendance without taking a leave of absence can register for classes, without applying for readmission, for up to four fall and spring semesters beyond the semester in which they were last registered, unless they attend another institution, in which case a readmission application is required. Baccalaureate graduates and undergraduate students with less than a 2.0 cumulative average retain registration eligibility for only one fall or spring semester beyond the semester in which they were last registered.

Effective fall 2009, all new transfer and readmitted students at Buffalo State College are required to fulfill Intellectual Foundations requirements regardless of their initial matriculation date into a regionally accredited four-year institution or two-year college. Students who have been academically dismissed must wait one full year from the time of dismissal before being considered for readmission. If readmitted, all coursework taken previously will be considered in computing the cumulative average. Any student with a Buffalo State GPA of less than 2.0 is eligible to apply for academic clemency <http://www.buffalostate.edu/academicstandards/x535.xml> when he or she applies for readmission. Readmission forms

<http://www.buffalostate.edu/admissions/readmission.xml> are available in the Undergraduate Admissions Office.

Summer Session

The college offers one of the largest and most comprehensive summer programs in the state university system, with more than 500 graduate and undergraduate courses available. Departments often choose to offer creative or unique courses in the summer. Summer Session consists of two four-week sessions and one three-week session beginning in late May. The last session begins in mid-July. Summer Session courses and course registration dates are posted in January online at www.buffalostate.edu/summer.

Students from other colleges are required to complete a non-degree application for admission in advance of registration.

Evening Study

Buffalo State maintains no separate evening division. Instead, all students—whether part time or full time, day or evening—are admitted through the Admissions Office. As a result, the provision of basic college services is direct and efficient. Students enjoy the flexibility of being able to switch between day and evening schedules simply on the basis of the courses for which they register. The general programs, policies, procedures, and course descriptions throughout this catalog apply to day and evening students alike.

Of the college's more than 70 undergraduate academic majors, the 12 available to evening students are business administration; career and technical education; computer information systems; criminal justice; electrical engineering technology, electronics; electrical engineering technology, power and machines; individualized studies; industrial technology; mechanical engineering technology; media production; social work; and urban and regional analysis and planning. Evening-available minors are computer information systems, criminal justice, quality, and safety studies.

The courses for each of these programs are sequenced over several semesters so that evening students are able to fit them into their schedules. Courses are offered on weekends and online.

Student Retention

The college routinely collects and maintains data regarding student persistence and graduation rates. Buffalo State graduation rates compare most favorably with national benchmarks, averages, and graduation rates for other similar public metropolitan institutions. Further information is available upon request.

FINANCES

Students are required to pay tuition and fees upon receipt of invoice with cash or credit card, or through a deferred-payment plan. Deductions will be made under various financial aid programs upon approval of the Financial Aid Office.

Room and board charges must be paid prior to arrival on campus. These charges are usually included in the bill covering tuition and fees. **The rates listed below are subject to review and may change without prior notice.**

Further information concerning payment is available in the Student Accounts Office, Moot Hall 260, (716) 878-4121, www.buffalostate.edu/studentaccounts.

Explanation of Terms

Full-time—A student registered for 12 or more credit hours a semester is considered a full-time student.

Part-time—A student registered for 1 to 11 credit hours a semester is considered a part-time student.

Semester—An academic year at the college consists of a fall semester and a spring semester. Yearly expenses are twice the semester rate.

Resident (for tuition purposes)—As established by the State University Board of Trustees, an individual university registrant is considered a New York State resident and is charged in-state tuition rates when that individual is determined to have a permanent and principal home in New York State for 12 months prior to registration. Those who do not meet this requirement are presumed to be out-of-state residents and are charged out-of-state tuition rates unless satisfactory proof is presented to show that domicile in New York State has, in fact, been established.

Tuition

Tuition for full-time Buffalo State undergraduate students is \$2,635 per semester for New York State residents and \$7,160 per semester for out-of-state students. Tuition for part-time undergraduate students is \$220 per credit hour for New York State residents and \$597 per credit hour for out-of-state residents.

College Fee

A mandatory college fee of \$12.50 per semester for full-time students and \$.85 per credit hour for part-time stu-

dents is collected by all units of the state university system to finance the operating budget.

Activity Fee

A mandatory activity fee of \$75 per semester for full-time students and \$6.25 per credit hour for part-time students is collected to support the activities of more than 80 student groups on campus.

Health Fee

All full-time students are required to pay a \$130-per-semester health fee; part-time students pay \$10.85 per credit hour per semester. This fee provides basic medical assistance to students on campus through the Weigel Health Center. A mandatory health fee is collected by all units of the State University system.

Waiver for Off-Site Distance-Education Students

Students enrolled exclusively in off-campus or distance-learning courses with no on-campus meetings are eligible for a waiver or refund of the student health fee (not the mandatory health insurance), provided they are not concurrently enrolled in on-campus courses. If a student is enrolled in both on-campus and off-campus or distance-learning courses, the health fee applies to all courses for which the student is registered. More information and refund forms are available at www.buffalostate.edu/weigel or from the Weigel Health Center at (716) 878-6711.

Athletic Fee

A mandatory athletic fee of \$133 per semester for full-time students and \$11.10 per credit hour for part-time students is collected to support intercollegiate athletics.

Technology Fee

A mandatory technology fee of \$160 per semester for full-time students and \$13.50 per credit hour for part-time students is collected to provide enhancements to campus technology.

Transportation Fee

A mandatory fee of \$31 per semester for full time students and \$2.60 per credit hour for part-time students is collected for the Buffalo State-Niagara Frontier Transportation Au-

thority (NFTA) Metro Pass Program. Under this program, all undergraduate students receive an NFTA Metro Pass, which provides unlimited use of both the extensive NFTA bus services on and around campus and all NFTA bus and rail services throughout the region.

Parking Fee

Students who wish to park on campus pay \$70 per academic year and \$10 for summer-only permits.

Room and Board

Residence hall room rates are \$3,169 per semester for a double-occupancy room. Room rental does not include telephone service, which students arrange with the telephone company. Some single rooms are available, but the college cannot guarantee these accommodations. Meal plan rates vary, starting at \$1,951 per semester. Residence hall room rates and meal plan rates are subject to change.

Miscellaneous Expenses

Miscellaneous expenses will vary depending on the academic program, personal spending habits, and commute distance.

Mandatory Student Health Insurance

The Buffalo State College student health insurance plan has been developed especially for Buffalo State College students. The plan provides coverage for sickness and injuries that occur on and off campus, and includes cost-saving features to keep the coverage as affordable as possible.

All full-time domestic undergraduate and graduate students who attend Buffalo State College are eligible and automatically enrolled in the Buffalo State College student health insurance plan unless an online waiver verifying proof of health insurance coverage is completed by the applicable deadline. Part-time domestic students are eligible to purchase this coverage; however, they are not automatically enrolled in the plan. Spouse and dependent coverage is available. Please visit www.buffalostate.edu/weigel for enrollment information or a waiver form, or contact the Weigel Health Center at (716) 878-6711. International students must purchase SUNY International Health Insurance or have comparable coverage.

International Student Health Insurance

All international students must enroll in a group health insurance plan available through the college. If a student carries a health insurance policy that provides coverage comparable to the SUNY-mandated health insurance, it may be accepted as an alternative, if approved by the medical director of the Weigel Health Center. The premium was \$1,144.50 per year for August 2011 through August 2012. There also are rates for coverage during any semester. The premium is subject to change each year. All American students studying abroad also must carry this insurance.

Summer Session Tuition and Fees

Tuition and fees are charged at the credit-hour rate for all courses taken during Summer Session.

An Estimated Budget

Estimated college costs can be found in the following table for the 2011–2012 academic year. Costs may vary according to a student's place of residence, academic program, and individual needs. All tuition rates, fees, and fines are subject to change without notice as directed by the State University Board of Trustees.

Estimated Budget for 2011–2012 Fall and Spring Semesters

(New York State Residents)

	Commuter	Resident
Fixed Costs (per semester)		
Tuition	\$2,635.00	\$2,635.00
Fees	\$541.50	\$541.50
Total Fixed Costs	\$3176.50	\$3176.50
Variable Costs (per semester)		
Books and supplies	\$495.00	\$495.00
Maintenance at home	\$2,066.00	—
Room	—	\$5,235.00
Miscellaneous expenses	\$500.00	\$500.00
Transportation	\$550.00	\$550.00
Total Variable Costs	\$3,611.00	\$6,780.00
Estimated Total Costs/Semester	\$6,787.50	\$9,956.50
Estimated Annual Cost (two semesters)	\$13,575.00	\$19,913.00

Time Payment Plan

The college has established a time payment plan to assist students and their families in meeting the cost of tuition, fees, room, and board. Payment plan applications may be obtained from the Student Accounts Office, Moot Hall 260, (716) 878-4121, or the Financial Aid Office, Moot Hall 230, (716) 878-4901.

Refund Policies

All financial refunds are sent to students in the following order:

1. Transferred electronically to the student's bank account if a direct deposit application is on file in the Student Accounts Office.
2. Mailed to the permanent address of record on file in the Registrar's Office. Students are responsible for informing the Registrar's Office of any address change.

Tuition Refunds

Tuition refunds will be processed only if the student officially withdraws through the Registrar's Office. Students given permission to cancel their registration are responsible for payment of tuition according to the following schedule:

Date of Course Withdrawal	Tuition Liability
<i>Spring and Fall Semesters</i>	
First week of class	0
Second week	30%
Third week	50%
Fourth week	70%
After fourth week	100%
-The first week of class ends on Saturday of the week in which classes are scheduled.	
<i>Summer Sessions</i>	
First two days of Session A, B, or C	0%
Third day through end of first week of Session A or B	50%
Third day through end of first week of Session C	65%
Second week of Session A, B, or C	100%

Room Rental Refunds

During the fall and spring semesters, a refund can be made only if a student withdraws due to circumstances beyond his or her control. Questions covering refunds are addressed in the residence hall license.

Board Charge Refunds

Refunds are calculated according to college and federal regulations and guidelines, less a \$20 service charge for processing. No refunds are given after the drop/add session at the start of each semester. Contact the Buffalo State Campus Dining Services Office, Campbell Student Union 223, for additional information.

Activity Fee

College Fee

Health Fee

Athletic Fee

Technology Fee

These fees are refunded only when registration is canceled during drop/add period.

Parking Fee

The Parking Fee is refundable within the first two weeks of class upon surrender of parking permit.

Service Fees

The following fees are administered to comply with mandatory SUNY policy:

Late Registration Fee

Registrations on "late registration day" (the first day of classes) or later are charged a mandatory \$40 late registration fee that cannot be waived or deferred. Exceptions are registrations for graduate workshops, independent study, special projects, contracts, and any course requiring performance auditions. Registrations for independent study, special projects, and contracts turned in after the second week of classes that generate the only registration for a student will also be assessed the \$40 late fee.

Billing Fee

A billing fee of \$30 is assessed to each delinquency notice sent by the college. Late filing of financial aid does not waive this fee. All financial aid should be filed by March 1st.

Late Payment Fee

A \$30 fee is charged if the final semester bill is not paid by the due date.

Late Drop/Add Fee

A \$20 late drop/add fee is charged for each transaction after the first week of classes. Independent study, special projects, or contracts added after the second week of classes also are charged this fee.

Academic Transcript Fee

There is a \$5 fee for each transcript request.

Returned-Check Fee

A \$20 fee is charged for each check returned by the bank or any declined credit card transaction. The fee is nondeferrable and cannot be waived. An additional billing fee is charged on any transaction covering a course and/or room registration. If payment is not received within 10 days from the date of notification, the account is referred to the New York State Attorney General's Office for collection and handling.

New York State Debt-Collection Mandate

The State University reserves the right to withhold academic records from any student who has not satisfied or made provision to satisfy all obligations incurred in the State University system. Unpaid accounts are, in due course, turned over to an external collection agency. Collection costs are added to the amount of indebtedness.

FINANCIAL AID

The goal of the Financial Aid Office is to assist students with securing sufficient funding to cover their educational expenses. Annually, 85 percent of all undergraduate students receive some form of financial aid (federal, state, institutional, and/or private) while attending Buffalo State College.

Staff members in the Financial Aid Office, Moot Hall 230, are available year-round to assist students and their families with the financial aid application process. Contact the Financial Aid Office at (716) 878-4902 and/or finaid@buffalostate.edu. Additional financial aid information is available online at www.buffalostate.edu/financialaid

Application Procedures

There are multiple steps in the financial aid application process. Students must file the Free Application for Federal Student Aid (FAFSA) after January 1 of each year to apply for aid for the upcoming year.

The FAFSA can be found online at www.fafsa.ed.gov. To expedite this process, a student and the parent of a dependent student will need to have a federal PIN (personal identification number); apply at www.pin.ed.gov. The PIN serves as the electronic signature on official financial aid documents.

After submitting the FAFSA, a student will receive a Student Aid Report (SAR) from the federal processor. This form contains the data the student entered on the FAFSA. The Department of Education will send it to the student either by e-mail (three to five days) or postal mail (two to three weeks). Students must review the SAR carefully for errors (the form highlights items that may need attention) and follow directions for making corrections. Students are encouraged to submit corrections promptly to avoid long delays in processing of their application. Students should retain a copy of the SAR for their records.

Financial Need

Based on financial information provided on the FAFSA, a thorough analysis of the student's and/or parent's financial

situation, including income, assets, and number of family members in college, will be conducted. Financial need is determined by taking the Cost of Attendance (an estimated budget that includes tuition, fees, room, board, books, supplies, transportation, and a personal allowance) and subtracting from it the Expected Family Contribution (EFC). The EFC is the amount of money a family can reasonably be expected to contribute as determined by the FAFSA. Aid is then awarded based on the resulting comparative measure of need. Students can be funded only up to the amount of the Cost of Attendance.

At times, Buffalo State College may require additional documentation to complete the review of a student's financial aid eligibility. This may include the submission of federal tax forms and other supporting documents. This verification process is required to ensure the accuracy of information provided on the FAFSA. If selected, students and parents will be required to provide the office with the requested documentation before aid will be disbursed to the student.

It is very important for students to respond to all requests for additional documentation in a timely fashion.

Eligibility for Federal Financial Aid

Eligibility for financial aid is based on many factors, including but not limited to citizenship status, matriculation status, enrollment status, financial need, and satisfactory academic progress.

To be considered eligible for federal financial aid, students must

- be in good academic standing;
- be a U.S. citizen or eligible noncitizen;
- be registered for selective service (males only);
- be matriculated;
- be registered for at least 6 credits (except for PELL Grant and TEACH Grant);
- not be in default on a previous educational loan;
- have a high school diploma or General Education Development (GED) certificate.

Matriculation

To be eligible for most forms of financial aid, students must be U.S. citizens or eligible noncitizens and matriculated into degree or certificate programs. Students taking

continuing education courses, some visiting students, and special status students who have been allowed to take courses but have not been formally accepted by the college are considered nonmatriculated and are not eligible for federal financial aid.

Students with bachelor's degrees taking courses required by the state for teacher certification may borrow a Federal Perkins Loan or a Federal Direct Loan at the fifth-year undergraduate limits, even though they are not actually pursuing a degree. Undeclared (premajor) graduate students also can take out loans at the fifth-year undergraduate limits for one year if they are enrolled in preparatory coursework. Preparatory coursework does not include courses taken solely to raise the student's GPA to meet graduate admission standards and does not include coursework in a graduate degree program.

Enrollment Status

In most cases, students must be enrolled at least half time (6 credit hours) in courses required for their program to be eligible for federal financial aid. Students may be eligible for a Federal PELL Grant and TEACH Grant when enrolled less than half time.

Overawards

Each year, a number of students receiving aid are overawarded. This occurs in part because students are awarded other forms of assistance (e.g., scholarships, tuition waivers, loans, etc.) from outside agencies after they have accepted their award package. As a result of an overaward, students may have portions of their federal aid reduced or canceled, which may leave an outstanding balance on their student account. Students should notify the Financial Aid Office in writing immediately if they receive additional funds that were not included in their award package.

Withdrawal from Classes

If a student who has received financial aid funds withdraws, takes a leave of absence, or drops out during a semester, a portion of the financial aid may need to be repaid to the granting institution. In some situations, students may have incurred full liability for charges but only have "earned" a portion of the aid they were awarded. In such cases, the unearned portions of aid will be returned, but students will still owe the full balance to the college. Students who unofficially withdraw (i.e., stop attending classes without formally withdrawing from school) may also be subject to returning a portion of the aid they received. Students considering withdrawal should consult with staff in the Financial Aid Office before doing so.

Return of Title IV (R2T4) Funds

Federal regulations mandate a Return of Title IV Funds calculation when a student receiving Title IV financial aid (e.g., Pell, Perkins, SEOG, and Direct Loans) completely withdraws. If a student never attends, ceases enrollment or withdraws from all courses in the semester and he/she received federal financial aid, the college must determine if

these funds are required to be returned to the appropriate financial aid programs within forty-five (45) days.

R2T4 Calculation

The R2T4 calculation may result in a reduction of the student's federal loan(s) and grant(s) if he/she attended 60 percent or less of the semester. The R2T4 calculation is based on the following:

- The number of days the student attended
- The institutional charges assessed
- The total amount of federal Title IV aid awarded, accepted, and/or disbursed

As a result, the school and the student may be required to return any "unearned" federal aid received.

Unofficial Withdrawal

Federal Title IV financial aid is processed for a student under the assumption that the student will attend courses for the entire period for which the financial assistance is provided. A registered student who **failed to earn a passing grade in at least one course** is presumed to have "unofficially withdrawn" for federal Title IV financial aid eligibility purposes.

The Financial Aid Office will work with the student and his/her faculty members to ascertain official proof regarding the student's last date of attendance (known as the withdrawal date) for the semester and perform the R2T4 calculation to determine the "unearned" federal financial aid that must be returned to the designated program(s). The student will be notified by U.S. Postal mail regarding the results of R2T4 calculation.

Academic Withdrawal

While there is no academic penalty associated with the 'W' grade, there may be Financial Aid implications regardless of the reason (e.g., medical, etc.). Any student who received federal Title IV financial aid funding (e.g., Pell Grant, Direct Loans, Perkins Loan, etc.) will have their eligibility recalculated in order to determine:

1. the amount of financial aid the student is eligible to retain
2. the amount of "unearned financial aid" that must be returned

Additionally, the calculation will be based on the earliest date documented on the official Academic Withdrawal form.

Unearned Aid

A determination regarding the percentage of the semester the student completed must be performed and this will reveal the percentage of the federal Title IV aid that the student has earned. The total amount of federal aid disbursed to the student, or that could have been disbursed to the student minus the amount of federal aid earned by the student

equals the amount of federal loan(s) and grant(s) that is unearned and that must be returned: (688.22(e)).

Total Title IV Disbursable Aid
- (minus) Title IV Aid Earned

= Title IV Loan(s) and Grant(s) to be Returned

If **the college** is required to return any unearned aid, we will reduce or cancel the federal award(s), debit the student's account and return the unearned portion of aid to the U.S. Department of Education.

This adjustment may result in a balance due to Buffalo State College. It is the student's responsibility to repay the "unearned" portion of aid that was charged back to the student account. Students will receive notification of this action via a U.S. Postal letter and he/she will receive an updated student bill.

Post-Withdrawal Disbursement

A post-withdrawal disbursement of federal Title IV aid occurs when the amount of federal aid earned by the student is greater than the amount of the federal aid disbursed for the semester. A student eligible for a post-withdrawal disbursement will receive written notification from the college. Students receive a notification via U.S. Postal mail that they have the right to accept or decline, some, or all, of the offered post-withdrawal loan disbursement(s).

R2T4 Distribution of Financial Aid Refund

Refunds returned to the U.S. Department of Education on behalf of the student are distributed among the financial aid programs in the following order:

1. Unsubsidized Federal Direct Stafford Loan
2. Subsidized Federal Direct Stafford Loans
3. Federal Perkins Loans
4. Federal Direct Parent Loan for Undergraduate Students
5. Federal PELL Grant
6. Academic Competitiveness Grant – eliminated 11-12 Academic Year
7. National SMART Grant – eliminated 11-12 Academic Year
8. Federal Supplemental Educational Opportunity Grant
9. Federal Graduate Plus Loans for Graduate Students

Notification

Students will receive written notification indicating the type and amount of aid returned to the U.S. Department of Education.

Satisfactory Academic Progress (Federal)

Satisfactory Academic Progress (SAP) is the process used to determine if a student is making acceptable progress toward a degree or certificate. At the end of each payment period (semester), a review of a student's progress is con-

ducted. A student's failure to meet any of the three of the Satisfactory Academic Progress standards (for all terms enrolled, not just those terms that aid was received) may result in loss of federal aid eligibility.

An electronic notification detailing the student's SAP status will be sent to the student's Buffalo State College e-mail address; if unavailable, a hard copy notification will be mailed to the permanent address on file.

All three of the following Satisfactory Academic Progress standards must be met:

1. Cumulative Grade Point Average (GPA) - Qualitative Component

a. A student must have a minimum cumulative GPA of 2.0 (BSC GPA only).

2. Minimum Pace rate (formerly known as Completion rate) for Attempted Credit Hours - Quantitative Component

a. A student must complete at least two-thirds (66.67%) of all cumulative attempted credit hours.

b. New freshmen are required to successfully complete at least half (50%) of the credits they attempt during their first two semesters. Starting with their third semester, they are then required to successfully complete two-thirds of their credits.

c. The following designations are considered to be attempted credit hours but are not considered to be successfully completed: I, N, X, W, U, E, and F grades and grades and courses removed through the academic clemency process. Noncredit remedial courses are counted at their credit equivalence (1 to 3 credits).

d. Transfer credit hours posted to the official transcript record and all courses removed through the academic clemency process will be counted as attempted credit hours.

3. Maximum Time frame/Degree Completion within 150 percent of the average Length of the Program - Quantitative Component

a. Students must complete their first baccalaureate degree within 150 percent of the normal time required to complete a bachelor's degree, not to exceed 180 attempted credit hours for a program with a published length of 120 credit hours.

b. Federal financial aid eligibility will be terminated when a student has attempted 180 credit hours; there is no waiver of the maximum time frame standard for any reason.

c. A student pursuing a double major or degree must earn his or her first bachelor's degree within the 150 percent maximum time frame standard.

d. A student that completed all coursework required for a major or degree is ineligible for a PELL grant even if an Application for Undergraduate Degree form is not on file.

All students must be accepted into a major before completing 60 credit hours to continue to be eligible for federal aid.

Repeated Courses

Courses that are repeated to improve a grade are counted as attempted each time they are taken but are only counted as completed once.

Readmission to the college after an absence does not automatically mean reinstatement of aid eligibility.

Financial Aid Warning

A student who fails to maintain cumulative GPA or meet Pace requirements is placed on Financial Aid Warning as long as it is mathematically possible to recover in one payment period. There is no action required by the student; federal aid eligibility continues for one payment period/semester.

Appeal Process for Special Circumstances

If the student is still not making satisfactory academic progress after the Financial Aid Warning semester, he or she is ineligible for federal financial aid until the required standard is achieved.

A student has a right to appeal the loss of federal financial aid eligibility if mitigating circumstances (events totally beyond the student's control) existed. All SAP appeals should be submitted to the Academic Standards Office, Twin Rise 100.

Financial Aid Probation

A student who fails to maintain the cumulative GPA and/or meet the Pace rate standard is placed on Financial Aid Probation only if the student has successfully appealed. The student will continue to receive federal financial aid for one payment period/semester. The student must meet SAP at the end of the probationary period or comply with the Academic Plan requirements.

If the student is still not making Satisfactory Academic Progress or fails to meet the Academic Plan requirements after the probationary period, he or she will become ineligible for federal financial aid until all three SAP standards are successfully met.

Federal Financial Aid Sources

There are three basic financial aid categories that constitute a student's individual award package: grants and scholarships (do not need to be repaid), loans (must be repaid), and jobs (Federal Work-Study position).

Eligibility for the Federal PELL Grant

The Federal PELL Grant Program provides need-based grants to low-income undergraduate students to promote access to postsecondary education. The student's Expected Family Contribution (EFC) determines eligibility for this grant. The maximum PELL Grant is set by the U.S. Department of Education each award. The amount of the PELL Grant a student will receive depends on the student's EFC and several factors, including cost of attendance (tuition and fees, room and board, books, and supplies) and the amount of time the student attends college (whether a full academic year or less, and whether full time or part time). Students cannot receive PELL Grant funds from more than one college at a time.

Eligibility for Federal Supplemental Educational Opportunity Grant (FSEOG)

The Federal Supplemental Educational Opportunity Grant (FSEOG) program is for undergraduates with exceptional financial need. PELL Grant recipients with the lowest expected family contributions (EFCs) will be considered first for a FSEOG. Just like PELL Grants, the FSEOG does not have to be repaid.

Eligibility for the Federal TEACH Grant

TEACH Grant eligibility is determined after the fall or spring semester starts. Those students who meet the eligibility requirements will be invited to apply for the TEACH Grant. Students must complete Entrance Counseling and an annual Service Agreement.

In exchange for receiving a TEACH Grant, students must agree to serve as a full-time teacher in a high-need field in a public or private elementary or secondary school that serves low-income students.

A TEACH Grant recipient must teach for at least four academic years (within eight calendar years). If a student fails to complete his or her service obligation, all amounts of TEACH Grants that were received will be converted to a Federal Direct Unsubsidized Stafford Loan. Students must then repay this loan to the U.S. Department of Education. They will be charged interest from the date the grant(s) was disbursed. Note: TEACH Grant recipients will be given a six-month grace period before entering repayment if a TEACH Grant is converted to a Direct Unsubsidized Loan.

Eligibility for Federal Perkins Loans

Students who have been awarded a Federal Perkins Loan will be required to complete an electronic Master Promissory Note (e-MPN) and entrance counseling. You may do so at SUNY Student Loan Service Center's website <http://slsc.albany.edu/ecsi/prom.html>. The MPN must be completed and received by the college before the loan can be disbursed. Failure to do so by the deadline will mean forfeiture of the loan. Once a Federal Perkins Loan MPN is on file at the college, subsequent loans should not require additional MPNs.

Eligibility for Federal Direct Loans

Direct Stafford Loans are low-interest loans for eligible students to help cover the cost of higher education.

Direct Subsidized Loans are for students with financial need. Students are not charged interest while in school at least half time and during grace periods and deferment periods.

Students are not required to demonstrate financial need to receive a Direct Unsubsidized Loan. Students can pay the interest while in school and during grace periods and deferment or forbearance periods, or students can allow it to accrue and be capitalized (that is, added to the principal amount of the loan). Students who choose not to pay the interest as it accrues will have an increased total amount to repay because interest will be charged on a higher principal amount.

If you are a first time Federal Direct Loan borrower, you must sign a Master Promissory Note. The electronic Master Promissory Note (e-MPN) is the agreement to pay back any Direct Loans. The e-MPN is available online <https://studentloans.gov/myDirectLoan/index.action>.

Online Entrance Counseling is required for first-time Direct Loans borrowers. Entrance Counseling will educate students on the rights and responsibilities associated with receiving funds that must be repaid. To satisfy your online Entrance Counseling <https://studentloans.gov/myDirectLoan/index.action> requirements, students must complete the tutorial and pass a quiz. Failure to comply with this requirement will prevent the disbursement of the student's loan proceeds.

The U.S. Department of Education issued PIN <http://www.pin.ed.gov/PINWebApp/pinindex.jsp> is required to complete Entrance Counseling and the e-MPN.

Eligibility for Federal Direct PLUS Loan for Parents of Undergraduate Students

The Federal Direct PLUS loan is a loan program for parents to assist their undergraduate dependent student when there is a gap between the cost of education and the student's own financial aid. These loans are federally regulated and require credit approval. The PLUS loan has a fixed interest rate, and if a parent is not credit-worthy, the student may be eligible for an additional Federal Direct Unsubsidized loan.

If a parent receives credit approval, he or she will also need to complete a Direct PLUS Master Promissory Note at www.studentloans.gov <https://studentloans.gov/myDirectLoan/index.action>.

If a parent is applying for a PLUS loan for more than one student in college, a separate note is required for each student. If more than one parent is applying for a PLUS loan for the same student, each parent must complete a note.

Eligibility for Federal Direct PLUS Loans for Graduate Students

Graduate students can borrow a low, fixed-interest, rate-guaranteed Direct PLUS Loan up to the cost of attendance less any other aid received to help cover educational expenses. This loan requires the student to be credit-worthy.

Buffalo State College must determine the student's maximum eligibility for Direct Subsidized and Unsubsidized Stafford Loans <http://studentaid.ed.gov/PORTALSWebApp/students/english/studentloans.jsp> before a student can receive a Direct PLUS Loan.

The first time a graduate student applies for a Direct PLUS Loan, he or she will need to complete a Direct PLUS e-

MPN. This e-MPN is separate from the Direct Subsidized and Unsubsidized Loans e-MPN.

Eligibility for Federal Work-Study

The Federal Work-Study program provides employment opportunities in various on-campus offices and in off-campus community service agencies. Students who qualify for the Federal Work-Study program will be paid at an hourly rate and receive biweekly paychecks for the hours worked. Federal Work-Study will not be credited to your account. It is the responsibility of the student to secure employment. Federal Work-Study positions are limited; therefore, there is no guaranty of eligibility from one year to the next. Students are encouraged to complete the FAFSA by March 1 to receive full consideration to participate in the Federal Work-Study program.

Eligible students will receive a letter before the start of the semester with details regarding the steps to log on to the Financial Aid website to research available positions. Students who do not qualify for Federal Work-Study or who are not successful in securing a job may be able to secure employment with the assistance of the Career Development Center in Cleveland Hall 306.

Scholarships

Buffalo State administers more than 100 scholarships for students demonstrating outstanding leadership qualities, academic abilities, and/or financial need. Staff in the Financial Aid Office, Moot Hall 230, assist students in locating scholarships offered by agencies not affiliated with Buffalo State College. Students may also visit www.buffalostate.edu/financialaid <http://www.buffalostate.edu/financialaid> for detailed scholarship information including application deadline dates.

Eligibility for New York State Financial Aid

Eligibility for Tuition Assistance Program

The Tuition Assistance Program (TAP) is a grant program for New York State residents who are enrolled full time (12 or more credit hours per semester). The online TAP application can be accessed after completing the FAFSA by linking to it directly from your FAFSA Confirmation Page. If you miss the TAP link after finishing the FAFSA, you must wait five business days until your FAFSA data is received by HESC. After the information is received, you can complete a TAP on the Web <http://www.tapweb.org/totw> application.

For TAP, the 12 credit hours cannot include illegal repeats (i.e., a course that previously received a passing grade for which a student is trying to improve the grade). Students enrolled for less than 12 credit hours can apply for Aid for Part-Time Study (APTS).

TAP Academic Eligibility Chart***

Before being certified for this payment	TAP Award Payment Number									
	1st	2nd	3rd	4th	5th	6th	7th	8th	9th*	10th*
(Having accrued this many TAP Points**)	0–5	6–11	12–17	18–23	24–29	30–35	36–41	42–47	48–53	54–59
A student must have completed this many credit hours with a passing or failing grade in the prior semester	0	6	6	9	9	12	12	12	12	12
Must have accrued at least this many credit hours	0	6	15	27	39	51	66	81	96	111
With at least this cumulative GPA	0.0	1.5	1.8	2.0	2.0	2.0	2.0	2.0	2.0	2.0

* Only EOP students can receive a ninth or 10th payment.

** TAP payments are measured by TAP points, with students usually being charged six points every semester they receive TAP.

*** Students who received a TAP payment in 2009 or earlier are evaluated under a different eligibility chart. EOP students are also evaluated under a different eligibility chart.

Eligibility for Aid for Part-Time Study

Aid for Part-Time Study (APTS) is a grant program for New York State residents who are enrolled for 3–11 credit hours per semester. Applications are available online at <http://www.buffalostate.edu/financialaid/x487.xml> and in the Financial Aid Office, Moot Hall 230.

Satisfactory Academic Progress (State)

To receive TAP/APTS, students must be in good academic standing. Good academic standing, in regard to state aid, is concerned with two components: pursuit of program and satisfactory academic progress. Pursuit of program tracks withdrawal from courses that result in a student's being enrolled for fewer than 12 credit hours in a semester. Satisfactory academic progress looks at both a student's cumulative GPA and the accumulation of credit hours toward a degree. A student's academic standing is then measured on the TAP Academic Eligibility Chart, above.

It should be noted that when using the chart, only semesters that a student receives a TAP/APTS payment are considered. Students who first receive TAP grants at the start of their junior year would be required to meet the standards represented by the first column. Students are limited to receiving eight semesters of TAP grants, except EOP students, who can receive 10 semesters of TAP. All students must be accepted into a major prior to completing 60 credit hours to continue to be eligible for TAP/APTS.

Students who fail to maintain good academic standing become ineligible for TAP/APTS until they achieve the appropriate standards without the assistance of state funding.

In exceptional situations, students who become ineligible may be granted a one-time waiver of their ineligibility. All waiver requests should be submitted to the Academic Standards Office, Twin Rise 100.

Arthur O. Eve Educational Opportunity Program (EOP)

EOP is a grant program for residents of New York State who, because of inadequate financial resources and academic preparation, have not had the same educational opportunities as other students. EOP students receive financial assistance, as well as focused academic support, to assist them in succeeding at the collegiate level. Application for the program is made on the SUNY Application for Admission. If a student is not admitted to the college through EOP, he or she cannot join the program at a later time.

Veterans Benefits

Veterans and those who are children or spouses of veterans who are deceased or have service-connected disabilities may be able to receive aid for approved postsecondary study. Applications are available in the Veterans Office in Cleveland Hall 210. Questions regarding aid eligibility should be directed to the Veterans Administration offices.

Aid for Students with Disabilities

Students with disabilities pursuing higher education may be eligible for assistance through the state Adult Career and Continuing Education Services – Vocational Rehabilitation <http://www.acces.nysed.gov/vr/do/home.html> (ACCES-VR) or Office of Children and Family Services,

Commission for the Blind and Visually Handicapped <http://www.ocfs.state.ny.us/main/cbvh/> (CBVH). Criteria and funding vary. Applications and eligibility requirements may be obtained at the Buffalo-area offices or at your local area offices for ACCES-VR and CBVH.

Eligibility for Native Americans

The U.S. Bureau of Indian Affairs offers need-based grants for college study to applicants who are enrolled tribal members of an American Indian, Eskimo, or Aleut tribe, band, or group recognized by the Bureau of Indian Affairs. An application is necessary for each year of study and must be accompanied by an official needs analysis from the Financial Aid Office after submission of the FAFSA.

First-time applicants also must submit tribal enrollment certification from the bureau, agency, or tribe that records enrollment for the tribe. Applications are available from the education office of the tribe, band, or group with which you are affiliated or possess membership. For further information, contact the Bureau of Indian Education at (202) 208-6123 or <http://www.bie.edu>.

New York State also offers grants to Native Americans who are members of one of the Native American tribes located on reservations within New York State. Applications and program details may be obtained from the Native American Education Program Unit, State Education Department, Room 461EBA, Albany, NY 12234, (518) 474-0537.

Eligibility for Summer Aid

Summer Session financial aid is available at Buffalo State College. Students wishing to apply for aid for Summer Session must complete the supplemental Summer Aid Application that becomes available at the end of March each year. Since summer aid eligibility is dependent upon a student's not having exhausted his or her eligibility during the fall and spring semesters, it is advisable that students seek advice before registering for classes.

Eligibility for Special Programs

Many Buffalo State students take advantage of the National Student Exchange (NSE) or Study Abroad programs. Financial aid is available for exchange programs. Students must submit the official exchange budget sheets to the Financial Aid Office, as well as have a processed FAFSA on file, to receive awards for their exchange. Students receive financial aid for participation in exchange. To receive TAP while on exchange, tuition payment must be to a New York State institution.

Award Notification

After you are accepted, the Financial Aid Office will send you an award letter detailing the aid you are eligible to receive based on program eligibility requirements. Students must accept, revise, or decline award(s) by the prescribed deadline date. Failure to accept aid by the deadline date may result in the loss of some types of financial aid.

The Financial Aid Office will send initial paper award letters to all new students. All students are responsible for monitoring their campus e-mail and their financial aid status online at the self-service Banner site.

Continuing students will receive their award letter via campus e-mail directing them to view their award online at the self-service Banner site. All students are given the opportunity to reduce or decline any award offered at the Banner site. Some aid programs require additional steps to complete the application process.

TAP Notification

New York State TAP award notifications are sent to students directly from HESC shortly after the state budget is set each year. TAP awards are school specific and must have "SUC Buffalo" on the certificate to be valid at Buffalo State. Actual award dollars are sent directly to the Student Accounts Office.

ACADEMIC POLICIES

The following college academic procedures, policies, and guidelines apply to all students and all college sessions. Students are responsible for determining their academic programs and for meeting every degree requirement. Faculty or professional staff members who act as advisers are obligated only to assist students in meeting this responsibility. Clarification of any requirements for the baccalaureate degree may be obtained from the academic adviser, department chair, or academic dean. Check with the Academic Standards Office, Twin Rise 100, (716) 878-5222, for clarification of other regulations or procedures. A list of academic policies can be found at www.buffalostate.edu/academicaffairs/x481.xml.

Academic Advisement

Students who have declared a major must seek advisement by contacting the chair of the department responsible for their major. Advisement for undeclared students affiliated with the Arthur O. Eve Educational Opportunity Program (EOP), Student Support Services Program (SSSP), All-College Honors, or Academic Intervention (AI) should contact those programs for advisement. Other undeclared majors should consult with the Academic Advisement Office, South Wing 110.

Degree Audit System

Students' academic progress toward meeting graduation requirements is recorded in the Degree Navigator audit system. Copies of up-to-date audit sheets should be secured before advisement and can be obtained online at www.buffalostate.edu/registrar/degreenavigator.xml. Necessary corrections or questions about the audit sheet information should be brought to the attention of the student's academic adviser.

Role of Students and Faculty in the Advisement Process

Effective academic advisement is the interaction between a qualified adviser who is knowledgeable and supportive and a serious student who is motivated and receptive, as together they evaluate and plan the student's course of study. The task of the adviser is to provide guidance and information for the student to make efficient progress in the pursuit of an academic goal. The adviser is responsible for being well informed and ready to provide aid in the selection of specific areas and courses, and for helping the student ful-

fill academic regulations and interpret administrative policies. The task of the student is to seek advisement, to understand, and to be responsible for decisions. The student should be familiar with the sources of information on requirements, regulations, and policies. The college bears the responsibility for establishing procedures and providing a setting conducive to good advisement.

Notification of Rights under the Family Educational Rights and Privacy Act (FERPA)

The Family Educational Rights and Privacy Act (FERPA) affords students certain rights with respect to their education records. These rights include:

1. The right to inspect and review the student's education records within 45 days of the day the college receives a request for access. A student should submit to the registrar, dean, head of the academic department, or other appropriate official a written request that identifies the record(s) the student wishes to inspect. The college official will make arrangements for access and notify the student of the time and place where the records may be inspected. If the records are not maintained by the college official to whom the request was submitted, that official shall advise the student of the correct official to whom the request should be addressed.
2. The right to request the amendment of the student's education records that the student believes are inaccurate, misleading, or otherwise in violation of the student's privacy rights under FERPA. A student who wishes to ask the college to amend a record should write the college official responsible for the record, clearly identify the part of the record the student wants changed, and specify why it should be changed. If the college decides not to amend the record as requested, the college will notify the student in writing of the decision and the student's right to a hearing regarding the request for amendment. Additional information regarding the hearing procedures will be provided to the student when notified of the right to a hearing.
3. The right to provide written consent before the college discloses personally identifiable information from the student's education records, except to the extent that FERPA authorizes disclosure without consent.

The college discloses education records without a student's prior written consent under the FERPA exception for disclosure to school officials with legitimate educa-

tional interests. A school official is a person employed by the college in an administrative, supervisory, academic or research, or support staff position (including law enforcement unit personnel and health staff); a person or company with whom the college has contracted as its agent to provide a service instead of using college employees or officials (such as an attorney, auditor, or collection agent); a person serving on the College Council; or a student serving on an official committee, such as a disciplinary or grievance committee, or assisting another school official in performing his or her tasks; and National Student Clearinghouse officials. A school official has a legitimate educational interest if the official needs to review an education record to fulfill his or her professional responsibilities for the college. Upon request, the college also discloses education records without consent to officials of another school in which a student seeks or intends to enroll.

Buffalo State hereby designates the following categories of student information as public or directory information. Such information may be disclosed by the institution for any purpose, at its discretion.

- a. Name, address, electronic mail address, telephone listing, dates of attendance, enrollment status (e.g., undergraduate or graduate; full-time or part-time), class level, and academic adviser.
- b. Most recent educational agency or institution attended; major field of study; degrees, honors, and awards received.
- c. Participation in officially recognized activities and sports, weight and height of members of athletic teams, date and place of birth, photographs.

Currently enrolled students may withhold disclosure of any category of information under the Family Educational Rights and Privacy Act of 1974. To withhold disclosure, written notification must be received by September 15 in the Registrar's Office, Moot Hall, Buffalo State, 1300 Elmwood Avenue, Buffalo, NY 14222-1095. Nondisclosure of information will commence thereafter and be effective until September 14 of the following year. Written notification to withhold disclosure must be made each academic year.

Buffalo State assumes that failure on the part of any student to specifically request the withholding of categories of directory information by the deadline date indicates individual approval for disclosure.

4. The right to file a complaint with the U.S. Department of Education concerning alleged failures by Buffalo State to comply with the requirements of FERPA. The name and address of the office that administers FERPA is Family Policy Compliance Office, U.S. Department of Education, 400 Maryland Ave., SW, Washington, DC 20202- 5901.

Academic Calendar

Check the Academic Calendar, including general student deadlines, at www.buffalostate.edu/academiccalendar.xml.

Registration Information

All currently registered students who will continue their studies during the next regular semester are expected to register within two weeks of their first day of registration eligibility. Procedures for registering can be found on the Registrar's Office website. Course listings are posted on the web in March for fall and in October for spring. For links to up-to-date registration and course information, go to www.buffalostate.edu/registrar.

To receive accurate information about registration eligibility and to maintain registration eligibility, students should remember the following:

- Notify the Registrar's Office of any change of address.
- Students subject to possible academic dismissal under probation regulations should register. Students clearly subject to dismissal should not begin a new semester or summer session until the appropriate dean has determined their status.
- Academic advisement is mandatory for all matriculated students.
- Students with outstanding financial obligations will not be allowed to register at any time.
- Not attending the first class meeting does not withdraw a student from a class.
- Students with 2.0 or higher GPAs who discontinue attendance without taking a leave of absence can register for classes without applying for readmission for up to four fall or spring semesters beyond the semester in which they were last registered. Baccalaureate graduates and students with less than 2.0 cumulative GPAs retain registration eligibility for only one fall or spring semester beyond the semester in which they were last registered.

Course Load

The average course load for matriculated undergraduates is 15–16 credit hours a semester. Should a matriculated student desire to register for more than 19 credit hours, the approval of the appropriate academic adviser must be secured. Students in majors should consult with their faculty adviser, and undeclared students not affiliated with EOP, STAR, SSSP, or AIM should consult with the coordinator of the Academic Advisement Office, Twin Rise 100. Students on academic probation (below a 2.0 cumulative grade point average) can enroll in a maximum of 15 credit hours. All students should consult with their academic adviser for proper guidance and review for overload. Probationary students seeking an override to their 15 credit limit must make the request at their dean's office.

To graduate in four years (eight semesters), at least 15 credits must be earned each semester to earn the minimum 120 credits required for a degree. Some majors require more than 120 credits.

Attendance

There is no uniform attendance policy set by the college. Attendance regulations are established by each instructor and will be distributed at the start of each semester.

Auditing Courses

Students may audit or take courses without earning credit, with the approval of the department chair and the instructor of the course. A person auditing a course will attend without formal recognition, will not be on the official class list in the Registrar's Office, will not be required to meet the requirements of the course, and will not be charged tuition or fees for the course.

Exception: Auditing is not permitted in any study-abroad program.

Special audit: Persons more than 60 years of age may audit courses on a space-available basis. Arrangements can be made through the Admissions Office, Moot Hall, (716) 878-5511.

The Admissions and Registrars Offices jointly make the following recommendation for an addition to this topic:

Auditors must complete a nonmatriculated student application in the Admissions Office, Moot Hall, before auditing a course.

Adding or Dropping Courses

Registration is continuous from the opening of registration through the end of the first week of classes. Dropping a course during that time removes all record of the course from the student's transcript. Dates and instructions for registration are posted on the web each semester. For up-to-date registration dates, go to www.buffalostate.edu/registrar. By the end of registration, students should recognize that they have made a serious commitment to complete the courses for which they are registered. It is expected that students will complete any necessary changes to their schedule before the first day of classes in a semester or Summer Session. Changes during the first week of classes (first two days of a Summer Session, or January Term) should be the exception.

Withdrawal from Courses

Instructors are required to notify students of their academic standing no later than the end of the ninth week of the semester, or after two-thirds of a summer session or January Term. If a student does not officially withdraw from a course and stops attending, a grade of E will be recorded.

Students who wish to leave a course after the drop/add period and before the final withdrawal date (the end of the 10th week of the semester, or after two-thirds of a Summer Session or January Term) may withdraw via Self Service Banner. Nonattendance at the first class meeting does not withdraw a student from a class.

Students withdrawing from some coursework may be eligible for a refund in accordance with the college refund schedule, which is posted each term at www.buffalostate.edu/studentaccounts. Beyond the end of the refund schedule's time limit, full charges are assessed. Student-teaching courses have different deadlines. Students should check with their departments.

Withdrawals remain on the transcript and are recorded as W's but do not count in credit hours or GPAs. Withdrawal from a course may affect eligibility for financial aid in the current semester and in future semesters. For additional information about financial aid eligibility, refer to the financial aid section of this catalog, or online at www.buffalostate.edu/financialaid.

Academic Clemency

Any student with a Buffalo State GPA of less than 2.0 is eligible to apply for Academic Clemency when he or she applies for readmission to the college through the Admissions Office. The student's last semester of enrollment must have been at least three years prior to the application for admission. Students can request clemency for up to two consecutive semesters of work or 30 consecutive credit hours if earned on a part-time basis. These two semesters or 30 hours are to be determined by the student in consultation with appropriate offices (Dean's Office, Educational Opportunity Program, etc.). A decision of clemency includes all coursework taken within those one or two semesters at Buffalo State; it is not selectively applied. As a result, the student forfeits all coursework during these two semesters and any remaining credit hours at the time of clemency must result in a 2.0 GPA or greater.

Any mathematics or English competency requirements fulfilled during the clemency period will still be recognized. However, any credit hours associated with these requirements will be removed and must be replaced with other coursework.

Clemency is applied only after a student has registered for an upcoming semester.

Leave of Absence, Medical Leave of Absence, Withdrawal from College

The Undergraduate Application for Leave of Absence/Withdrawal from College form can be obtained in the Academic Advisement Office, South Wing 110, (716) 878-5336, or in the student's academic department office. Students in a major should begin the application process by conferring with their department chair. Undeclared students should meet with the coordinator of the Academic Advisement Office. Refunds of tuition, if applicable, will be made on a prorated basis as outlined for that semester. Financial aid recipients who withdraw or take a leave of absence may owe a refund of aid they received for the semester. For additional information about financial aid, refer to the financial aid section of this catalog or www.buffalostate.edu/financialaid.

Medical Leave of Absence

Medical leaves of absence of varying lengths of time are granted for documented serious injury or illness. After obtaining a Leave of Absence/Withdrawal form, students requesting a medical leave of absence should report to the Weigel Health Center. To receive a medical leave of absence, students must complete the form and provide a physician's statement that includes the specific semester(s) for which the leave is being requested, diagnosis/reason for the

leave request, and a recommendation from the physician that the medical leave be granted.

Leave of Absence

Matriculated students who wish to leave the college for personal or financial reasons may be granted leaves of absence of two full years (four fall/spring semesters) beyond the semester in which they were last registered, as long as they are in good academic standing with a minimum GPA of 2.0. A leave will not be granted to study at another college or university.

An application for a leave during a semester already in progress must be received in the Registrar's Office, Moot Hall, no later than the last working day before the Critique and Evaluation Period. These approved leaves will begin at the date the request is received in the Registrar's Office.

Withdrawal from College

To maintain good academic standing and eligibility for readmission to the college, students finding it necessary to withdraw must do so officially. Failure to file for withdrawal will result in the recording of an E grade in each course in which the student is registered. When it is impossible to withdraw in person, it must be done in writing from the student to the dean. Students withdrawing officially with no outstanding obligations or commitments to the college are considered to be in good academic standing.

The chair and associate dean must sign the Withdrawal from College form. A request to withdraw from the college must be received in the Registrar's Office, Moot Hall, no later than the last working day before the critique and evaluation period.

Grading

The college uses letter grades to indicate the status of a student at the completion of a course. All grades are awarded at the sole discretion of the faculty member responsible for the course. A grade must be submitted for every student on the course roster at the end of the semester. Students will be apprised of evaluation policies in each class at the beginning of every semester. This information will also include notification, where appropriate, that the plus/minus grading system will be used as determined by the instructor. Instructors will inform students of their standing in each course by the end of the ninth week of the semester, or two-thirds of a Summer Session or January Term. Mid-term grades may be available on Banner for some courses. Questions regarding grading policies or an individual grade received in a particular course should be addressed to the instructor or to the department chair.

Grades awarded by the college:

A	=	Superior
A-		
B+		
B	=	Above average
B-		
C+		
C	=	Average

C-		
D+		
D	=	Below average, but passing
E	=	Failure or unofficial withdrawal from a course
S	=	Satisfactory
U	=	Unsatisfactory
P	=	Pass
F	=	Fail

The following letters are used to indicate status:

I	=	Incomplete
N	=	Grade delayed
X	=	Grade not submitted
W	=	Withdrawn

Explanation of Grades

- S, U** S (satisfactory) and U (unsatisfactory) grades are reserved for student teaching or other field experiences that are not readily evaluated by the normal letter grades and basic skills courses.
- P, F** P (pass) and F (fail) grades are given for courses taken on a pass-fail basis (see description below). They may be submitted only under proper authorization.
- W** W (withdrawn) grades may be submitted only when a student has formally withdrawn from a course.
- I** I (incomplete) grades may be submitted only when the department chair or program coordinator has been properly notified.
- N** N (grade delayed) grades are given for graduate theses/projects and internships. Grades may be given when coursework normally carries over from one semester to another and when it is necessary to delay grading to a subsequent semester. N grades may be submitted only with the permission of the department chair or program coordinator.

Incomplete Grades

An incomplete grade is a temporary grade issued for medical emergencies or life crises. Students must request an incomplete grade directly from the instructor. An incomplete grade is converted to a letter grade by the 10th week of the following spring or fall semester. If the work is not completed by that time, the instructor will submit a grade based upon the amount of work completed. If the instructor who granted the incomplete is not able to evaluate the student's fulfillment of course requirements during the stipulated time period, the chair or program coordinator is responsible for changing the grade. Anyone not completing the course requirements within this time will automatically have a grade of E recorded.

Pass-Fail Option

The pass-fail option permits any matriculated student who has accrued at least 15 credit hours and a minimum cumulative GPA of 2.0 to take a course for credit without receiving a letter grade of A, B, C, D, or E. Students may enroll in one course each semester or summer on a pass-fail basis. All sessions combined make up the summer semester. A pass (P) grade provides credit but no quality points and is not counted in total hours used to determine cumulative

average. A fail (F) grade is treated as a failure although the hours are not used in computing the cumulative average.

A pass-fail credit may be applied toward a degree. Courses required for the student's major and minor cannot be taken on a pass-fail basis. Courses taken as part of early childhood and childhood education program concentrations and distributions may not be taken pass-fail.

Any course, except English composition 100-level courses and those required for completion of a major or a minor, may be taken on a pass-fail basis. Students must declare their intention to do so by the end of the 10th week of classes in any semester or after two-thirds of a Summer Session or January Term. After receiving the approval signature of the student's adviser, a declaration of intent must be filed with the Registrar's Office, Moot Hall, by the published deadline. An instructor may choose to substitute a letter grade for the pass if written consent from the student is received and the form is submitted prior to the end of the semester. Once an application for pass-fail has been submitted, the pass-fail option for that semester has been exhausted. Subsequent filing of a substitution form to receive a letter grade does not allow submission of another pass-fail application for that semester.

Students may not use pass-fail to repeat a course for which a grade of C- or below was earned.

Note: Students are cautioned that the amount of pass-fail work permitted may jeopardize their chances for admission to graduate or professional school or for career placement.

Unit of Credit (Credit Hour)

The semester hour is the unit of course credit. It represents completion of one 50-minute class period per week for one semester. A course having three class periods a week will earn 3 semester hours of credit. Studio and laboratory classes usually earn 1 credit for each two hours of attendance unless otherwise indicated. The college expects student preparation of two hours for each hour in class.

Quality Point System

The quality point system is used for determining GPAs, as follows:

A	=	4.0
A-	=	3.67
B+	=	3.33
B	=	3.0
B-	=	2.67
C+	=	2.33
C	=	2.0
C-	=	1.67
D+	=	1.33
D	=	1.0
E	=	0.0

No other letters carry quality point value.

Term GPA

A student's term GPA is computed by dividing the total number of quality points by the total number of credit hours attempted in one semester. Only grades carrying quality points are included. For example, consider a stu-

dent with the following courses and grades at the end of a semester:

Example

Course	Grade	Credit	Quality Point Value	Points
MAT 161	B-	4	(x2.67)	= 10.68
SOC 101	A	3	(x4)	= 12.00
ENG 250	E	3	(x0)	= 0
HEW 101	C	1	(x2)	= 2.00
PHI 220	D+	3	(x1.33)	= 3.99
		14		28.67

The student has attempted 14 credit hours, successfully completed 11, and earned 28.67 quality points. The formula for computing this student's term average follows: $28.67 / 14 = 2.04$

(Term Quality Points / Term Credit Hours) = (Term GPA)

If the student had taken an additional 3-credit-hour course, DES 371, and received a P grade, the average would not change. If the student received an F grade in DES 371 using the pass-fail option, the average would not change.

Cumulative GPA

A student's cumulative GPA is computed by dividing the total number of quality points by the total number of credit hours attempted in all semesters of attendance at Buffalo State. As with the semester GPA, only grades carrying quality points are included. Courses taken at other institutions are not included.

Change of Grade

Grades submitted at the end of the semester are considered final. In case of an error or other extenuating circumstance resulting in an incorrect grade, a request for a grade change must be submitted by the instructor, with full written justification, to the appropriate associate dean.

Repeating Courses

A student may repeat a given course once for which a C-, D+, D, or E grade was earned. The course must have the same prefix, number, title, and credit hours. The repeated course must be taken at Buffalo State. Only the second grade and those semester hours completed will be used in determining the GPA. A student may not repeat a course a third time.

All grades remain on the permanent record. Students may not use pass-fail to repeat a course for which a C-, D+, D, or E grade was earned. A passing grade will not replace an F or U grade, since F and U are not computed in the GPA. Courses with letter grades above C- cannot be repeated. Courses that were illegally repeated will not be used in computing the cumulative average. Practicum courses may differ. Check with the department that offered the course. Repeating courses affects financial aid. Check with the Financial Aid Office for the current policy.

Once a student has completed a bachelor's degree, a final average for that degree is computed. Courses from that degree may not be repeated, and that final average is not affected by any subsequent coursework at Buffalo State.

Declaring an Academic Major

All students must declare a major before completing credits that would result in achieving "junior class level" standing. It is recommended that all students declare a major upon completing 30 credit hours. Before declaring a major, students should seek the advice of the chair of the department or the associate dean of the school/college responsible for the major. A Change of Major form, available from the chair or the associate dean, must then be completed and sent to the Registrar's Office. Some academic programs have special requirements that the student must meet before being admitted as a major. For example, fine arts candidates must submit a portfolio of representative work. The department chair or program coordinator can provide information on specific requirements.

Changing a Major

Students who have completed at least one semester at Buffalo State may change their major by going to the department office of the new major and filling out a Change of Major form. It is recommended that students seek the advice of the department chair before deciding to change a major. If the chair approves the change, the form will be forwarded to the Registrar's Office for recording. Such changes should be made at least four weeks before registration for the next semester so that students are not restricted from registering for any course in their new major.

A student on probation will not be permitted to transfer to a new major without the approval of the associate dean of the new major.

Second Major, Single Degree

A student may fulfill the requirements for two majors and receive a designation on the official transcript indicating the completion of a baccalaureate degree in one major with the fulfillment of requirements of a second major. The student must identify a primary major in which the degree will be awarded. In fulfilling the requirements of a second major, the student will make careful use of electives. The student completes an Application for Undergraduate Degree at the Registrar's Office indicating on the application the degree major and the second major. Go to www.buffalostate.edu/registrar for a link to a page where students can download a copy of the application. Upon receipt of the degree, the student's transcript will contain two entries: the major degree and a notation that "this student has also completed all requirements for a second major in the appropriate area."

The primary major adviser does regular advisement of the student. Students opting for a second major should contact the department involved, request a review of their progress and academic advice concerning the second major, and complete a Change of Major form to be filed with the Re-

gistrar's Office. Only one baccalaureate degree may be awarded for a four-year, 120-credit-hour program.

Dual Baccalaureate Degrees

The awarding of two degrees at the baccalaureate level may occur under given circumstances. Coursework in fulfillment of requirements for two baccalaureate degrees (B.S. or B.A. or both) may be undertaken simultaneously or concurrently, but requires significant additional coursework (at least 32 credit hours, usually one additional year) in distinctly different fields. Exceptions to this requirement are the bachelor of fine arts and bachelor of technology, in which two degrees may be awarded upon the fulfillment of the requirements of each degree. Students must earn a minimum of 152 credit hours to qualify for two baccalaureate degrees. Students pursuing dual baccalaureate degrees should seek academic advisement from the appropriate faculty advisers or department chairs in both majors to ensure that all dual degree requirements have been fulfilled. The maximum number of degrees awarded at the baccalaureate level is two.

Academic Levels (Class Level)

Students are given class designations according to the number of credit hours they have earned. Undergraduate levels are:

Freshmen	0 to 29 credit hours
Sophomores	30 to 59 credit hours
Juniors	60 to 89 credit hours
Seniors	90 or more credit hours

Basic Writing Requirement

The college requires all matriculated students to demonstrate college-level skills in composition.

Basic Writing Requirement for Freshmen

Entering freshmen will be placed in the appropriate writing-level course through the College Writing Program's placement policy. See

www.buffalostate.edu/writingprogram for the placement policy. Students are placed at one of the three levels:

- CWP 099
- CWP 101
- CWP 102

Basic Writing Exemption

The writing program director will forward any basic writing exemptions to the registrar.

CWP 099 is a noncredit course and may not be used to meet any degree requirements. CWP 099, CWP 101, and CWP 102 will be graded on an A-through-E basis. A through D are officially passing grades; however, courses with a prerequisite of CWP 101 or CWP 102 require a C or higher in the class. This means that a student cannot enroll in CWP 102 until he or she has earned at least a C in CWP 101 (grades of C- or below do not meet the requirement). Course challenges will not be permitted.

Students who are considering taking a composition course at another institution that they expect will fulfill the Buffa-

lo State basic writing requirement must seek prior permission from the College Writing Program director. The basic writing requirement is usually completed by the end of the sophomore year.

Basic Writing Requirement for Transfer Students

If two composition courses equivalent to CWP 101 and CWP 102 are transferred, the basic writing requirement is satisfied. If one composition course equivalent to CWP 101 is transferred, the student must complete CWP 102. If no composition courses are transferred, the student must confer with an academic adviser and follow the requirement stated for freshmen (above). Transfer students must complete the basic writing requirement within their first 45 credit hours at Buffalo State College.

Writing Across the Curriculum Requirement

Writing represents a critical component of the educational process, and the integration of writing into all types of courses across the curriculum is widely encouraged. In particular, the college has established a two-course (4–6 credit hours) Writing Across the Curriculum requirement for all students to enhance and reinforce basic writing skills learned in CWP 101 and CWP 102. Taking two Writing Across the Curriculum (W) courses satisfies this requirement. Like many courses offered on this campus, W courses include both formal and informal writing. W courses, however, emphasize writing as a major course component for both instruction and evaluation. Instructors employ writing-to-learn techniques as a major way of teaching. In such courses, students learn to use writing as a tool that can be used in all their learning processes. A significant portion of the coursework, and subsequently grades in these W courses, will be allocated on the basis of the student's writing performance.

Every piece of formal writing submitted as part of the requirement should meet the following minimum standards, as appropriate to the course and the nature of the assignment:

- Clearly stated purpose/main idea/thesis
- Adequate support/proof/development of main idea
- Clear and logical organization of information
- Complete sentences
- Standard usage of grammar, punctuation, and spelling
- Correct documentation (interior documentation, references, and/or bibliography) in a format appropriate to the field
- Evidence of critical thinking

Some departments have established an alternative method whereby their majors may satisfy the W requirement. Satisfactory completion of CWP 102 or its equivalent is a prerequisite for all courses used in fulfillment of the writing-intensive requirement.

The W courses submitted for transfer from other institutions to Buffalo State College will be evaluated using the criteria stated above. Courses that do not meet the criteria will not be transferred.

Basic Writing Requirement for International Students

International students registering at Buffalo State are required to take the placement examination administered by

the College Writing Program if they do not have SAT/ACT scores. They must register for the appropriate College Writing Program course(s) designated for nonnative English speakers. International students must complete the Basic Writing requirement before declaring a major. Information on these requirements and ESL instruction is available through the International Student Affairs Office, Campbell Student Union 400. Individual and group supplemental instruction in English as a Second Language is available through the Academic Skills Center, South Wing.

Graduation Requirements

Go to www.buffalostate.edu/registrar/forms.xml to download the Application for Undergraduate Degree. All students expecting to qualify for a degree must fulfill the following requirements:

1. File Application for Undergraduate Degree with the Registrar's Office, Moot Hall, by the specified date. Failure to make application before the date may eliminate the student from the Commencement program and delay the granting of the degree.
2. Students must meet all financial obligations to the college and return all college property.
3. Students must meet all curricular requirements. They must have completed the prescribed curriculum for their major. If requirements have changed since they were admitted to a program, they may choose to graduate under the old or new requirements.
 - a. Students must maintain a minimum cumulative GPA of 2.0 for all coursework taken at the college. The minimum cumulative GPA for the courses taken in the major field must also be 2.0.
 - b. Students must complete the 39–66 credit hours of Intellectual Foundations requirements.
 - c. All candidates must have completed a minimum of 33 credit hours of upper-division coursework, courses generally considered advanced and numbered 300–499.
 - d. A minimum of 32 credit hours, including the last 16, must be completed at the college.
 - e. A minimum of 120 academic credit hours must be completed.
 - f. Students are required to successfully complete 4–6 credit hours of "writing intensive" courses indicated by the designation W following the course number.
4. Education majors leading to certification for teaching in the early childhood and upper-elementary grades must fulfill a drug-education requirement and should file a certification application with the Teacher Certification Office, Caudell Hall 101.
5. No students will be cleared for graduation until all grades of I, N, or X have been replaced with an appropriate letter grade.

Commencement Ceremony

Commencement is held each year at the end of the spring semester to honor the previous fall semester December graduates and the current May and August degree candi-

dates. Information is mailed in March to December graduates, as well as to May and August degree candidates who apply for their degrees by the appropriate deadlines. For more information, visit the Buffalo State Commencement website at www.buffalostate.edu/commencement.

Dean's Honor List

Students must meet all of the following criteria to be eligible for the Dean's Honor List:

1. Must earn a minimum term GPA of 3.5.
2. Must complete a minimum of 12 credit hours of letter grade work (i.e., A, B, C, or D). Grades of S and P are not considered. Students are ineligible for the Dean's Honor List if they have an incomplete grade or grades of I, N, X, or U in a course for that semester.
3. All courses must be taken at Buffalo State.

Part-Time Dean's List

Part-time, matriculated students (students carrying less than a 12-credit-hour course load per semester) will become eligible for Part-Time Dean's List only after prior completion of 12 credit hours of letter grade work (A–E) at Buffalo State. The Dean's List designation will be determined once a year at the end of the spring semester for courses taken during that semester and the preceding fall semester.

Eligibility also requires the following:

1. A minimum GPA of 3.5 for all coursework taken in that academic year
2. No grades of I, N, X, or U in a course during that year
3. Completion of at least 12 hours of letter grade work per academic year

Baccalaureate Academic Honors/Gold Honors Cord

An honors citation is given to graduating students who have achieved a minimum cumulative GPA of 3.5 for all work completed. Students with a cumulative average of 3.8 to 4.0 will be designated *summa cum laude*; 3.65 to 3.79 *magna cum laude*; and 3.5 to 3.64 *cum laude*. To be considered for an honors citation, a student must complete a minimum of 54 credit hours at Buffalo State.

Degree candidates with a minimum GPA of 3.5 who have completed or have in progress 54 credit hours at Buffalo State may be eligible for academic honors. These students are invited to wear a gold cord at Commencement to signify their academic achievement, and they are recognized in the Commencement program. They will be notified by Academic Affairs separately from the Commencement Information Brochure, which is sent to degree candidates' homes in March. They also will be on a list at Commencement Headquarters, where caps, gowns, and honors cords are purchased.

All College Honors Program

The All College Honors Program addresses the needs of academically gifted students. Open to a select number of incoming freshman, transfer, and local students, the All College Honors Program requires students to earn honors credits across disciplines in the arts, humanities, social

sciences, math/science, and applied science and technology. Students must maintain a minimum cumulative GPA of 3.5 to remain in the program. Students interested in this program should contact the Admissions Office at (716) 878-5713.

Honors in Majors

Many departments have programs leading to baccalaureate degrees with honors. Generally, these departments require special criteria for admission to the departmental major and 6 credit hours of predetermined honors work to earn the distinction. Students interested in departmental honors programs should contact the department of their choice. The following majors can be pursued as baccalaureate degrees with honors: anthropology, the arts, biology, earth sciences, economics B.A., geology, history, philosophy, psychology B.A., psychology B.S., and social studies education (7–12).

Honors Convocation

This recognition of academic excellence is held each spring semester. Students with a minimum cumulative GPA of 3.5 after earning 45 credit hours are invited to attend the Honors Convocation with family members and a faculty guest. Transfer students are eligible after completing 30 credit hours at Buffalo State.

Academic Probation and Dismissal

Good Academic Standing

All students not on Academic Probation are considered to be in good academic standing and are eligible to participate in extracurricular activities at Buffalo State. Any Buffalo State student with a cumulative GPA of a 2.0 or above, on Academic Warning, or on Academic Probation is eligible to register for coursework at Buffalo State.

Academic Warning

Many students go through an adjustment period when beginning their baccalaureate studies at Buffalo State. Therefore, any student—freshman or transfer—whose first-semester GPA is less than 2.0 and who has not met any of the terms for academic dismissal from Buffalo State will be on Academic Warning in his or her second semester of study at the college. However, if a student's GPA is less than a 2.0 and the student has met one or more of the reasons for academic dismissal from Buffalo State, the student may still be immediately dismissed at the discretion of the college.

In accordance with the Buffalo State Advisement Policy, students on Academic Warning may be subject to an advisement hold in order to encourage a discussion with the student's academic adviser to help build an effective academic strategy before the student may register for additional coursework at Buffalo State. An extended Academic Warning semester may be granted at the discretion of the college if the student has demonstrated exceptional academic progress during the Academic Warning term. Stu-

dents on Academic Warning may be ineligible for financial aid based on failure to meet federal and/or state aid eligibility standards.

Academic Probation

A student is on Academic Probation if the student's cumulative Buffalo State GPA is less than 2.0 after the second semester of study at Buffalo State. However, if a student's GPA is less than a 2.0 and the student has met one or more of the reasons for academic dismissal from Buffalo State, the student may be immediately dismissed at the discretion of the college without a probationary semester. A student on Academic Probation has until the completion of the next semester (i.e., spring or fall) to raise the cumulative GPA to a 2.0 or higher.

In accordance with the Buffalo State Advisement Policy, students on Academic Probation may be subject to an advisement hold in order to encourage a discussion with the student's academic adviser to help build an effective academic strategy before the student may register for additional coursework at Buffalo State. Students on Academic Probation may be ineligible for financial aid based on failure to meet federal and/or state aid eligibility standards. Students on Academic Probation are not eligible to participate in extracurricular college activities.

Academic Dismissal

Students are reviewed for Academic Dismissal at the end of each academic semester (fall, spring, and summer). Each dismissed student will receive official notification via U.S. mail to the student's address of record with the college or the student's Buffalo State e-mail account, and all future academic-year registrations and on-campus housing reservations will be removed. Dismissal appeal guidelines and deadlines are communicated to the student in the dismissal notification sent by the student's dean's office.

Students may be dismissed from Buffalo State for the following reasons:

1. Unsuccessfully completing (i.e., E, F, U, I, N, X, or W) one half or more of a semester's work
2. Failing to satisfy Academic Warning or Academic Probation requirements
3. Failing any course for the third time
4. Failing to complete basic skills requirements (e.g., the Intellectual Foundation's Basic Communication and Mathematics/Quantitative Reasoning requirements) by the end of their sophomore year
5. Determination of an academic misconduct offense

Students who have been academically dismissed must wait one full year from the time of dismissal before being considered for readmission and/or nonmatriculated enrollment at Buffalo State. A dismissed student may not attend Buffalo State Summer Session courses. If readmitted, all coursework taken previously at Buffalo State will be considered in computing the cumulative average, unless the student has opted for Academic Clemency. All prior Buffalo State coursework, including clemency-bearing credits,

will be used in calculating the readmitted student's federal and state financial aid eligibility at Buffalo State. Readmission forms are available in the Admissions Office, Moot Hall 110.

Academic Eligibility for Financial Aid

Financial aid guidelines require that to continue to receive financial aid, students must show evidence of making satisfactory academic progress toward a degree. For additional information about financial aid eligibility, refer to the financial aid section of this catalog or visit www.buffalostate.edu/offices/finaid.

Academic Misconduct

All students are expected to display honesty and integrity in completing course requirements and college academic regulations. Academic misconduct refers to any form of plagiarism or cheating on examinations or assignments, and is inconsistent with the aims and goals of Buffalo State.

Faculty may require students to use textual similarity detection software (e.g., Turnitin.com) in courses at Buffalo State College. Textual similarity detection software compares submitted student text to a database of millions of previously published documents, including those on the public Internet, a proprietary collection of published articles, as well as every student paper previously submitted to the detection service. When similarities between student text and an existing document are found, the software identifies those similarities for instructor and/or student review. (Similarity alone is not evidence of academic misconduct, as such material may be correctly cited.) This software may be used as an educational tool to assist students in learning how to properly cite resources, decrease instances of academic misconduct, and/or assist in the identification of acts of academic misconduct.

Instances of academic misconduct include, but are not limited to, prior acquisition or possession of an examination and submission of false data, submission of the work of another individual without proper acknowledgment, and performance of work in a course for another individual while registered in the same course. As a result of an admission of academic misconduct, an instructor may issue a written warning; allow the student to resubmit the work, telling the student what grade penalty, if any, will be assessed; submit a recalculated grade; or submit a failing grade with a "J" designation (to appear only on the internal audit system but not on the student's official transcript; possible grades are EJ, FJ, UJ, WJ). Grade points for the failing grade will be averaged even if the student repeats the course. No penalty for an alleged instance of academic misconduct may be imposed unless the student has been apprised of the allegation, the penalty, and the procedures of due process that are available under this policy. Neither the instructor nor the student should be represented or accompanied by an attorney. A student has the right to appeal allegations of academic misconduct as outlined in the Academic Misconduct Policy at www.buffalostate.edu/academicaffairs/x607.xml.

A statement outlining formal college policies and procedures to be followed in cases of alleged academic misconduct will be on file in each dean's office, in the Academic Standards Office, in the Student Life Office, and at www.buffalostate.edu/academicaffairs/x607.xml. Cases of severe infractions of acceptable standards may be brought before the Academic Misconduct Board, chaired by the appeals director of academic standards, and may result in academic dismissal.

Graduate Courses

Second-semester seniors (i.e., students who have completed more than 106 credits by the end of the previous semester at Buffalo State) may register for graduate-level courses if they have maintained a minimum cumulative GPA of 2.5. A maximum of 6 graduate credit hours may be taken as a senior. The combined enrollment of undergraduate and graduate courses should not exceed 15 hours per semester. Courses taken in this manner are related to a graduate program of study and will not apply toward an undergraduate degree. These courses may be applied toward an advanced degree if they are acceptable to the department. The six-year time limitation on the completion of the master's degree program applies to these as well as to other credits.

Graduate Programs of Study

The Graduate School offers master's degrees, certificates of advanced study, graduate certificates, and postbaccalaureate teacher certification programs through the college's five schools.

The master of arts (M.A.) degree is offered in applied economics, art conservation, biology, chemistry, English, history, history with museum studies concentration, and multidisciplinary studies. Master of science (M.S.) degrees are offered in adult education, creative studies, criminal justice, industrial technology, multidisciplinary studies (with program tracks: individualized, museum studies, public relations management), and higher education and student affairs administration. The master of science in education (M.S.Ed.) degree is offered in art education (K–12); biology education (7–12); business and marketing education; career and technical education; chemistry education (7–12); childhood and early childhood curriculum and instruction; childhood and early childhood education (birth–grade 6), including initial teaching certification; earth science education (7–12); educational technology; English education (7–12); literacy specialist (birth–grade 12); mathematics education (7–12); physics education (7–12); physics education (7–12), alternative certification; social studies education (7–12); special education: childhood; special education: early childhood; speech–language pathology; and technology education. Certificates of advanced study are offered in art conservation and educational leadership. The master of professional studies degree is available in literary specialist (grades 5–12). Graduate certificates are offered in adult education, creativity and change leadership, human resource development, museum studies, public management, and teaching bilingual exceptional individuals. Postbaccalaureate teacher certification

programs are offered in art education, biology education, business and marketing education, career and technical education, chemistry education, earth science education, English education, French education, mathematics education, physics education, social studies education, Spanish education, and technology education.

Applying for Graduate Study

Students holding bachelor's degrees from an accredited college or university are eligible to apply for graduate study at Buffalo State. International applicants must submit transcript evaluations and TOEFL scores. Admissions applications, application fee payment forms, transcript request forms, and supplemental department materials are available to download at (716) 878-5601; www.buffalostate.edu/graduateschool/admissions; <http://www.buffalostate.edu/graduateschool/admissions>; the Graduate School Office, Cleveland Hall 204; or e-mail gradoffc@buffalostate.edu.

Alternative Methods of Earning College Credit

Advanced Placement Examinations

Credit may be granted for acceptable scores in approved Advanced Placement examinations, provided the subjects meet the curricular requirements of the specialized units of the college. Approved examinations include New York State College Proficiency Examinations (CPEP), College Entrance Examination Board Advanced Placement Examinations (AP), and College Entrance Examination Board College Level Examinations (CLEP).

Students receiving the lowest passing grade may be admitted to an advanced course but will receive no credit for the beginning course that was exempted. All other passing grades carry college credit. Before taking such an examination for credit, students already enrolled at the college must receive advance approval from the appropriate department chair. When the examination subject is the same as or overlaps a college course already credited, no new credit will be granted.

Course Challenge

Each department determines which courses may be challenged by examination. Matriculated undergraduate students may earn credit hours by challenging the specially designated courses. The following rules apply:

1. Total challenge credit may not exceed 30 credit hours.
2. A course in which a student is currently enrolled may not be challenged.
3. A course may not be challenged more than once.
4. Credit earned will be recorded as credit (cr) only rather than by grade.
5. No credit will be awarded when the challenged area duplicated an area for which credit already has been awarded.
6. A student must be matriculated to register for a course challenge.

Contract

Taking a course by contract is one form of independent study open to students who have reached sophomore level and are in good academic standing. If a course is not offered in a given semester, students may request to take a course by contract. Application forms are available in the academic department and the Registrar's Office, Moot Hall, and must be filed with that office by the established deadline each semester. Both the instructor and the department chair must sign applications.

Students are provided with a course outline, bibliography, statement of responsibilities, and dates by which responsibilities are to be met. Students may then pursue the course independently under the guidance of a faculty member. The number of conferences, type of evaluation, and culminating activity will be decided by the faculty member and the student before registering for the course. These requirements must be filed with the department chair.

Freshmen are also eligible to take courses by contract under special circumstances. They may do so if

1. they are in their second semester of a one-year course and have a grade of A or B in the first semester part of the course;
2. they have successfully challenged the preceding course in the sequence;
3. they have entered the college with excellent high school records or have done honors work in pertinent fields in high school.

Credit for Experiential Learning

Credit for college-level experiential learning is available. Matriculated students who consider their previous learning experience as college-level creditable may enroll in INS 300, Educational Assessment and Portfolio Development. This course is open to matriculated students who must attend an information session in August to become familiar with the portfolio development process. In INS 300, students will conduct a self-appraisal and inventory of all potentially creditable prior learning. The portfolio will be treated as an application to appropriate departments for the award of college credit.

Within the guidelines noted below, credit for experiential learning follows essentially the same principle as transfer credit; students may receive credit for knowledge gained elsewhere. Students may receive a maximum of 30 credit hours. Credit will be awarded on the basis of its correspondence to existing Buffalo State courses. Credit earned will be recorded as credit (cr) only, rather than by grade.

For information regarding credit for experiential learning, students should contact the Individualized Studies coordinator, South Wing 310, (716) 878-5303.

Cross-Registration

Students who have reached the sophomore level may take courses at any public or private college in Western New York with which Buffalo State has a cross-registration relationship for degree credit as long as they maintain a 12-credit-hour course load at Buffalo State. They may enroll for no more than one course elsewhere in any semester. Students who fall below the 12-credit-hour course load at

the college will forfeit any credit hours earned at another institution that semester under the cross-registration procedure.

Students wishing to take a course on another campus that will apply toward a major must receive permission from the department chair. Cross-registration approval forms are available in the Registrar's Office, Moot Hall, and must be signed by the student's adviser and returned to the Registrar's Office for signature. Students must then take the signed cross-registration approval to the appropriate campus where they must register according to the procedures of that campus.

Transcripts are forwarded automatically to Buffalo State at the end of the semester. Courses taken through cross-registration are recorded as if they had been taken at Buffalo State (credit hours and grade counts in cumulative GPA).

There is no cross-registration during the summer or January Term.

At the time of publication, the State University of New York was preparing to issue new rules for cross registration.

Off-Campus Study

Courses may be taken at other institutions for transfer credit as long as prior approval from the department chair is obtained and the Study Off Campus Form from the Registrar's Office, Moot Hall, is completed and returned to that office. Students are urged to have transcripts of all coursework completed elsewhere forwarded to the Registrar's Office as soon as possible. Coursework undertaken elsewhere, other than by cross-registration, will be recorded as transfer credit on the college transcript.

Independent Study (499)

Independent study provides students with the opportunity to pursue a topic that may be covered only briefly or not at all in regular course offerings. Students may choose a faculty sponsor who is an expert in the selected topic and together determine all aspects of the study, including the method of evaluation. The chair of the sponsoring department must approve the description of the study.

Students electing to do independent study should have a degree of knowledge in the area they have chosen, in addition to a strong motivation to work alone much of the time. Independent study is never a substitute for a course already being offered that term.

Specific requirements for independent study:

1. Sophomores, juniors, and seniors who have successfully completed basic courses or their equivalent in the area of study chosen are eligible to participate. They need a minimum GPA of 2.0 and a minimum GPA of 2.0 the previous semester, plus a minimum GPA of 2.0 in work completed in the selected area. Freshmen who have successful advanced preparation in the selected area may also be allowed this option.
2. The study must be relevant to the student's total program, and the student must derive special benefit from supervision by the college staff. The study must meet

standards established for such programs by the department or program.

3. No independent study may be undertaken for fewer than 3 credit hours. A maximum of 30 credit hours in all areas may be taken independently by a student. No more than two independent studies may be taken in one semester.

Further information is available from the department chair and program coordinator. Application forms are available in the academic department and the Registrar's Office, Moot Hall, and must be filed with that office by the established deadline each semester.

Project (495)

Upper-division students may undertake a project related to a required course for up to 3 credit hours per project. No more than 6 credit hours of academic project work are allowed. Application forms are available in the academic department and the Registrar's Office, Moot Hall, and must be filed with that office by the established deadline each semester.

Internship (488)

Internship programs provide students with guided and supervised field experiences (experiential learning) as part of their degree programs. Students who wish to participate in the program must have a minimum GPA of 2.0 and a background of courses or experience within the area of interest. Approval for experiential learning situations must be obtained from either the student's adviser or the chair of the department within which the student is a major, the supervising faculty member, and the chair of the department within which credit will be granted. An individual student will be permitted to apply a maximum of 15 credit hours toward the baccalaureate degree.

Topics Courses (189 and 389)

The topics format provides the opportunity for in-depth study and examination of rapidly and significantly changing disciplinary issues, topics, or practices, and may be used to accommodate requests of external agencies or the specialized resources of visiting faculty members. Students may accumulate a maximum of 9 credit hours in one discipline.

Military Service Educational Experience

College credit hours may be awarded for education received through military service, specialty schools, technical training schools, and basic training programs. Request for such credit should be made to the Admissions Office, Moot Hall. Documents showing completion of such courses should accompany all requests.

Evaluation of this experience is based on its relation to college degree requirements and recommendations suggested by the American Council on Education Credit Manual.

Credit by Evaluation

Up to 45 credit hours may be accepted from the following sources:

<i>Source</i>	<i>Maximum credit hours</i>
Published examinations <i>No more than 18 credit hours may be in general examinations.</i>	30
Course challenge	30

Noncollegiate institutions	15
Proprietary institutions	15

Published examinations: Included in this category are nationally given subject and general examinations sponsored by the College Level Examination Program (CLEP), Advanced Placement Program (APP), and College Proficiency Examination (CPE). Passing grades are required for credit.

Course challenge: Requirements are outlined above.

Military service courses: Requirements are outlined above.

Courses from noncollegiate organizations: For credits to be granted, the institution must be approved by the State Education Department and listed in its Guide to Educational Programs in Noncollegiate Organizations. Noncollegiate organizations are those whose primary function is not education, such as the American Institute of Banking. Such credit applies primarily to the major and is determined by the appropriate department.

Courses from proprietary institutions: The institution must be approved by the State Education Department and listed in its official publication of approved institutions. Proprietary institutions are privately owned and for-profit, such as Bryant & Stratton Business Institute. Such credit is applied primarily to the major and is determined by the appropriate department.

Transcript of Academic Record

Official transcripts of records are not issued directly to students but will be forwarded upon request to authorities whom the student may designate.

A student copy may be ordered for personal use. The fee is \$5 for each transcript requested. Proper photo identification is required when picking up the student copy. Transcript request forms are available in the Registrar's Office, Moot Hall, or at www.buffalostate.edu/registrar/transcript.xml. Transcripts will not be furnished for students who have incurred a financial obligation to the college. Transcript requests sent by mail must include the student's name, current address, student (Banner ID or Social Security) number, dates of attendance, graduation date (if applicable), name and address of the party to whom the transcript is to be sent, the student's signature authorizing release of the transcript, and a \$5 check or money order payable to Buffalo State College. All checks or money orders must include the last four digits of the student's Banner ID number or Social Security number.

Transcript requests by telephone cannot be honored. All requests are acted upon in the order in which they are received. Sufficient time is necessary for processing; requests should be made well in advance of the date needed, usually at least two weeks.

Teacher Certification Office

Buffalo State College maintains a Teacher Certification Office in Caudell Hall 101 that serves as a resource for Buffalo State College students, faculty, and staff. The Teacher Certification Office verifies program completion so that Buffalo State College graduates may apply for New York State teacher certification. The Teacher Certification Office also verifies completion of teacher education programs for graduates applying for out-of-state certification, provides teacher certification examination bulletins, and is a resource for certification requirements in all 50 states.

New York State Certification

All students who successfully complete an approved program in teacher education may be recommended to the New York State Education Department for a teaching certificate if they have met all requirements, including at least one student-teaching placement in an urban setting and the required seminars. In addition, the New York State Education Department requires both a background check through a fingerprinting process and satisfactory performance on a series of examinations before a certificate can be issued.

Graduates are able to apply for a New York State Teacher Certificate online through the TEACH Online Service system at www.highered.nysed.gov/tcert/teach. In order for the Teacher Certification Office to provide verification of program completion to the New York State Office of Teaching, students need to provide the certification office with permission to release this information. Release forms may be obtained from the office's website or the Teacher Certification Office.

All teacher certification candidates who are applying for Initial Certification and Professional Certification through our Teacher Certification Office are required to complete two clock hours of coursework or training in the following four seminars:

S.A.V.E. (School Anti-Violence Education Workshop)
Child Abuse Identification Workshop
Drug and Alcohol Awareness Seminar
Fire and Arson Safety Seminar

Information regarding these seminars may be obtained from departmental offices and the Teacher Certification Office or website. Students completing an early childhood education and/or childhood education B.S. program through Buffalo State College may be required to take an additional HIV/Exposure Seminar.

Teacher Certification Examination

Successful completion of identified portions of the New York State Teacher Certification Examinations (NYSTCE) is required for New York teaching certificates in all areas. Information can be obtained from departmental offices and the Teacher Certification Office.

Interstate Certification

As a participant in the Interstate Certification Project, New York State has reciprocity agreements with a number of other states, allowing Buffalo State graduates to be certified there. These include reciprocity for classroom teachers, vocational teachers, and administrative personnel in

various states. The New York State Teacher Certification Examinations may not be acceptable in other states. Students should check with individual states to determine specific requirements.

Certification for B.S./B.A. Degree Holders

Holders of a B.S. or B.A. degree who wish to become certified may complete certification requirements through additional coursework at the undergraduate level or through specially designed postbaccalaureate or master's degree programs. It is advised that they communicate with the appropriate department to determine the required admissions procedure. Please note: A department may require the completion of subject matter courses in the major area to remove any deficiencies. All professional education requirements and any subject matter courses must be completed prior to the student teaching semester. A full semester (12–15 credit hours) of student teaching, including at least one urban placement, must be successfully completed.

Holders of a B.S. or B.A. degree interested in early childhood education and/or childhood education only should contact the Graduate School, Cleveland Hall 204, for application to a special postbaccalaureate degree program.

Transportation to Off-Campus Instructional Sites

Students are responsible for providing their own transportation to off-campus sites for required courses, including student teaching and participation.

Transfer Students

Credit hours previously earned will be evaluated for all transfer students upon admission to the college. A maximum of 88 credit hours may be transferred from other regionally accredited institutions, with no more than 66 credit hours transferred from two-year colleges. Most credit hours earned at other institutions will be accepted, although the college cannot guarantee how credit hours earned at two-year institutions will relate to bachelor's degree requirements. The most common cases in which transfer credit hours are not accepted follow:

1. Developmental courses in mathematics, English, and learning skills
2. Courses in theology or religion with sectarian emphasis

Only credit is transferable. Grades, quality points, and cumulative averages do not transfer.

The evaluation of transfer credit hours is recorded in Degree Navigator, the audit system located at <http://www.buffalostate.edu/registrar/degreenavigator.xml> <http://www.buffalostate.edu/registrar/degreenavigator.xml> The system records the major and general college requirements that have already been fulfilled, and those that remain.

Departments reserve the right to refuse to accept transfer credit hours in fulfillment of their own major requirements. Whether or not a course fulfills a major requirement may be open to discussion with the department chair or academ-

ic adviser, and it is useful to have a copy of the catalog from the previous institution available.

Student Complaints, Grievances, and Appeals

Buffalo State complies with New York State Education regulations requiring that campuses have procedures in place for filing complaints and seeking resolution of perceived problems.

Academic Appeals: Waiver of Academic Regulations
Students are expected to adhere to all regulations of the college. However, unusual and extenuating circumstances may warrant a modification of certain regulations.

Students should not request a waiver of any regulations without very strong evidence to justify the waiver. Requests for waivers are made by completing an Academic Appeals Petition available in the Academic Standards Office, Twin Rise 100, or on the Academic Standards website at www.buffalostate.edu/academicstandards/x463.xml.

The assistant dean for University College/director of Academic Standards, makes decisions on requests for waivers that do not relate to a student's major after consulting with the Academic Appeals Committee. The assistant dean's decision is final. A minimum of one month is necessary to process academic appeals.

Decisions on requests for a waiver related to a student's major are made by the appropriate department chair in accordance with procedures established by the department or area faculty. Requests for application of AP and/or transfer credit should be taken directly to the Admissions Office; these requests do not require an Academic Appeals Petition.

Student Complaints Regarding Discrimination

If the complaint involves alleged harassment or discrimination based on race, sex, ethnicity, national origin, sexual orientation, gender identity, religion, age, disability, or marital or veteran status, the student should use procedures administered through the Equity and Campus Diversity Office. Acts of discrimination should be reported immediately to this office for confidential discussion of the alleged acts. Students have 90 days from the alleged act of discrimination or 90 days after receipt of a grade to file a complaint. A copy of the procedures may be obtained in Cleveland Hall 415.

Student Complaints Regarding Nonacademic Issues

If the complaint involves nonacademic issues, the student should deal with procedures administered by the Dean of Students Office, Campbell Student Union 306. However, students are encouraged to seek resolution of the perceived problem directly in the unit in question before initiating processes that are more formal.

Student Complaints Regarding Academic Issues

The procedures outlined in the next section pertain to complaints about academic issues other than those dealing with waiver of collegewide academic regulations or graduation issues, which are addressed by petitions to the Academic Appeals Committee. The college seeks to resolve student

grievances as promptly and informally as possible. No adverse action will be taken against any student initiating a complaint.

Students who feel aggrieved regarding any aspect of the academic program have a right to request a resolution by bringing the matter to the attention of the appropriate college personnel. The academic appeals process regarding a waiver of academic regulations is outlined under Waiver of Academic Regulations section. If the perceived problem pertains to a grade or the conduct of a particular course, students should follow the Student Academic Grievance Procedures, below.

Student Academic Grievance Procedures

The procedures that follow pertain to alleged violations or misapplication of college and/or course policies. They are also directed at a student grievance alleging that the student has been treated unfairly, in violation of established academic policy or practice. These procedures reflect the college's commitment to a fair and prompt resolution of student academic grievances. These procedures begin with an informal process but include a formal process that centers on hearings and recommended resolution of the grievance in a way that maximizes the opportunity for a full and impartial solution. Request to waive or otherwise alter college academic policies shall continue to be the province of the Academic Appeals Committee (see Waiver of Academic Regulations).

The procedures below do not deal with grievances that are based on issues of sexual harassment or discrimination. Such grievances are handled through the Equity and Campus Diversity Office. Similarly, complaints that deal with other nonacademic issues are administered by the Dean of Students Office (see previous section).

For academic grievances, students are advised to retain all documentation from the course, including (but not limited to) the syllabus, tests, quizzes, papers, and any graded evaluations. These materials are required to substantiate any grievance.

1. Jurisdiction

A grievance shall include, but not be restricted to, a complaint by a student

- a. That college regulations and/or policies have been violated or misapplied to him or her
- b. That he or she has been treated unfairly, defined in terms of established academic policy or practice governing or affecting students at the college

2. Time Limit

- a. At the informal level before the fifth week of the following semester
- b. At the formal level before the 10th week of the following semester

3. Grievance Resolution Process

The process includes the possibility of hearings at two levels: the department and the faculty.

- a. At the department level, a student with a complaint should attempt to resolve the complaint informally with the faculty or staff member involved. The assistance of the chair may be sought to resolve the dis-

pute to the satisfaction of both parties. A student must initiate the process no later than five weeks into the following semester. The student who is not able to achieve resolution with the instructor may initiate a formal grievance or grade appeal process no later than 10 weeks into the following semester by preparing a written statement, which includes the following:

1. A statement of the case in detail
2. All information about the conference with the instructor
3. A statement of the reasons the student believes he or she is aggrieved or, in the case of a grade, why it should be reconsidered
4. All relevant supporting materials, which should be identified and listed in an index

The student shall submit complete copies of the written statement and attachments to the chair of the department and the faculty member identified in the grievance. The chair shall carefully review the statement, confer with the student and instructor, and attempt to reach a resolution of the dispute. The chair may ask members of the department to serve as a committee to review the materials and assist him or her in reaching a decision. The chair's response must be made within 10 academic days of the date of the student's request.

In conformance with state regulations, the department shall maintain adequate documentation about each formal complaint and its disposition for at least six years after final disposition of the complaint. If the department chair is the party against whom the grievance is brought, the student should initiate a review at the dean's level, which follows:

- b. If the matter is not resolved to the student's satisfaction at the departmental level, he or she may request a hearing at the faculty level by writing to the dean of the faculty and forwarding the documentation to that office. The request must be made within 10 academic days of the receipt of the recommendation of the department chair. The dean or designee shall convene a three-person committee drawn from a panel of available faculty within 10 academic days. Such committee shall include one faculty member from the department in which the faculty member resides. Furthermore, after the committee is constituted, the faculty member and the student have the right to review the committee membership and request alternative members in the event it is believed a member of the committee is not neutral. The committee shall meet and review the materials presented and solicit a response from the instructor to each count of the student's case. In the case of a grade appeal, the committee will familiarize itself with the standards and objectives of the course and evaluative material presented. Concerns shall be limited to consideration of the fairness of the application of the standards and objectives, and whether the standards and objectives were made known to the student in a reasonable manner. The difficulty of the standards shall not be an issue.

The burden of proof shall be on the student, who may be asked to appear before the committee.

In the case of a grade appeal, if the majority of the committee feels no case can be made, the original grade will remain. If it finds that the standards and objectives were not reasonably known to the student or were unfairly applied, it may recommend a different grade and give its reasons for so recommending. The committee shall report its findings in writing to the student, the instructor, and the dean.

If the panel recommends a different grade, the instructor shall have 10 academic days from receipt of the panel's report to inform the dean of the faculty of the intent to change the grade. If necessary, the dean may direct that the grade be changed. A change of grade shall not be interpreted as an admission of unfairness in grading.

In the case of a grievance, if the majority of the committee members adjudge the grievance to be without foundation, written notification of their findings will be forwarded to the student, the instructor, and the dean of the faculty. If, in the judgment of the committee, there is a basis for the grievance, a written report will be forwarded to the dean of the faculty with specific recommendations for redress. Copies shall be forwarded to the student and the instructor.

The dean of the faculty will notify all parties of his or her final decision regarding the grievance within 10 academic days of receipt of the committee's findings and recommendations.

In conformance with state regulations, the dean's office shall maintain adequate documentation about each formal complaint and its disposition for at least six years after the final disposition of the complaint.

4. Committees

Committee members shall be drawn from a list of faculty nominated by departments. In naming the committee to hear a grievance, the dean shall take care to ensure that no member has an interest in the case being heard.

5. Confidentiality

Once the grievance committee has been convened to hear a complaint, principals and committee members shall have the obligation to maintain the confidentiality of the proceedings and of all materials presented.

6. Review

This procedure must be reviewed after two years. The review process should identify any irregularities in grade changes. To facilitate this review, a copy of all documentation/findings at the formal level shall be retained in the department office.

Complaints to State Education Department

Any individual who continues to feel aggrieved after pursuing the options outlined previously, is unable to resolve the problems, or believes the institution has not properly addressed the concerns may file a written complaint with the State Education Department within three years of the alleged incident.

The complainant may telephone the Postsecondary Complaint Registry to request a complaint form at (212) 951-

6493 or write to the New York State Education Department, Postsecondary Complaint Registry, One Park Ave., 6th Floor, New York, NY 10016.

Students Unable to Attend Classes on Certain Days Because of Religious Beliefs

1. No person shall be expelled from or be refused admission as a student to an institution of higher education because he or she is unable, due to religious beliefs, to register for or attend classes, or to participate in any examination, study, or work requirements, on a particular day or days.
2. Any student in an institution of higher education who is unable, because of his or 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 the administrative officials of each institution of higher education to make available to each student who is absent from school, because of his or her religious beliefs, an equivalent opportunity to register for classes or make up any examination, study, or work requirements that 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 the said student such equivalent opportunity.
4. If registration, classes, examinations, study, or work requirements are held on Friday after 4:00 p.m. or on Saturday, similar or makeup classes, examinations, study, or work requirements shall be made available on other days, where it is possible and practical to do so. No special fees shall be charged to the student for these classes, examinations, study, or work requirements held on other days.
5. In effectuating the provisions of the Education Law, it is expected that faculty and administrative officials will exercise the fullest measure of good faith. No adverse or prejudicial effects shall result to any student for availing himself or herself of the provisions of this section.
6. Any student who is aggrieved by the alleged failure of any faculty or administrative official 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 or her rights under this section.
7. The term "religious beliefs" 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.
8. At Buffalo State College, we sharpen the mandate of the state and endorse the policy that prohibits administering evaluative examinations on Rosh Hashanah, Yom Kippur, and Good Friday.

Assessment

Buffalo State is committed to fostering the academic achievement and personal development of its students. To carry out this commitment, the college continuously gathers information about the effectiveness of its academic programs, the progress of students toward educational and personal goals, and the achievements and perspectives of alumni. This information is used to monitor program effectiveness, to recognize educational trends and opportunities, and to develop a sound, factual basis for academic planning.

Each Buffalo State student is expected to participate in the college's assessment efforts. Academic programs use various means and other methods. Participation in these activities may be a completion requirement for some degree programs.

ACADEMIC ORGANIZATION

The college is organized into five schools: the School of Arts and Humanities, the School of Education, the School of Natural and Social Sciences, the School of the Professions, and the Graduate School. Each school contains specific departments responsible for the degree programs offered there. Each school reports to an academic dean who is responsible for the administration of the departments and the degree programs residing in that area. Students should consult with their dean, usually by appointment, when issues remain unresolved after having met with their department chair. All the major areas of study or interdisciplinary programs described below fall under the responsibility of one or more of the departments.

Each program description gives valuable information concerning all aspects of each course of study offered at Buffalo State College. This information includes the department offering the program, the degree that is granted, an explanation of the program's content and purpose, special admission requirements, required credit hours in the major field and outside of the field, the number of electives allowed, and total degree requirements.

School of Arts and Humanities

The following undergraduate departments are in the School of Arts and Humanities: Art Education, Communication, Design, English, Fine Arts, Interior Design, Modern and Classical Languages, Music, Philosophy, and Theater. The School of Arts and Humanities also offers interdisciplinary degree programs in Arts and Letters, Television and Film arts, and Writing.

School of Education

The following undergraduate departments are in the School of Education: Adult Education, Career and Technical Education, Elementary Education and Reading, Exceptional Education, and Social and Psychological Foundations of Education. The School of Education also offers degree programs in individualized studies.

School of Natural and Social Sciences

The following undergraduate departments are in the School of Natural and Social Sciences: Anthropology, Biology, Chemistry, Earth Sciences and Science Education, Economics and Finance, Geography and Planning, Health and Wellness, History and Social Studies Education, Mathe-

matics, Physics, Political Science, Psychology, and Sociology. The School of Natural and Social Sciences also offers degree programs in individualized studies.

School of the Professions

The following undergraduate departments are in the School of the Professions: Business, Computer Information Systems, Creative Studies, Criminal Justice, Dietetics and Nutrition, Hospitality and Tourism, Social Work, Speech-Language Pathology, Student Personnel Administration, and Technology (includes Fashion Technology). The School of the Professions also offers degree programs in individual studies.

University College

University College is the academic home of Buffalo State first-year and undeclared students, providing support for their transition to college life and assistance in determining their best selection of majors and careers. University College strives to serve students by being a place that challenges them to think in new ways; to make intentional and appropriate personal and academic choices; and to find meaningful connections to faculty, staff, and fellow students. University College coordinates efforts to ensure that Buffalo State students are glad they came to this college and find it a place to earn success as scholars.

Continuing Professional Studies

Continuing Professional Studies is the academic home of programs for adult students at Buffalo State College. In partnership with schools and departments, Continuing Professional Studies provides high-quality credit and noncredit courses, workshops, and certificate programs to both traditional and nontraditional learners using a variety of locations, schedules, and technologies. Continuing Professional Studies manages Summer Session, January Term, Veterans Services/Certification Office, individualized studies, evening and weekend programs for adult students, online learning programming and development, conference planning, and noncredit programming.

COLLEGEWIDE DEGREE REQUIREMENTS FOR BACCALAUREATE DEGREES

Students entering Buffalo State before fall 2006 or who were readmitted in fall 2006 or later should consult with their adviser and www.buffalostate.edu/registrar/degreenavigator.xml for general education requirements.

The Intellectual Foundations program is required of all undergraduate students entering Buffalo State who begin their college careers in fall 2006 or later or are readmitted into the college after a two-year absence. Students entering Buffalo State before fall 2006 should consult with their adviser and www.buffalostate.edu/registrar/degreenavigator.xml for general education requirements. For the most up-to-date information, consult www.buffalostate.edu/registrar.

Mission of the Intellectual Foundations Program

The Intellectual Foundations program promotes an understanding of the continuity of human history, the depth of inherited knowledge, the validity of diverse modes of inquiry, the value of artistic expression, and the richness of our collective experience. The purpose of the Intellectual Foundations program is to develop the skills and habits of mind required for a life of intellectual curiosity and civic engagement.

Intellectual Foundations Program Requirements

The Intellectual Foundations program constitutes 39–66 of the 120 credit hours necessary for graduation, divided among 15 areas of knowledge. In each of the 15 areas, students may select from lists of approved courses. These lists are updated each semester, and only those courses that appear on the list during the semester the student successfully completes those courses may be applied to the Intellectual Foundations requirements. The courses that meet the Intellectual Foundations requirement as of this printing are listed on the following pages with the specific categories and credit distribution. For up-to-date course listings, see www.buffalostate.edu/intellectualfoundations.

If you have questions about the Intellectual Foundations requirements or which requirements you should be following, please consult your department office or the Academic

Advisement Center, University College, South Wing 110, (716) 878-5223. For the most current information about Intellectual Foundations requirements, visit www.buffalostate.edu/intellectualfoundations.

Categories and Credit Distribution

Under the Intellectual Foundations requirements, student must complete the requisite number of credit hours in the following 15 categories:

3 credit hours	BSC 101 Foundations of Inquiry*
0–6 credit hours	Basic Writing: CWP 101 and CWP 102 or equivalent
3 credit hours	Mathematics/Quantitative Reasoning**
6 credit hours	Cognate Foundations: Arts
6 credit hours	Cognate Foundations: Humanities
6 credit hours	Cognate Foundations: Natural Sciences
6 credit hours	Cognate Foundations: Social Sciences
3 credit hours	Foundations of Civilizations: American History
3 credit hours	Foundations of Civilizations: Western Civilization
3 credit hours	Foundations of Civilizations: Non-western Civilization
0–3 credit hours	Technology and Society††
0–3 credit hours	Diversity††
0–3 credit hours	Basic Oral Communication††
0–6 credit hours	Writing Across the Curriculum††
0–6 credit hours	Foreign Language†
39–66	Total credit hours

*Recommended in the first year at Buffalo State for all students entering fall 2006 or later with fewer than 60 credits.

***Students cannot be exempted from this requirement. Students must complete MAT 097 or MAT 098 or the equivalent before taking the Mathematics and Quantitative Reasoning required course unless they have completed three years of high school math or attained an SAT math score of 460 or an ACT math score of 16.*

†*Proficiency may be wholly or partially completed prior to college.*

††*One designated 3-credit course, which may satisfy multiple requirements*

In Cognate Foundations in the arts, humanities, natural sciences, and social sciences, students must take at least

two designated courses in two different disciplines (course prefixes). **Each student may use courses to fulfill both major requirements and Intellectual Foundations requirements, or those of other General Education categories.** Students may also count mathematics and quantitative reasoning and foreign language courses toward their major requirements. Courses in the following Intellectual Foundations categories may satisfy multiple requirements without restriction: technology and society, diversity, basic oral communication, and writing across the curriculum.

Additional Degree Requirements

In addition to the liberal arts education coursework described on the following pages, all undergraduate degree candidates must meet the following collegewide graduation requirements:

- Successful completion of required coursework in the declared major
- Successful completion of at least 120 credit hours, of which at least 33 must be upper division. At least 32 credits must be taken at Buffalo State, including the last 16 credits
- Final minimum overall cumulative GPA of 2.0
- Final minimum major GPA of 2.0
- Successful clearing of all I, N, or X grades

Course Coding System

A four-character code is used to identify which Intellectual Foundations requirement(s) a course fulfills. This information is printed in the legend of the online undergraduate class schedule. The Intellectual Foundations codes are as follows:

AHIF	American History, IF
ARIF	Arts, IF
BCBW	Basic Communication, IF
DIIF	Diversity, IF
FLA	Foreign Language, IF
HUIF	Humanities, IF
MQIF	Mathematics and Quantitative Reasoning, IF
NSIF	Natural Science, IF
NWIF	Non-Western Civilization, IF
OCIF	Basic Oral Communication, IF
SSIF	Social Science, IF
TSIF	Technology and Society, IF
WCIF	Western Civilization, IF

Department (Major) Requirements

A major consists of no fewer than 24 credit hours and usually no more than 42 credit hours in a particular field of study. Each department sets its own requirements. To receive a degree in a particular major, students must complete at least 6 credit hours in their major at Buffalo State. Courses and sequences of a major are determined by individual departments with the approval of the College Senate, Academic Affairs, and the president.

Second Majors and Minors

Courses selected to satisfy the general education requirement may be used to fulfill any part of the requirements of a second major or a minor.

Electives

The number of unrestricted elective courses varies according to the individual program. These courses are needed to make up the 120 credit hours required for graduation. Check the individual program requirements to determine the number of electives allowed. These courses are taken in addition to general education and departmental credit hours.

Foreign Language Requirement

All Intellectual Foundations students must demonstrate proficiency in a single foreign language equivalent to the successful completion of one year of college-level work (102-level proficiency or equivalent).

Students who have successfully completed foreign language study on the high school level may register for the appropriate course. Successful completion of one language through the second year in high school satisfies the requirement. Proficiency in foreign language also may be achieved by completing 6 credits on the College-Level Examination Program test (see section Alternative Methods of Earning College Credit).

Sign language may be substituted for foreign language for students in the following majors (list is here): www.buffalostate.edu/registrar/documents/Intellectualfoundations.htm#Language

For further information regarding placement or any aspect of the requirement, contact the Modern and Classical Languages Department, Bishop Hall 126, (716) 878-5414.

Upper-Division Course Requirement

All students must complete a minimum of 33 credit hours of upper-division coursework (300–400 levels) to be eligible for graduation. An exception is made for foreign language courses (see foreign language requirement). Specific information can be obtained through the appropriate major departments.

Writing Across the Curriculum Requirement

Writing represents a critical component of the educational process, and the integration of writing into all types of courses across the curriculum is widely encouraged. See Basic Writing Requirements 36 for more information.

Basic Writing Requirement

The college requires all matriculated students to demonstrate college-level skills in composition. For more information, see Basic Writing Requirement 36 in the Academic Policies section of this catalog.

Academic Minors

Buffalo State academic minors are specially conceived sequences of courses designed to allow students to achieve important goals. A minor may be used to complement the major course of study, broaden and enhance career opportunities, gain expertise in an area of interdisciplinary studies, or provide in-depth study in a subject of special interest. While an academic minor is an optional study program, students often find it an excellent way to make strategic use of all college elective courses.

Each minor program consists of 18–21 credit hours of coursework. A minimum cumulative GPA of 2.0 is required for admission to a minor program, and at least three of the courses in each minor must be completed at the college. Students may not elect a minor from the same discipline as their major program. Students who complete the

minor with a minimum GPA of 2.0 will have the minor recorded on their official transcript.

Only matriculated students who intend to seek an undergraduate degree may be accepted into a minor program. A minor may be earned simultaneously only while completing a major degree program.

Students interested in selecting a minor program should contact the coordinating department as soon as possible and complete a Change of Major/Minor form. A listing of all minors and requirements is on file in each department and dean's office. Only the coordinating department provides advisement on individual minors.

For a list of minors, please refer to Undergraduate Minor Programs at a Glance chart on page 55.

Intellectual Foundations Courses

The courses listed below will satisfy the relevant Intellectual Foundations requirement. Choose the number of required courses and credits from each of the following categories. (Most courses equal 3 credits.)

Foundations of Inquiry:

(Required in the first year for all students entering Buffalo State with fewer than 57 credits)

BSC 101 or
HON 100

Basic Writing

CWP 101
CWP 102

Mathematics/Quantitative Reasoning

ECO 305
MAT 103
MAT 114
MAT 122
MAT 126
MAT 161
MAT 311
PHI 107

Cognate Foundations: Arts

Choose two courses from two different disciplines (course prefixes) for a total of at least 6 credits.

AED 100
AED 200
DAN 200
DAN 220
DAN 224
DES 114
DES 190
FAR 100

FAR 101
FAR 250
FAR 251
HON 103
MUS 201
MUS 206
MUS 208
MUS 210
MUS 290
THA 106
THA 216

Cognate Foundations: Humanities

AAS 240
COM 100
ENG 151
ENG 160
ENG 205
ENG 206
ENG 210
ENG 211
ENG 212
ENG 220
ENG 221
ENG 230
ENG 231
ENG 240
ENG 241
ENG 243
ENG 252
ENG 255
HON 101
HUM 100
MCL 100
PHI 101
PHI 102
PHI 110
REL 104
REL 205
REL 206
SPC 103

Cognate Foundations: Natural Sciences

ANT 100
ANT 220
BIO 100
BIO 101
BIO 104
BIO 211
BIO 212
BIO 213
CHE 100
CHE 101
CHE 111
ENS 100
GEG 101
GEG/GES 241
GES 101
GES 102
GES 111
GES 131
GES 223
GES 224
GES 232
GES/GEG 241
HON 102
NSF 102
PHY 100
PHY 103
PHY104
PHY 107
PHY 111
SCI 100
SCI 105
SCI 231
SCI 232
SLP 220

Cognate Foundations: Social Sciences

ANT 244/244W
CRJ 101
ECO 101
ECO 201

ECO 202	HIS 320	ENG 353
GEG 102	HIS 337	ENG 354
HON 202	HIS 338	ENG 385
HON 302	HIS 373	EXE 100
PSC 101	HIS 445	GEG 309
PSC 103	HIS 465	HIS 302
PSC 230	MUS 209	HIS 311
PSY 101	NFS 108	HIS 322/322W
SLP 206	PSC 340	HIS/SSE/SST 363
SOC 100	REL 303	MUS 206
SOC 240	REL 321	PSC 225
Foundations of Civilizations: American History	Technology and Society	PSC 390
ANT 250	ANT 385	PSY 387
ECO 103	ANT 400	SOC 240
HIS 106	BIO 104	SOC 310
HIS 107	CHE 315	SOC 312
PSC 102	CIS 105	SOC 321
Foundations of Civilizations: Western Civilization	COM 100	SOC 333
AED 315	EDU 375	SOC 350
ANT 303	ENG 380	SOC 351
ENG 130	ENS 100	SPC 311
GEG 364	ENT 100	SPC 333
HIS 115	EXE 375	SWK 319/319W
HIS 116	FLE 201	Basic Oral Communication
HIS 117	FOR 122	AED 303
MUS 224	GEG 419	AED 304
PHI 301	GES 111	AMT 495/495W
PHI 310	GES 223	ANT 415
PHI 347	GES 232	BIO 303
PSC 351/351W	HIS 120	BIO 350
PSC 352	HIS 332	CHE 471
REL 105	HON 301	CRJ 303/303W
REL 121	MED 307	CRJ 470
THA 317	NFS 105	CRJ/PSC/SOC 485
THA 318	PHY 304	ECO 490
THA 332	SCI 231	EDU 400
Foundations of Civilizations: Non-Western Civilizations	TEC 150	EDU 404
ANT 101	TEC 260	ENG 463
ANT 300	TEC 319	ENG 490/490W
ANT 301	THA 332	GEG 461
ANT 305	Diversity	GES 307
ANT 306	AAS 100	GES 460
ANT 307	AAS 240	HIS 300/300W
ANT 327	AAS 321	MAT 491
ANT 329	AAS 351	MED 407
ANT 330	ANT 300	MED 408
ANT 377	ANT 301	MUS 440
ANT 381	ANT 307	PHI 351
ENG 353	ATS 325	PHY 410
FTT 349	BUS 305	PSC 470/470W
GEG 359	CRJ 425	PSY 472
GEG 360	CRJ 430	SED 407
HEW 327	DAN 230	SED 408
HIS 230	DAN 234	SPC 205
HIS 231	ECO 302/302W	SSE 409
HIS 306	EDU 310/310W	SSE 410
HIS 307	ENG 231	THA 350
HIS 310	ENG 240	Foreign Language
	ENG 241	CHI 101/102
	ENG 243	FRE 101/102
	ENG 251	GER 101/102

GRK 101/102
ITA 101/102
LAT 101/102
SLP 101/102*

SPA 101/102
SWA/SSD 101/102

*Sign Language may substitute for a foreign language for students in certain majors

Writing Across the Curriculum

Two 3-credit courses designated "writing intensive" (marked "W" next to the course number in the schedule, such as "ENG 300W"). Writing Across the Curriculum courses may satisfy multiple requirements.

Foreign Language

Proficiency in a foreign language equivalent to at least the 102 level may be demonstrated by success in a foreign language in high school or completion of one of the following:

CHI 101 and CHI 102
FRE 101 and FRE 102
FRE 110
GER 101 and GER 102
GRK 101 and GRK 102
ITA 101 and ITA 102
LAT 101 and LAT 102
SLP 210 and SLP 497
SPA 101 and SPA 102
SWA/AAS 101 and SWA/AAS 102

Sign language may substitute for a foreign language for students in selected majors.

UNDERGRADUATE PROGRAMS

Undergraduate Major Programs at a Glance

**Evening study available. See minor programs on page 55 for full listing of Undergraduate Minors.*

Major Program	Degree	HEGIS code	Buffalo State code	Program description on page	Department
Anthropology	B.A.	2202	BA-NS ANT	Page 57	Anthropology
Art	B.A.	1002	BA-AH ART	Page 57	Fine Arts
Art Education (K–12) ¹	B.S.	0831	BS-AH AED	Page 58	Art Education
Art History	B.A.	1003	BA-AH ARH	Page 59	Fine Arts
Arts and Letters	B.A.	4091	BA-AH ALT	Page 59	Dean, A&H
Biology	B.A.	0401	BA-NS BIO	Page 60	Biology
Biology Education (7–12) ¹	B.S.	0401.01	BS-NS BGS	Page 61	Biology
Biology Education (7–12; 5–6 Extension) ¹	B.S.	0401.01	BS-NS BGX	Page 61	Biology
Business Administration	B.S.	0506	BS-SP BSA	Page 63	Business
Business and Marketing Education ¹	B.S.	0838.01	BS-ED BME	Page 64	Educational Foundations
Career and Technical Education ^{1*}	B.S.	0839.03	BS-ED CTE	Page 65	Educational Foundations
Ceramics	B.F.A.	1009	BFA-AH CER	Page 66	Design
Ceramics	B.S.	1009	BS-AH CER	Page 67	Design
Chemistry	B.A.	1905	BA-NS CHE	Page 67	Chemistry
Chemistry Education (7–12) ¹	B.S.	1905.01	BS-NS CGS	Page 68	Chemistry
Chemistry Education (7–12; 5–6 Extension) ¹	B.S.	1905.01	BS-NS CGX	Page 69	Chemistry
Childhood Education (Grades 1–6)	B.S.	0802	BS-ED CED	Page 72	Elementary Education and Reading
Communication Design	B.F.A.	1009	BFA-AH CMD	Page 79	Design
Communication Studies	B.A.	0699	BA-AH COM	Page 80	Communication
Computer Information Systems*	B.S.	0702	BS-SP CIS	Page 81	Computer Information Systems
Criminal Justice	B.S.	2105	BS-SP CRJ	Page 81	Criminal Justice
Dietetics: Coordinated Program	B.S.	1306	BS-SP DIE	Page 83	Dietetics and Nutrition
Dietetics: Didactic Program	B.S.	1306	BS-SP DIE	Page 83	Dietetics and Nutrition
Early Childhood and Childhood Education (Birth–Grade 6)	B.S.	0522	BS-ED ECC	Page 70	Elementary Education and Reading
Early Childhood Education (Birth–Grade 2)	B.S.	0802	BS-ED ECE	Page 83	Elementary Education and Reading
Earth Science Education (7–12) ¹	B.S.	1917.01	BS-NS EGS	Page 85	Earth Sciences and Science Education
Earth Science Education (7–12; 5–6 Extension) ¹	B.S.	1917.01	BS-NS EGX	Page 86	Earth Sciences and Science Education
Earth Sciences	B.S.	1917	BS-NS EAS	Page 87	Earth Sciences and Science Education

Major Program	Degree	HEGIS code	Buffalo State code	Program description on page	Department
Economics	B.A.	2204	BA-NS ECO	Page 88	Economics and Finance
Economics	B.S.	2204	BS-NS ECO	Page 89	Economics and Finance
Electrical Engineering Technology (Electronics)*	B.S.	0925	BS-SP ETE	Page 89	Technology
Electrical Engineering Technology (Power and Machines)*	B.S.	0925	BS-SP ETP	Page 90	Technology
English	B.A.	1501	BA-AH ENG	Page 90	English
English Education (7–12) ¹	B.S.	1501.01	BS-AH ENS	Page 91	English
Exceptional Education (Dual Certification—Teachers of Special Education and Elementary Education)	B.S.Ed.	0808	BSED-ED EXE	Page 93	Exceptional Education
Fashion and Textile Technology	B.S.	1303	BS-SP FTT	Page 93	Technology
Fibers	B.F.A.	1009	BFA-AH FIB	Page 95	Design
Fibers	B.S.	1009	BS-AH FIB	Page 96	Design
Forensic Chemistry	B.S.	1999.20	BS-NS FRC	Page 96	Chemistry
French Education (7–12) ¹	B.S.	1102.01	BS-AH FRS	Page 97	Modern and Classical Languages
French Language and Literature	B.A.	1102	BA-AH FRE	Page 99	Modern and Classical Languages
Geography	B.A.	2206	BA-NS GEG	Page 99	Geography and Planning
Geology	B.A.	1914	BA-NS GEO	Page 100	Earth Sciences and Science Education
Health and Wellness	B.S.	0837	BS-SP HEW	Page 100	Health and Wellness
History	B.A.	2205	BA-NS HIS	Page 101	History and Social Studies Education
Hospitality Administration	B.S.	1307	BS-SP HTR	Page 101	Hospitality and Tourism
Individualized Studies*	B.S.	4901	BS-UC INS	Page 102	Deans' Offices
Industrial Technology*	B.S.	0925	BS-SP TEC	Page 102	Technology
Interior Design	B.F.A.	1009	BFA-AH INT	Page 103	Interior Design
Journalism	B.A.	0602	BA-AH JBS	Page 103	Communication
Mathematics	B.A.	1701	BA-NS MAT	Page 105	Mathematics
Mathematics—Applied	B.S.	1703	BS-NS AMT	Page 105	Mathematics
Mathematics Education (7–12) ¹	B.S.	1701.01	BS-NS MTS	Page 106	Mathematics
Mathematics Education (7–12; 5–6 Extension) ¹	B.S.	1701.01	BS-NS MTX	Page 107	Mathematics
Mechanical Engineering Technology*	B.S.	0925	BS-SP MET	Page 108	Technology
Media Production	B.A.	0603	BA-AH MDP	Page 108	Communication
Metals/Jewelry	B.F.A.	1009	BFA-AH MJD	Page 109	Design
Metals/Jewelry	B.S.	1009	BS-AH MJD	Page 110	Design
Music	B.A.	1005	BA-AH MUS	Page 110	Music
Music Education (Pre-K–12)	B.Mus.	1005	MUSB-AH MUE	Page 111	Music
Painting	B.F.A.	1002	BFA-AH PTG	Page 111	Fine Arts
Philosophy	B.A.	1509	BA-AH PHI	Page 112	Philosophy and Humanities
Photography	B.F.A.	1011	BFA-AH PHO	Page 112	Fine Arts
Physics	B.A.	1902	BA-NS PHY	Page 113	Physics
Physics	B.S.	1902	BS-NS PHY	Page 113	Physics
Physics-Engineering 3-2 Cooperative Program	B.S.	1902	BS-NS PHY	Page 113	Physics
Physics Education (7–12) ¹	B.S.	1902.01	BS-NS PGS	Page 106	Physics
Physics Education (7–12; 5–6 Extension) ¹	B.S.	1902.01	BS-NS PGX	Page 107	Physics
Political Science	B.A.	2207	BA-NS PSC	Page 116	Political Science
Printmaking	B.F.A.	1009	BFA-AH PRT	Page 118	Fine Arts

Major Program	Degree	HEGIS code	Buffalo State code	Program description on page	Department
Psychology	B.A.	2001	BA-NS PSY	Page 118	Psychology
Psychology	B.S.	2001	BS-NS PSY	Page 119	Psychology
Public Communication	B.A.	0699	BA-AH PCM	Page 120	Communication
Sculpture	B.F.A.	1002	BFA-AH SCL	Page 121	Fine Arts
Social Studies Education (7–12) ¹	B.S.	2201.01	BS-NS SSS	Page 121	History and Social Studies Education
Social Studies Education (7–12; 5–6 Extension) ¹	B.S.	2201.01	BS-NS SSX	Page 123	History and Social Studies Education
Social Work*	B.S.	2104	BS-SP SWK	Page 126	Social Work
Sociology	B.A.	2208	BA-NS SOC	Page 126	Sociology
Sociology—Applied	B.S.	2208	BS-NS SOA	Page 127	Sociology
Spanish Education (7–12) ¹	B.S.	1105.01	BS-AH SPS	Page 127	Modern and Classical Languages
Spanish Language and Literature	B.A.	1105	BA-AH SPA	Page 129	Modern and Classical Languages
Speech-Language Pathology	B.S.	1220	BS-SP SLP	Page 130	Speech-Language Pathology
Technology Education ¹	B.S.	0839.01	BS-SP TED	Page 130	Technology
Television and Film Arts	B.A.	0603	BA-AG TFA	Page 131	Communication
Theater	B.A.	1506	BA-AH THA	Page 132	Theater
Urban and Regional Analysis and Planning*	B.S.	2214	BS-NS URP	Page 132	Geography and Planning
Wood/Furniture	B.F.A.	1009	BFA-AH WFD	Page 133	Design
Wood/Furniture	B.S.	1009	BS-AH WFD	Page 134	Design
Writing	B.A.	10605	BA-AH WRT	Page 134	English

Undergraduate Minor Programs at a Glance

*Evening study available.

Minor Program	Code	Department
African and African American Studies	AAS	Dean's Office, Natural and Social Sciences
Aging	AGE	Psychology
Anthropology	ANT	Anthropology
Art History	ARH	Fine Arts
Art Therapy	ATH	Art Education
Asian Studies	ASI	History and Social Studies Education
Astronomy	AST	Earth Sciences and Science Education
Biology	BIO	Biology
Business Economics	BEC	Economics and Finance
Chemistry	CHE	Chemistry
Coaching	COA	Coaching and Physical Education
Computer Information Systems*	CIS	Computer Information Systems
Creative Studies	CRS	Center for Studies in Creativity
Criminal Justice*	CRJ	Criminal Justice
Dance	DAN	Theater
Design (Ceramic, Fiber, Furniture, Jewelry)	DES	Design
Deviance	DEV	Sociology
Digital Music Production	DMP	Music
Economic Policy Analysis	EPA	Economics and Finance
English	ENG	English
Environment and Society	EVS	Earth Sciences and Science Education
Environmental Science	ENV	Earth Sciences and Science Education
Forensic Anthropology	FAN	Anthropology
French	FRE	Modern and Classical Languages
Geographic Information Systems	GIS	Geography and Planning

Minor Program	Code	Department
Geography	GEG	Geography and Planning
Geology	GEO	Earth Sciences and Science Education
German	GER	Modern and Classical Languages
Global Studies	GLB	International and Exchange Office
History	HIS	History and Social Studies Education
Hospitality Administration	HTR	Hospitality and Tourism
Indigenous Studies	ING	Anthropology
Intelligence Analysis	INA	Criminal Justice
International Economics	IEC	Economics and Finance
International Relations	IRE	Political Science
Italian	ITA	Modern and Classical Languages
Leadership	LDR	Dean's Office, School of the Professions
Legal Studies	LGL	Political Science
Mathematics	MAT	Mathematics
Medieval Studies	MEV	History and Social Studies Education
Meteorology and Climatology	MTC	Geography and Planning
Museum Studies	MST	History and Social Studies Education
Painting	PTG	Fine Arts
Philosophy	PHI	Philosophy and Humanities
Photography	PHO	Fine Arts
Physics	PHY	Physics
Planning	PLN	Geography and Planning
Polish, Russian, and East European Studies	PRE	History and Social Studies Education
Political Science	PSC	Political Science
Printmaking	PRT	Fine Arts
Psychology	PSY	Psychology
Public Administration	PUB	Political Science
Quality*	QUA	Technology
Religious Studies	REL	Philosophy and Humanities
Safety Studies*	SAF	Technology
Sculpture	SCL	Fine Arts
Social Welfare	SOW	Social Work
Sociology	SOC	Sociology
Spanish	SPA	Modern and Classical Languages
Speech	SPC	Communication
Study of Understanding Community, Diversity, and Peace	CDP	Geography and Planning
Theater	THA	Theater
Women's Studies	WST	Dean's Office, Natural and Social Sciences
Writing	WTG	English

ANTHROPOLOGY (B.A.)

BA-NS ANT

Anthropology Department Bachelor of Arts (HEGIS 2202)

Classroom Building B107 (716) 878-6110

Anthropology is the exploration of what it means to be human. Although anthropology is often associated with faraway places and remote excavations, anthropologists are increasingly involved in research on such topics as education, health, food, migration, sports, tourism, and cultural identity. The study of anthropology provides a broad-based approach to the understanding of human culture (past and present) and human biology. The anthropological perspective is global, holistic, and involves considerable time-depth. The major exposes students to the primary subdivisions within the field: archaeology, social cultural anthropology, physical/biological anthropology, linguistics, and folklore. The B.A. in anthropology prepares students for further academic training at the graduate level, but can also lead directly to careers in nonacademic (applied) areas, such as forensics, contract archaeology, cultural resource management, museum work, social services, education, government, and market research. Internships, archaeological field schools, and a departmental honors program are available to students in this major.

Intellectual Foundations Requirements	39–66 cr
Total Required Credit Hours in Anthropology	33–36 cr

A. Required Courses (15 cr)

ANT 100	Human Origins
ANT 101	Understanding Culture
ANT 488	Internship

TWO of the following three courses:

ANT 412W	Seminar in Cultural Anthropology
ANT 415	Seminar in Archaeology
ANT 418W	Seminar in Physical Anthropology

B. Electives (12–15 cr)

Select one course from each of the following areas:

Archaeology (3 cr)

*ANT 250	Historical Archaeology
ANT 310	Mesoamerican Archaeology
ANT 312	Archaeology of North America
ANT 329	World Prehistory
ANT 377	Ancient Civilization

Physical Anthropology (3 cr)

*ANT 220	Case Studies in Physical Anthropology
ANT 321	Primatology
ANT 323	Anthropology of Disease
ANT 324	The Human Skeleton
ANT 325	Forensic Anthropology
ANT 326	The Human Fossil Record

Regional/ Social Cultural/Topical Courses (3 cr)

ANT 300	Indigenous Peoples of Western North America
ANT 301	Indigenous Peoples of Eastern North America

ANT 303	The Anthropology of Europe
ANT 305	Peoples of Africa
ANT 306	Peoples of Asia
ANT 307	Urban Anthropology
ANT 327	Medical Anthropology
ANT 330	Pacific Islanders
ANT 340	Women in Anthropological Perspective
ANT 341	Art and Culture in Anthropological Perspective
ANT 344W	Folklore & Fantasy in Popular Culture: From Middle-earth to F
ANT 350	Global Marriage Practices
ANT 362W	Urban Folklore
ANT 365	Practicing Anthropology
ANT 367	Culture and Ecology
ANT 370	The Anthropology of Contemporary Issues
ANT 380	Language and Culture
ANT 381	Religion, Magic and Culture
ANT 388W	Folklore & Technology: American Roots Music

Experiential Courses (3–6 cr)

ANT 244W	Introduction to Folklore and Folklife
ANT 308	Archaeological Method (Field School)
ANT 315W	Research Methods in Cultural Anthropology
ANT 385	Visual Anthropology
ANT 400	Ancient Materials
ANT 495	Project
ANT 498	Honors Research
ANT 499	Independent Study

C. Two Other Courses, From Any Area, Selected by Advisement (6 cr)

All College Electives	21–48 cr
Total Required Credit Hours	120 cr

* Courses listed with asterisks may count towards the major requirements **ONLY** if student is also a **Forensic Anthropology or Indigenous Studies Minor**.
Note: ANT 389 may be used to fill one or more of the elective requirements according to content in any given semester. You may take only three ANT 389 courses over the duration of your time at BSC. Please contact your adviser to determine the appropriate designation.

ART (B.A.)

BA-AH ART

Fine Arts Department Bachelor of Arts (HEGIS 1002)

National Association of Schools of Art and Design (NASAD) Accredited
Upton Hall 502 (716) 878-6014

The art program provides students with the opportunity to study a wide variety of visual arts media. Together with basic instruction in drawing, design, and art history, students, under advisement, select 24 credit hours in electives in fine arts and/or design.

The Fine Arts Department reserves the right to retain artwork for official purposes, such as exhibits, catalogs, or teaching aids.

Students are expected to assume the costs of materials they use in their courses. All studio courses may have an additional instructional charge for materials used in class.

Intellectual Foundations Requirements 39–66 cr

Total Required Credit Hours in Art 42 cr

A. Required Courses (21 cr)

DES 101	Introductory Design 2D I
DES 103	Introductory Design 3D I
FAR 101	Drawing I
FAR 102	Drawing II
FAR104	Themes and Issues in Contemporary Arts
FAR 250	Art History I
FAR 251	Art History II

B. Electives in Fine Arts and/or Design (21 cr)

All College Electives 12–39 cr

Total Required Credit Hours 120 cr

ART EDUCATION (K–12, B.S.)

BS-AH AED

Art Education Department Bachelor of Science (HEGIS 0831)

Bishop Hall 103 (716) 878-4106

National Association of Schools of Art and Design (NASAD) Accredited

National Council for Accreditation of Teacher Education (NCATE) Accredited

The art education program prepares students for initial certification to teach kindergarten through grade 12 art in New York State schools. The program develops art education professionals who are knowledgeable about the subject of art; who think systematically about the act of teaching; who are committed to teaching students about art in meaningful and critical ways; who consider teaching to be a dynamic and continuing process of development and growth; who recognize and respect individual differences in their students and adapt their teaching strategies to fit individual student needs; who are sensitive to issues related to diversity in class, ethnicity, and gender in contemporary society; who are active in the professional, cultural, and art communities; who understand and are prepared to utilize current technology and media in the public school art programs; who understand and promote the value of art in contemporary cultures; and who are prepared to address the unique learning needs of kindergarten through grade 12 students in an urban environment.

Requirements of Major: For students to enroll and remain in the art education program, they must maintain a minimum cumulative GPA of 2.5 and a minimum GPA of 3.0 in their major. A portfolio review is required for admission to the department. Students are expected to assume the costs of materials they use in art education courses, and there may be an additional instructional charge for materials used in class.

Student Teaching: Eligibility for student teaching is determined by the Art Education Department; placement is arranged by the art education coordinator of student teaching.

Student teaching experiences are provided in cooperating elementary and secondary schools. In some cases, students may be required to reside in the community where their student teaching assignments take place; transportation to/from the student teaching assignment is the student's responsibility. Students enrolled in the student teaching semester devote full time to their practicum assignment.

Prior written approval must be obtained from the chair of the Art Education Department for a student to enroll for any other college credit work during a student teaching assignment except for AED 400. All students anticipating a student teaching assignment must show proof of having a test for tuberculosis within three months of the assignment. Results of the test must be filed at the health center.

Transfer Students: Students transferring to the art education major as juniors, and who wish to complete their programs in four semesters, should plan their schedules of coursework in art education with great care, and with an academic adviser. It is important to note that AED 300W, AED 301W, and AED 302W are intended as a sequence and may not be taken concurrently except for students in postbaccalaureate certification-only programs.

Postbaccalaureate (Certification-Only) Program (see below): This program is for students who have already earned a B.A./B.F.A. degree in a studio area and are interested in earning art teacher certification.

Intellectual Foundations Requirements 39–66 cr

Total Required Credit Hours in Art Education 36 cr

A. Required Courses (24 cr)

AED 200	Fundamentals of Art Inquiry
AED 300W	Foundations in Art Education
AED 301W	Theoretical Constructs in Art Education
AED 302W	Functions and Practice in Art Education
AED 315	Arts in Living
AED 398	Computer Applications for Art Educators
AED 400	Student Teaching Seminar
ATS 325	Arts and Special Needs

B. Required Field Experience (12 cr)

AED 303	Elementary Student Teaching in Art (6)
AED 304	Secondary Student Teaching in Art (6)

Total Required Credit Hours in Fine Arts and Design 36 cr

A. Required Fine Arts Courses (15 cr)

FAR 101	Drawing I
FAR 102	Drawing II
FAR 104	Themes and Issues in Contemporary Arts
FAR 250	Art History I
FAR 251	Art History II

B. Required Design Courses (9 cr)

DES 101	Introductory Design 2D I
DES 103	Introductory Design 3D I
One elective selected by advisement.	

C. Studio (FAR and DES) Electives Selected by Advisement (12 cr)

All College Electives 0–6 cr

ART EDUCATION (K–12, PTCP)

PBC-AH AED

Art Education Department Postbaccalaureate Teacher Certification Program (HEGIS 0831)

Bishop Hall 103 (716) 878-4106
National Association of Schools of Art and Design (NASAD) Accredited
National Council for Accreditation of Teacher Education (NCATE) Accredited

The art education postbaccalaureate certification-only program offers a course sequence meeting the educational requirements for certification. Students are expected to complete the entire sequence, and are responsible for any additional certification requirements established by the New York State Education Department, Teacher Certification Division, including the NYS Teacher Certification Examinations, and mandated seminars. In order to be eligible for the program, applicants must have and maintain a minimum 2.5 overall GPA and a 3.0 GPA in the major, which includes art education, design, and fine arts coursework.

Except for the student teaching semester, postbaccalaureate certification-only students may elect to attend part time or full time. Courses are offered each semester (not summer) during daytime hours.

Art teacher certification is a function of the Bureau of Teacher Certification, NYS Education Department, Albany. In order to respond to local information requests, the bureau has a field representative in the Western New York area.

First Semester		12 cr
AED 200	Fundamentals of Art Inquiry	
AED 398	Computer Applications for Art Educators	
AED 300W	Foundations in Art Education	
AED 301W	Theoretical Constructs in Art Education	
Second Semester		9 cr
AED 302W	Functions and Practice in Art Education	
AED 315	Arts in Living	
ATS 325	Arts and Special Needs	
Third Semester		15 cr
AED 303	Elementary Student Teaching in Art (6)	
AED 304	Secondary Student Teaching in Art (6)	
AED 400	Student Teaching Seminar	
Total Required Credit Hours		36 cr

ART HISTORY (B.A.)

BA-AH ARH

Fine Arts Department Bachelor of Arts (HEGIS 1003)

National Association of Schools of Art and Design (NASAD) Accredited
Upton Hall 502 (716) 878-6014

The program in art history is designed to train students in the history and development of art worldwide. Art history, as one of the disciplines in the liberal arts, is envisioned as a foundation for graduate study and for careers in a wide variety of professions. Art history majors are prepared for graduate work in art history, arts administration, museum studies, arts librarianship, visual resource and archive curatorship, historic preservation and art conservation. Buffalo State art history majors who continue their studies on the graduate level may find employment in public and private agencies, libraries, galleries, museums, publishing houses, art dealerships, colleges, arts consultancies, commercial arts organizations and in tourism. It is recommended that art history majors achieve fluency in at least one foreign language before graduating.

Intellectual Foundations Requirements 39–66 cr

Total Required Credit Hours in Art History 42 cr

A. Required Courses (27 cr)

FAR 101	Drawing I
FAR 104	Themes and Issues in Contemporary Arts
FAR 250	Art History I
FAR 251	Art History II
FAR 354	Art and Culture of Greece
FAR 359	High Renaissance and Mannerism
FAR 362	Nineteenth-Century Art
or FAR 363	or Twentieth-Century Art

One course in medieval art from list below
One course in non-Western art from list below

B. Electives in Art History (15 cr)

Select three courses from the following:

FAR 325	History of Photography
FAR 352	Art and Culture of Islam
FAR 353	Art and Culture of Egypt and the Near East
FAR 356	Early Medieval Art
FAR 357	Late Medieval Art
FAR 358	Early Renaissance Art in Italy
FAR 361	Italian Baroque Art
FAR 364	Art After 1940
FAR 365	American Art
FAR 367	Baroque of Northern Europe
FAR 369	Art in the Middle Ages
FAR 371	Art Theory and Criticism
FAR 372	Masterworks of Architecture
FAR 380	Art of Africa
FAR 389	Topics in Art History
FAR 469	Art and Architecture in Siena
FAR 488	Internship in Art History
FAR 499	Independent Study in Art History

All College Electives 12–39 cr

Total Required Credit Hours 120 cr

ARTS AND LETTERS (B.A.)

BA-AH ALT

Dean's Office, School of Arts and Humanities Bachelor of Arts (HEGIS 4901)

Rockwell Hall 222 (716) 878-6326

The B.A. degree program in arts and letters provides the opportunity to craft a customized major for students who are interested in the study of any of the forms of human expression, creativity, and culture, and whose career/life plans would be served by an academic scope broader than that offered by any single department. Because these graduates leave Buffalo State with communication and interpersonal skills, a sense of aesthetics, critical thinking abilities, attention to detail, and experience working independently or as part of a team, they can develop successful careers in administration, marketing, sales, law, business management, customer relations, human resource management, event planning, cultural tourism, and more. We urge all arts and letters majors to engage in an off-campus internship before graduation to enhance skills and because it is attractive to potential employers.

Intellectual Foundations Requirement **39–66 cr**

Total Required Credit Hours in the Major **39 cr**

(at least 21 credits upper division)

A. Primary Concentration (18 cr)

Courses selected by advisement (at least 9 credit hours in upper division except student teaching) in one of the following areas:

- Art Education (with certain limitations)
- Communication
- Dance
- Design
- English
- Fine Arts
- Modern and Classical Languages (not allowing 101-102)
- Music
- Philosophy and Humanities
- Theater

B. Secondary Concentration (9 cr)

Select a second area from list above (at least 3 of the 9 credit hours must be in upper division)

C. Arts and Humanities Courses (9 cr)

D. Senior Paper or Project (3 cr)

A capstone experience under the guidance of the faculty adviser, this activity must be approved by the adviser and the topic forwarded to the dean before work is begun.

All College Electives **18–42 cr**

Total Required Credit Hours **120 cr**

BIOLOGY (B.A.)

BA-NS BIO

Biology Department Bachelor of Arts (HEGIS 0401)

Science Building 314 (716) 878-5203

The B.A. degree program in the biological sciences prepares students for several options, including various employment opportunities at the bachelor's degree level, and entrance to graduate or professional schools.

A departmental honors program is also available. Students should contact the department for additional information.

Academic Performance Policy: Students who have a GPA of 2.0 or less in BIO-prefixed courses required for the major at the end of a semester will be placed on departmental probation. Students will then have two semesters to raise

their GPA to a 2.0 or greater in BIO-prefixed required courses or they will be dismissed from the department.

Intellectual Foundations Requirements **39–66 cr**

Total Required Credit Hours in Biology **35–36 cr**

A. Required Courses (12 cr)

- BIO 211 Introduction to Cell Biology and Genetics (4)
- BIO 212 Introduction to Organismal Biology and Diversity (4)
- BIO 213 Introduction to Ecology, Evolution, and Behavior (4)

B. Concentration Courses

Students are required to complete one of the following concentrations:

Integrative Biology Concentration (24 cr)

- BIO 303 Genetics (4)
- BIO 405 Organic Evolution

Elective biology courses (300-400 level, except BIO 308-BIO 309) selected by advisement (16 cr)

Aquatic Biology Concentration (23 cr)

- BIO 300 Biostatistics (4)
- BIO 325 Ichthyology (4)
- BIO 418 Limnology (4)
- BIO 429 Fisheries Biology (4)
- BIO 430 Stream Ecology (4)
- BIO 488 Internship in Aquatic Biology

Biotechnology Concentration (23–24 cr)

- BIO 303 Genetics (4)
- BIO 314 Advanced Cell Biology (4)
- BIO 316 General Microbiology (4)
- BIO 450 Recombinant DNA Technology (4)

Select one course from the following (3–4 cr):

- BIO 301 Cell Physiology (4)
- BIO 305 Molecular Biology (4)
- BIO 350 Genes in Populations (4)
- BIO 402 Comparative Animal Physiology (4)
- BIO 408 Plant Physiology (4)
- CHE 470 Biochemistry

Elective biology course (300-400 level, except BIO 308-BIO 309) selected by advisement (4 cr)

Total Required Credit Hours in Other Fields **8–18 cr**

- CHE 111, CHE 112 Fundamentals of Chemistry I, II (4, 4)
- CHE 201, CHE 203 Organic Chemistry I with Laboratory (3,1)
- CHE 202 Organic Chemistry II

Note: CHE 111 and CHE 112 are required of all Biology B.A. students. CHE 201 and CHE 203 are required of students completing the biotechnology concentration; CHE 202 is required of biotechnology students who choose to take CHE 470.

Recommended Courses in Related Fields

- CHE 202, CHE 203, CHE 204, PHY 107/PHY 108 or PHY 111/PHY 112, MAT 126

All College Electives **0–38 cr**

Total Required Credit Hours **120 cr**

BIOLOGY EDUCATION (7–12, B.S.)

BS-NS BGS

Biology Department Bachelor of Science (HEGIS 0401.01)

National Council for Accreditation of Teacher Education (NCATE) Accredited
Science Building 314 (716) 878-5203

The biology B.S. degree program in secondary education leads to a New York State Initial Certificate for teaching both biology and general science in grades 7–12. Students seeking admission to the biology B.S. education program should initially enroll in the biology B.A. program. After successfully completing at least two required biology courses at Buffalo State with a GPA in these courses of 2.75 or higher, students apply for admission to the biology B.S. education program during the semester they complete SED 200. A minimum GPA of 2.75 in biology courses is required for admission to SED 405, SED 407, and SED 408.

Intellectual Foundations Requirements 39–66 cr

Total Required Credit Hours in Biology 30 cr

A. Required Courses (27 cr)

BIO 211	Introduction to Cell Biology and Genetics (4)
BIO 212	Introduction to Organismal Biology and Diversity (4)
BIO 213	Introduction to Ecology, Evolution, and Behavior (4)
BIO 303	Genetics (4)
BIO 315	Ecology (4)
BIO 405	Organic Evolution

Select one of the following:

BIO 308, BIO 309	Human Anatomy and Physiology (with lab) (3, 1)
BIO 402	Comparative Animal Physiology (4)

B. Elective Course (3 cr)

Any upper-division course in biology.

Total Required Credit Hours in Professional Education 24 cr

EDF 303	Educational Psychology
EDU 416	Teaching Literacy in Middle and Secondary Schools
SCI 445	Literacy for Teaching Science
EXE 372	Foundations of Teaching Adolescents with Disabilities
SED 200	Field Experience in Secondary Science Education
SED 401	Techniques for Teaching Laboratory Activities in the Secondary Science Classroom
SED 405	Methods and Materials in Teaching Secondary School Science
SED 409	Seminar in Secondary Science Education

Total Required Credit Hours in Student Teaching 12 cr

SED 407	Practice Teaching Science in the Middle School (6)
SED 408	Practice Teaching Science in the High School (6)

Total Required Credit Hours in Other Fields for Certification 30-38 cr

A. One Year (or Equivalent) of a Foreign Language (0-6 cr)

B. Cognate Sciences* (23-25 cr)

CHE 111 and CHE 112	Fundamentals of Chemistry I, II (4, 4)
GES 101	Introductory Geology
GES 103	Introductory Geology Laboratory (1)
PHY 107 and	General Physics I, II (4,4)

PHY 108

OR

PHY 111 and University Physics I, II (5, 5)

PHY 112

Select one of the following:

GES 111	General Oceanography
GES 131	Introductory Astronomy
GES 241	Meteorology

C. Mathematics* (7 cr)

BIO 300	Biostatistics (or equivalent) (4)
MAT 126	Calculus (or equivalent)

**In most cases, two courses can fulfill Intellectual Foundations requirements.*

Total Required Credit Hours

135 cr

BIOLOGY EDUCATION (7–12, 5–6 EXTENSION, B.S.)

BS-NS BGX

Biology Department Bachelor of Science (HEGIS 0401.01)

National Council for Accreditation of Teacher Education (NCATE) Accredited
Science Building 314 (716) 878-5203

The biology B.S. degree program in secondary education leads to a New York State Initial Certificate for teaching both biology and general science in grades 5–12.. Students seeking admission to the biology B.S. education program should initially enroll in the biology B.A. program. After successfully completing at least two required biology courses at Buffalo State with a GPA in these courses of 2.75 or higher, students apply for admission to the biology B.S. education program during the semester they complete SED 200. A minimum GPA of 2.75 in biology courses is required for admission to SED 405, SED 407, and SED 408.

Intellectual Foundations Requirements 39–66 cr

Total Required Credit Hours in Biology 30 cr

A. Required Courses (27 cr)

BIO 211	Introduction to Cell Biology and Genetics (4)
BIO 212	Introduction to Organismal Biology and Diversity (4)
BIO 213	Introduction to Ecology, Evolution, and Behavior (4)
BIO 303	Genetics (4)
BIO 315	Ecology (4)
BIO 405	Organic Evolution

Select one of the following:

BIO 308, BIO 309	Human Anatomy and Physiology (with lab) (3, 1)
BIO 402	Comparative Animal Physiology (4)

B. Elective Course (3 cr)

Any upper-division course in biology.

Total Required Credit Hours in Professional Education 30 cr

EDF 303	Educational Psychology
EDU 416	Teaching Literacy in Middle and Secondary Schools
SCI 445	Literacy for Teaching Science
EXE 372	Foundations of Teaching Adolescents with Disabilities
SCI 323	Science as Inquiry

SED 200	Field Experience in Secondary Science Education
SED 310	Teaching Science in a Middle School
SED 401	Techniques for Teaching Laboratory Activities in the Secondary Science Classroom
SED 405	Methods and Materials in Teaching Secondary School Science
SED 409	Seminar in Secondary Science Education

Total Required Credit Hours in Student Teaching **12 cr**

SED 407	Practice Teaching Science in the Middle School (6)
SED 408	Practice Teaching Science in the High School (6)

Total Required Credit Hours in Other Fields for Certification **30-38 cr**

A. One Year (or Equivalent) of a Foreign Language (0-6 cr)

B. Cognate Sciences* (23-25 cr)

CHE 111 and CHE 112	Fundamentals of Chemistry I, II (4, 4)
GES 101	Introductory Geology
GES 103	Introductory Geology Laboratory (1)
PHY 107 and PHY 108	General Physics I, II (4, 4)
OR	
PHY 111 and PHY 112	University Physics I, II (5, 5)

Select one of the following:

GES 111	General Oceanography
GES 131	Introductory Astronomy
GES 241	Meteorology

C. Mathematics* (7 cr)

BIO 300	Biostatistics (or equivalent) (4)
MAT 126	Calculus (or equivalent)

**In most cases, two courses can fulfill Intellectual Foundations requirements.*

Total Required Credit Hours **141 cr**

BIOLOGY EDUCATION (7-12, PTCP)

PBC-NS BGS

Biology Department Postbaccalaureate Teacher Certification Program (HEGIS 0401.01)

National Council for Accreditation of Teacher Education (NCATE) Accredited
Science Building 314 (716) 878-5203

The biology education (7-12) postbaccalaureate certification-only program leads to a New York State Initial Certificate for teaching both biology and general science in grades 7-12. The program is intended for persons with existing undergraduate degrees in biology or a related field who are interested in obtaining certification to teach biology in secondary schools or general science in middle schools. A minimum GPA of 2.75 in biology courses is required for admission to SED 405, SED 407, and SED 408.

Total Required Credit Hours in Biology **30 cr**

A. Required Courses (or Equivalent Courses) (27 cr)

BIO 211	Introduction to Cell Biology and Genetics (4)
BIO 212	Introduction to Organismal Biology and Diversity (4)
BIO 213	Introduction to Ecology, Evolution, and Behavior (4)
BIO 303	Genetics (4)

BIO 315	Ecology (4)
BIO 405	Organic Evolution

Select one of the following:

BIO 308 and BIO 309	Human Anatomy and Physiology (with lab) (3, 1)
BIO 402	Comparative Animal Physiology (4)

B. Elective Course (3 cr)

Any upper-division course in biology.

Total Required Credit Hours in Professional Education **24 cr**

EDF 303	Educational Psychology
EDU 416	Teaching Literacy in Middle and Secondary Schools
SCI 445	Literacy for Teaching Science
EXE 372	Foundations of Teaching Adolescents with Disabilities
SED 200	Field Experience in Secondary Science Education
SED 401	Techniques for Teaching Laboratory Activities in the Secondary Science Classroom
SED 405	Methods and Materials in Teaching Secondary School Science
SED 409	Seminar in Secondary Science Education

Total Required Credit Hours in Student Teaching **12 cr**

SED 407	Practice Teaching Science in the Middle School (6)
SED 408	Practice Teaching Science in the High School (6)

Total Required Credit Hours in Other Fields for Certification **30-38 cr**

A. One Year (or Equivalent) of a Foreign Language (0-6 cr)

B. Cognate Sciences (23-25 cr)

CHE 111 and CHE 112	Fundamentals of Chemistry I, II (4, 4)
GES 101	Introductory Geology
GES 103	Introductory Geology Laboratory (1)
PHY 107 and PHY 108	General Physics I, II (4,4)
OR	
PHY 111 and PHY 112	University Physics I, II (5, 5)

Select one of the following:

GES 111	General Oceanography
GES 131	Introductory Astronomy
GES 241	Meteorology

C. Mathematics (7 cr)

BIO 300	Biostatistics (or equivalent) (4)
MAT 126	Calculus (or equivalent)

Total Required Credit Hours **96 cr**

BIOLOGY EDUCATION (7-12, 5-6 EXTENSION, PTCP)

PBC-NS BGX

Biology Department Postbaccalaureate Teacher Certification Program (HEGIS 0401.01)

National Council for Accreditation of Teacher Education (NCATE) Accredited
Science Building 314 (716) 878-5203

The biology education (7-12) postbaccalaureate certification-only program with 5-6 extension leads to a New York State Initial Certificate for teaching both biology and general science in grades 5-12. The program is intended for

persons with existing undergraduate degrees in biology or a related field who are interested in obtaining certification to teach biology in secondary schools or general science in middle schools. A minimum GPA of 2.75 in biology courses is required for admission to SED 405, SED 407, and SED 408.

Total Required Credit Hours in Biology 30 cr

A. Required Courses (or Equivalent) (27 cr)

BIO 211	Introduction to Cell Biology and Genetics (4)
BIO 212	Introduction to Organismal Biology and Diversity (4)
BIO 213	Introduction to Ecology, Evolution, and Behavior (4)
BIO 303	Genetics (4)
BIO 315	Ecology (4)
BIO 405	Organic Evolution

Select one of the following:

BIO 308 and BIO 309	Human Anatomy and Physiology (with lab) (3, 1)
BIO 402	Comparative Animal Physiology (4)

B. Elective Course (3 cr)

Any upper-division course in biology.

Total Required Credit Hours in Professional Education 30 cr

EDF 303	Educational Psychology
EDU 416	Teaching Literacy in Middle and Secondary Schools
SCI 445	Literacy for Teaching Science
EXE 372	Foundations of Teaching Adolescents with Disabilities
SCI 323	Science as Inquiry
SED 200	Field Experience in Secondary Science Education
SED 310	Teaching Science in a Middle School
SED 401	Techniques for Teaching Laboratory Activities in the Secondary Science Classroom
SED 405	Methods and Materials in Teaching Secondary Science
SED 409	Seminar in Secondary Science Education

Total Required Credit Hours in Student Teaching 12 cr

SED 407	Practice Teaching Science in the Middle School (6)
SED 408	Practice Teaching Science in the High School (6)

Total Required Credit Hours in Other Fields for Certification 30-38 cr

A. One Year (or Equivalent) of a Foreign Language (0-6 cr)

B. Cognate Sciences (23-25 cr)

CHE 111 and CHE 112	Fundamentals of Chemistry I, II (4, 4)
GES 101	Introductory Geology
GES 103	Introductory Geology Laboratory (1)
PHY 107 and PHY 108	General Physics I, II (4, 4)
OR	
PHY 111 and PHY 112	University Physics I, II (5, 5)

Select one of the following:

GES 111	General Oceanography
GES 131	Introductory Astronomy
GES 241	Meteorology

C. Mathematics (7 cr)

BIO 300	Biostatistics (or equivalent) (4)
MAT 126	Calculus (or equivalent)

Total Required Credit Hours 102 cr

BUSINESS ADMINISTRATION (B.S.)

BS-SP BSA

**Business Department
Bachelor of Science (HEGIS 0506)**

Chase Hall 302 (716) 878-4239

The bachelor of science degree in business administration prepares students for leadership roles in management and marketing in both domestic and international business, and public and nonprofit organizations. During the first two years of the program, students acquire a foundation in accounting, economics, and computers, as well as in the arts, humanities, and social and natural sciences. The last two years are devoted to upper-division courses in management, marketing, human resources, law, finance, production and operations management, and a capstone course in business strategy. Upon acceptance into the program, students will be required to choose and complete a 15-hour concentration in one of the following areas: management, marketing, or international business.

Admission Requirements: Transfer students are accepted into the program on a competitive basis. No freshmen are accepted directly into the program. Students interested in business as a major may be admitted as a pre-business major (0424) until completion of entrance requirements. Prior to acceptance into the program, students will be required to attain competency in mathematics and English composition, and have a minimum cumulative GPA of 2.5.

Transfer students must take all concentration courses, the six hours of upper-division business elective courses, BUS 430, and BUS 460 at Buffalo State College. Transfer courses with D or less will not be accepted into the major.

Intellectual Foundations Requirements 39-66 cr

Total Required Credit Hours in Business 60 cr

A. Business Core (39 cr)

CIS 101	Computer Fundamentals
ECO 201	Principles of Macroeconomics
ECO 202	Principles of Microeconomics
BUS 312	Financial Accounting
BUS 313	Managerial Accounting
BUS 320	Principles of Marketing
BUS 325	Human Resource Management
BUS 334	Business Law I
BUS 360	Principles of Management
FIN 314	Corporate Finance
ECO 305	Statistics for Economics
OR	
MAT 311	Introductory Probability and Statistics
BUS 460	Production and Operations Management
BUS 430	Strategic Management

B. Concentration (15 cr)

Marketing

BUS 321	Marketing on the Internet
BUS 323	Sales Methods and Techniques
BUS 327	Advertising Concepts and Practices
BUS 329	Sales Management
BUS 330	Marketing Management
BUS 347	Retail Management

BUS 348	Electronic Commerce
BUS 403	Consumer Behavior
BUS 404	Marketing Research
BUS 420	International Marketing Management

Management

BUS 300	International Business
BUS 324	Business Communication
BUS 329	Sales Management
BUS 335	Business Law II
BUS 347	Retail Management
BUS 350	Current Practices in Technology
BUS 365	Entrepreneurship
BUS 366	Management Information Systems
BUS 367	Strategic Management of Innovation and Technology
BUS 368	Sports Management and Marketing
BUS 369	Organizational Change and Development
BUS 424	International Business Communication
BUS 473	International Management

International Business

BUS 300	International Business
BUS 363	Business in the Western Hemisphere
BUS 417	International Accounting
BUS 420	International Marketing
BUS 424	International Business Communication
BUS 425	International and Cross-Cultural Training
BUS 473	International Management
ECO 401	International Economics
FIN 400	International Finance

Foreign language competency is recommended for the International Business Concentration.

C. Business Electives (6 cr)

Any upper-level Business Department course that is not required in the business core or used in your concentration may be taken as a business elective. The department recommends that students meet the business elective requirement through participation in the internship program, BUS 378: Business Professional Practice.

All College Electives	0–21 cr
Total Required Credit Hours	120–126 cr

**BUSINESS AND MARKETING EDUCATION
(B.S.)**

BS-ED BME

**Department of Career and Technical Education
Bachelor of Science (HEGIS 0838.01)**

National Council for Accreditation of Teacher Education (NCATE) Accredited
Bacon Hall 316S (716) 878-4717

The B.S. degree program in business and marketing education leads to initial certification to teach business and marketing subjects in New York State.

In this teaching field, applicants for a teaching certificate must also have an equivalent of one year of occupation-related work experience, which they may obtain through the field experience courses as part of the business electives.

Admission Requirements: No freshmen are accepted directly into the major. Students seeking admittance into the business and marketing education major must provide evi-

dence of successfully completing BUS 311 and BUS 324W, and have a minimum cumulative GPA of 2.5. Successful completion is defined as achieving a minimum grade of C.

Intellectual Foundations Requirements	39–66 cr
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Total Required Credit Hours in Business	36 cr
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BUS 300	International Business
BUS 312	Financial Accounting
BUS 313	Managerial Accounting
BUS 320	Principles of Marketing
BUS 324W	Business Communications
BUS 325	Human Resource Management
BUS 334	Business Law I
BUS 350	Current Practices in Business Computing
BUS 360W	Principles of Management
BUS 430	Strategic Management

Two 300-level or higher BUS electives selected by advisement.

Total Required Credit Hours in Professional Education	33 cr
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BME301W/ CTE 301	Principles of Business/Marketing and Technology Education
BME302/ CTE 302	Curriculum and Evaluation in Business/Marketing and Technology Education
BME 303	Instructional Strategies in Business/Marketing Education
BME 411/ CTE 404	Applied Teaching Methods in Business/Marketing Education
BME 415	Student Teaching (6)
BME 416	Student Teaching (6)
EDF 303	Educational Psychology
EDU 416	Teaching Literacy In Middle and Secondary Schools
EXE 100/ CTE 421	Nature and Needs of Individuals with Special Needs

All College Electives	0–12 cr
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Total Required Credit Hours	120 cr
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**BUSINESS AND MARKETING EDUCATION
(PTCP)**

PBC-ED BME

**Department of Career and Technical Education
Postbaccalaureate Teacher Certification
Program
HEGIS (0838.01)**

National Council for Accreditation of Teacher Education (NCATE) Accredited
Bacon Hall 316S (716) 878-4717

This program is for students currently holding a bachelor's degree and/or master's degree and would like to pursue teaching business and marketing education in a secondary school environment in New York State. To be eligible for admission,* the following requirements must be satisfied: (1) Completion of a bachelor's or master's degree from an accredited college or university with a concentration of at least 36 credit hours in business and business-related courses, such as computer science and economics, with a minimum 2.5 GPA. The department will accept up to 6 credits in either CIS and/or economics. All other courses should match the required courses in the busi-

ness/marketing education major. (2) Provide a résumé. (3) Provide a statement of qualification (essay format).

Note: This program is considered a postbaccalaureate program. Interested students should apply through the Graduate School.

Business Core **36 cr**

Accepted courses per review of Business and Marketing Education Program.

Professional Core **33 cr**

BME 301W/ CTE 301	Principles of Business/Marketing and Technology Education
BME 302/ CTE 302	Curriculum and Evaluation in Business/Marketing and Technology Education
BME 303	Instructional Strategies in Business and Marketing Education
BME 411/ CTE 404	Applied Teaching Methods in Business Education
BME415	Student Teaching (6)
BME 416	Student Teaching (6)
EDF 303/503	Educational Psychology
EDU 416	Teaching Literacy In Middle and Secondary Schools
EXE 100/ CTE 421	Nature and Needs of Individuals with Special Needs

Total Required Credit Hours **69 cr**

**CAREER AND TECHNICAL EDUCATION
(B.S.)***

BS-ED CTE

**Department of Career and Technical Education
Bachelor of Science (HEGIS 0839.03)**

National Council for Accreditation of Teacher Education (NCATE) Accredited
Bacon Hall 316S (716) 878-4717

This program prepares career and technical teachers for teaching positions in city high schools, area vocational schools (BOCES), technical institutes, correctional facilities, and community college technical programs. It provides theoretical and practical preparation in planning, instructing, and managing the learning environment for students who have or will have extensive work experience in agricultural education, business and marketing education, family and consumer sciences subject education, health careers education, technical education, or trade education. Students in career and technical education complete coursework in career and technical education to be recommended for initial certification (grades 712) in New York State in one of over 83 certification titles. A complete listing of Certification Titles and Codes for Career and Technical Subjects can be found on the New York State Education Department Web site: www.highered.nysed.gov/cert/certificate/careertech_certcodes.htm.

Admission Requirements:

1. Verified full-time trade experience: four years with high school diploma, or two years with an A.A.S. degree in the occupational area, or one year with a B.S. degree and 36 credit hours of coursework in the occupational area, or a work-study arrangement (see EPOT, below).

2. High school diploma or equivalent: High school students interested in entering the program prior to completing the required work experience may apply for the EPOT program (Early Preparation of Occupational Teachers). Applicants must be able to locate a position in their trade. They will take courses in the evening, leading to a B.S. degree and teacher certification, while learning their trade in a paid position. The program takes about five years to complete.
3. Admission review.
4. Trade proficiency verified by a practical and theoretical examination.
5. Students entering the program must take Buffalo State College's math and English competency exams prior to the completion of 9 hours of college credit.

**Evening study available.*

Intellectual Foundations Requirements **39–60 cr**

Total Required Credit Hours in Career and Technical Education **66 cr**

A. Major Field (30 cr)

CTE 100	Comprehensive Theoretical Trade or Technical Skills (15)
CTE 200	Comprehensive Theoretical Trade or Performance Skills (15)

B. Professional Requirements (36 cr)

CTE 301/ BME 301	Principles of Business/Marketing and Technology Education
CTE 302/ BME 302	Curriculum and Evaluation in Business/Marketing and Technology Education
CTE 306	Laboratory Management
CTE 311	Career Mentoring Internship
CTE 350	School and Community Relationship Field Experience
ENG 370	Foundations of Language
CTE 402	Assessment Techniques in Career and Technical Subjects
CTE 404	Methods of Teaching Career and Technical Subjects
CTE 413	Student Teaching Career and Technical Education (6)
CTE 415	Professional Development Seminar
CTE 421	Occupational Education for Individuals with Special Needs
CTE 435	Curricular Problems of Career and Technical Schools

C. Required Courses in Behavioral Studies (6 cr)

EDF 303	Educational Psychology
EDF 353	Human Development During Early Adolescence and Adolescence

All College Electives **0–15 cr**

Total Required Credit Hour **120 cr**

**CAREER AND TECHNICAL EDUCATION
(PTCP)***

PBC-ED CTE

**Department of Career and Technical Education
Postbaccalaureate Teacher Certification
Program (HEGIS 0839.03)**

National Council for Accreditation of Teacher Education (NCATE) Accredited
Bacon Hall 316S (716) 878-4717

This program is designed for students who have earned a baccalaureate degree in an area other than career and technical education (CTE) from an accredited college or university, and intend to complete the coursework required for New York State certification as a career and technical teacher.

This postbaccalaureate teacher certification program prepares career and technical teachers for positions in high schools, vocational schools, technical institutes, correctional facilities, and community colleges. It provides theoretical and practical preparation in planning, instructing, and managing the learning environment for students who have or will have extensive work experience in a specific trade.

After successfully completing the teacher certification program and passing required New York State teacher certification exams, students are eligible to apply for New York State certification through the Teacher Certification Office, Caudell Hall 101. No degree or certificate is awarded by Buffalo State.

This program is offered during the evening at Buffalo State. Some courses are offered via interactive distance learning at off-campus BOCES sites.

Financial Assistance: For financial aid purposes, students are considered fifth-year undergraduates, eligible for undergraduate loans.

Admission Requirements:

1. A bachelor's degree from an accredited college or university in an area other than career and technical education, with a minimum cumulative GPA of 2.5 (4.0 scale).
2. Minimum of one year of work experience in a CTE area. In addition, all applicants should review the Admission to a Graduate Program section in this catalog.

**Evening study available.*

Occupational Competency Exams		30 cr
CTE 100	Comprehensive Theoretical Trade or Technical Skills (15)	
CTE 200	Practice (or equivalent) (15)	
Required Courses		36 cr
CTE 301/ BME 301	Principles of Business/Marketing and Technology Education	
CTE 302/ BME 302	Curriculum and Evaluation in Business/Marketing and Technology Education	
CTE 306	Laboratory Management	
CTE 311	Career Mentoring Internship	
CTE 350	School and Community Relationship Field Experience	
CTE 402	Assessment Techniques in Career and Technical Subjects	
CTE 404	Methods of Teaching Career and Technical Subjects	
CTE 413	Student Teaching Career and Technical Education (6)	
CTE 421	Occupational Education for Individuals with Special Needs	
EDF 303	Educational Psychology	
EDF 353	Human Development during Early Adolescence	
ENG 470	Foundation of Language	
Total Required Credit Hours		36–66 cr

CERAMICS (B.F.A.)

BFA-AH CER

Design Department Bachelor of Fine Arts (HEGIS 1009)

National Association of Schools of Art and Design (NASAD) Accredited
Upton Hall 212 (716) 878-6032

The B.F.A. degree in ceramics is a studio-intensive program of study focused on developing the aesthetic, conceptual, and technical skills necessary to foster creativity as students work toward developing their individual identities as visual designers/artists. This degree offers students a specialized studio-oriented education in preparation for advanced or graduate studies, or for beginning careers as professional designers or artists.

Students begin with foundation courses in two-dimensional design, three-dimensional design, drawing, art history, and design history, along with courses in metals, fibers, and wood. Major courses in ceramics and sculpture complete the requirements. Internship opportunities are available. The remaining credit hours are completed in required Intellectual Foundations courses and in other chosen studio courses.

Admission Requirements: There is no entrance portfolio review for admission. All students will enter the ceramics major with a bachelor of science (BS-AH CER) intent, and complete a selection of foundation and major course(s) before a commit-to-major portfolio review for admission into the bachelor of fine arts program (BFA-AH CER). Commit-to-major portfolio reviews are conducted by faculty and generally take place during the sophomore year. After passing the portfolio review, to continue in the B.F.A. degree program a 3.0 GPA must be maintained in the major.

Transfer students are urged to submit their portfolios the semester before transfer in order to facilitate placement in departmental courses and/or for possible commit-to-major portfolio review. Please call the Design Department for additional information. As a condition of graduation, each B.F.A student will be required to mount an individual exhibition of his/her work.

The Design Department reserves the right to retain students' work for official purposes, such as exhibitions, catalogs, teaching aids, or permanent collections, and to use images of the students and their work for publicity and recruitment. Students are expected to assume the costs of materials used in courses. Some studio courses may have an additional charge for materials used in class.

The Design Department may be in the process of curricular revision. Please refer to the college Web site or the department for updated information.

Intellectual Foundations Requirements	39–66 cr
Total Required Credit Hours in Ceramics	79 cr

A. Foundation Courses (37 cr)

- | | |
|---------|------------------------------|
| DES 101 | Introduction to Design: 2D I |
| DES 103 | Introduction to Design: 3D I |

FAR 101	Drawing I
DES 104	Introduction to Design: 3D II
DES 230	Introduction to Jewelry
DES 242	Fibers I
DES 250	Wood Design I
DES 312W	History of Craft
DES 414	Senior Seminar (4)
FAR 104	Themes and Issues in Contemporary Arts
FAR 250	Art History I
FAR 251	Art History II

B. Major Courses (30 cr)

DES 220	Ceramics I
DES 320	Ceramics II
DES 321	Ceramics: Junior Studio (3, 3)
DES 421	Ceramics: Senior Studio (6, 6)
FAR 240	Introduction to Sculpture
FAR 345	Figure Modeling

C. Studio Electives Selected by Advisement (12 cr)

DES 330	Applied Jewelry Techniques
DES 336	Metalsmithing
DES 338	Computer 3D Modeling and Rendering
DES 342	Fibers II
DES 350	Technical Processes in Wood
FAR 341	Intermediate Sculpture I

All College Electives	0–2 cr
Total Required Credit Hours	120 cr

CERAMICS (B.S.)

BS-AH CER

Design Department Bachelor of Science (HEGIS 1009)

National Association of Schools of Art and Design (NASAD) Accredited
Upton Hall 212 (716) 878-6032

The B.S. degree in ceramics is a studio degree with a strong academic component. This degree offers students a broadly grounded educational experience as a basis for beginning careers as professional designers or artists.

Students begin with foundation courses in two-dimensional design, three-dimensional design, drawing, and design history, along with courses in metals, fibers, and wood. Major courses in ceramics focus on developing the aesthetic, conceptual, and technical skills necessary to foster creativity as students work toward developing their individual identities as visual designers/artists. Internship opportunities are available. The remaining credit hours are completed in required Intellectual Foundations courses and in other academic subjects of the student's choosing. The academic component offers opportunities to gain a broader base of knowledge, as well as knowledge in other disciplines related to the major field of study.

Admission Requirements: There is no entrance portfolio review for admission. All students will enter the ceramics major with a bachelor of science (BS-AH CER) intent, and complete a selection of foundation and major course(s) before a commit-to-major portfolio review for continuation in the B.S. degree program. Commit-to-major portfolio

reviews are conducted by faculty and generally take place during the sophomore year. After passing the portfolio review, to continue in the B.S. degree program a 2.5 GPA must be maintained in the major. Transfer students are urged to submit their portfolios the semester before transfer in order to facilitate placement in departmental courses and/or for possible commit-to-major portfolio review. Please call the Design Department for additional information.

The Design Department reserves the right to retain students' work for official purposes, such as exhibitions, catalogs, teaching aids, or permanent collections, and to use images of the students and their work for publicity and recruitment. Students are expected to assume the costs of materials used in courses. Some studio courses may have an additional charge for materials used in class.

Intellectual Foundations Requirements	39–66 cr
Total Required Credit Hours in Ceramics	45 cr

A. Foundation Courses (24 cr)

DES 101	Introduction to Design: 2D I
DES 103	Introduction to Design: 3D I
DES 230	Introduction to Jewelry
DES 242	Fibers I
DES 250	Wood Design I
DES 312W	History of Craft
FAR 101	Drawing I
FAR104	Themes and Issues in Contemporary Arts

B. Major Concentrations (21 cr)

DES 220	Ceramics I
DES 320	Ceramics II
DES 321	Ceramics: Junior Studio (3, 3)
DES 421	Ceramics: Senior Studio (3, 3)
FAR 240	Introductory Sculpture

All College Electives	9–36 cr
Total Required Credit Hours	120 cr

CHEMISTRY (B.A.)

BA-NS CHE

Chemistry Department Bachelor of Arts (HEGIS 1905)

Science Building 313 (716) 878-5204

The chemistry B.A. degree program offers students a strong background in chemistry while providing students with two concentration options, traditional chemistry and biochemistry. Both concentrations are approved by the American Chemical Society. Graduates of this program are fully prepared to assume entry-level positions as chemists with industrial or governmental laboratories, or to begin more specialized programs of study at the graduate level. The biochemistry concentration prepares students for both professional programs in health-related professions and advanced studies in biochemistry.

Transfer Admission Requirements: Transfer students from two-year colleges should have earned credit for course equivalent to CHE 111, CHE 112, CHE 201, CHE 202, CHE 203, CHE 204, CHE 301, MAT 161, MAT 162,

MAT 263, PHY 111, PHY 112, and BIO 211 (biochemistry concentration only) to avoid possible delays in the completion of the degree program. Transfer students must complete a minimum of 10 credits in chemistry at Buffalo State. Chemistry courses taken elsewhere may be substituted for similar courses at Buffalo State only if they have the same or equivalent prerequisites. Chemistry courses not meeting this criterion may be transferred as elective credit.

Intellectual Foundations Requirements 39–51 cr

Total Required Credit Hours in Chemistry 42–44 cr

A. Required Courses (28 cr)

CHE 111	Fundamentals of Chemistry I (4)
CHE 112	Fundamentals of Chemistry II (4)
CHE 201	Organic Chemistry I
CHE 202	Organic Chemistry II
CHE 203	Organic Chemistry Laboratory I (1)
CHE 204	Organic Chemistry Laboratory II (1)
CHE 301	Analytical Chemistry (4)
CHE 305	Physical Chemistry I
CHE 306	Physical Chemistry II
CHE 307	Physical Chemistry Laboratory I (1)
CHE 308	Physical Chemistry Laboratory II (1)

B. Concentration Courses

Students are required to complete one of the following concentrations:

Chemistry Concentration¹ (16 cr)

CHE 310	Literature of Chemistry (1)
CHE 360	Introduction to Inorganic Chemistry
CHE 403	Instrumental Analysis (4)
CHE 462	Advanced Inorganic Chemistry (4)
CHE 470	Biochemistry I
CHE 471	Biochemical Techniques (1)

¹*In addition to the above courses, any student who wishes to meet American Chemical Society minimum certification requirements must take CHE 430 or complete at least 3 credit hours in a laboratory-based CHE 495 (research project).*

Biochemistry Concentration (20 cr)

CHE 310	Literature of Chemistry (1)
CHE 360	Introduction to Inorganic Chemistry
CHE 470	Biochemistry I
CHE 471	Biochemical Techniques (2)
CHE 472	Biochemistry II

Select two courses from the following:

BIO 303	Genetics (4)
BIO 305	Molecular Biology (4)
BIO 314	Advanced Cell Biology (4)
BIO 316	General Microbiology (4)
BIO 450	Recombinant DNA (4)
CHE 403	Instrumental Analysis (4)

Total Required Credit Hours in Other Fields 25–29 cr

BIO 211	Introduction to Cell Genetics (4)
MAT 161	Calculus I (4)
MAT 162	Calculus II (4)
MAT 163	Using Technology to Explore Calculus I (1)
MAT 164	Using Technology to Explore Calculus II (1)
MAT 263	Calculus III (4)
MAT 264	Using Technology to Explore Calculus III (1)
PHY 111	University Physics I (5)
PHY 112	University Physics II (5)

Note: BIO 211 is only required for the biochemistry concentration

All College Electives

0–14 cr

Total Required Credit Hours

120 cr

CHEMISTRY EDUCATION (7–12, B.S.)

BS-NS CGS

**Chemistry Department
Bachelor of Science (HEGIS 1905.01)**

National Council for Accreditation of Teacher Education (NCATE) Accredited
Science Building 313 (716) 878-5204

The chemistry B.S. secondary education program leads to a New York State Initial Certificate for teaching both chemistry and general science in grades 7–12. Students seeking admission to the B.S. chemistry program should initially enroll in the B.A. chemistry program. After successfully completing at least two required chemistry courses at Buffalo State with a GPA in these courses of 2.75 or higher, students apply for admission to the B.S. chemistry program during the semester they complete SED 200. A minimum GPA of 2.75 in chemistry courses is required for admission to SED 405, SED 407, and SED 408.

Transfer Admission Requirements: Transfer students from two-year colleges should have earned credit for courses equivalent to CHE 111, CHE 112, CHE 201, CHE 202, CHE 203, CHE 204, CHE 301, MAT 161, MAT 162, MAT 263, PHY 111, and PHY 112 to avoid possible delays in completing the degree program. Transfer students must complete a minimum of 10 credit hours in chemistry at Buffalo State. Chemistry courses taken elsewhere may be substituted for similar courses at Buffalo State only if they have the same or equivalent prerequisites. Chemistry courses not meeting this criterion may be transferred as elective credit.

Intellectual Foundations Requirements 36–42 cr

Total Required Credit Hours in Chemistry 42 cr

CHE 111, CHE 112	Fundamentals of Chemistry I, II (4, 4)
CHE 201, CHE 202	Organic Chemistry I, II (3, 3)
CHE 203, CHE 204	Organic Chemistry Laboratories I, II (1, 1)
CHE 301	Analytical Chemistry (4)
CHE 305, CHE 306	Physical Chemistry I, II (3, 3)
CHE 307, CHE 308	Physical Chemistry Laboratories I, II (1, 1)
CHE 310	Literature of Chemistry (1)
CHE 403	Instrumental Analysis (4)
CHE 460	Inorganic Chemistry
CHE 461	Inorganic Chemistry Laboratory (2)
CHE 470	Biochemistry I
CHE 471	Biochemical Techniques (1)

Total Required Credit Hours in Professional Education 24 cr

EDF 303	Educational Psychology
EDU 416	Teaching Literacy in Middle and Secondary Schools
EXE 372	Foundations of Teaching Adolescents with Disabilities

SCI 445	Literacy for Teaching Science
SED 200	Field Experience in Secondary Science Education
SED 401	Techniques for Teaching Laboratory Activities in the Secondary Science Classroom
SED 405	Methods and Materials in Teaching Secondary School Science
SED 409	Seminar in Secondary Science Education

Total Required Credit Hours in Student Teaching **12 cr**

SED 407	Practice Teaching Science in the Middle School (6)
SED 408	Practice Teaching Science in the High School (6)

Total Required Credit Hours in Other Fields for Certification **40–46 cr**

A. One Year (or Equivalent) of a Foreign Language (0–6 cr)

B. Cognate Sciences* (25 cr)

GES 101	Introductory Geology
GES 103	Introductory Geology Laboratory (1)
PHY 111, PHY 112	University Physics I, II (5, 5)

Select two courses from the following:

BIO 211	Introduction to Cell Biology and Genetics (4)
BIO 212	Introduction to Organismal Biology and Diversity (4)
BIO 213	Introduction to Ecology, Evolution, and Behavior (4)

Select one course from the following:

GES 111	General Oceanography
GES 131	Introductory Astronomy
GES 241	Meteorology

C. Mathematics* (15 cr)

MAT 161	Calculus I (4)
MAT 162	Calculus II (4)
MAT 163	Using Technology to Explore Calculus I (1)
MAT 164	Using Technology to Explore Calculus II (1)
MAT 263	Calculus III (4)
MAT 264	Using Technology to Explore Calculus III (1)

**Some of these courses may be counted in the Intellectual Foundations requirements (above) or as electives.*

Total Required Credit Hours **154 cr**

CHEMISTRY EDUCATION (7–12, 5–6 EXTENSION, B.S.)

BS-NS CGX

**Chemistry Department
Bachelor of Science (HEGIS 1905.01)**

National Council for Accreditation of Teacher Education (NCATE) Accredited
Science Building 313 (716) 878-5204

The chemistry B.S. secondary education program leads to a New York State Initial Certificate for teaching both chemistry and general science in grades 5–12. Students seeking admission to the B.S. chemistry program should initially enroll in the B.A. chemistry program. After successfully completing at least two required chemistry courses at Buffalo State with a GPA in these courses of 2.75 or higher, students apply for admission to the B.S. chemistry program during the semester they complete SED 200. A minimum GPA of 2.75 in chemistry courses is required for admission to SED 405, SED 407, and SED 408.

Transfer Admission Requirements: Transfer students from two-year colleges should have earned credit for courses

equivalent to CHE 111, CHE 112, CHE 201, CHE 202, CHE 203, CHE 204, CHE 301, MAT 161, MAT 162, MAT 263, PHY 111, and PHY 112 to avoid possible delays in completing the degree program. Transfer students must complete a minimum of 10 credit hours in chemistry at Buffalo State. Chemistry courses taken elsewhere may be substituted for similar courses at Buffalo State only if they have the same or equivalent prerequisites. Chemistry courses not meeting this criterion may be transferred as elective credit.

Intellectual Foundations Requirements **36–42 cr**

Total Required Credit Hours in Chemistry **42 cr**

CHE 111, CHE 112	Fundamentals of Chemistry I, II (4, 4)
CHE 201, CHE 202	Organic Chemistry I, II (3, 3)
CHE 203, CHE 204	Organic Chemistry Laboratories I, II (1, 1)
CHE 301	Analytical Chemistry (4)
CHE 305, CHE 306	Physical Chemistry I, II (3, 3)
CHE 307, CHE 308	Physical Chemistry Laboratories I, II (1, 1)
CHE 310	Literature of Chemistry (1)
CHE 403	Instrumental Analysis (4)
CHE 460	Inorganic Chemistry
CHE 461	Inorganic Chemistry Laboratory (2)
CHE 470	Biochemistry I
CHE 471	Biochemical Techniques (1)

Total Required Credit Hours in Professional Education **30 cr**

EDF 303	Educational Psychology
EDU 416	Teaching Literacy in Middle and Secondary Schools
EXE 372	Foundations of Teaching Adolescents with Disabilities
SCI 445	Literacy for Teaching Science
SCI 323	Science as Inquiry
SED 200	Field Experience in Secondary Science Education
SED 310	Teaching Science in the Middle School
SED 401	Techniques for Teaching Laboratory Activities in the Secondary Science Classroom
SED 405	Methods and Materials in Teaching Secondary School Science
SED 409	Seminar in Secondary Science Education

Total Required Credit Hours in Student Teaching **12 cr**

SED 407	Practice Teaching Science in the Middle School (6)
SED 408	Practice Teaching Science in the High School (6)

Total Required Credit Hours in Other Fields for Certification **40–46 cr**

A. One Year (or Equivalent) of a Foreign Language (0–6 cr)

B. Cognate Sciences* (25 cr)

GES 101	Introductory Geology
GES 103	Introductory Geology Laboratory (1)
PHY 111, PHY 112	University Physics I, II (5, 5)

Select two courses from the following:

BIO 211	Introduction to Cell Biology and Genetics (4)
BIO 212	Introduction to Organismal Biology and Diversity (4)
BIO 213	Introduction to Ecology, Evolution, and Behavior (4)

Select one course from the following:

GES 111	General Oceanography
GES 131	Introductory Astronomy
GES 241	Meteorology

C. Mathematics* (15 cr)

MAT 161	Calculus I (4)
MAT 162	Calculus II (4)
MAT 163	Using Technology to Explore Calculus I (1)
MAT 164	Using Technology to Explore Calculus II (1)
MAT 263	Calculus III (4)
MAT 264	Using Technology to Explore Calculus III (1)

*Some of these courses may be counted in the Intellectual Foundations requirements (above) or as electives.

Total Required Credit Hours **160 cr**

CHEMISTRY EDUCATION (7–12, PTCP)

PBC-NS CGS

Chemistry Department Postbaccalaureate Teacher Certification Program (HEGIS 1905.01)

National Council for Accreditation of Teacher Education (NCATE) Accredited
Science Building 313 (716) 878-5204

The chemistry education (7–12) postbaccalaureate certification-only program leads to a New York State Initial Certificate for teaching both chemistry and general science in grades 7–12. The program is intended for persons with existing undergraduate bachelor's degrees in chemistry or a related field who are interested in obtaining certification to teach chemistry in secondary schools or general science in middle schools. A minimum GPA of 2.75 in chemistry courses is required for admission to SED 405, SED 407, and SED 408.

Total Required Credit Hours in Chemistry **42 cr**

CHE 111, CHE 112	Fundamentals of Chemistry I, II (4, 4)
CHE 201, CHE 202	Organic Chemistry I, II (3, 3)
CHE 203, CHE 204	Organic Chemistry Laboratory I, II (1, 1)
CHE 301	Analytical Chemistry (4)
CHE 305, CHE 306	Physical Chemistry I, II (3, 3)
CHE 307, CHE 308	Physical Chemistry Laboratory I, II (1, 1)
CHE 310	Literature of Chemistry (1)
CHE 403	Instrumental Analysis (4)
CHE 460	Inorganic Chemistry
CHE 461	Inorganic Chemistry Laboratory (2)
CHE 470	Biochemistry I
CHE 471	Biochemical Techniques (1)

Total Required Credit Hours in Professional Education **24 cr**

EDF 303	Educational Psychology
EDU 416	Teaching Literacy in Middle and Secondary Schools
EXE 372	Foundations of Teaching Adolescents with Disabilities
SCI 445	Literacy for Teaching Science
SED 200	Field Experience in Secondary Science Education
SED 401	Techniques for Teaching Laboratory Activities in the Secondary Science Classroom
SED 405	Methods and Materials in Teaching Secondary School Science
SED 409	Seminar in Secondary Science Education

Total Required Credit Hours in Student Teaching **12 cr**

SED 407	Practice Teaching Science in the Middle School (6)
SED 408	Practice Teaching Science in the High School (6)

Total Required Credit Hours in Other Fields for Certification **33-39 cr**

A. One Year (or Equivalent) of a Foreign Language (0-6 cr)

B. Cognate Sciences (25 cr)

GES 101	Introductory Geology
GES 103	Introductory Geology Laboratory (1)
PHY 111, PHY 112	University Physics I, II (5, 5)
<i>Select two courses from the following:</i>	
BIO 211	Introduction to Cell Biology and Genetics (4)
BIO 212	Introduction to Organismal Biology and Diversity (4)
BIO 213	Introduction to Ecology, Evolution, and Behavior (4)

Select one course from the following:

GES 111	General Oceanography
GES 131	Introductory Astronomy
GES 241	Meteorology

C. Mathematics (8 cr)

MAT 161	Calculus I (4)
MAT 162	Calculus II (4)

Total Required Credit Hours **111 cr**

CHEMISTRY EDUCATION (7–12, 5–6 EXTENSION, PTCP)

PBC-NS CGX

Chemistry Department Postbaccalaureate Teacher Certification Program (HEGIS 1905.01)

National Council for Accreditation of Teacher Education (NCATE) Accredited
Science Building 313 (716) 878-5204

The chemistry education (7–12) postbaccalaureate certification-only program with 5–6 extension leads to a New York State Initial Certificate for teaching both chemistry and general science in grades 5–12. The program is intended for persons with existing undergraduate bachelor's degrees in chemistry or a related field who are interested in obtaining certification to teach chemistry in secondary schools or general science in middle schools. A minimum GPA of 2.75 in chemistry courses is required for admission to SED 405, SED 407, and SED 408.

Total Required Credit Hours in Chemistry **42 cr**

CHE 111, CHE 112	Fundamentals of Chemistry I, II (4, 4)
CHE 201, CHE 202	Organic Chemistry I, II (3, 3)
CHE 203, CHE 204	Organic Chemistry Laboratory I-II (1, 1)
CHE 301	Analytical Chemistry (4)
CHE 305, CHE 306	Physical Chemistry I, II (3, 3)
CHE 307, CHE 308	Physical Chemistry Laboratory I, II (1, 1)
CHE 310	Literature of Chemistry (1)
CHE 403	Instrumental Analysis (4)
CHE 460	Inorganic Chemistry
CHE 461	Inorganic Chemistry Laboratory (2)

CHE 470	Biochemistry I
CHE 471	Biochemical Techniques (1)

Total Required Credit Hours in Professional Education 30 cr

EDF 303	Educational Psychology
EDU 416	Teaching Literacy in Middle and Secondary Schools
EXE 372	Foundations of Teaching Adolescents with Disabilities
SCI 445	Literacy for Teaching Science
SCI 323	Science as Inquiry
SED 200	Field Experience in Secondary Science Education
SED 310	Teaching Science in the Middle School
SED 401	Techniques for Teaching Laboratory Activities in the Secondary Science Classroom
SED 405	Methods and Materials in Teaching Secondary School Science
SED 409	Seminar in Secondary Science Education

Total Required Credit Hours in Student Teaching 12 cr

SED 407	Practice Teaching Science in the Middle School (6)
SED 408	Practice Teaching Science in the High School (6)

Total Required Credit Hours in Other Fields for Certification 33-39 cr

A. One Year (or Equivalent) of a Foreign Language (0-6 cr)

B. Cognate Sciences (25 cr)

GES 101	Introductory Geology
GES 103	Introductory Geology Laboratory (1)
PHY 111, PHY 112	University Physics I, II (5, 5)

Select two courses from the following:

BIO 211	Introduction to Cell Biology and Genetics (4)
BIO 212	Introduction to Organismal Biology and Diversity (4)
BIO 213	Introduction to Ecology, Evolution, and Behavior (4)

Select one course from the following:

GES 111	General Oceanography
GES 131	Introductory Astronomy
GES 241	Meteorology

C. Mathematics (8 cr)

MAT 161	Calculus I (4)
MAT 162	Calculus II (4)

Total Required Credit Hours 117 cr

CHILDHOOD AND EARLY CHILDHOOD EDUCATION (BIRTH - GRADE 6, COMBINED PROGRAM)

BS-ED ECC

Elementary Education and Reading Department Bachelor of Science (HEGIS 0802)

National Council for Accreditation of Teacher Education (NCATE) Accredited
Bacon Hall 302 (716) 878-5916

Admission Requirements: Formal admission to the childhood and early childhood education program is a two-step process. Initial admission as a preliminary or "early" major (ELEW) is required following acceptance to the college. Applications to ELEW are available in Bacon 302. To be considered for formal admission to the combined major, students must have successfully completed at least 45 credit hours, which must include ENG/CWP 101, ENG/CWP 102, and the mathematics and quantitative reasoning com-

petency requirement. They must also have passed two Intellectual Foundations courses with a minimum grade of C and the foundation courses for the selected major (EDF 202, EDF 203, EDU 201, EDF 302, and EDU 211 or their equivalents) with a 2.5 average in those courses. Applicants to the full majors must earn a minimum cumulative GPA of 2.5, as well as a minimum 2.5 in these selected EDF/EDU courses.

An acceptable application to the department includes evidence that the above requirements have been met, a description of relevant experiences, and the score or proof of registration from the Liberal Arts and Sciences Test (L.A.S.T.) of the New York State Teacher's Exam. Acceptance into the department enables students to proceed through the curricular courses of the Combined major. Applications to ECC are available in Bacon 302.

Combined childhood and early childhood education majors must complete one year of college-level study of one language other than English. Typically, two years of high school study of one language is equivalent to one year of college-level work. Combined program education majors must also complete a distribution requirement of at least 6 credit hours in each of the following areas: mathematics, science, social studies, and English (not including ENG/CWP 101 and ENG/CWP 102).

Combined Majors also complete a 30-credit-hour concentration chosen from: American studies, English, foreign language, mathematics, science, or social studies.

Student Teaching: The culminating courses for the combined education majors include two supervised student teaching experiences with children at different age levels in different types of schools. Eligibility and placement for each student teaching experience is determined by the department office in cooperation with public schools in the greater Buffalo area. It is expected that students in this major will have at least one urban teaching experience. Prior written approval must be obtained from the chair of the department for students to enroll for any other college credit work during a student teaching assignment except for EXE 362 and/or EDU 375.

Graduates will be recommended for New York State Initial Certification to teach children from birth through grade 6 (combined childhood and early childhood major; ECC.)

Academic Concentrations: Combined education majors are required to complete an academic concentration in addition to the professional program requirements; the concentration seeks to broaden students' academic backgrounds. Descriptions of the approved concentrations can be found in the Elementary Education Department Handbook for Majors, available on the department Web site, www.buffalostate.edu/elementaryeducation, or from the department office.

Transfer Students: Most courses taken at an accredited institution and relevant to a Buffalo State degree program will be accepted, but the majority of courses applied to the Combined education major must be courses completed at Buffalo State. Grades for transfer courses are generally used in computing the required GPA for admission to the "early" major. Students planning to transfer as juniors into

the childhood and early childhood combined programs will not usually be able to complete their programs in four semesters, they must seek advisement at the institution in which they initially enrolled to assure that the prerequisite course equivalencies are met. Since the teacher candidate will graduate with recommendation for two certification areas, Combined majors should anticipate an additional semester of college work.

Intellectual Foundations Requirements	39–66 cr
Credit Hours for Concentration	30 cr
Distribution Courses	24 cr
Total Required Credit Hours in Education	69 cr
EDF 202	Child Development and Education
EDF 203	School and Society
EDU 201	Introduction to Elementary Education
EDF 302	Educational Psychology: Elementary Education
EDU 211	Introduction to Literacy
EDU 220	Programs for Infants and Toddlers
EDU 310W	Teaching and Social Studies in the Elementary School
EDU 311W	The Teaching of Reading and other Language Arts in the Elementary School (6)
EDU 312	The Teaching of Mathematics and Science in the Elementary School (6)
EDU 329	Integrated Thematic Instruction for Young Children (6)
EDU 326	Emergent Literacy
EXE 362	Behavior and Classroom Management
EXE 371	Foundations of Teaching Children with Disabilities
EDU 375	Integration of Technology in Education
EDU 400	Practicum in Teaching (6)
EDU 402	Seminar to Accompany Student Teaching
EDU 410	Practicum in Teaching Early Childhood (6)
EDU 411	Parents, Schools, and Community (taken with student teaching)
Total Required Credit Hours	149 cr

The total number of required hours will vary with course selection. Students should refer to the *Elementary Education Handbook* and an academic advisor for more detailed information.

CHILDHOOD EDUCATION (GRADES 1–6, B.S.)

BS-ED CED

Elementary Education and Reading Department Bachelor of Science (HEGIS 0802)

National Council for Accreditation of Teacher Education (NCATE) Accredited
Bacon Hall 302 (716) 878-5916

Admission Requirements: Formal admission to the childhood education program is a two-step process. Initial admission as a preliminary or "early" major (ELEW) is required following acceptance to the college. To be considered for formal admission to the childhood education ma-

major (CED), students must have successfully completed at least 45 credit hours, which must include ENG/CWP 101, ENG/CWP 102, and the mathematics and quantitative reasoning competency requirement. They must also have passed two Intellectual Foundations courses with a minimum grade of C and the foundation courses for the selected major, EDF 202, EDF 203, EDU 201, EDF 302, and EDU 211 or their equivalents) with a 2.5 average in those courses. Applicants to the full majors must earn a minimum cumulative GPA of 2.5, as well as a minimum 2.5 in these selected EDF/EDU courses.

An acceptable application to the department includes evidence that the above requirements have been met, a description of relevant experiences, and the score or proof of registration from the Liberal Arts and Sciences Test (L.A.S.T.) of the New York State Teacher's Exam. Acceptance into the department enables students to proceed through the curricular courses of the childhood major. Applications to CED are available in Bacon 302.

Childhood education majors must complete one year of college-level study of one language other than English. Typically, two years of high school study of one language is equivalent to one year of college-level work. Childhood education majors must also complete a distribution requirement of at least 6 credit hours in each of the following areas: mathematics, science, social studies, and English (not including ENG/CWP 101 and ENG/CWP 102).

Majors also complete a 30-credit-hour concentration chosen from: American studies, English, foreign language, mathematics, science, or social studies.

Student Teaching: The culminating courses for the childhood education majors include two supervised student teaching experiences with children at different age levels in different types of schools. Eligibility and placement for each student teaching experience is determined by the department office in cooperation with public schools in the greater Buffalo area. It is expected that students in these majors will have at least one urban teaching experience. Prior written approval must be obtained from the chair of the department for students to enroll for any other college credit work during a student teaching assignment except for EXE 362 and/or EDU 375.

Graduates will be recommended for New York State Initial Certification to teach children in grades 1-6.

Academic Concentrations: Childhood education majors are required to complete an academic concentration in addition to the professional program requirements; the concentration seeks to broaden students' academic backgrounds. Descriptions of the approved concentrations can be found in the *Elementary Education Department Handbook for Majors*, available on the department Web site, www.buffalostate.edu/elementaryeducation, or from the department office.

Transfer Students: Most courses taken at an accredited institution and relevant to a Buffalo State degree program will be accepted, but the majority of courses applied to the childhood education major must be courses completed at Buffalo State. Grades for transfer courses are generally used in computing the required GPA for admission to the

"early" major (ELEW). Jointly registered program students are admitted directly into the childhood major (BS-ED CED) only. Students planning to transfer as juniors into the childhood program and wishing to complete their programs in four semesters must seek advisement at the institution in which they initially enrolled to assure that the prerequisite course equivalencies are met.

Intellectual Foundations Requirements	39–66 cr
Credit Hours for Concentration	30 cr
Distribution Courses	24 cr
Total Required Credit Hours in Education	54 cr
EDF 202	Child Development and Education
EDF 203	School and Society
EDU 201	Introduction to Elementary Education
EDF 302	Educational Psychology: Elementary Education
EDU 211	Introduction to Literacy
EDU 310W	Teaching Social Studies in the Elementary School
EDU 311W	The Teaching of Reading and other Language Arts in the Elementary School (6)
EDU 312	The Teaching of Mathematics and Science in the Elementary School (6)
EXE 362	Behavior and Classroom Management
EXE 371	Foundations of Teaching Children with Disabilities
EDU 375	Integration of Technology in Education
EDU 400	Practicum in Teaching (Primary) (6)
EDU 401	Practicum in Teaching (Intermediate) (6)
EDU 402	Seminar in Education
Total Required Credit Hours	137 cr

The total number of required hours will vary with course selection. Students should refer to the Elementary Education Handbook and an academic adviser for more detailed information.

CHILDHOOD EDUCATION AND ENGLISH EXTENSION (GRADES 1–6 AND 7-9 ENGLISH EXTENSION, B.S.)

BS-ED CEN

Elementary Education and Reading Department Bachelor of Science (HEGIS 0802)

National Council for Accreditation of Teacher Education (NCATE) Accredited
Bacon Hall 302 (716) 878-5916

Admission Requirements: Formal admission to the childhood education with English extension is a two-step process. Initial admission as a preliminary or "early" major (ELEW) is required following acceptance to the college. To be considered for formal admission to the full childhood education with English extension major (CEN), students must have successfully completed at least 45 credit hours, which must include ENG/CWP 101, ENG/CWP 102, and the mathematics and quantitative reasoning competency requirement. They must also have passed two Intellectual Foundations courses with a minimum grade of C and the foundation courses for the selected major (EDF 202, EDF 203, EDU 201, EDF 302, and EDU 211 or their equivalents) with a 2.5 average in those courses. Appli-

cants to the full major must earn a minimum cumulative GPA of 2.5, as well as a minimum 2.5 in these selected EDF/EDU courses.

An acceptable application to the department includes evidence that the above requirements have been met, a description of relevant experiences, and the score or proof of registration from the Liberal Arts and Sciences Test (L.A.S.T.) of the New York State Teacher's Exam. Acceptance into the department enables students to proceed through the curricular courses of the childhood with English extension major. Applications to the major are available in Bacon 302.

Childhood with English extension education majors must complete one year of college-level study of one language other than English. Typically, two years of high school study of one language is equivalent to one year of college-level work. Childhood education majors must also complete a distribution requirement of at least 6 credit hours in each of the following areas: mathematics, science, social studies, and English (not including ENG/CWP 101 and ENG/CWP 102).

English Extension Majors also complete a 30-credit-hour concentration in English as outlined in the elementary education handbook, available in Bacon 302 and the BSC website, www.buffalostate.edu/elementaryeducation.

In addition, English Extension majors will take ENG 463 in the semester prior to student teaching. See the English department for details about course availability and orientations.

Student Teaching: The culminating courses for the Childhood with English extension major include two supervised student teaching experiences with children at different age levels in different types of schools. Eligibility and placement for each student teaching experience is determined by the department offices in cooperation with public schools in the greater Buffalo area. It is expected that students in this major will have at least one urban teaching experience. Prior written approval must be obtained from the chair of the department for students to enroll for any other college credit work during a student teaching assignment except for EXE 362 and/or EDU 375.

Graduates in this major will be recommended for New York State Initial Certification to teach children in grades 1–6 and 7-9 English.

Transfer Students: Most courses taken at an accredited institution and relevant to a Buffalo State degree program will be accepted, but the majority of courses applied to the childhood education with mathematics extension major must be courses completed at Buffalo State. Grades for transfer courses are generally used in computing the required GPA for admission to the "early" major (ELEW). Jointly registered program students are admitted directly into the childhood major (BS-ED CED) only. Students planning to transfer as juniors into the childhood program with English extension and wishing to complete their programs in four or five semesters must seek advisement at the institution in which they initially enrolled to assure that the prerequisite course equivalencies are met. Since graduates in extension programs will receive two certifica-

tions, it often requires an additional semester of college work.

Intellectual Foundations Requirements 39–66 cr

Credit Hours for English Concentration 30 cr

Distribution Courses 24 cr

Total Required Credit Hours in Education 60 cr

EDF 202	Child Development and Education
EDF 203	School and Society
EDU 201	Introduction to Elementary Education
EDF 302	Educational Psychology: Elementary Education
EDU 211	Introduction to Literacy
EDU 310 W	Teaching Social Studies in the Elementary School
EDU 311 W	The Teaching of Reading and other Language Arts in the Elementary School (6)
EDU 312	The Teaching of Mathematics and Science in the Elementary School (6)
EXE 362	Behavior and Classroom Management
EXE 371	Foundations of Teaching Children with Disabilities
EDU 375	Integration of Technology in Education
ENG 463	Methods, Materials, and Professional Development for Teachers of English (6 credits)
ENG 464	Student Teaching of English in Junior High-Middle School (6 credits)
EDU 402	Seminar in Education
EDU 404	Student Teaching (6 credits)

Total Required Credit Hours 143 cr

The total number of required hours will vary with course selection. Students should refer to the Elementary Education Handbook and an academic adviser for more detailed information.

CHILDHOOD EDUCATION AND FRENCH EXTENSION (GRADES 1–6 AND 7–9 FRENCH EXTENSION, B.S.)

BS-ED CFR

Elementary Education and Reading Department Bachelor of Science (HEGIS 0802)

National Council for Accreditation of Teacher Education (NCATE) Accredited
Bacon Hall 302 (716) 878-5916

Admission Requirements: Formal admission to the childhood education with French extension major is a two-step process. Initial admission as a preliminary or "early" major (ELEW) is required following acceptance to the college. To be considered for formal admission to the full childhood education with French extension major (CFR), students must have successfully completed at least 45 credit hours, which must include ENG/CWP 101, ENG/CWP 102, and the mathematics and quantitative reasoning competency requirement. They must also have passed two Intellectual Foundations courses with a minimum grade of C and the foundation courses for the selected major (EDF 202, EDF 203, EDU 201, EDF 302, and EDU 211 or their equivalents) with a 2.5 average in those courses. Applicants to the full major must earn a minimum cumulative

GPA of 2.5, as well as a minimum 2.5 in these selected EDF/EDU courses.

An acceptable application to the department includes evidence that the above requirements have been met, a description of relevant experiences, and the score or proof of registration from the Liberal Arts and Sciences Test (L.A.S.T.) of the New York State Teacher's Exam. Acceptance into the department enables students to proceed through the curricular courses of the childhood with French extension major. Applications to the major are available in Bacon 302.

Childhood with French extension education majors must complete a distribution requirement of at least 6 credit hours in each of the following areas: mathematics, science, social studies, and English (not including ENG/CWP 101 and ENG/CWP 102).

French Extension Majors also complete a 30-credit-hour concentration in French as outlined in the elementary education handbook, available in Bacon 302, and on the BSC website: www.buffalostate.edu/elementaryeducation.

In addition, French Extension majors take FLE 401 in the fall semester closest to their student teaching experience. See the Modern and Classical Languages department for availability and orientations.

Student Teaching: The culminating courses for the Childhood with French Extension major include two supervised student teaching experiences with children at different age levels in different types of schools. Eligibility and placement for each student teaching experience is determined by the department office in cooperation with public schools in the greater Buffalo area. It is expected that students in this major will have at least one urban teaching experience. Prior written approval must be obtained from the chair of the department for students to enroll for any other college credit work during a student teaching assignment except for EXE 362 or EDU 375.

Graduates in this major will be recommended for New York State Initial Certification to teach children in grades 1–6 and 7–9 French.

Transfer Students: Most courses taken at an accredited institution and relevant to a Buffalo State degree program will be accepted, but the majority of courses applied to the childhood education with French extension major must be courses completed at Buffalo State. Grades for transfer courses are generally used in computing the required GPA for admission to the "early" major (ELEW). Jointly registered program students are admitted directly into the childhood major (BS-ED CED) only. Students planning to transfer as juniors into the childhood program with French extension and wishing to complete their program in four or five semesters must seek advisement at the institution in which they initially enrolled to assure that the prerequisite course equivalencies are met. Since teacher candidates will qualify for two certifications, most extension programs will require an additional semester.

Intellectual Foundations Requirements 39–66 cr

Credit Hours for French Concentration 30 cr

Distribution Courses		24 cr
Total Required Credit Hours in Education		57 cr
EDF 202	Child Development and Education	
EDF 203	School and Society	
EDU 201	Introduction to Elementary Education	
EDF 302	Educational Psychology: Elementary Education	
EDU 211	Introduction to Literacy	
EDU 310 W	Teaching Social Studies in the Elementary School	
EDU 311 W	The Teaching of Reading and other Language Arts in the Elementary School (6)	
EDU 312	The Teaching of Mathematics and Science in the Elementary School (6)	
EXE 362	Behavior and Classroom Management	
EXE 371	Foundations of Teaching Children with Disabilities	
EDU 375	Integration of Technology in Education	
FLE 401	Teaching Foreign Languages in Middle and High Schools (offered fall semester only)	
FLE 407	Student Teaching of Foreign Languages in the Middle/Junior High School (6 credits)	
EDU 402	Seminar in Education	
EDU 404	Student Teaching (6 credits)	

Total Required Credit Hours **140 cr**

The total number of required hours will vary with course selection. Students should refer to the Elementary Education Handbook and an academic adviser for more detailed information.

CHILDHOOD EDUCATION AND ITALIAN EXTENSION (GRADES 1–6 AND 7-9 ITALIAN EXTENSION, B.S.)

BS-ED CIT

Elementary Education and Reading Department Bachelor of Science (HEGIS 0802)

National Council for Accreditation of Teacher Education (NCATE) Accredited
Bacon Hall 302 (716) 878-5916

Admission Requirements: Formal admission to the childhood education with Italian extension is a two-step process. Initial admission as a preliminary or "early" major (ELEW) is required following acceptance to the college. To be considered for formal admission to the full childhood education with Italian extension (CIT), students must have successfully completed at least 45 credit hours, which must include ENG/CWP 101, ENG/CWP 102, and the mathematics and quantitative reasoning competency requirement. They must also have passed two Intellectual Foundations courses with a minimum grade of C and the foundation courses for the selected major (EDF 202, EDF 203, EDU 201, EDF 302, and EDU 211 or their equivalents) with a 2.5 average in those courses. Applicants to the full major must earn a minimum cumulative GPA of 2.5, as well as a minimum 2.5 in these selected EDF/EDU courses.

An acceptable application to the department includes evidence that the above requirements have been met, a description of relevant experiences, and the score or proof of registration from the Liberal Arts and Sciences Test (L.A.S.T.) of the New York State Teacher's Exam. Acceptance into the department enables students to proceed

through the curricular courses of the childhood with Italian extension major. Applications to the major are available in Bacon 302.

Childhood with Italian extension education majors must complete a distribution requirement of at least 6 credit hours in each of the following areas: mathematics, science, social studies, and English (not including ENG/CWP 101 and ENG/CWP 102).

In addition, Italian extension majors take FLE 401 in the fall semester closest to their student teaching experience. See the Modern and Classical Languages Department for course availability and orientations.

Majors also complete a 30-credit-hour concentration in Italian as outlined in the elementary education handbook, available in Bacon 302 and on the BSC website: www.buffalostate.edu/elementaryeducation.

Student Teaching: The culminating courses for the childhood, with Italian extension major include two supervised student teaching experiences with children at different age levels in different types of schools. Eligibility and placement for each student teaching experience is determined by the department office in cooperation with public schools in the greater Buffalo area. It is expected that students in these majors will have at least one urban teaching experience. Prior written approval must be obtained from the chair of the department for students to enroll for any other college credit work during a student teaching assignment except for EXE 362 or EDU 375.

Graduates in this major will be recommended for New York State Initial Certification to teach children in grades 1–6 and 7-9 Italian.

Transfer Students: Most courses taken at an accredited institution and relevant to a Buffalo State degree program will be accepted, but the majority of courses applied to the childhood education with Italian extension major must be courses completed at Buffalo State. Grades for transfer courses are generally used in computing the required GPA for admission to the "early" major (ELEW). Jointly registered program students are admitted directly into the childhood major (BS-ED CED) only. Students planning to transfer as juniors into the childhood with Italian extension program and wishing to complete their programs in four or five semesters must seek advisement at the institution in which they initially enrolled to assure that the prerequisite course equivalencies are met. Since the teacher candidate will graduate with recommendation for two certification areas, extension majors should anticipate an additional semester of college work.

Intellectual Foundations Requirements **39–66 cr**

Credit Hours for Italian Concentration **30 cr**

Distribution Courses **24 cr**

Total Required Credit Hours in Education **57 cr**

EDF 202	Child Development and Education
EDF 203	School and Society
EDU 201	Introduction to Elementary Education
EDF 302	Educational Psychology: Elementary Education
EDU 211	Introduction to Literacy

EDU 310 W	Teaching Social Studies in the Elementary School
EDU 311 W	The Teaching of Reading and other Language Arts in the Elementary School (6)
EDU 312	The Teaching of Mathematics and Science in the Elementary School (6)
EXE 362	Behavior and Classroom Management
EXE 371	Foundations of Teaching Children with Disabilities
EDU 375	Integration of Technology in Education
FLE 401	Teaching Foreign Languages in Middle and High Schools (offered fall semester only)
FLE 407	Student Teaching of Foreign Languages in the Middle/Junior High School (6 credits)
EDU 402	Seminar in Education
EDU 404	Student Teaching (6 credits)

Total Required Credit Hours **142 cr**

The total number of required hours will vary with course selection. Students should refer to the Elementary Education Handbook and an academic adviser for more detailed information.

CHILDHOOD EDUCATION AND MATHEMATICS EXTENSION (GRADES 1–6 AND 7-9 MATHEMATICS EXTENSION, B.S.)

BS-ED CMT

Elementary Education and Reading Department Bachelor of Science (HEGIS 0802)

National Council for Accreditation of Teacher Education (NCATE) Accredited

Bacon Hall 302 (716) 878-5916

Admission Requirements: Formal admission to the childhood education with math extension is a two-step process. Initial admission as a preliminary or "early" major (ELEW) is required following acceptance to the college. To be considered for formal admission to the full childhood education with math extension (CMT), students must have successfully completed at least 45 credit hours, which must include ENG/CWP 101, ENG/CWP 102, and the mathematics and quantitative reasoning competency requirement. They must also have passed two Intellectual Foundations courses with a minimum grade of C and the foundation courses for the selected major (EDF 202, EDF 203, EDU 201, EDF 302, and EDU 211 or their equivalents) with a 2.5 average in those courses. Applicants to the full major must earn a minimum cumulative GPA of 2.5, as well as a minimum 2.5 in these selected EDF/EDU courses.

An acceptable application to the department includes evidence that the above requirements have been met, a description of relevant experiences, and the score or proof of registration from the Liberal Arts and Sciences Test (L.A.S.T.) of the New York State Teacher's Exam. Acceptance into the department enables students to proceed through the curricular courses of the childhood with math extension major. Applications to the major are available in Bacon 302.

Childhood with math extension education majors must complete one year of college-level study of one language other than English. Typically, two years of high school study of one language is equivalent to one year of college-

level work. Childhood education majors must also complete a distribution requirement of at least 6 credit hours in each of the following areas: mathematics, science, social studies, and English (not including ENG/CWP 101 and ENG/CWP 102).

Math extension majors also complete a 30-credit-hour concentration in mathematics as outlined in the elementary education handbook, available in Bacon 302 and on the BSC website: www.buffalostate.edu/elementaryeducation.

In addition, math extension majors will take MED 307 in the spring semester prior to their student teaching experience. See the mathematics departments for course availability and orientation.

Student Teaching: The culminating courses for the childhood with math extension major include two supervised student teaching experiences with children at different age levels in different types of schools. Eligibility and placement for each student teaching experience is determined by the department office in cooperation with public schools in the greater Buffalo area. It is expected that students in these majors will have at least one urban teaching experience. Prior written approval must be obtained from the chair of the department for students to enroll for any other college credit work during a student teaching assignment except for EXE 362 or EDU 375.

Graduates in this major will be recommended for New York State Initial Certification to teach children in grades 1–6 and 7-9 mathematics.

Transfer Students: Most courses taken at an accredited institution and relevant to a Buffalo State degree program will be accepted, but the majority of courses applied to the childhood education with mathematics extension major must be courses completed at Buffalo State. Grades for transfer courses are generally used in computing the required GPA for admission to the "early" major (ELEW). Jointly registered program students are admitted directly into the childhood major (BS-ED CED) only. Students planning to transfer as juniors into the childhood program with math extension and wishing to complete their programs in four to five semesters must seek advisement at the institution in which they initially enrolled to assure that the prerequisite course equivalencies are met. Since the teacher candidate will graduate with recommendation for two certification areas, extension majors should anticipate an additional semester of college work.

Intellectual Foundations Requirements	39–66 cr
Credit Hours for Math Concentration	30 cr
Distribution Courses	24 cr
Total Required Credit Hours in Education	57 cr
EDF 202	Child Development and Education
EDF 203	School and Society
EDU 201	Introduction to Elementary Education
EDF 302	Educational Psychology: Elementary Education
EDU 211	Introduction to Literacy
EDU 310 W	Teaching Social Studies in the Elementary School
EDU 311 W	The Teaching of Reading and other Language Arts

EDU 312	in the Elementary School (6) The Teaching of Mathematics and Science in the Elementary School (6)
EXE 362	Behavior and Classroom Management
EXE 371	Foundations of Teaching Children with Disabilities
EDU/EXE 375	Integration of Technology in Education
MED 309	Teaching Mathematics in the Middle School (offered spring semester only)
MED 407	Student Teaching of Mathematics in Junior High-Middle School (6 credits)
EDU 402	Seminar in Education
EDU 404	Student Teaching (6 credits)

Total Required Credit Hours **140 cr**

The total number of required hours will vary with course selection. Students should refer to the Elementary Education Handbook and an academic adviser for more detailed information.

CHILDHOOD EDUCATION AND SOCIAL STUDIES EXTENSION (GRADES 1–6 AND 7–9 SOCIAL STUDIES EXTENSION, B.S.)

BS-ED CSS

Elementary Education and Reading Department Bachelor of Science (HEGIS 0802)

National Council for Accreditation of Teacher Education (NCATE) Accredited
Bacon Hall 302 (716) 878-5916

Admission Requirements: Formal admission to the childhood education with social studies extension is a two-step process. Initial admission as a preliminary or "early" major (ELEW) is required following acceptance to the college. To be considered for formal admission to the full childhood education with social studies extension major (CSS), students must have successfully completed at least 45 credit hours, which must include ENG/CWP 101, ENG/CWP 102, and the mathematics and quantitative reasoning competency requirement. They must also have passed two Intellectual Foundations courses with a minimum grade of C and the foundation courses for the selected major (EDF 202, EDF 203, EDU 201, EDF 302, and EDU 211 or their equivalents) with a 2.5 average in those courses. Applicants to the full major must earn a minimum cumulative GPA of 2.5, as well as a minimum 2.5 in these selected EDF/EDU courses.

An acceptable application to the department includes evidence that the above requirements have been met, a description of relevant experiences, and the score or proof of registration from the Liberal Arts and Sciences Test (L.A.S.T.) of the New York State Teacher's Exam. Acceptance into the department enables students to proceed through the curricular courses of the childhood with social studies extension major. Applications to the major are available in Bacon 302.

Childhood with social studies extension education majors must complete one year of college-level study of one language other than English. Typically, two years of high school study of one language is equivalent to one year of college-level work. Childhood education with social stu-

dies extension majors must also complete a distribution requirement of at least 6 credit hours in each of the following areas: mathematics, science, social studies, and English (not including ENG/CWP 101 and ENG/CWP 102).

Social studies extension majors also complete a 30-credit-hour concentration in social studies as outlined in the elementary education handbook, available in Bacon 302 and on the BSC website:

www.buffalostate.edu/elementaryeducation

In addition, social studies extension majors take SSE 303 in the semester prior to student teaching. See the social studies department for seat availability and orientation.

Student Teaching: The culminating courses for the childhood with social studies extension major include two supervised student teaching experiences with children at different age levels in different types of schools. Eligibility and placement for each student teaching experience is determined by the department office in cooperation with public schools in the greater Buffalo area. It is expected that students in these majors will have at least one urban teaching experience. Prior written approval must be obtained from the chair of the department for students to enroll for any other college credit work during a student teaching assignment except for EXE 362 or EDU 375.

Graduates in this major will be recommended for New York State Initial Certification to teach children in grades 1–6 and 7–9 social studies.

Transfer Students: Most courses taken at an accredited institution and relevant to a Buffalo State degree program will be accepted, but the majority of courses applied to the childhood education with social studies major must be courses completed at Buffalo State. Grades for transfer courses are generally used in computing the required GPA for admission to the "early" major (ELEW). Jointly registered program students are admitted directly into the childhood major (BS-ED CED) only. Students planning to transfer as juniors into the childhood program with social studies extension and wishing to complete their programs in four-five semesters must seek advisement at the institution in which they initially enrolled to assure that the prerequisite course equivalencies are met. Since the teacher candidate will graduate with recommendation for two certification areas, extension majors should anticipate an additional semester of college work.

Intellectual Foundations Requirements	39–66 cr
Credit Hours for Soc. St. Concentration	30 cr
Distribution Courses	24 cr
Total Required Credit Hours in Education	57 cr
EDF 202	Child Development and Education
EDF 203	School and Society
EDU 201	Introduction to Elementary Education
EDF 302	Educational Psychology: Elementary Education
EDU 211	Introduction to Literacy
EDU 310 W	Teaching Social Studies in the Elementary School
EDU 311 W	The Teaching of Reading and other Language Arts in the Elementary School (6 credits)

EDU 312	The Teaching of Mathematics and Science in the Elementary School (6)
EXE 362	Behavior and Classroom Management
EXE 371	Foundations of Teaching Children with Disabilities
EDU 375	Integration of Technology in Education
SSE 303	Methods and Materials in Teaching Middle School Social Studies
SSE 409	Student Teaching of Social Studies in the Middle School (6 credits)
EDU 402	Seminar in Education
EDU 404	Student Teaching (6 credits)

Total Required Credit Hours **142 cr**

The total number of required hours will vary with course selection. Students should refer to the Elementary Education Handbook and an academic adviser for more detailed information.

CHILDHOOD EDUCATION AND SPANISH EXTENSION (GRADES 1–6 AND 7-9 SPANISH EXTENSION, B.S.)

BS-ED CSH

Elementary Education and Reading Department Bachelor of Science (HEGIS 0802)

National Council for Accreditation of Teacher Education (NCATE) Accredited
Bacon Hall 302 (716) 878-5916

Admission Requirements: Formal admission to the childhood education with Spanish extension is a two-step process. Initial admission as a preliminary or "early" major (ELEW) is required following acceptance to the college. To be considered for formal admission to the full childhood education with Spanish extension (CSH), students must have successfully completed at least 45 credit hours, which must include ENG/CWP 101, ENG/CWP 102, and the mathematics and quantitative reasoning competency requirement. They must also have passed two Intellectual Foundations courses with a minimum grade of C and the foundation courses for the selected major (EDF 202, EDF 203, EDU 201, EDF 302, and EDU 211 or their equivalents) with a 2.5 average in those courses. Applicants to the full major must earn a minimum cumulative GPA of 2.5, as well as a minimum 2.5 in these selected EDF/EDU courses.

An acceptable application to the department includes evidence that the above requirements have been met, a description of relevant experiences, and the score or proof of registration from the Liberal Arts and Sciences Test (L.A.S.T.) of the New York State Teacher's Exam. Acceptance into the department enables students to proceed through the curricular courses of the childhood with Spanish extension major. Applications to the major are available in Bacon 302.

Childhood with Spanish extension education majors must complete a distribution requirement of at least 6 credit hours in each of the following areas: mathematics, science, social studies, and English (not including ENG/CWP 101 and ENG/CWP 102).

Spanish extension majors also complete a 30-credit-hour concentration in Spanish as outlined in the elementary education handbook, available in Bacon 302 and on the BSC website: www.buffalostate.edu/elementaryeducation.

In addition, Spanish extension majors will take FLE 401 in the fall semester closest to their student teaching experience. See the Modern and Classical Languages department for seat availability and orientation.

Student Teaching: The culminating courses for the childhood with Spanish extension major include two supervised student teaching experiences with children at different age levels in different types of schools. Eligibility and placement for each student teaching experience is determined by the department office in cooperation with public schools in the greater Buffalo area. It is expected that students in these majors will have at least one urban teaching experience. Prior written approval must be obtained from the chair of the department for students to enroll for any other college credit work during a student teaching assignment except for EXE 362 or EDU 375.

Graduates in this major will be recommended for New York State Initial Certification to teach children in grades 1–6 and 7-9 Spanish.

Transfer Students: Most courses taken at an accredited institution and relevant to a Buffalo State degree program will be accepted, but the majority of courses applied to the childhood education with Spanish extension major must be courses completed at Buffalo State. Grades for transfer courses are generally used in computing the required GPA for admission to the "early" major (ELEW). Jointly registered program students are admitted directly into the childhood major (BS-ED CED) only. Students planning to transfer as juniors into the childhood program with Spanish extension and wishing to complete their programs in four-five semesters must seek advisement at the institution in which they initially enrolled to assure that the prerequisite course equivalencies are met. Since the teacher candidate will graduate with recommendation for two certification areas, extension majors should anticipate an additional semester of college work.

Intellectual Foundations Requirements	39–66 cr
Credit Hours for Spanish Concentration	30 cr
Distribution Courses	24 cr
Total Required Credit Hours in Education	57 cr
EDF 202	Child Development and Education
EDF 203	School and Society
EDU 201	Introduction to Elementary Education
EDF 302	Educational Psychology: Elementary Education
EDU 211	Introduction to Literacy
EDU 310 W	Teaching Social Studies in the Elementary School
EDU 311 W	The Teaching of Reading and other Language Arts in the Elementary School (6)
EDU 312	The Teaching of Mathematics and Science in the Elementary School (6)
EXE 362	Behavior and Classroom Management
EXE 371	Foundations of Teaching Children with Disabilities
EDU 375	Integration of Technology in Education
FLE 401	Teaching Foreign Languages in Middle and High Schools (offered fall semester only)

FLE 407	Student Teaching of Foreign Languages in the Middle/Junior High School (6 credits)
EDU 402	Seminar in Education
EDU 404	Student Teaching (6 credits)

Total Required Credit Hours **140 cr**

The total number of required hours will vary with course selection. Students should refer to the Elementary Education Handbook and an academic adviser for more detailed information.

COACHING AND PHYSICAL EDUCATION

COA

Coaching and Physical Education Coaching Minor Program

Houston Gym 130A (716) 878-4519

The coaching minor educates and prepares non-physical education major students to coach interscholastic teams. Students may focus their interests in training in one or more sport specialties. Students who successfully complete the coaching minor also fulfill the New York State Coaching Certification requirements.

Total Required Credit Hours in Coaching **18 cr**

A. Required Courses (9 cr)

HPR 300	Principles, Philosophy and Organization of Athletics in Education
HPR 309	Health Sciences for Coaching
HPR 335	Care and Prevention of Athletic Injuries
OR	
HEW 310	Health Standards and Emergency Care

B. Electives in Coaching (6 cr)

Select two classes from the following:

HPR 201	Techniques and Theories of Coaching Specialty Sports
HPR 202	Techniques and Theories of Coaching Soccer
HPR 203	Techniques and Theories of Coaching Football
HPR 205	Techniques and Theories of Coaching Track and Field
HPR 207	Techniques and Theories of Coaching Baseball/Softball
HPR 208	Techniques and Theories of Coaching Swimming
HPR 209	Techniques and Theories of Coaching Basketball
HPR 488	Internship in Coaching Interscholastic Sports

C. Elective Selected by Advisement (3 cr)

Select one class from the following:

BUS 368	Sports Management and Marketing
HEW 320	Psychoactive Drugs and Health
HEW 425	Alcohol Problems
HPR 301	Kinesiology
HPR 319	Sociology of Sport
PSY 325	Social Behavior

COMMUNICATION PROGRAMS

See Individual Majors

- Communication Studies
- Journalism
- Media Production
- Public Communication

- Television and Film Arts

COMMUNICATION DESIGN (B.F.A.)

BFA-AH CMD

Design Department Bachelor of Fine Arts (HEGIS 1009)

National Association of Schools of Art and Design (NASAD) Accredited

Upton Hall 212 (716) 878-6032

The B.F.A. degree in communication design is a studio-intensive program of study. This degree offers students a specialized studio-oriented education in preparation for advanced or graduate studies, or for beginning careers as professional designers.

Students begin with foundation courses in two-dimensional design, three-dimensional design, color, art history, and design history. The major is completed with courses in communication design and selected major electives. Internships are required of senior level majors.

The remaining credit hours are completed in required Intellectual Foundations courses and in other chosen studio courses.

All students entering the communication design major enter with a bachelor of fine arts (BFA-AH CMD) intent, and are required to pass a portfolio review for admission into the upper division. Commit-to-major portfolio reviews are conducted by faculty and generally take place during the sophomore year after the completion of selected foundations courses, as well as the first course in the intended major. To continue in the B.F.A. degree program, a 3.0 GPA must be maintained in the major.

Transfer students are urged to submit their portfolios the semester before transfer in order to facilitate placement in departmental courses and/or for possible commit-to-major portfolio review. Please call the Design Department for additional information.

The Design Department reserves the right to retain students' work for official purposes, such as exhibitions, catalogs, teaching aids, or permanent collections. Students are expected to assume the costs of materials used in courses. Some studio courses may have an additional charge for materials used in class.

The Design Department may be in the process of curricular revision. Please refer to the college Web site or the department for updated information.

Intellectual Foundations Requirements **39-66 cr**

Total Required Credit Hours in Communication Design **79 cr**

A. Foundation Courses (37 cr)

DES 101	Introduction to Design: 2D I
DES 102	Introduction to Design: 2D II
DES 103	Introduction to Design: 3D I
DES 277	Computer Graphics I
DES 314W	History of Graphic Design
DES 377	Computer Graphics II
DES 307	Color Theory
DES 414	Senior Seminar (4)

FAR 101	Drawing I
FAR 104	Themes and Issues in Contemporary Arts
FAR 250	Art History I
FAR 251	Art History II

B. Major Courses (33 cr)

DES 270	Visual Communication I
DES 271	Typography
DES 370	Visual Communication II
DES 374	Advertising I
DES 378	Web Design
DES 380	Illustration I
DES 473	Graphic Design
DES 475	Graphic Design Practicum (6)
DES 479	Multimedia
DES 480	Illustration II

C. Studio Electives Selected by Advisement (9 cr)

DES 220	Ceramics I
DES 230	Introduction to Jewelry
DES 242	Fibers I
DES 250	Wood I

All College Electives 0–2 cr

Total Required Credit Hours 120 cr

COMMUNICATION STUDIES (B.A.)

BA-AH COM

Communication Department Bachelor of Arts (HEGIS 0601)

Bishop Hall 210 (716) 878-6008

This major allows students much flexibility to tailor a program of theory-based and applied courses. It meets the needs of students preferring a generalist approach to communication, as well as for students seeking a more academic, less applied approach. Compare this major with journalism, media production, and public communication. Like these other majors within the Communication Department, the communication studies major adheres to the standards of the Accrediting Council on Education in Journalism and Mass Communication.

Career Opportunities: Students in communication studies prepare for careers in organizational communication, research, media analysis, public relations, lobbying, speechwriting, fundraising, and other fields that require a liberal arts education enhanced with communication expertise. The major also provides a base for graduate education in communication, law, management, and other professional areas.

The profile of a successful communication studies graduate is a person with strong writing and speaking proficiency, keen ethical insight, competence in analyzing and thinking critically, and skill in working effectively both independently and in teams.

Admission Requirements: Incoming freshman and transfer students can declare the major. A 2.6 in the major is needed to register for certain required upper-division courses (300- and 400-level).

See www.buffalostate.edu/communication for application forms and additional information, including a list of equivalent core courses at community colleges. Transfer students from two-year schools may apply only core courses toward this major for a maximum of 12 credits. Students generally require four semesters of study after completing communication core courses.

Academic Standards: Only grades of C or higher may be applied toward requirements for any communication degree; courses with lower grades must be repeated. Consistent with standards of the Accrediting Council for Education in Journalism and Mass Communication, the number of communication courses that students may take is capped, encouraging a broad-based liberal arts education. The department encourages students to take minors or second majors, and requires evidence of an academic concentration or area of expertise outside the Communication Department.

Intellectual Foundations Requirements 39–66 cr

Total Required Credit Hours in Communication 42 cr

A. Communication Core (12 cr)

COM 100	Media Literacy
or SPC 103	or Introduction to Human Communication
COM 210	Introduction to Writing for the Media
COM 215	Introduction to Visual Communication
SPC 205	Introduction to Oral Communication

Note: Students must have a minimum GPA of 2.6 in the major to register for certain upper-division courses (330- and 400-level).

B. Upper-Level Oral Communication Course (3 cr)

<i>Select one course from the following:</i>	
SPC 306	Advanced Public Speaking
SPC 307	Group Communication
SPC 315	Media Performance

C. Upper-Level Written Communication Course (3 cr)

<i>Select one course from the following:</i>	
COM 303	Print News I: Reporting
COM 304	Writing and Producing
COM 308	Public Relations Writing
COM 325	Feature Writing
COM 337	Electronic News I: Producing
COM 390	Special Topics: Journalism Writing

D. Upper-Level Visual Communication Course (3 cr)

<i>Select one course from the following:</i>	
COM 322	Communication Graphics
COM 329	Video Production
COM 336	Web and Social Media Production

E. Communication Theory and Criticism (6 cr)

<i>Select two courses from the following:</i>	
COM 310	International Communication
COM 327	Literary Journalism
COM 400	Communication Law
COM 401	Applied Communication Research
COM 410	Communication History
SPC 309	Persuasion and Propaganda
SPC 311	Intercultural Communication
SPC 321	Rhetorical Criticism
SPC 333	Minorities and the Media
SPC 407	Organizational Communication
SPC 422	Media Criticism
SPC 424	Special Topics in Media Criticism

F. Senior Seminar (3 cr)

COM 450 Communication and Society

G. Communication Electives (12 cr)COM 495 Independent Project
or COM 499 Independent Study
or 300/400-level COM or SPC electives by advise-
ment**All College Electives** 12–39 cr**Total Required Credit Hours** 120 cr**COMPUTER INFORMATION SYSTEMS (B.S.)***

BS-SP CIS

**Computer Information Systems Department
Bachelor of Science (HEGIS 0702)**

Chase Hall 202 (716) 878-5528

The computer information systems program prepares students for entry-level positions, such as programmer, systems analyst, or network support in the computer field, and provides them with the technical knowledge and managerial skills necessary for a wide range of subsequent career paths. There is a growing demand in all sectors for individuals with this combination of capabilities. This program was developed with the cooperation of employers and information systems professionals and, unlike a computer science program, its emphasis is on commercial applications of computers rather than theory.

Admission Requirements: Transfer students from parallel A.S. or A.A.S. programs in computer information systems or computer science, and students from nonparallel programs who have completed a programming course equivalent to CIS 151, are accepted directly into the CIS major on a competitive basis providing they have a minimum cumulative GPA of 2.5 and a minimum GPA of 2.0 in major courses from the transfer institution. Freshmen and transfer students who do not meet these requirements for admission to the CIS major are accepted into the CIS premajor (0824) with no special requirements. Premajors are expected to take CIS 151 within three semesters of entering the premajor. Freshmen who have 6 credits of AP computer science can be accepted directly into the CIS major (0825). CIS premajors, undeclared students, and students in other majors at Buffalo State can be admitted to the CIS major when they have (a) completed CIS 151 (or an equivalent transfer course) with a minimum grade of C or achieved a minimum GPA of 2.0 in CIS major courses taken at Buffalo State, and (b) achieved a minimum cumulative GPA of 2.5 at Buffalo State.

The CIS department is in the process of curricular revision. Please refer to college Web listings or the department for updated information.

*Evening study available.

Intellectual Foundations Requirements 39–66 cr**Total Required Credit Hours in Computer
Information Systems** 42 cr**A. Required Courses (24 cr)**CIS 151 Computer-Based Information Processing I
CIS 251 Computer-Based Information Processing II
OR
CIS 361 Fundamental Concepts in Object-Oriented Program-
ming¹
CIS 315 Computer Organization
CIS 370 Systems Analysis and Design
CIS 380 Microcomputer Applications
CIS 400 Visual Basic Programming for the Windows Envi-
ronment
CIS 410 Computer Operating Systems
CIS 411 Database Systems**B. Electives (18 cr)**CIS 375 Programming for the Internet Environment
CIS 391 Information Systems Project Management
CIS 405 Comprehensive COBOL Programming
CIS 413 Multimedia Web Programming
CIS 420 Database Management Systems
CIS 425 Object-Oriented Development
CIS 427 E-Commerce Concepts, Technologies and implemen-
tation
CIS 435 Computer Seminar
CIS 442 Advanced Systems Applications
CIS 470 Data Communications
CIS 471 Networking Laboratory I
CIS 473 Enterprise Systems Design and Administration
CIS 475 Programming for the Internet Environment II
CIS 488 Internship
CIS 495 Project
CIS 499 Independent Study

In addition to the above courses, one non-CIS course may be taken as an elective with the department chair's permission.

C. Residency Requirements

A minimum of 21 credit hours must be completed in the CIS department at Buffalo State College.

No more than 3 credit hours of CIS 488 may be used to fulfill the CIS elective requirement.

No more than 3 credit hours of CIS elective requirement can be satisfied by credit hours from CIS 495 and CIS 499.

¹ Required only for transfer students who have not taken a course in C programming.

All College Electives 12–39 cr**Total Required Credit Hours** 120 cr**CRIMINAL JUSTICE (B.S.)**

BS-SP CRJ

**Criminal Justice Department
Bachelor of Science (HEGIS 2105)**

Classroom Building C114 (716) 878-4517

Criminal justice is a multidisciplinary academic program that examines the characteristics and operations of the criminal justice system and relationships between crime and crime control within the context of a democratic society. The program explores social, cultural, political, and organizational influences on criminal justice policies and operations from both theoretical and real-world perspectives.

Admission Requirements: Students are not accepted to the criminal justice major during their first semester at Buffalo

State. However, students can be admitted as premajors to receive the benefit of departmental information and advisement. A minimum of 12 credit hours of coursework must be completed with a minimum cumulative GPA of 2.5. A student is then eligible to apply for admittance as a criminal justice major. Transfer students from community colleges are accepted based upon their academic average and according to their date of application.

Concentrations in Major:

Concentration in Policing: CRJ 202, CRJ 301, CRJ 409

Concentration in Corrections: CRJ 204, CRJ 306, CRJ 406, CRJ 420

Concentration in Intelligence Analysis: CRJ 250, CRJ 355, CRJ 450, CRJ 455

Intellectual Foundations Requirements 39–66 cr

Total Required Credit Hours in Criminal Justice 42 cr

1. ECO 305, PSY 306, MAT 311, SOC 301, or an approved statistics course is a prerequisite for CRJ 315.
2. CRJ 495 and CRJ 499 require senior class standing and a minimum cumulative GPA of 3.0 at Buffalo State.

A. Core Courses (18 cr)

CRJ 101	Introduction to Criminal Justice
CRJ 201	Criminal Law
CRJ 202	The Police Process
CRJ 204	The Correctional Process
CRJ 303	Criminal Justice Theory and Ideology
CRJ 315	Research Methods in Criminal Justice

B. Supporting Courses (6 cr)

Select four courses from the following:

CRJ 250	Introduction to Intelligence Analysis
CRJ 301	Police Organization and Management
CRJ 302	Criminal Justice and the Community
CRJ 305	The Juvenile Justice System
CRJ 306	Probation, Parole, and Community Corrections
CRJ 307	Comparative Criminal Justice Systems
CRJ 308	Crime Prevention
CRJ 317	Constitutional Issues in Criminal Justice
CRJ 320	Criminal Courts
CRJ 355	Crime Analysis

C. Criminal Justice Electives (9 cr)

CRJ 425	Race, Ethnicity, and the Administration of Justice ¹
OR	
CRJ 430	Gender and the Administration of Justice ¹

Select two courses from the following:

CRJ 402	Advanced Administration in Criminal Justice
CRJ 404	White-Collar and Corporate Crime
CRJ 406	Correctional Institutions and Programs
CRJ 408	Proseminar in Criminal Justice
CRJ 409	Advanced Issues in Law Enforcement
CRJ 410	Organized Crime
CRJ 420	Advanced Issues in Punishment and Corrections
CRJ 440	Drugs, Crime, and Drug Policy
CRJ 450	Terrorism and Criminal Justice
CRJ 455	Advanced Intelligence Analysis
CRJ 470	Advanced Seminar in Criminal Justice
CRJ 485	Moot Court
CRJ 488	Internship
CRJ 495	Special Project

CRJ 499 Independent Study

D. Professional, Behavioral, and Social Science Electives² (9 cr)

Select three courses from the following:

ANT 307	Urban Anthropology
ANT 325	Forensic Anthropology
BIO 322	Human Heredity
BUS 312	Financial Accounting
BUS 313	Managerial Accounting
BUS 334	Business Law I
BUS 360	Principles of Management
BUS 410	Accounting Analysis
CHE 312	Chemistry and Criminalistics
CRS 302	Creative Approaches to Problem Solving
ECO 305	Statistics for Economics
ECO 312	Urban Economics
ECO 350	Public Finance
ECO 360	Introduction to the Economic Analysis of Law
EDF 311/ SOC 311	Family Violence
ENG 300	Writing for the Professions
GEG 425	Fundamentals of GIS
HIS 341	African Americans and Civil Rights
HIS 342	English Legal History
LIB 300	Advanced Library Research Methods
MAT 311	Introductory Probability and Statistics
PHI 304	Philosophy of Law
PSC 315	State and Local Government Politics
PSC 316	Urban Ethnic Politics
PSC 320	U.S. Constitution/Civil Liberties
PSC 360	Public Administration
PSC 364	American Public Policy
PSY 306	Statistics in Psychological Research
PSY 325	Social Behavior
PSY 367	Organizational Behavior
PSY 375	Forensic Psychology
PSY 376	Health Psychology
PSY 411	Abnormal Psychology
SOC 301	Social Statistics
SOC 351	Sociology of Race and Ethnicity
SOC 353	Environment and Society
SOC 380	Sociology of Crime
SOC 382	Sociology of Law
SOC 390	Sociology of Juvenile Delinquency
SPA 201	Intermediate Spanish I
SPA 202	Intermediate Spanish II
SPC 306	Public Speaking
SWK 319	Dynamics of Poverty
SWK 320	Social Services Organizations

¹ One of these courses must be included as an elective.

² No more than 7 credit hours from one course area (i.e., two PSC courses, two PSY courses, or two SOC courses) allowed.

All College Electives 12–39 cr

Total Required Credit Hours 120 cr



See Individual Majors

- Ceramics
- Communication Design
- Fibers

- Metals/Jewelry
- Wood/Furniture

DIETETICS- COORDINATED PROGRAM (B.S.)

BS-SP DIE COR

Dietetics and Nutrition Department Bachelor of Science (HEGIS 1306)

American Dietetic Association (ADA) Accredited
Caudell Hall 207 (716) 878-5913

The coordinated program in dietetics (CPD) is currently granted continuing accreditation by the Commission on Accreditation for Dietetics Education of the American Dietetic Association, 120 South Riverside Plaza, Suite 2000, Chicago, IL 60606-6995, (312) 899-5400.

The program began in 1971 and is the only such program in the SUNY system. The program combines theoretical learning with supervised practice; therefore, the program provides students with the academic and supervised practice requirements established by CADE for entry-level dietitians. Graduates of the program receive a verification statement signed by the CPD program director. Graduates are then eligible to apply to take the registration examination administered by the Commission on Dietetic Registration. Passing the registration examination earns the credentials of registered dietitian (RD).

Admission Requirements: All students with sophomore, junior, or senior status meeting the eligibility requirements must apply for admission to the program during the designated period. Eligibility requirements are a minimum cumulative GPA of 2.75 and completion of the following prerequisite courses prior to beginning the program in the fall: BIO 308, BIO 309, CHE 111, CHE 112, CHE 321, CHE 322, NFS 100, NFS 102, NFS 110, NFS 200, NFS 230, NFS 302, NFS 315, PSY 101, and SOC 100. Selection is based on GPA, completion of prerequisite courses, biographical sketch, personal interviews, faculty/employer recommendations, and various other activities. Up to 16 students are accepted into this program each year.

Individuals interested in applying to the coordinated program must contact the department for application details. These are available by December 1 of each year; completed forms must be returned by the end of the first week of classes of the spring semester.

This curriculum has been revised as part of the accreditation process. Contact the department for information.

Intellectual Foundations Requirements 39–66 cr

Total Required Credit Hours in Nutrition and Food Science 74 cr

A minimum of 12 credit hours in the major must be completed in the department.

A. Required Courses (47 cr)

NFS 100	Introduction to Food Preparation
NFS 102	Introductory Nutrition
NFS 110	Applied Principles of Management in Dietetics/Food Services
NFS 200	Applied Food Chemistry

NFS 210	Food Service Systems Management in Health Care
NFS 230	Introduction to Dietetics (2)
NFS 300	Food processing I
NFS 302	Advanced Nutrition
NFS 310	Personnel Management in Dietetics/Food Services
NFS 315	Life Cycle and Community Nutrition I
NFS 316	Life Cycle and Community Nutrition II (2)
NFS 330	Seminar on Complementary and Alternative Nutrition (1)
NFS 401	Medical Nutrition Therapy I
NFS 402	Medical Nutrition Therapy II
NFS 403	Medical Nutrition Therapy III
NFS 405	Principles of Nutrition Education (2)
NFS 419	Introduction to Clinical Practice (2)
NFS 430	Introduction to Nutrition Research (2)

B. Courses for ADA Requirements (27 cr)

To satisfy the clinical requirements of the ADA, students are required to take the following courses, which may be substituted for electives.

NFS 445	Nutritional Care A
NFS 446	Nutritional Care B
NFS 447	Nutritional Care C
NFS 448	Nutritional Care D
NFS 449	Nutritional Care E (Nutritional Care of Long-Term Patients)
NFS 450	Senior Practicum in Dietetics
NFS 451	Specialty Practice
NFS 471	Experiences in Health-Care Food Service Systems

Required Courses Outside the Major

The ADA requires completion of subjects outside nutrition to satisfy academic requirements. Courses meeting these requirements are identified below; they may be taken as electives or used in fulfilling the Intellectual Foundations requirements.

BIO 100	Principles of Biology
BIO 210	Bacteriology
BIO 308	Human Anatomy and Physiology
BIO 309	Laboratory in Human Anatomy and Physiology (1)
CHE 111	Fundamentals of Chemistry I (4)
CHE 112	Fundamentals of Chemistry II (4)
CHE 321	Principles of Organic Chemistry (4)
CHE 322	Biological Chemistry (4)
CIS 101	Computer Fundamentals
ECO 305	Statistics for Economics (or equivalent)
LIB 100	Introduction to Library Research Methods
PSY 101	Introduction to Psychology
SOC 100	Introduction to Sociology

All College Electives 0–22 cr

Total Required Credit Hours 120 cr

DIETETICS- DIDACTIC PROGRAM (B.S.)

BS-SP DIE DID

Dietetics and Nutrition Department Bachelor of Science (HEGIS 1306)

American Dietetic Association (ADA) Initial Accreditation
Caudell Hall 207 (716) 878-5913

The didactic program in dietetics (DPD) is currently granted initial accreditation by the Commission on Accreditation for Dietetics Education of the American Dietetic Association, 120 South Riverside Plaza, Suite 2000, Chicago, IL 60606-6995, (312) 899-5400.

The program provides students with the academic requirements established by the Commission on Accreditation for

Dietetics Education (CADE) for entry-level dietitians. Graduates of the program receive a verification statement signed by the DPD program director. Graduates are then eligible to apply for a CADE-accredited supervised practice program via dietetic internships or pre-professional practice programs that are available throughout the country. After completing the supervised practice requirements, individuals may take the registration examination administered by the Commission on Dietetic Registration. Passing the registration examination earns the credentials of registered dietitian (RD). Career opportunities are available to dietitians in health facilities, food service organizations, government agencies, and consulting work. Some individuals use this program to prepare for graduate study in nutrition-related areas.

Admission Requirements: Students are admitted as freshmen or transfers. Transfer students, undeclared students, or students changing majors or desiring a major in this program must have a minimum GPA of 2.75 in previous college credit. Undeclared students or those changing majors to dietetics must fill out a Change of Major form.

Intellectual Foundations Requirements **39–66 cr**

Total Required Credit Hours in Nutrition and Food Science **37 cr**

NFS 100	Introduction to Food Preparation (3)
NFS 102	Introduction to Nutrition
NFS 110	Applied Principles of Management in Dietetics/Food Service
NFS 200	Applied Food Chemistry
NFS 210	Food Systems Management in Health Care
NFS 230	Introduction to Dietetics Profession (1)
NFS 300	Food Processing I (2)
NFS 302	Advanced Nutrition
NFS 310	Personnel Management in Dietetics/Food Services
NFS 315	Life Cycle/Community I
NFS 316	Life Cycle/Community II (2)
NFS 330	Seminar: Complementary and Alternative Nutrition (1)
NFS 401	Medical Nutrition Therapy I
NFS 402	Medical Nutrition Therapy II
NFS 403	Medical Nutrition Therapy III
NFS 405	Principles of Nutrition Education (2)
NFS 419	Introduction to Clinical Practice (2)
NFS 430	Introduction to Nutrition Research (2)
NFS 420	Dietetics Field Experience (2)
NFS 495	Senior Project (2)

Total Required Credit Hours Outside the Department* **39 cr**

BIO 100	Principles of Biology
BIO 210	Bacteriology
BIO 308	Human Anatomy and Physiology
BIO 309	Human Anatomy and Physiology Lab (1)
CHE 111	Fundamentals of Chemistry I (4)
CHE 112	Fundamentals of Chemistry II (4)
CHE 321	Principles of Organic Chemistry (4)
CHE 322	Biological Chemistry (4)
CIS 101	Computer Fundamentals
ECO 305	Statistics for Economics
OR	
MAT 311	Introductory Probability and Statistics
LIB 100	Introduction to Library Research Methods (1)
PSY 101	Introduction to Psychology
SOC 100	Introduction to Sociology

*Some of these courses meet the Intellectual Foundations requirements.

All College Electives **0–5 cr**

Total Required Credit Hours **120 cr**

EARLY CHILDHOOD EDUCATION (BIRTH - GRADE 2, B.S.)

BS-ED ECE

Elementary Education and Reading Department Bachelor of Science (HEGIS 0823)

National Council for Accreditation of Teacher Education (NCATE) Accredited
Bacon Hall 302 (716) 878-5916

Admission Requirements: Formal admission to the early childhood education program is a two-step process. Initial admission as a preliminary or "early" major (ELEW) is required following acceptance to the college. Applications to ELEW are available in Bacon 302. To be considered for formal admission to the early childhood education major, students must have successfully completed at least 45 credit hours, which must include ENG/CWP 101, ENG/CWP 102, and the mathematics and quantitative reasoning competency requirement. They must also have passed two Intellectual Foundations courses with a minimum grade of C and the foundation courses for the major (EDF 202, EDF 203, EDU 201, EDF 302, and EDU 211 or their equivalents) with a 2.5 average in those courses. Applicants to the full major must earn a minimum cumulative GPA of 2.5, as well as a minimum 2.5 in these selected EDF/EDU courses.

An acceptable application to the department includes evidence that the above requirements have been met, a description of relevant experiences, and the score or proof of registration from the Liberal Arts and Sciences Test (L.A.S.T.) of the New York State Teacher's Exam. Acceptance into the department enables students to proceed through the curricular courses of their selected major. Applications to ECE are available in Bacon 302.

Early childhood education majors must complete one year of college-level study of one language other than English. Typically, two years of high school study of one language is equivalent to one year of college-level work. Early childhood education majors must also complete a distribution requirement of at least 6 credit hours in each of the following areas: mathematics, science, social studies, and English (not including ENG/CWP 101 and ENG/CWP 102).

Early Childhood majors also complete a 30-credit-hour concentration chosen from: American studies, English, foreign language, mathematics, science, or social studies.

Student Teaching: The culminating courses for the early childhood education majors include two supervised student teaching experiences with children at different age levels in different types of schools. Eligibility and placement for each student teaching experience is determined by the department office in cooperation with public schools in the

greater Buffalo area. It is expected that students in these majors will have at least one urban teaching experience. Prior written approval must be obtained from the chair of the department for students to enroll for any other college credit work during a student teaching assignment except for EDU 375. EDU 411 may be taken prior to or with Student Teaching.

Graduates will be recommended for New York State Initial Certification to teach children from birth through grade 2 (early childhood, ECE).

Academic Concentrations: Early childhood education majors are required to complete an academic concentration in addition to the professional program requirements; the concentration seeks to broaden students' academic backgrounds. Descriptions of the approved concentrations can be found in the Elementary Education Department Handbook for Majors, available on the department Web site, www.buffalostate.edu/elementaryeducation, or from the department office.

Transfer Students: Most courses taken at an accredited institution and relevant to a Buffalo State degree program will be accepted, but the majority of courses applied to the early childhood education major must be courses completed at Buffalo State. Grades for transfer courses are generally used in computing the required GPA for admission to the "early" major. Students planning to transfer as juniors into the early childhood programs and wishing to complete their programs in four semesters must seek advisement at the institution in which they initially enrolled to assure that the prerequisite course equivalencies are met.

Intellectual Foundations Requirements	39–66 cr
Credit Hours for Concentration	30 cr
Distribution Courses	24 cr
Total Required Credit Hours in Education	54 cr
EDF 202	Child Development and Education
EDU 201	Introduction to Elementary Education
EDF 302	Educational Psychology: Elementary Education
EDU 211	Introduction to Literacy
EDU 220	Programs for Infants and Toddlers
EDU 311W	The Teaching of Reading and other Language Arts in the Elementary School (6)
EDU 329	Integrated Thematic Instruction for Young Children (6)
EDU 326	Emergent Literacy
EXE 362	Behavior and Classroom Management (optional)
EXE 371	Foundations of Teaching Children with Disabilities
EDU 375	Integration of Technology in Education
EDU 400	Practicum in Teaching (Primary) (6)
EDU 402	Seminar in Education
EDU 410	Practicum in Teaching Early Childhood (6)
EDU 411	Parents, Schools, and Community
Total Required Credit Hours	120 cr

The total number of required hours will vary with course selection. Students should refer to the Elementary Education Department Handbook and an academic adviser for more detailed information.

EARTH SCIENCE EDUCATION (7–12, B.S.)

BS-NS EGS

Earth Sciences and Science Education Department Bachelor of Science (HEGIS 1917.01)

National Council for Accreditation of Teacher Education (NCATE) Accredited
Science Building 271 (716) 878-6731

The earth science secondary education program leads to a New York State Initial Certificate for teaching both earth sciences and general sciences in grades 7–12. Students seeking admission to the B.S. Earth Science Education program should initially enroll in the B.S. Earth Sciences program. After successfully completing at least 6 credits in required geology (GES) courses at Buffalo State with a GPA in these courses of 3.0 or higher, students apply for admission to the B.S. Earth Science Education program during the semester they complete SED 200. A minimum GPA of 3.0 in earth science (GES) courses is required for admission to SED 405, SED 407, and SED 408.

Intellectual Foundations Requirements¹ **39–66 cr**

Total Required Credit Hours in Earth Sciences¹ **40 cr**

GES 101	Introductory Geology
GES 102	Historical Geology
GES 103	Introductory Geology Laboratory (1)
GES 111	General Oceanography
GES 131	Introductory Astronomy
GES 241	Meteorology
GES 302	Invertebrate Paleontology (4)
GES 303	Mineralogy and Petrology (4)
GES 307	Geomorphology
GES 408	Structural Geology (4)
GES 405	Geology of North America

One astronomy elective.

One upper-division earth science elective.

Total Required Credit Hours in Professional Education **24 cr**

EDF 303	Educational Psychology
EDU 416	Teaching Literacy in Middle and Secondary Schools
EXE 372	Foundations of Teaching Adolescents with Disabilities
SCI 445	Literacy for Teaching Science
SED 200	Field Experience in Secondary Science Education
SED 401	Techniques for Teaching Laboratory Activities in the Secondary Science Classroom
SED 405	Methods and Materials in Teaching Secondary School Science
SED 409	Seminar in Secondary Science Education

Total Required Credit Hours in Student Teaching **12 cr**

SED 407	Practice Teaching Science in the Middle School (6)
SED 408	Practice Teaching Science in the High School (6)

Total Required Credit Hours in Other Fields for Certification **22–30 cr**

A. One Year (or Equivalent) of a Foreign Language (0-6 cr)

B. Cognate Sciences (22–24 cr)

CHE 111, CHE 112	Fundamentals of Chemistry I, II (4, 4)
PHY 111, PHY 112	University Physics I, II (5, 5)

112
OR
PHY 107, PHY General Physics I, II (4, 4)
108

Select two courses from the following:

BIO 211 Introduction to Cell Biology and Genetics (4)
BIO 212 Introduction to Organismal Biology and Diversity (4)
BIO 213 Introduction to Ecology, Evolution, and Behavior (4)

Total Required Credit Hours **137 cr**

¹ May be applied to geology B.A. program or earth sciences B.S. program.

EARTH SCIENCE EDUCATION (7–12, 5–6 EXTENSION, B.S.)

BS-NS EGX

Earth Sciences and Science Education Department Bachelor of Science (HEGIS 1917.01)

National Council for Accreditation of Teacher Education (NCATE) Accredited
Science Building 271 (716) 878-6731

The secondary education earth science program leads to a New York State Initial Certificate for teaching both earth sciences and general sciences in grades 5–12. Students seeking admission to the B.S. Earth Science Education program should initially enroll in the B.S. Earth Sciences program. After successfully completing at least 6 credits in required geology (GES) courses at Buffalo State with a GPA in these courses of 3.0 or higher, students apply for admission to the B.S. Earth Science Education program during the semester they complete SED 200. A minimum GPA of 3.0 in earth science (GES) courses is required for admission to SED 405, SED 407, and SED 408.

Intellectual Foundations Requirements¹ **39–66 cr**

Total Required Credit Hours in Earth Sciences¹ **40 cr**

GES 101 Introductory Geology
GES 102 Historical Geology
GES 103 Introductory Geology Laboratory (1)
GES 111 General Oceanography
GES 131 Introductory Astronomy
GES 241 Meteorology
GES 302 Invertebrate Paleontology (4)
GES 303 Mineralogy and Petrology (4)
GES 307 Geomorphology
GES 408 Structural Geology (4)
GES 405 Geology of North America

One astronomy elective.

One upper-division earth science elective.

Total Required Credit Hours in Professional Education **30 cr**

EDF 303 Educational Psychology
EDU 416 Teaching Literacy in Middle and Secondary Schools
EXE 372 Foundations of Teaching Adolescents with Disabilities
SCI 323 Science as Inquiry
SCI 445 Literacy for Teaching Science
SED 200 Field Experience in Secondary Science Education
SED 310 Teaching Science in the Middle School

SED 401 Techniques for Teaching Laboratory Activities in the Secondary Science Classroom
SED 405 Methods and Materials in Teaching Secondary School Science
SED 409 Seminar in Secondary Science Education

Total Required Credit Hours in Student Teaching **12 cr**

SED 407 Practice Teaching Science in the Middle School (6)
SED 408 Practice Teaching Science in the High School (6)

Total Required Credit Hours in Other Fields for Certification **22–30 cr**

A. One Year (or Equivalent) of a Foreign Language (0-6 cr)

B. Cognate Sciences (22–24 cr)

CHE 111, CHE Fundamentals of Chemistry I, II (4, 4)

112

PHY 111, PHY University Physics I, II (5, 5)

112

OR

PHY 107, PHY General Physics I, II (4, 4)

108

Select two courses from the following:

BIO 211 Introduction to Cell Biology and Genetics (4)

BIO 212 Introduction to Organismal Biology and Diversity (4)

BIO 213 Introduction to Ecology, Evolution, and Behavior (4)

Total Required Credit Hours **143 cr**

¹ May be applied to geology B.A. program or earth sciences B.S. program.

EARTH SCIENCE EDUCATION (7–12, PTCP)

PBC-NS EGS

Earth Sciences and Science Education Department Postbaccalaureate Teacher Certification Program (HEGIS 1917.01)

National Council for Accreditation of Teacher Education (NCATE) Accredited
Science Building 271 (716) 878-6731

The secondary education earth science postbaccalaureate certification-only program leads to a New York State Initial Certificate for teaching both earth sciences and general sciences in grades 7–12. The program is intended for persons with existing undergraduate degrees in earth sciences or a related field who are interested in obtaining certification to teach earth sciences in secondary schools or general science in middle schools. A minimum GPA of 3.0 in earth science courses is required for admission to SED 405, SED 407, and SED 408.

Total Required Credit Hours in Earth Sciences **40 cr**

GES 101 Introductory Geology
GES 102 Historical Geology
GES 103 Introductory Geology Laboratory (1)
GES 111 General Oceanography
GES 131 Introductory Astronomy
GES 241 Meteorology
GES 302 Invertebrate Paleontology (4)
GES 303 Mineralogy and Petrology (4)
GES 307 Geomorphology
GES 408 Structural Geology
GES 405 Geology of North America

One astronomy elective.

One upper-division earth science elective.

Total Required Credit Hours in Professional Education 24 cr

EDF 303	Educational Psychology
EDU 416	Teaching Literacy in Middle and Secondary Schools
EXE 372	Foundations of Teaching Adolescents with Disabilities
SCI 445	Literacy for Teaching Science
SED 200	Field Experience in Secondary Science Education
SED 401	Techniques for Teaching Laboratory Activities in the Secondary Science Classroom
SED 405	Methods and Materials in Teaching Secondary School Science
SED 409	Seminar in Secondary Science Education

Total Required Credit Hours in Student Teaching 12 cr

SED 407	Practice Teaching Science in the Middle School (6)
SED 408	Practice Teaching Science in the High School (6)

Total Required Credit Hours in Other Fields for Certification 22–30 cr

A. One Year (or Equivalent) of a Foreign Language (0-6 cr)

B. Cognate Sciences (22–24 cr)

CHE 111, CHE 112	Fundamentals of Chemistry I, II (4, 4)
PHY 111, PHY 112	University Physics I, II (5, 5)
OR	
PHY 107, PHY 108	General Physics I, II (4, 4)

Select two courses from the following:

BIO 211	Introduction to Cell Biology and Genetics (4)
BIO 212	Introduction to Organismal Biology and Diversity (4)
BIO 213	Introduction to Ecology, Evolution, and Behavior (4)

Total Required Credit Hours 96 cr

EARTH SCIENCE EDUCATION (7–12, 5–6 EXTENSION, PTCP)

PBC-NS EGX

Earth Sciences and Science Education Department Postbaccalaureate Teacher Certification Program (HEGIS 1917.01)

National Council for Accreditation of Teacher Education (NCATE) Accredited
Science Building 271 (716) 878-6731

The secondary education earth science postbaccalaureate certification-only program leads to a New York State Initial Certificate for teaching both earth sciences and general sciences in grades 5–12. The program is intended for persons with existing undergraduate degrees in earth sciences or a related field who are interested in obtaining certification to teach earth sciences in secondary schools or general science in middle schools. A minimum GPA of 3.0 in earth science courses is required for admission to SED 405, SED 407, and SED 408.

Total Required Credit Hours in Earth Sciences 40 cr

GES 101	Introductory Geology
GES 102	Historical Geology
GES 103	Introductory Geology Laboratory (1)
GES 111	General Oceanography

GES 131	Introductory Astronomy
GES 241	Meteorology
GES 302	Invertebrate Paleontology (4)
GES 303	Mineralogy and Petrology (4)
GES 307	Geomorphology
GES 408	Structural Geology (4)
GES 405	Geology of North America

One astronomy elective.

One upper-division earth science elective.

Total Required Credit Hours in Professional Education 30 cr

EDF 303	Educational Psychology
EDU 416	Teaching Literacy in Middle and Secondary Schools
EXE 372	Foundations of Teaching Adolescents with Disabilities
SCI 323	Science as Inquiry
SCI 445	Literacy for Teaching Science
SED 200	Field Experience in Secondary Science Education
SED 310	Teaching Science in the Middle School
SED 401	Techniques for Teaching Laboratory Activities in the Secondary Science Classroom
SED 405	Methods and Materials in Teaching Secondary School Science
SED 409	Seminar in Secondary Science Education

Total Required Credit Hours in Student Teaching 12 cr

SED 407	Practice Teaching Science in the Middle School (6)
SED 408	Practice Teaching Science in the High School (6)

Total Required Credit Hours in Other Fields for Certification 22–30 cr

A. One Year (or Equivalent) of a Foreign Language (0-6 cr)

B. Cognate Sciences (22–24 cr)

CHE 111, CHE 112	Fundamentals of Chemistry I, II (4, 4)
PHY 111, PHY 112	University Physics I, II (5, 5)
OR	
PHY 107, PHY 108	General Physics I, II (4, 4)

Select two courses from the following:

BIO 211	Introduction to Cell Biology and Genetics (4)
BIO 212	Introduction to Organismal Biology and Diversity (4)
BIO 213	Introduction to Ecology, Evolution, and Behavior (4)

Total Required Credit Hours 104 cr

EARTH SCIENCES (B.S.)

BS-NS EAS

Earth Sciences and Science Education Department Bachelor of Science (HEGIS 1917)

Science Building 271 (716) 878-6731

The Earth Sciences program offers students the opportunity to develop a broad understanding of the earth as a dynamic, interacting system of land, sea, atmosphere, and solar system. The student, in consultation with a faculty adviser, will select one of the three concentrations, usually after completion of 9 GES credit hours. The concentrations, leading in potentially different career directions, are Earth Science (for secondary education Earth Science candidates), Environmental Earth Sciences, and Geology (Earth Sciences majors may not minor in Astronomy).

Coursework in chemistry, calculus, and physics is expected, particularly for students intent upon careers in the geosciences, contemplating graduate study, or seeking certification as a secondary Earth Science teacher. The recommended courses, and higher, are CHE 111, CHE 112, MAT 126, MAT 127, PHY 111, and PHY 112. Each student should choose the appropriate courses by advisement, beginning with entry into the major.

Student majors are given many opportunities to pursue independent research under faculty supervision or an internship experience. Students may find additional information about undergraduate research possibilities from faculty members, and by visiting the Undergraduate Research Office (www.buffalostate.edu/undergraduateresearch).

A departmental honors program also is available. Students should contact the department for additional information.

Intellectual Foundations Requirements **38–65 cr**

Total Required Credit Hours in Earth Sciences **41–43 cr**

A. Required Courses (25 cr)

- GES 101 Introductory Geology
- GES 102 Historical Geology
- GES 103 Introductory Geology Laboratory (1)
- GES 111 General Oceanography
- GES 131 Introductory Astronomy
- GES 303 Mineralogy and Petrology (4)
- GES 307 Geomorphology (4)
- GES 408 Structural Geology (4)

B. Concentrations (16–18 cr)

Environmental Earth Sciences Concentration (18 cr)

- GES 300 Sedimentology
- GES 301 Stratigraphy
- GES 452 Hydrogeology
- GES 460 Applied Environmental Methods

Select two courses from the following:

- GES 350 Environmental Geochemistry
- GEG 365 Soil Science and Management
- GES 444 Global Systems Geomorphology
- GES 450 Field Geology

Students should consider completing the Environmental Science minor program.

Completion of CHE 111 and CHE 112 are advised.

Earth Science Concentration (16 cr)

- GES 241 Meteorology
- GES 302 Invertebrate Paleontology (4)
- GES 405 Geology of North America

One astronomy elective.

One upper-division GES elective.

Students who wish to obtain earth science and general science certifications (7–12) for junior/senior high school teaching must also complete other professional requirements. See the earth science education (7–12) program in this catalog.

Geology Concentration (16 cr)

- GES 300 Sedimentology
- GES 301 Stratigraphy
- GES 302 Invertebrate Paleontology (4)
- GES 450 Field Geology

Select one course from the following:

- GES 403 Glacial Geology
- GES 405 Geology of North America

Students contemplating graduate study are advised that CHE 111, CHE 112, MAT 126, MAT 127, PHY 111, and PHY 112 are essential to a modern geology (or related) program. These sequences should begin before the graduate school decision is made; failure to take them limits students' future options.

All College Electives **11–40 cr**

Total Required Credit Hours **120 cr**

ECONOMICS (B.A.)

BA-NS ECO

**Economics and Finance Department
Bachelor of Arts (HEGIS 2204)**

Classroom Building B207 (716) 878-4606

The B.A. degree program in economics provides a solid foundation in the skills and analytical techniques required to understand changes in the economic environment and to be able to formulate decisions as consumers, resource owners, and managerial personnel in business, government, and nonprofit organizations. This program is also designed to prepare students to participate, as career professionals, citizens and as scholars, in the global economy by providing a strong focus on the international aspects of economics. Students who choose this program are encouraged to complement the international focus of the program by taking additional appropriate courses in history, political science, and geography. In addition to providing preparation for a variety of entry-level management positions in business and government, the program also offers excellent preparation for graduate work in international business, economics, and law.

Admission Requirements: Transfer or uncommitted students must have a minimum GPA of 2.0 in all previous college credits.

Transfer Students: Most courses taken at an accredited institution and relevant to the B.A. degree program will be accepted, but the majority of courses applied to the major must be courses completed at Buffalo State. In most cases, grades for transfer courses will be used in computing the required minimum GPA for admission into the program.

Honors Option for the B.A. Program: An honors designation is available for students who have established high standards of achievement and demonstrated a capacity for independent work. Students should contact the department for information on admission and requirements.

Intellectual Foundations Requirements **39–66 cr**

Total Required Credit Hours in Economics **36 cr**

A. Required Courses (24 cr)

- ECO 201 Principles of Macroeconomics
- ECO 202 Principles of Microeconomics
- ECO 305 Statistics for Economics
- ECO 307 Intermediate Microeconomics
- ECO 308 Intermediate Macroeconomics
- ECO 405 History of Economic Thought
- ECO 490 Senior Seminar

B. Select at Least One Course from the Following:

- ECO 401 International Economics
- ECO 403 Comparative Economic Systems

ECO 404	Economic Development
FIN 400	International Finance

C. Economics Electives Selected by Advisement (12 cr)

(Only 3 credit hours of ECO 488, ECO 495, or ECO 499 may be included.)

All College Electives **18–45 cr**

It is strongly recommended that students who plan to pursue a Ph.D. in economics also complete, as a minimum, MAT 161, MAT 162, and MAT 202.

Total Required Credit Hours **120 cr**

ECONOMICS (B.S.)

BS-NS ECO

**Economics and Finance Department
Bachelor of Science (HEGIS 2204)**

Classroom Building B207 (716) 878-4606

The B.S. degree program in economics provides a solid foundation in the basic skills and analytical techniques that are necessary to understand changes in the broad economic environment and be able to formulate decisions as consumers, resource owners, and managerial personnel in business, government, and nonprofit organizations. Students choose a concentration in either applied economics or financial economics and complete additional required courses and specialized electives. Both concentrations prepare students for entry-level management positions in business, government, and nonprofit organizations, and provide excellent preparation for graduate work in business administration, economics, and law. Financial economics is the rigorous study of financial markets (bonds, derivatives, swaps, and equities) and their related institutions.

Admission Requirements: Transfer or uncommitted students must have a minimum GPA of 2.0 in previous college credits.

Transfer Students: Most courses taken at an accredited institution and relevant to the B.S. degree program will be accepted, but the majority of courses applied to the major must be courses completed at Buffalo State. In most cases, grades for transfer courses will be used in computing the required GPA for admission into the program.

Intellectual Foundations Requirements **39–66 cr**

Total Required Credit Hours in Economics **39–45 cr**

A. Required Courses (27 cr)

BUS 312	Financial Accounting
ECO 201	Principles of Macroeconomics
ECO 202	Principles of Microeconomics
ECO 305	Statistics for Economics
ECO 307	Intermediate Microeconomics
ECO 308	Intermediate Macroeconomics
ECO 424	Econometrics
ECO 490	Senior Seminar
MAT 126	Calculus
OR	
MAT 161	Calculus I

B. Concentrations

Students are required to select one of two concentrations. Only 3 credit hours of ECO 488, ECO 495, or ECO 499 may be included.

AEC—Applied Economics Concentration (12 cr)

Required Courses (6 cr)

ECO 320	Managerial Economics
OR	
ECO 325	Industrial Organization
ECO 405	History of Economic Thought
<i>At least 6 credit hours must be selected from the following:</i>	
ECO 300	Labor Economics
ECO 301	Economics of Labor Relations
ECO 302	Women in the Economy
ECO 304	Money and Banking
ECO 312	Urban Economics
ECO 350	Public Finance
ECO 355	The Economics of Energy and the Environment
ECO 360	Introduction to the Economic Analysis of Law
ECO 401	International Economics
ECO 403	Comparative Economic Systems
ECO 404	Economic Development
ECO 411	Regional Economic Analysis
ECO 488	Internship
ECO 495	Project
ECO 499	Independent Study
FIN 400	International Finance

FNE—Financial Economics Concentration (18 cr)

Required Courses (9 cr)

BUS 313	Managerial Accounting
ECO 304	Money and Banking
FIN 314	Corporation Finance
<i>At least 9 credit hours must be selected from the following:</i>	
ECO 488	Internship
ECO 495	Project
ECO 499	Independent Study
FIN 345	Estate Planning
FIN 370	Technical Analysis of Financial Markets
FIN 400	International Finance
FIN 414	Investment Management
FIN 415	Cases in Corporate Finance
FIN 416	Advanced Corporation Finance
FIN 417	Derivative Securities
FIN 418	Bond Markets

It is strongly recommended that students who plan to pursue a Ph.D. in economics also complete, as a minimum, MAT 161, MAT 162, and MAT 202.

All College Electives **9–42 cr**

Total Required Credit Hours **120 cr**

ELECTRICAL ENGINEERING TECHNOLOGY (ELECTRONICS) (B.S.)*

BS-SP ETE

**Technology Department
Bachelor of Science (HEGIS 0925)**

Technology Accreditation Commission/Accreditation Board for Engineering and Technology (TAC/ABET) Accredited**

Upton Hall 315 (716) 878-6017

Electrical engineering technologists who specialize in electronics are employed in the design, testing, fabrication, and application of solid-state circuits and systems (both digital and analog), communication systems, and control systems.

This includes consumer products, as well as industrial electronics and computer equipment.

**Evening study available.*

Intellectual Foundations Requirements¹ 39–66 cr

Major Requirements 48 cr

ENT 300	Analytical Methods for Technologists
ENT 301	Mechanics I
ENT 302	Mechanics II
ENT 331	Electrical Circuits and Devices I
ENT 341	Electronics
ENT 342	Networks
ENT 351	Analog Electronics
ENT 352	Digital Electronics
ENT 371	Electric Machines
ENT 431	Digital Systems I
ENT 432	Microprocessors
ENT 441	Communication Transmission Technology
ENT 442	RF and Microwave Communications
ENT 461	Control Systems I
ENT 462	Control Systems II
ENT 465	Electrical Design

Electives¹ 16–28 cr

¹The following accreditation requirements can be included in the Intellectual Foundations requirements and electives:

- CHE 101 or CHE 111
- CHE 102 or CHE 112
- CIS 151
- MAT 110 or MAT 124
- MAT 126 or MAT 161
- MAT 127 or MAT 162
- PHY 107 or PHY 111
- PHY 108 or PHY 112
- SPC 205

Total Required Credit Hours 124 cr

****Technology Accreditation Commission/Accreditation Board for Engineering and Technology Inc. (TAC/ABET), 111 Market Place, Suite 1050, Baltimore, MD 21202, (410) 347-7700.**

ELECTRICAL ENGINEERING TECHNOLOGY (POWER AND MACHINES) (B.S.)*

BS-SP ETP

Technology Department Bachelor of Science (HEGIS 0925)

Technology Accreditation Commission/Accreditation Board for Engineering and Technology (TAC/ABET) Accredited**

Upton Hall 315 (716) 878-6017

Electrical engineering technologists who specialize in power and machines are employed in the design, testing, manufacture, and application of electrical machinery, electrical power systems, and control systems. They are diversified individuals who can fill the many industrial positions that require a knowledge of both mechanical and electrical technology.

**Evening study available.*

Intellectual Foundations Requirements¹ 39–66 cr

Major Requirements 48 cr

ENT 300	Analytical Methods for Technologists
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ENT 301	Mechanics I
ENT 302	Mechanics II
ENT 331	Electrical Circuits and Devices I
ENT 341	Electronics
ENT 342	Networks
ENT 371	Electric Machines
ENT 431	Digital Systems I
ENT 432	Microprocessors
ENT 445	Power Electronics
ENT 461	Control Systems I
ENT 462	Control Systems II
ENT 465	Electrical Design
ENT 471	Power Systems I
ENT 472	Power Systems II
TEC 101	Technical Drawing

Electives¹ 6–33 cr

¹The following accreditation requirements can be included in the Intellectual Foundations requirements and electives:

- CHE 101 or CHE 111
- CHE 102 or CHE 112
- CIS 151
- MAT 110 or MAT 124
- MAT 126 or MAT 161
- MAT 127 or MAT 162
- PHY 107 or PHY 111
- PHY 108 or PHY 112
- SPC 205

Total Required Credit Hours 124 cr

****Technology Accreditation Commission/Accreditation Board for Engineering and Technology Inc. (TAC/ABET), 111 Market Place, Suite 1050, Baltimore, MD 21202, (410) 347-7700.**

ENGLISH PROGRAMS

See Individual Majors

- English
- English Education
- Television and Film Arts
- Writing

ENGLISH (B.A.)

BA-AH ENG

English Department Bachelor of Arts (HEGIS 1501)

Ketchum Hall 326 (716) 878-5416

The English B.A. program in literature offers a liberal arts English major, the enhancement of writing skills, and electives to satisfy Intellectual Foundations requirements.

Intellectual Foundations Requirements 39–66 cr

Total Required Credits in English 42 cr

(27 credits must be upper-division)

A. Required Courses (15 cr)

ENG 190 Introduction to Literary Interpretation

(Must be taken immediately after completion of basic communication requirement or within first year of transfer to English Department.)

Major Figure Select one course from the following:
 ENG 313 Milton
 or ENG 314 or Chaucer
 or ENG 315 or Shakespeare I

or ENG 316	or Shakespeare II
ENG 370	Foundations of Language
ENG 390	Literary Criticism and Theory
ENG 490	Senior Seminar

B. Area Courses in English (27 cr)

1. Three courses in British literature, at least one before 1800 and at least two before 1900. Pre-1800 options: ENG 210, ENG 313, ENG 314, ENG 315, ENG 316, ENG 415, ENG 416, ENG 417. Pre-1900 options: ENG 211, ENG 418, ENG 419, ENG 420, OR ENG 421. Other options: ENG 212, ENG 252, ENG 455. If students use ENG 313, ENG 314, ENG 315, or ENG 316 to satisfy their Major Figure requirement (see above), they cannot use it to satisfy their pre-1800 requirement.
2. Three courses in American literature, at least one prior to 1900, and ONLY one can be in a minority area. Pre-1900 options: ENG 220, ENG 441, ENG 442, ENG 445. Other options: ENG 221, ENG 443, ENG 444. Minority area options: ENG 240, ENG 241, ENG 353, ENG 354.
3. Two courses in world literature, one of which must be non-Western. Non-Western options: ENG 230, ENG 345, ENG 346. Other options: ENG 130, ENG 310, ENG 330, ENG 331, ENG 332, ENG 335, ENG 350, ENG 351. The following courses from the Modern and Classical Languages Department and the Humanities Program CAN apply to these areas with approval of English Department chair. Non-Western option: FRE 341. Other options: FRE 331, GER 337, GER 338, HUM 320, HUM 328, ITA 336, MCL 337, MCL 338.
4. One course in minority literature. Options: ENG 231, ENG 240, ENG 241, ENG 353, ENG 354. (If any of these courses are taken to fulfill an American literature requirement, they cannot count for the minority literature requirement.)

Note: Other courses, such as topics courses, when appropriate, can also fulfill major requirements. Discuss questions with adviser.

All College Electives	12–39 cr
Total Required Credit Hours	120 cr

ENGLISH EDUCATION (7–12, B.S.)

BS-AH ENS

English Department Bachelor of Science (HEGIS 1501.01)

National Council for Accreditation of Teacher Education (NCATE) Accredited
Ketchum Hall 326 (716) 878-5416

The English B.S. degree program in secondary education leads to a New York State Initial Certificate for teaching English in grades 7–12.

Freshmen and transfers with fewer than 30 credits or a GPA below 2.5 are admitted into the English major and may switch to English education upon meeting departmental requirements. Transfers with more than 30 credits and a

GPA of 2.5 or above can be admitted directly into English education.

Admission Requirements: 30 credits of college coursework; mandatory meeting with the English education coordinator; a 2.5 GPA and/or a strong indication of the professional disposition required to be a successful teacher. Evidence of professional dispositions can be indicated in a variety of ways: faculty recommendations, completed professional disposition forms, interview with English Education Committee, and/or evidence of relevant extracurricular activities.

Intellectual Foundations Requirements	39–66 cr
Total Required Credits in English (Literature and Language)	39 cr

(21 credits must be upper division)

A. Required Courses (15 credits)

ENG 190	Introduction to Literary Analysis and Interpretation (Must be taken immediately after completion of freshman composition requirement or within first year of transfer to English Department.)
ENG 317	Shakespeare for Future Teachers (Students can also take ENG 315 or ENG 316.)
ENG 354	Ethnic American Literatures
ENG 370	Foundations of Language
ENG 461	Young Adult Literature

B. Area Courses in Literature (24 credits)

1. Three courses in British Literature, at least one before 1800 and at least two before 1900. Pre-1800 options: ENG 210, ENG 313, ENG 314, ENG 315, ENG 316, ENG 415, ENG 416, ENG 417. If students use ENG 315 or ENG 316 to satisfy their Shakespeare requirement (see above), they cannot use it to satisfy their pre-1800 requirement. Pre-1900 options: ENG 211, ENG 418, ENG 419, ENG 420, ENG 421. Other options: ENG 252, ENG 455.
2. Three courses in American literature, at least one prior to 1900, and ONLY one can be in a minority area. Pre-1900 options: ENG 220, ENG 441, ENG 442, ENG 445. Other options: ENG 221, ENG 443, ENG 444. Minority area options: ENG 240, ENG 241, ENG 353.
3. One course in World literature. Options: ENG 130, ENG 131, ENG 230, ENG 310, ENG 330, ENG 331, ENG 332, ENG 335, ENG 345, ENG 346, ENG 350, ENG 351. The following courses from the Modern and Classical Languages Department and the Humanities Program can apply to these areas with approval of the English Department chair: FRE 331, FRE 341, GER 337, GER 338, HUM 320, HUM 328, ITA 336, MCL 337, MCL 338.
4. One elective: Students may choose from any of the literature courses listed in the categories above, and from the following:

ENG 151	Introduction to Poetry
ENG 231	Women in Literature
ENG 301W	Advanced Composition
ENG 305W	Creative Writing: Narrative

ENG 306W	Creative Writing: Poetry
ENG 356	Futuristic Fiction
ENG 380	History of the Printed Book
ENG 390	Literary Criticism and Theory

Or an appropriate 490 or 499 section.

Note: Other courses, such as topics courses, when appropriate, can fulfill major requirements. Discuss questions with adviser.

Total Required Credits in Professional Education **42 cr**

A. General Education Courses (15 cr)

EDU/EXE 375	Integration of Technology in Education
EDU 416	Teaching Literacy in Middle and Secondary Schools
EDF 303	Educational Psychology for Teachers of Adolescents
EDF 403	Historical and Philosophical Forces Influencing Secondary Education
EXE 100	Nature and Needs of Individuals with Special Needs

B. English Education (27 cr)

ENG 200	Field Experience in Secondary English Education
ENG 309	Teaching and Evaluating Writing
ENG 311	Methods of Teaching Language
ENG 463	Methods, Materials, and Professional Development for Teachers of English (6)
ENG 464	Student Teaching in Middle/Junior High School English (6) ¹
ENG 465	Student Teaching in Senior High School English (6) ¹

Students are encouraged to utilize their exceptional education course (EXE 100) to fulfill Intellectual Foundations requirements. Doing so will offer more flexibility to their program.

¹EDF 303, EDF 403, EDU 416, ENG 200, ENG 309, ENG 463 are prerequisites for student teaching (ENG 464 and ENG 465). Students must have 2.0 overall GPA, and a 2.75 GPA in English courses and in education courses to student teach.

All College Electives **0 cr**

Total Required Credit Hours **120 cr**

ENGLISH EDUCATION (7–12, PTCP)

PBC-AH ENS

English Department Postbaccalaureate Teacher Certification Program (HEGIS 1501.01)

National Council for Accreditation of Teacher Education (NCATE) Accredited
Ketchum Hall 326 (716) 878-5416

The English secondary education postbaccalaureate certification-only program prepares students to create productive learning environments, plan and execute effective instructional activities in the English language arts, monitor and assess student learning, address the special developmental needs of students at the middle-school level and in high school, and work effectively with learners having diverse backgrounds or special needs. It takes approximately three to four semesters to complete certification requirements at Buffalo State. Students in this program take both undergraduate- and graduate-level courses and will be billed appropriately for each type. Graduate credits can be applied to a master's degree at Buffalo State. For financial aid purposes, students will be considered fifth-year undergraduates eligible for undergraduate loans. To apply for the program, students should request an application from the Graduate Studies and Research Office, Cleveland Hall 204.

Admission Requirements: (1) Bachelor's degree in English with courses in Shakespeare, ethnic American literature, young adult literature, and world literature, or completion of an undergraduate degree in a related discipline with 36 credit hours of coursework in English, including courses in Shakespeare, ethnic American literature, young adult literature, and world literature. Applicants who do not meet these admission requirements can take courses at Buffalo State to become eligible to apply. (2) The study of a language other than English. Applicants must have completed two years of high school study in one foreign language or two semesters in college. Students not meeting these requirements must complete two semesters of a language other than English at Buffalo State. (Students must provide the department with copies of their high school transcripts to demonstrate the high school foreign-language requirement.) (3) Coursework in exceptional education and education technology (3 credits each) or demonstrated expertise in these areas. Students not meeting these requirements can take undergraduate or graduate courses at Buffalo State. (4) Minimum cumulative GPA of 2.75 in baccalaureate studies, as well as 2.75 GPA in the English major or English coursework.

Additional Requirements: To receive provisional teaching certification, students must pass the first two tests of the New York State Teacher Certification Exams, the Liberal Arts and Sciences Test, and the Assessment of Teaching Skills-Written. Registration bulletins for the exams can be obtained from the Teacher Certification Office, Caudell Hall 101. Students can obtain certifications in identifying child abuse by attending one of several workshops offered at Buffalo State.

Total Required Credit Hours in English and Professional Education **24 cr**

A. Undergraduate-level Coursework (15 cr)

EDF 403	Historical and Philosophical Forces Influencing Secondary Education
EDU 416	Teaching Literacy in Middle and Secondary Schools
ENG 311	Methods of Teaching Language
ENG 463	Methods, Materials, and Professional Development for Teachers of English (6)

B. Graduate-level Coursework (9 cr)

EDF 500	Multicultural Education
EDF 503 or EDF 529	Educational Psychology or Adolescent Psychology
EDF 692	The Teaching of Writing

Total Required Credit Hours in Student Teaching* **12 cr**

ENG 464	Student Teaching (Middle/Junior High)
or ENG 465	Student Teaching (High School)

**Students certified in another secondary area are exempt from this requirement.*

Total Required Credit Hours **36 cr**

EXCEPTIONAL EDUCATION (B.S.ED.)

BSED-ED EXE

Dual Certification Program: Teachers of Childhood Special Education and Childhood Education

Exceptional Education Department Bachelor of Science in Education (HEGIS 0808)

National Council for Accreditation of Teacher Education (NCATE) Accredited
Ketchum Hall 202 (716) 878-5317

Undergraduate majors in exceptional education study within a cross-categorical program focusing on the education of students who have a variety of regular and special instructional needs. Included are students in disability groups traditionally associated with mental retardation, physical/neurological disabilities, and learning and behavioral problems.

Graduates of the program typically obtain positions as teachers in resource rooms, self-contained classrooms, special schools, and residential facilities, or as consultant teachers in general education settings. Students who pursue initial certification in both childhood special education and childhood education are particularly well qualified to work with students with special needs in integrated education settings. Students in exceptional education complete coursework in elementary education to be recommended for initial certification as a teacher of childhood education (grades 1–6) in New York State, as well as being recommended for initial certification as a teacher of childhood special education in New York State.

Candidates for initial certification in special education must achieve passing scores on the Liberal Arts and Sciences Test (LAST), the Assessment of Teaching Skills-Written (ATS-W), Multi-Subject Content Specialty Test, and the Students with Disabilities Content Specialty Test of the New York State Teacher Certification Exam (NYSTCE).

Admission Requirements: Students must provide evidence of potential for success to be admitted into the exceptional education program. Entering freshmen who express an interest in exceptional education on their applications to Buffalo State will be assigned to premajor status (0301) and will be accepted into exceptional education (0299) after (1) successfully completing 12 credit hours at Buffalo State, (2) successfully completing ENG 101 and ENG 102, (3) earning at least two minimum grades of C in two Intellectual Foundations courses, (4) completing the mathematics basic skills competency requirement, and (5) earning a minimum cumulative GPA of 2.6.

Transfer students from other colleges who are not directly accepted into the exceptional education program by the Admissions Office will be accepted as exceptional education premajors (0301). They will be accepted as majors (0299) after (1) successfully completing 12 credit hours at Buffalo State; (2) waiving/successfully completing ENG 101 and 102; (3) earning at least two minimum grades of C in two cognate foundations courses, unless waived by an

associate of arts or associate of science degree; (4) passing the mathematics basic skills competency requirement, unless waived; and (5) earning a minimum cumulative GPA of 2.6.

Buffalo State students who are undeclared or wishing to change to an exceptional education major from another major will be accepted directly into the program (0299) after (1) successfully completing ENG 101 and 102, (2) earning at least two minimum grades of C in two cognate foundations courses, (3) passing the mathematics basic skills competency requirement, and (4) earning a minimum cumulative GPA of 2.6. Students who meet criteria 1, 2, and 3 above will be accepted as premajors (0301) if their cumulative GPA is between 2.5 and 2.59. They can be accepted into the major only after earning a cumulative GPA of 2.6.

Intellectual Foundations Requirements 39-66 cr

Total Required Credit Hours for Concentration 30 cr

A concentration can be in one of the following subjects: English, French, Italian, math, science, social studies, Spanish, or American studies.

Total Required Credit Hours for the Exceptional Education Major 65 cr

EDF 202	Child Development and Education
EDF 203	School and Society
EDF 302	Educational Psychology: Elementary Education
EDU 211	Introduction to Literacy
EDU 310	Teaching Social Studies in the Elementary School
EDU 311	Teaching Reading and Language Arts (6)
EDU 312	Teaching Math and Science (6)
EDU 404	Practicum in Elementary School Teaching (6)
EXE 100	Nature and Needs of Individuals with Special Needs
EXE 360	Foundations of Teaching Individuals with Disabilities
EXE 361	Field Experience in Teaching Individuals with Disabilities (1)
EXE 362	Behavior and Classroom Management
EXE 363	Field Experience in Behavior Management (1)
EXE 364	Educating Students with Severe Disabilities
EXE 365W	Evaluation and Assessment in Special Education
EXE 366	Field Experience Evaluation and Assessment in Special Education (1)
EXE 367W	Curriculum for Children with Mild Disabilities
EXE 368	Field Experience Curriculum for Children with Mild Disabilities (2)
EXE 375	Integration of Technology in Education
EXE 420	Practicum in Special Education (6)

Distribution Courses 24 cr

6 credit hours can be in each of the following areas: English, math, science, and social studies.

Total Required Credit Hours 167 cr

FASHION AND TEXTILE TECHNOLOGY (B.S.)

BS-SP FTT

Technology Department Bachelor of Science (HEGIS 1303)

Upton Hall 314 (716) 878-6018

The fashion and textile technology program at Buffalo State is the only baccalaureate program in Western New York that offers a variety of career preparation options for

the multifaceted, global fashion industry. Faculty expertise, continuous updating of technology-based curriculum, and industry partnerships contribute to the strength of the program. Class sizes are small, allowing individual attention. Students are encouraged to participate in extracurricular programmatic activities and regional and national competitions. Students have achieved top honors in national apparel (Bobbin Show) and textile design [Computer Integrated Textile Design Association (CITDA)] competitions. Internships are available in the Buffalo area and elsewhere in the United States. Affiliations with industry and professional organizations include the American Apparel Footwear Association (AAFA), which has endorsed the program; the American Association of Textiles Chemists and Colorists (AATC); the American Collegiate Retailing Association (ACRA); and the International Textiles Apparel Textile Association (ITAA).

The fashion and textile technology program is designed to prepare students for employment in the apparel, textile, and fashion industries. Employment opportunities exist in textiles, retail management, CAD design for textiles and apparel, apparel production, product development, textile testing/quality control, home furnishing, and government agencies. Examples of available positions include technicians in testing labs to set safety and performance standards, CAD (print, weave, knit, technical, or fashion graphic) apparel designers, trend and design specialists, private label costing and sourcing, CAM production, stylists, colorists, entrepreneurs, fashion/visual merchandisers, merchandiser representatives, fashion journalists, logistics specialists, U.S. customs agents, and theater costuming.

Graduates have been employed by most major apparel and textile companies, including, but not limited to, Abercrombie & Fitch, Calvin Klein, Dior, Ralph Lauren, Macy's, Fisher-Price, New Era, Eastman Machine Co., AccuMED Technologies Inc., GAP and GAP Kids, Hartmarx, Lord & Taylor, Bureau Veritas testing labs, Limited, Oxford Industries, Swavelle/Mill Creek, Tony Walker & Co., Tobin Home Fashions, Toppers, Tommy Hilfiger, Graco Home Fashions International, Park B. Smith, Appollo Patio Furniture Design, Target, Dillards, and Victoria's Secret.

Program Information: The curriculum for the fashion and textile technology program is divided into two parts: the required 21 credit hours of core coursework; and one or more specialized concentrations: fashion merchandising, apparel design, product development, or fashion/textile design. Individuals who have extensive work experience in the fashion field are encouraged to explore earning college credit by course challenge or experiential learning.

Fashion and textile technology majors may spend a year studying their specialty at the Fashion Institute of Technology (FIT) in New York City in a "three-one" program, earning a B.S. from Buffalo State and an associate's degree from FIT. North Carolina State University and other institutions have exchange programs. Study abroad opportunities are available in several countries.

Scholarships and Financial Aid: Students may apply for departmental scholarships. Financial assistance through the college is also available. The American Apparel and Foot-

wear Association endorses the program and offers \$5,000 in scholarships for majors every year.

Intellectual Foundations Requirements 39–66 cr

Total Required Credit Hours in Fashion Technology 51 cr

A. Required Core Courses (21 cr)

FTT 110	Survey of Fashion/Textile Industry
FTT 206	Introduction to Textiles
FTT 208	Introduction to Fashion Technologies
FTT 306	Textile Evaluation
FTT 310	Sewn Products Industry
FTT 358	Fashion Forecasting and Consumer Issues
FTT 450	Issues in Fashion/Textile Industry

B. Concentration Courses (30 cr)

Select one concentration:

Fashion Merchandising Concentration

BUS 320	Principles of Marketing
FTT 150	Introduction to Fashion Merchandising
FTT 250	Fashion Buying and Merchandising Principles
FTT 350	Fashion Merchandising Applications
FTT 455	Issues in Merchandising and Fashion Retailing
FTT 488	Internship

Select four courses from the following:

BUS 325	Human Resource Management
BUS 365	Entrepreneurship
COM 210	Introduction to Writing for the Media
COM 303*	Writing for News
FTT 109**	Fundamentals of Apparel Construction
FTT 308	Fashion CAD (Computer Aided Design)
FTT 355	Research in Fashion Merchandising
FTT 410	Advanced Product Development

Apparel Design Concentration¹

FTT 109	Fundamentals of Apparel Construction
FTT 224	Pattern Drafting and Grading For Industry
FTT/THA 303	Fashion Illustration
FTT 324	Industrial Apparel Assembly
FTT 326	Apparel Design I: Flat Pattern
FTT 327	Apparel Design II: Computerized Flat Pattern
FTT 328	Apparel Design III: Draping
FTT 451 or FTT 488	Senior Project or Internship

Select two courses from the following:

FTT 300	Knit Technology ¹
FTT 304	Pattern Development for Industry
FTT 308	Fashion CAD (Computer Aided Design)
FTT 410	Advanced Product Development
FTT 412	CAD: Apparel/Textile Design for Industry
FTT 413	CAD Weave for Industry

Product Development Concentration

FTT 109	Fundamentals of Apparel Construction
FTT 224	Pattern Drafting and Grading for Industry
FTT 300	Knit Technology I
FTT 324	Industrial Apparel Assembly
FTT 326	Apparel Design I: Flat Pattern
FTT 410	Advanced Product Development
FTT 451 or FTT 488	Senior Project or Internship

Select two courses from the following:

FTT 304	Pattern Development for Industry
FTT 308	Fashion CAD (Computer Aided Design)
FTT 327	Apparel Design II: Computerized Pattern Making
FTT 412	CAD: Apparel/Textile Design for Industry
FTT 413	CAD Weave for Industry

TEC 200	Total Quality Management
Fashion/Textile Design Technologies Concentration¹	
DES 242	Fibers I
FTT 303 or FAR 101	Fashion Illustration or Drawing I
FTT 304	Pattern Development for Industry
FTT 308	Fashion CAD (Computer Aided Design)
FTT 412	CAD: Apparel/Textile Design for Industry
FTT 413	CAD Weave for Industry
FTT 451 or FTT 488	Senior Project or Internship

Select one course from the following:

DES 215	Design History
FTT 348	History of Costume
FTT 349	History of Textiles
THA 332	Period Styles

Select two courses from the following:

AED 100	Essentials of Visual Arts
DES 307*	Color Theory
DES 342*	Fibers II
FAR 210*	Introduction to Painting
FTT 150	Introduction to Merchandising
FTT 200	Introduction to Hand Knitting
FTT 300	Knit Technology I
FTT 410*	Advanced Product Development

C. Recommended Electives

DES 101	Introduction to Design: Two Dimensional I
DES 102*	Introduction to Design: Two Dimensional II
DES 307*	Color Theory
FTT 109	Fundamentals of Apparel Construction
FTT 150	Introduction to Merchandising
FTT 200	Introduction to Hand Knitting
FTT 300	Knit Technology I/F S
FTT 304	Pattern Development for Industry
FTT 309	Technical Fashion Drawing
FTT 348	History of Costume
FTT 349	History of Textiles
FTT 355*	Research in Fashion Merchandising
FTT 410*	Advanced Product Development
FTT 412	CAD: Apparel/Textile Design for Industry
FTT 413	CAD Weave for Industry
FTT 452	Fashion Show Production
TEC 200	Total Quality Management

*Courses that may have additional prerequisites.

** Course is strongly recommended.

¹ A minor in design is strongly recommended.

All College Electives	6–33 cr
Total Required Credit Hours	120 cr

FIBERS (B.F.A.)

BFA-AH FIB

Design Department Bachelor of Fine Arts (HEGIS 1009)

National Association of Schools of Art and Design (NASAD) Accredited
Upton Hall 212 (716) 878-6032

The B.F.A. degree in fibers is a studio-intensive program of study focused on developing the aesthetic, conceptual, and technical skills necessary to foster creativity as students work toward developing their individual identity as

visual designers/artists. This degree offers students a specialized studio-oriented education in preparation for advanced or graduate studies, or for beginning careers as professional designers or artists.

Students begin with foundation courses in two-dimensional design, three-dimensional design, drawing, painting, art history, and design history, along with courses in ceramics, metals/jewelry, and wood. Major courses in fibers complete the requirements. Internship opportunities are available. The remaining credit hours are completed in required Intellectual Foundations courses and in other chosen studio courses.

Admission Requirements: There is no entrance portfolio review for admission. All students will enter the fibers major with a bachelor of science (BS-AH FIB) intent, and must complete a selection of foundation and major course(s) before a commit-to-major portfolio review for admission into the bachelor of fine arts program (BFA-AH FIB). Commit-to-major portfolio reviews are conducted by faculty and generally take place during the sophomore year. After passing the portfolio review, to continue in the B.F.A. degree program a 3.0 GPA must be maintained in the major. Transfer students are urged to submit their portfolios the semester before transfer in order to facilitate placement in departmental courses and/or for possible commit-to-major portfolio review. Please call the Design Department for additional information. As a condition of graduation, B.F.A students will be required to mount an individual exhibition of their work.

The Design Department reserves the right to retain students' work for official purposes, such as exhibitions, catalogs, teaching aids, or permanent collections, and to use images of the students and their work for publicity and recruitment. Students are expected to assume the costs of materials used in courses. Some studio courses may have an additional charge for materials used in class.

The Design Department may be in the process of curricular revision. Please refer to the college's Web site or the department for updated information.

Intellectual Foundations Requirements	39–66 cr
Total Required Credit Hours in Fibers	79 cr

A. Foundation Courses (37 cr)

DES 101	Introduction to Design 2D I
DES 103	Introduction to Design 3D I
DES 220	Ceramics I
DES 230	Introduction to Jewelry Making
DES 250	Wood Design I
DES 312W	History of Craft: Industrial Revolution to the Present
DES 414	Senior Seminar/Exhibition (4)
FAR 101	Drawing I
FAR 104	Themes and Issues in Contemporary Arts
FAR 210	Introductory Painting
FAR 250	Art History I
FAR 251	Art History II

B. Major Courses (30 cr)

DES 242	Fibers I
DES 338	Computer 3D Modeling and Rendering
DES 342	Fibers II
DES 344	Fibers: Junior Studio (3, 3)

DES 444	Fibers: Senior Studio (3, 3, 3)
FTT 304	Pattern Development for Industry
FTT 412	CAD: Apparel and Textile Design for Industry
OR	
FTT 413	CAD: Weave for Industry

C. Studio Electives Selected by Advisement (12 cr)

DES 320	Ceramics II
DES 330	Applied Jewelry Techniques
DES 350	Wood Design II
DES XXX	(DES 321, DES 331, DES 351)

All College Electives **0–2 cr**

Total Required Credit Hours **120 cr**

FIBERS (B.S.)

BS-AH FIB

Design Department Bachelor of Science (HEGIS 1009)

National Association of Schools of Art and Design (NASAD) Accredited
Upton Hall 212 (716) 878-6032

The B.S. degree in fibers is a studio degree with a strong academic component. This degree offers students a broadly grounded educational experience as a basis for beginning careers as professional designers or artists.

Students begin with foundation courses in two-dimensional design, three-dimensional design, drawing, painting, and design history, along with courses in ceramics, metals/jewelry, and wood. Major courses in fibers focus on developing the aesthetic, conceptual, and technical skills necessary to foster creativity as students work toward developing their individual identity as visual designers/artists. Internship opportunities are available. The remaining credit hours are completed in required Intellectual Foundations courses and in other academic subjects of the student's choosing. The academic component offers opportunities to gain a broader base of knowledge, as well as knowledge in other disciplines related to the major field of study.

Admission Requirements: There is no entrance portfolio review for admission. All students will enter the fibers major with a bachelor of science (BS-AH FIB) intent, and complete a selection of foundation and major course(s) before a commit-to-major portfolio review for continuation in the B.S. degree program. Commit-to-major portfolio reviews are conducted by faculty and generally take place during the sophomore year. After passing the portfolio review, to continue in the B.S. degree program a 2.5 GPA must be maintained in the major. Transfer students are urged to submit their portfolios the semester before transfer in order to facilitate placement in departmental courses and/or for possible commit-to-major portfolio review. Please call the Design Department for additional information.

The Design Department reserves the right to retain students' work for official purposes, such as exhibitions, catalogs, teaching aids, or permanent collections, and to use images of the students and their work for publicity and recruitment. Students are expected to assume the costs of

materials used in courses. Some studio courses may have an additional charge for materials used in class.

Intellectual Foundations Requirements **39–66 cr**

Total Required Credit Hours in Fibers **45 cr**

A. Foundation Courses (24 cr)

DES 101	Introduction to Design 2D I
DES 103	Introduction to Design 3D I
DES 220	Ceramics I
DES 230	Introduction to Jewelry Making
DES 250	Wood Design I
DES 312W	History of Craft: Industrial Revolution to the Present
FAR 101	Drawing I
FAR 104	Themes and Issues in Contemporary Arts

B. Major Concentrations (21 cr)

DES 242	Fibers I
DES 342	Fibers II
DES 344	Fibers: Junior Studio (3, 3)
DES 444	Fibers: Senior Studio (3,3)
FTT 304	Print Rendering for Industry

All College Electives **9–36 cr**

Total Required Credit Hours **120 cr**

FINE ARTS

See Individual Majors

- Art
- Art History
- Painting
- Photography
- Printmaking
- Sculpture

FORENSIC CHEMISTRY (B.S.)

BS-NS FRC

Chemistry Department Bachelor of Science (HEGIS 1999.20)

Science Building 313 (716) 878-5204

Forensic chemistry is a program of professional study whose graduates are prepared to assume entry-level positions as forensic chemists in police laboratories at the local, state, or federal level.

Admission Requirements: Prospective majors must complete CHE 111 and CHE 112 (or the equivalent) with minimum grades of C before applying to the program. Students who have not yet met this requirement will be accepted into the pre-forensic chemistry program (FRCW) and will be formally admitted to the major upon completion of the previously stated requirement.

Admission Recommendations: Transfer students from two-year colleges should have earned credit for courses equivalent to CHE 111, CHE 112, CHE 201, CHE 202, CHE 203, CHE 204, FOR 122, MAT 161, and PHY 111 to avoid possible delays in the completion of the degree program. Transfer students must complete a minimum of 10 credit hours in chemistry at Buffalo State. Chemistry courses

taken elsewhere may be substituted for similar courses at Buffalo State only if they have the same equivalent prerequisite. Chemistry courses not meeting this criterion may be transferred as elective credit.

Intellectual Foundations Requirements		33–45 cr
Total Required Credit Hours in Chemistry		32 cr
CHE 111	Fundamentals of Chemistry I (4)	
CHE 112	Fundamentals of Chemistry II (4)	
CHE 201	Organic Chemistry II	
CHE 202	Organic Chemistry II	
CHE 203	Organic Chemistry Laboratories I (1)	
CHE 204	Organic Chemistry Laboratory II (1)	
CHE 301	Analytical Chemistry (4)	
CHE 331	Principles of Physical Chemistry	
CHE 403	Instrumental Analysis (4)	
CHE 470	Biochemistry I	
CHE 471	Biochemical Techniques (2)	
Total Required Credit Hours in Forensic Science		15 cr
FOR 122	Scientific Criminal Evidence Analysis	
FOR 312	Chemistry and Criminalistics	
FOR 412	Internship in Criminalistics	
FOR 414	Forensic Chemistry Laboratory (4)	
FOR 416	Optical Microscopy (2)	
Total Required Credit Hours in Biology		8 cr
BIO 211	Introduction to Cell Biology and Genetics (4)	
BIO 303	Genetics (4)	
or		
BIO 350	Genes in Populations (4)	
Upper Division Elective Courses in the Major		7–9 cr
<i>Select at least 7 credits from the following:</i>		
ANT 324	The Human Skeleton	
ANT 325	Forensic Anthropology	
BIO 305	Molecular Biology (4)	
BIO 308	Human Anatomy and Physiology	
BIO 309	Laboratory in Human Anatomy and Physiology (1)	
BIO 314	Advanced Cell Biology (4)	
BIO 316	General Microbiology (4)	
BIO 450	Recombinant DNA Technology (4)	
CHE 300	Chemistry and Medications	
CHE 310	Literature in Chemistry (1)	
CHE 360	Introduction to Inorganic Chemistry	
CHE 406	Analytical Toxicology (2)	
CHE 472	Biochemistry II	
GES 360	Forensic Geoscience	
PSY 375	Forensic Psychology	
FOR 412	Internship in Criminalistics (2nd)	
or		
FOR 495	Special Project in Forensics	
Total Required Credit Hours in Other Fields		23 cr
MAT 161	Calculus I (4)	
MAT 162	Calculus II (4)	
MAT 163	Using Technology to Explore Calculus I (1)	
MAT 164	Using technology to Explore Calculus II (1)	
MAT 311	Introductory Probability and Statistics	
PHY 111	University Physics I (5)	
PHY 112	University Physics II (5)	
All College Electives		0–2 cr
Total Required Credit Hours		120 cr

FRENCH EDUCATION (7–12, B.S.)

BS-AH FRS

Modern and Classical Languages Department Bachelor of Science (HEGIS 1102.01)

American Council on the Teaching of Foreign Languages-
National Council for Accreditation of Teacher Education
(ACTFL-NCATE <http://www.ncate.org>) Accredited
Bishop Hall 122 (716) 878-5414

The French secondary education program enables students to earn provisional certification to teach French in New York State secondary schools. Students develop French language skills, study the structure and sound system of French, expand their knowledge of the literature and culture of French-speaking peoples, and explore the teaching and learning of foreign languages in school settings. The curriculum includes a series of field experiences. All students desiring this program may be admitted into the B.A. Language and Literature program, which functions as a pre-major for the B.S. program. Prospective students who apply for admission to the B.S. program must complete a Change of Major Form and complete two brief entrance essays – one in English and the other in French – in the Modern and Classical Languages Department office (Bishop 122) after they have successfully completed 6 credits beyond FRE302. No student will be admitted with less than a 2.5 overall GPA, or with less than a 2.5 GPA in French courses. Students must have a minimum GPA of 2.5 (overall and in French), to enroll in the teaching practicum. Also, students must complete an ACTFL-approved Oral Proficiency Interview (OPI) in order to demonstrate Advanced-Low Proficiency in French.

Intellectual Foundations Requirements **39–66 cr**

Total Required Credit Hours in French **36 cr**

A. Required Courses (27 cr)

FRE 301	French Conversation and Composition
FRE 302	French Conversation and Composition
FRE 305	Phonetics and Orthography
FRE 306	Literature and Culture of France from Pre-History to Renaissance
FRE 307,	Literature and Culture of France from Renaissance to Revolution
FRE 308	Literature and Culture of France in the Nineteenth Century
FRE 309	Literature and Culture of France in the Twentieth Century
FRE 415	Advanced Grammar and Composition
FRE 416	Advanced Conversation and Composition

B. Electives (9 cr)

<i>Select three courses from the following:</i>	
FRE 303	Translation
FRE 331	French Literature in Translation (if all assignments are completed in French)
FRE 341	Francophone Literature in Translation (if taken in French)
FRE 411	Studies in French Poetry
FRE 412	Studies in the French Novel
FRE 413	Studies in French Theater
FRE 417	Business French

FRE 496	Seminar I	
FRE 497	Seminar II	
Total Required Credit Hours in Professional Education		24 cr
EDF 303	Educational Psychology	
EDF 403	Historical and Philosophical Forces Influencing Secondary Education	
EDU 416	Teaching Literacy in Middle and Secondary Schools	
EXE 372	Foundations of Teaching Secondary Students with Disabilities	
FLE 240	Introduction to Linguistics	
FLE 300	Introduction to the Foreign Language Classroom	
FLE 340	Second Language Acquisition and Literacy	
FLE 401	Teaching Foreign Language in Middle and High Schools	
Total Required Credit Hours in Student Teaching		12 cr
FLE 407/ SED 407	Student Teaching of Foreign Languages in the Middle/Junior High School (6)	
FLE 408/ SED 408	Student Teaching of Foreign Languages in the High School (6)	
All College Electives		0–6 cr
Total Required Credit Hours		120 cr

FRENCH EDUCATION (7–12, PTCP)

PBC-AH FRE

Modern and Classical Languages Department Postbaccalaureate Teacher Certification Program (HEGIS 1102.01)

National Council for Accreditation of Teacher Education (NCATE) Accredited
Bishop Hall 122 (716) 878-5414

The French (7-12) postbaccalaureate teacher certification program leads to eligibility for New York State initial certification to teach French in grades 7-12. This program is designed for students who have earned a baccalaureate degree in French or a related field from an accredited college or university and intend to complete the coursework required for New York State certification to teach French in middle or high schools.

The program supplies the background knowledge necessary for teachers to implement the New York State Learning Standards for Languages Other Than English (LOTE) 7-12. It also meets the standards set by national professional organizations such as the American Council of Teachers of Foreign Languages (ACTFL) and the National Council for Accreditation of Teacher Education (NCATE).

Students are responsible for any additional certification requirements, including the Liberal Arts and Sciences Test (LAST), the Assessment of Teaching Skills--Written (ATS-W), Content Specialty Test (CST) in French, Oral Proficiency Interview (OPI), and all seminars required for initial certification. It takes three to four semesters of coursework, field experiences, and student teaching to complete certification requirements.

To student teach, a student must have achieved a minimum GPA of 2.75 in French coursework and overall, and must have earned a minimum grade of C in FLE300, FLE340 and FLE401. Also, the student must complete an ACTFL-Approved Oral Proficiency Interview (OPI) in order to

demonstrate Advanced-Low Proficiency in French. If Advanced-Low is not achieved, an additional upper-level French course, chosen in consultation with the student's advisor, must be successfully completed.

After successfully completing the teacher certification program and passing all required tests, students are eligible to apply for New York State Initial Certification through the Teacher Certification Office, Caudell Hall, 112 Buffalo State College. No degree or certificate is awarded by Buffalo State College.

Financial Assistance: For financial aid purposes, students who are fully admitted into the program are considered fifth-year undergraduates, eligible for undergraduate loans, when applicable.

Admission Requirements.*

1. A bachelor's degree from an accredited college or university with a minimum cumulative grade point average (GPA) of 2.75 (4.0 scale), a major in French language, literature, culture (or a closely related discipline with a minimum of 30 hours in French).
2. A minimum GPA of 2.75 in French coursework.
3. A completed application form submitted to the Graduate Office at Buffalo State College.
4. Official transcripts from all previous college/university work.**
5. A personal interview with the program coordinator, department chair, or other designated official.
6. Successful completion of two written essays (one English, one French), administered by the department as part of the interview process.

*Applicants who do not meet these minimum requirements should contact an Modern and Classical Languages advisor.

**Students who received degrees from institutions outside the United States must have their transcripts evaluated by a recognized evaluation service.

Program Requirements

Residency Requirements * **		6 cr
FRE 305	Phonetics and Orthography	
FRE 306	Literature & Culture of France from Prehistory to the Renaissance	
FRE 307,	Literature & Culture of France from Renaissance to Revolution	
FRE 308	Literature & Culture of France in the Nineteenth Century	
FRE 309	Literature and Culture of France in the Twentieth Century	
FRE 410	French Poetry from Baudelaire to Present	
FRE 411	Studies in French Poetry	
FRE 412	Studies in the French Novel	
FRE 413	Studies in French Theater	
FRE 415	Advanced Grammar and Composition	
FRE 416	Advanced Conversation and Composition	
FRE 417	Business French	
FRE 496	Seminar I	
FRE 497	Seminar II	

* All students required to take a minimum of 6 credit hours above the 302 level

** Students with undergraduate degrees are eligible, with instructor permission, to enroll in graduate level language and literature courses at Buffalo State College

Professional Education Courses **24 cr**

EDF 303	Educational Psychology
EDF 403	Historical and Philosophical Forces Influencing Secondary Education
EDU 416	Teaching Literacy in Middle and Secondary Schools
EXE 372	Foundations of Teaching Secondary Students with Disabilities
FLE 240	Introduction to Linguistics
FLE 300	Introduction to the Foreign Language Classroom
FLE 340	Second Language Acquisition and Literacy
FLE 401	Teaching Foreign Language in Middle and High Schools

Total Required Credit Hours in Student Teaching **12 cr**

FLE 407/ SED 407	Student Teaching of Foreign Languages in the Middle/Junior High School (6)
FLE 408/ SED 408	Student Teaching of Foreign Languages in the High School (6)

Total Required Credit Hours **42 cr**

Total Required Credit Hours **42 cr**

FRENCH LANGUAGE AND LITERATURE (B.A.)

BA-AH FRE

Modern and Classical Languages Department Bachelor of Arts (HEGIS 1102)

Bishop Hall 122 (716) 878-5414

This program develops the ability to communicate in French, introduces French and Francophone literary masterpieces, and explores significant aspects of French and Francophone culture. Students are encouraged to study abroad in an approved program. This program also serves as a premajor for students who wish to enter the Bachelor of Science in French Education (7–12) program.

Intellectual Foundations Requirements **39–66 cr**

Total Required Credit Hours in French **36 cr**

A. Required Courses (18 cr)

FRE 301	French Conversation and Composition
FRE 302	French Conversation and Composition
FRE 306	Literature & Culture of France Pre-History to Renaissance
FRE 307,	Literature & Culture of France Renaissance to Revolution
FRE 308	Literature & Culture of France in the Nineteenth Century
FRE 309	Literature and Culture of France in the Twentieth Century

B. Electives Selected by Advisement (18 cr)

FRE 303	Translation
FRE 305	Phonetics and Orthography
FRE 331	French Literature in Translation ¹
FRE 341	Francophone Literature in Translation ¹

FRE 411	Studies in French Poetry
FRE 412	Studies in the French Novel
FRE 413	Studies in French Theater
FRE 415	Advanced Grammar and Composition
FRE 416	Advanced Conversation and Composition
FRE 417	Business French
FRE 496	Seminar I
FRE 497	Seminar II

¹ These courses may be taken as a part of the French major only with the instructor's permission and the chair's permission, and only if all the work for the course is done in French.

All College Electives **18–45 cr**

Total Required Credit Hours **120 cr**

GEOGRAPHY (B.A.)

BA-NS GEG

Geography and Planning Department Bachelor of Arts (HEGIS 2206)

Classroom Building A213 (716) 878-6216

Geography provides students with a basic foundation of the discipline while allowing them to focus on one of two major geographic subject areas. The physical geography concentration emphasizes the interaction of humans with the natural environment; the human geography concentration emphasizes social, cultural, and urban patterns.

Intellectual Foundations Requirements **39–66 cr**

Total Required Credit Hours in Geography **39 cr**

A. Required Courses (24 cr)

GEG 101	World Natural Environments
GEG 102	Human Geography
GEG 199	Computers in the Social Sciences
GEG/PLN 325	Remote Sensing and Mapping
GEG/PLN 390	Quantitative Methods in Geography and Planning
GEG/PLN 430	Senior Thesis

Select one course from the following:

GEG 359	Arctic Geography
GEG 360	Geography of Asia
GEG 362	Geography of the United States and Canada
GEG 364	Geography of Europe

Select one course from the following:

PSC 203	Political Analysis
SOC 300	Methods in Social Research ¹

¹ Prerequisites for SOC 300 are waived by the Sociology Department for geography majors. In addition, geography majors are required to select one of two concentrations to complete an additional 15 credit hours of geography.

B. Physical Geography Concentration Electives (15 cr)

Selected by advisement

GEG 303	Global Climatology
GEG 307	Conservation and Environmental Management
GEG 365	Soil Science and Management
GEG 375	Principles of Hydrology
GEG 382	Weather Forecasting
GEG 383	Severe and Unusual Weather
GEG 384	Atmospheric Science
GEG 385	Paleoclimatology
GEG 386	Applied Climatology
GEG 421	Watershed Analysis
GEG 423	Biogeography

GEG 425	Fundamentals of GIS
GEG 428	Environmental Assessment and Planning Applications in GIS
GEG 478	Global Change
GEG 480	Air Pollution Modeling
GEG 485	Interactive and Web-Based Mapping
GEG 488	Internship
GES 307	Geomorphology
GES 452	Hydrogeology
GEG 241/ GES 241	Meteorology
PLN370	Water Resource Planning

C. Human Geography Concentration Electives (15 cr)

Selected by advisement

GEG 305	Principles of Economic Geography
GEG 307	Conservation and Environmental Management
GEG 309	Urban Geography
GEG/PLN 310	Urban Transportation Planning
GEG/PLN 330	Land Resource Analysis and Planning
GEG 405	Urban Analysis Using GIS
GEG 409	Industrial Geography
GEG 416	Geographies of Development
GEG 419	Globalization, Technology, Competition and Service Economies
GEG 425	Fundamentals of GIS
GEG 427	Corporate Applications in GIS
GEG 485	Interactive and Web-Base Mapping

All College Electives 18–42 cr

Total Required Credit Hours 120 cr

GEOLOGY (B.A.)

BA-NS GEO

Earth Sciences and Science Education Department Bachelor of Arts (HEGIS 1914)

Science Building 271 (716) 878-6731

The geology program offers students a variety of opportunities to investigate the materials that constitute and the processes that shape the earth. Classroom, laboratory, and field work provide a base for careers related to energy, the environment, and the exploration for and production of petroleum and mineral resources. Graduates of the program are prepared to enter these fields and/or pursue advanced study in the geosciences.

Coursework in calculus and physics is strongly recommended, particularly for students contemplating graduate study. The recommended courses, or higher, are MAT 126, MAT 127, PHY 111, and PHY 112. Each student should choose the appropriate courses by advisement, beginning with entry into the major.

Student majors are strongly encouraged to pursue independent research under faculty supervision or an internship experience. Students may find additional information about undergraduate research possibilities from faculty and by visiting the Office of Undergraduate Research Web site at www.buffalostate.edu/undergraduateresearch.

A departmental honors program also is available. Students should contact the department for additional information.

Intellectual Foundations Requirements 39–66 cr

Total Required Credit Hours in Geology 42 cr

A. Required Courses (33 cr)

GES 101	Introductory Geology
GES 102	Historical Geology
GES 103	Introductory Geology Laboratory (1)
GES 300	Sedimentology
GES 301	Stratigraphy
GES 302	Invertebrate Paleontology (4)
GES 303	Mineralogy and Petrology (4)
GES 408	Structural Geology (4)
Two semesters of chemistry: CHE 111 and CHE 112 or equivalent (8)	

B. Electives Selected by Advisement (9 cr)

Credit will be allowed for any course in geology (GES courses).

All College Electives 12–39 cr

Total Required Credit Hours 120 cr

HEALTH AND WELLNESS (B.S.)

BS-NS HEW

Health and Wellness Department Bachelor of Science (HEGIS 0837)

Houston Gymnasium (716) 878-6501

The health and wellness program prepares undergraduate students to assume roles as health/wellness professionals in private business and industry, community organizations, and healthcare environments. Students will be able to administer effective health/wellness programs in organizations that advance preventive medicine and positive lifestyle habits. Students also may participate in the Health and Wellness Student Association; which educates students through lectures, guest speakers, attending conferences, and field trips on ways to achieve a healthier lifestyle.

Admission Requirements: Applicants must have a minimum cumulative GPA of 2.5.

Intellectual Foundations Requirements 39–66 cr

Total Required Credit Hours in Health and Wellness 42 cr

A. Required Courses (33 cr)

HEW 204	Personal Health
HEW 225	Introduction to Disease Prevention
HEW 279	Physical Adaptation to Exercise ¹
HEW 302	Exercise Principles and Techniques
HEW 305	Community Health and Wellness
HEW 307	Exercise, Fitness, and Nutrition
HEW 310	Health Standards and Emergency Care ¹
HEW 312W	Methods and Materials in Health and Wellness
HEW 401	Assessment and Evaluation in Health and Wellness
HEW 411W	Critical Issues in Health and Wellness
HEW 412W	Health and Wellness Programs

¹ BIO 100 is a prerequisite for HEW 279 and HEW 310.

B. Electives (9 cr)

HPR 301	Kinesiology
HEW 308	Women's Health Issues
HEW 320	Psychoactive Drugs and Health
HEW 345	Wellness, Fitness, and Aging
HEW 425	Alcohol Problems
HEW 488	Internship (6 cr or 9 cr)

All College Electives 12–39 cr

Total Required Credit Hours **120 cr**

HISTORY (B.A.)

BA-NS HIS

History and Social Studies Education Department Bachelor of Arts (HEGIS 2205)

Classroom Building C205 (716) 878-5412

The program ensures both a knowledge and an understanding of the foundations of the development of humankind, stimulates thinking about interaction of ideas, develops facility with written and verbal expression, increases confidence in articulating ideas, and encourages the critical awareness of self so important to an educated individual. Special emphasis is placed on the development of the abilities to analyze, synthesize, and communicate.

A departmental honors program is also available. Students should contact the department for additional information.

Intellectual Foundations Requirements **39–66 cr**

Total Required Credit Hours in History **39 cr**

American History (6 cr)

HIS 106	History of American Life I
HIS 107	History of American Life II

European History (6 cr)

Select two courses from the following:

HIS 115	Foundations of Western Civilization
HIS 116	Europe Since 1500
HIS 117	Twentieth-Century Europe
	World History (6 cr)

Two electives in Asian, African, Middle Eastern, or Latin American history (6 cr)

Research and Writing Seminar (3 cr)

HIS 300W	Research and Writing Seminar
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Historiography Seminar (3 cr)

HIS 490W	Senior Seminar in Historiography
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Upper-Division History Electives (15 cr)

Three 300-level history courses.
Two 400-level history courses.

All College Electives 15–42 cr

Total Credit Hours **120 cr**

HOSPITALITY ADMINISTRATION (B.S.)

BS-SP HTR

Hospitality and Tourism Department Bachelor of Science (HEGIS 1307)

Accreditation Commission for Programs in Hospitality Administration (ACPHA) Accredited
Caudell Hall 207 (716) 878-5913

The hospitality and tourism curriculum prepares graduates for management positions in various aspects of the hospitality industry. Career opportunities exist for managers in restaurants, hotels, clubs, casino and gaming, resorts, catering operations, residential and health care, school and university food service, sales, production, travel and tourism, and other components of industry/business.

The department's mission is to educate and develop proven hospitality professionals by integrating a strong core curriculum with a deliberate emphasis on experiential learning. The department is defined by its extraordinary focus on student development, and is firmly grounded in producing graduates that excel in communication, teamwork, professionalism, and problem solving.

Admission Requirements: Transfer or undeclared students desiring to major in this program must have a minimum GPA of 2.0 in previous college credits.

Intellectual Foundations Requirements **39–66 cr**

Total Required Credit Hours in Hospitality Administration **42 cr**

A. Required Courses (30 cr)

HTR 110	Introduction to Hospitality and Tourism
HTR 300	Food and Beverage Management (4)
HTR 350	Computer Applications for Hospitality
HTR 370	Cost Controls in Hospitality
HTR 380	Advanced Training in Hospitality
HTR 390	Strategic Marketing in Hospitality
HTR 455	Advanced Human Resource Management in Hospitality
HTR 470	Legal Issues in Hospitality
HTR 480	Practicum in Hospitality Operations (4)
HTR 485	Seminar in Hospitality (1)

B. Concentration Courses (12 cr)

Restaurant and Institutional Management Concentration

HTR 100	Multicultural Foods
HTR 200	Sanitation and Safety in Food Service
HTR 361W	Principles of Management in Food Service
NFS 334	Contemporary Nutrition

Required: 400 hours of hospitality-related industry experience.

Hotel Tourism Management Concentration

HTR 368	Hotel Operations
HTR 408	Conventions, Meetings, and Expositions Management
HTR 418	Tourism Management
HTR 468	Hotel Management

Required: 400 hours of hospitality-related industry experience.

Electives in Hospitality Administration

HTR 100	Multicultural Foods
HTR 200	Sanitation and Safety in Food Service
HTR 305	Advanced Food
HTR 318	Cultural Tourism
HTR 320	Alcohol Management Issues (2)
HTR 330	Fundamentals of Bakeshop Production
HTR 335	Wine Essentials

HTR 340	Industry Experience
HTR 348	Tourism and World Travel
HTR 361	Principles of Management in Food Service
HTR 363	Quantity Food Production
HTR 364	Dining Room Service
HTR 365	Menu Planning
HTR 368	Hotel Operations
HTR 375	Events Management
HTR 385	Private Club Management
HTR 400	Catering Management
HTR 408	Convention and Meeting Management
HTR 418	Tourism Management
HTR 420	Franchising and Entrepreneurship in the Hospitality Industry
HTR 430	Management and Marketing of Services
HTR 460	Concepts in Strategic Management
HTR 468	Hotel Management
HTR 475	Research Methods in Hospitality

All College Electives	12-39 cr
Total Required Credit Hours	120 cr

INDIVIDUALIZED STUDIES (B.S.)*

BS-UC INS

Continuing Professional Studies Bachelor of Science (HEGIS 4901)

Cleveland Hall 210 (716) 878-5907

The individualized studies program provides students with a vehicle to design their own unique programs of study. The program allows students to investigate a theme, an issue, a problem, or a particular career interest and to formulate a specific curriculum accordingly. Individualized studies provides appreciable academic advisement so that students can integrate and synthesize several academic fields.

The program offers students a choice between two distinct options. Students may combine any two compatible minor programs (Track I) or develop their own programs of study by drawing upon the offerings of two to four different academic fields (Track II). Students in both tracks complete all collegewide degree expectations: the Intellectual Foundations requirements and unrestricted electives. Both tracks require a senior-level integrating research project as a culminating degree experience.

Since individualized studies is particularly attractive to working adult students, it recognizes and embraces college-level experiential learning generated outside the formal classroom.

Admission Requirements: Entering students must have a minimum 2.3 GPA and must expect to complete a minimum of 36 credit hours under individualized studies advisement once accepted into the major.

*Evening study available.

Intellectual Foundations Requirements	39-66 cr
Total Required Credit Hours in Individualized Studies	39-45 cr

Track I: Two minors
OR

Track II: Two to four academic fields, maximum of six courses per discipline
Culminating Project 495 (3 cr)

All College Electives	9-42 cr
Total Required Credit Hours	120 cr

INDUSTRIAL TECHNOLOGY (B.S.)*

BS-SP TEC

Technology Department Bachelor of Science (HEGIS 0925)

Accreditation: Association of Technology Management and Applied Engineering (ATMAE.org)
<http://www.ATMAE.org>
Upton Hall 314 (716) 878-6018

The industrial technology program, through its two concentrations, provides students with the opportunity to develop a specialty within a broader framework of technical operations knowledge. By selecting the manufacturing concentration, the student specializes in direct manufacturing support of a technical or managerial nature. Knowledge of management principles, physical sciences, technology of industry, and liberal arts is employed to optimize manufacturing processes, materials, and personnel. The quality concentration allows the student to develop the ability to assist the product or service organization in obtaining the maximum level of quality performance in a lean environment. This concentration requires a professional internship that places the student in a specialty position in a local organization as a culminating activity.

Program graduates have filled positions as industrial engineers, manufacturing engineers, quality-assurance specialists, directors of technology, production/lean operations managers, corporate trainers, cost estimators, purchasing managers, first line supervisors, supply chain managers, distribution supervisors, safety engineers, drafting specialists, technical writers, web masters, and technical sales and marketing specialists.

Admission Requirements: This program accepts freshmen, sophomores, and transfer students.

*Evening study available.

Intellectual Foundations Requirements	39-66 cr
Total Required Credit Hours in Technology/Core Courses	24 cr

TEC 101	Technical Drawing
TEC 201	Materials Processing
TEC 311	Materials Science and Testing
TEC 312	Materials Management
TEC 313	Statistical Quality Control
TEC 314	Electromechanics
TEC 402	Ergonomics
TEC 403	Systems Analysis

Total Required Credit Hours in Concentration	18 cr
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A. Manufacturing Concentration¹

TEC 400/ BUS 320	Marketing
TEC 302	CAD/CAM
TEC 351	Energy Systems

TEC 404W	Industrial Systems Applications
TEC 405	Manufacturing Technology
TEC 465	Safety Management

B. Quality Concentration¹

COM 307	Communication and Group Processes
MAT 311	Introductory Probability and Statistics
TEC 200W	Total Quality Management
TEC 321	Measurement Systems
TEC 323	Quality Improvement Through Design of Experiments
TEC 488	Quality Internship

¹Student selects either the manufacturing or quality concentration.

Total Required Credit Hours in Other Fields for Accreditation **12 cr**

Core Math (3)	
Core Chemistry (3)	
MAT 124	Pre-Calculus Mathematics
PHY 107	General Physics I

All College Electives **0–27 cr**

Total Required Credit Hours **120 cr**

INTERIOR DESIGN (B.F.A.)

BFA-AH INT

Interior Design Department Bachelor of Fine Arts (HEGIS 1009)

Council for Interior Design Accreditation (CIDA) Accredited

National Association of Schools of Art and Design (NASAD) Accredited

Upton Hall 212 (716) 878-5252

The interior design B.F.A. degree offers students a specialized studio-oriented education in preparation for advanced or graduate studies, or for beginning careers as professional interior designers. Students gain a thorough knowledge of design processes and technical skills, including computer-aided design and traditional drafting and rendering. Construction methods, lighting design, materials specification, and color use are emphasized to support specializations within the major. Studios offer design exploration in spatial experimentation, residential design, retail design, public buildings, office planning, and industry standards for sustainable design principles, and culminates in the Undergraduate Thesis Project.

Interior design graduates are prepared for careers in independent practice and employment in interior design and architectural firms, institutions, corporations, and other settings. Following completion of this program, plus two years interior design work experience, students are eligible to apply and sit for the professional, nationally recognized NCIDQ (National Council for Interior Design Qualification) licensing exam. They may then apply for a "Certified Interior Designer" designation and the right to practice in New York State.

The Interior Design Department is committed to the intellectual, personal, and professional growth of the students. Through varied and increasingly complex coursework, coupled with a strong community-based project component, the students and faculty have and will continue to

enhance the region in terms of residential, health care, and commercial designs, as well as culturally sensitive and public-interest projects. These projects connect the students, faculty, and community in a dynamic relationship, inspire students to expand their horizons, and create life-long learners. The program is rigorous and comprehensive, resulting in professional and innovative designers actively sought after by regional and national employers.

Requirements for Acceptance to Major:

1. Successful completion of the Skills Competency Exam following IDE 151, IDE 152, and IDE 153. The one-day exam evaluates entry-level ability to visualize, design, and communicate spatial solutions to a simple problem through scaled drafting, rendering, and model-building.
2. A minimum cumulative GPA of 2.6 after the freshman year.
3. Transfer Students: Acceptance to the major is determined after reviewing a portfolio of work during an interview with the chair of the Interior Design Department; transcripts are evaluated on a case-by-case basis.

Intellectual Foundations Requirements **39–66 cr**

Total Required Credit Hours in Interior Design **81 cr**

A. Common Foundations Courses

DES 101	Introduction to Design 2D I
FAR 101	Drawing I
FAR 104	Themes and Issues in the Contemporary Arts

B. Interior Design Major Courses

DES 312W	History of Craft: Industrial Revolution to the Present
FAR 250	Art History I
FAR 251	Art History II
FTT 206	Introduction to Textiles or DES 242 Fibers I
IDE 101	Introduction to Interior Design
IDE 151	Mechanical and Perspective Drawing
IDE 152	Introduction to Color Rendering
IDE 153	Spatial Explorations and Model Building
IDE 201	Interior Design I
IDE 202	Construction Fundamentals I
IDE 203	Furniture Theory and Application
IDE 204	Materials and Color
IDE 251	Interior Design II
IDE 252	Construction Fundamentals II
IDE 301	Interior Design III
IDE 302	Computer Applications for Interior Design
IDE 303	Interior Detailing
IDE 351	Interior Design IV
IDE 352	AutoCAD for Interior Designers
IDE 353	Interior Design Professional Practice and Specifications
IDE 401	Interior Design V
IDE 402	Lighting Design
IDE 451	Interior Design VI
IDE 488	Internship

Total Required Credit Hours **120 cr**

JOURNALISM (B.A.)

BA-AH JBS

Communication Department Bachelor of Arts (HEGIS 0602)

Accrediting Council on Education in Journalism and Mass Communications (Accredited)
Bishop Hall 210 (716) 878-6008

This major allows students who enjoy writing the flexibility to tailor a program based on reporting and presentation of news, and other journalistic writing through print, broadcast and online media. It meets the needs of students preparing for a career in which research and interviewing abilities, accurate and objective reporting, legal and ethical insight, and competence in editing are central to professional practice. Compare this major with communication studies, media production, and public communication.

This is the only journalism program at any SUNY school that is affiliated with the Accrediting Council on Education in Journalism and Mass Communications. Only four other undergraduate programs in New York State are accredited.

Career Opportunities: Students prepare for careers as reporters, anchors, commentators, and news directors for radio, television, and internet-based media, and as reporters, editors, and columnists on newspapers, magazines, blogs, and other digital media.

The profile of a successful journalism graduate is a person with a strong writing proficiency and a compelling use of language, good speaking and listening skills, keen ethical insight and legal awareness, and competence in presentation of information in a particular format (written, visual, and/or digital).

Admission Requirements: Incoming freshmen and transfer students can declare the major. A 2.6 GPA in the major is needed to register for required upper division courses (300 and 400 levels).

See www.buffalostate.edu/communication for application forms and additional information, including a list of equivalent core courses at community colleges. Transfer students from two-year schools may apply only core courses toward this major for a maximum of 12 credits. Students generally require four semesters of study after completing communication core courses.

Academic Standards: Only grades of C or higher may be applied toward requirements for any communication degree; courses with lower grades must be repeated. Consistent with standards of the Accrediting Council for Education in Journalism and Mass Communication, the number of communication courses that students may take is capped, encouraging a broad-based liberal arts education. The department encourages students to take minors or second majors, and requires evidence of an academic concentration or area of expertise outside the Communication Department.

Intellectual Foundations Requirements **39–66 cr**

Total Required Journalism Courses **42 cr**

A. Communication Core (12 cr)

COM 100	Media Literacy
COM 210	Introduction to Media Writing
COM 215	Introduction to Visual Communication

SPC 205 Introduction to Oral Communication

Note: Students must have a minimum GPA of 2.6 in the major to register for certain upper-division courses (300- and 400-level).

B. Major Requirements (21 cr)

COM 302	Principles of Journalism
COM303	Print News I: Reporting
COM312	Basic Media Production
COM337	Electronic News I: Producing
COM325 or COM338	Feature Writing or Electronic News II: Reporting
COM400	Communication Law
COM405	Online Newsroom

D. Senior Seminar (3 cr)

COM 450	Communication and Society
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E. Communication Electives (6 cr)

COM 488 or COM 495 or COM 499	Internship or Independent Project or Independent Study or 300/400-level elective by advisement
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All College Electives **12–39 cr**

Total Required Credit Hours **120 cr**

LEADERSHIP

LDR

Center for Studies in Creativity Leadership Minor Program

Chase Hall 244 (716) 878-4861

The leadership minor program is designed for all students interested in studying and applying leadership theory and practice. The leadership minor supports the mission of Buffalo State in preparing a diverse population of students for leadership roles and responsibilities in a challenging world. The minor serves as a nexus for connecting and integrating the insights of a variety of disciplines in understanding the complex phenomenon of leadership. Out of multiple modes of inquiry, students acquire frameworks that guide creative and critical thinking, and inform the practice of leadership in relevant contexts.

Total Required Credit Hours in Leadership **18 cr**

A. Required Courses (12 cr)

CRS/UNC 201	Foundations of Leadership
CRS 302	Creative Approaches to Problem Solving
CRS 303	Creative Leadership through Effective Facilitation
CRS/UNC/BUS 435	Experiences in Leadership (capstone course)

B. Electives (6 cr)

Electives must be chosen from two different skill areas (Ability to Interact Socially, Critical Evaluation and Systematic Thinking, Empowerment, or Diversity) identified as critical to effective leadership. One of the chosen electives must be an upper-level elective. Select two classes from the following:

Ability to Interact Socially

ENG 300W	Writing for the Professions
SPC 205	Introduction to Oral Communication
SPC 306	Public Speaking*
SPC 311	Intercultural Communication
SWK 105	Interpersonal Relations

Critical Evaluation and Systematic Thinking

BUS 360	Principles of Management
PHI 103	Introduction to Logic
PHI 310	History of Ethics*
SOC 240	Analyzing Social Problems
SPC 321	Rhetorical Criticism

Empowerment

BUS 426	Creative Opportunities in Leadership and Management Practices
PSY 365	Psychology in the Workplace*
SOC 331	Sociology of Group Dynamics*
SPC 205	Introduction to Oral Communication
SPC 307	Group Communication*

Diversity

BUS 305	Workforce Diversity in the 21st Century
HIS/SSE 363	American Identity in Transition: Diversity and Pluralism in the United States
PSC 230	International Relations
SOC 312	Women in Society

* Indicates courses with prerequisites

MATHEMATICS (B.A.)

BA-NS MAT

Mathematics Department Bachelor of Arts (HEGIS 1701)

Bishop Hall 317 (716) 878-5621

Admission Requirements: High school mathematics through Regents Course III is recommended.

Intellectual Foundations Requirements **39–66 cr**

Total Required Credit Hours in Mathematics **41 cr**

A. Required Courses (29 cr)

MAT 161	Calculus I (4)
MAT 162	Calculus II (4)
MAT 163	Using Technology to Explore Calculus I (1)
MAT 164	Using Technology to Explore Calculus II (1)
MAT 202	Introduction to Linear Algebra
MAT 263	Calculus III
MAT 264	Using Technology to Explore Calculus III (1)
MAT 270	Discrete Mathematics I
MAT 301	Fundamentals of Abstract Algebra
MAT 381	Probability
MAT 417	Introduction to Real Analysis I

B. Electives Selected by Advisement (12 cr)

Select four courses from the following:

MAT 302	Algebra II
MAT 309	Discrete Mathematics II
MAT 315	Differential Equations
MAT 316	Intermediate Differential Equations
MAT 322W	Modern Geometry
MAT 351	Elementary Theory of Numbers
MAT 366	Computer Mathematics II
MAT 370	Applied Networks
MAT 382	Topics in Mathematical Statistics
MAT 383	Applied Statistics
MAT 401	Introduction to Computability
MAT 404	Applications of Linear Algebra
MAT 411	Complex Variables
MAT 418	Introduction to Real Analysis II
MAT 431	Mathematical Logic

MAT 461	Numerical Analysis
MAT 471	Introduction to Topology
MAT 490	Seminar
MAT 495	Project
MAT 499	Independent Study

All College Electives **15–40 cr**

Total Required Credit Hours **120 cr**

MATHEMATICS—APPLIED (B.S.)

BS-NS AMT

Mathematics Department Bachelor of Science (HEGIS 1703)

Bishop Hall 317 (716) 878-5621

The applied mathematics B.S. program is directed toward a career goal for computer- and mathematics-related government, industrial, or business employment. It may also provide a basis for entry into graduate school in mathematics, applied mathematics, computer science, or other related disciplines.

Admission Requirements: Four years of college preparatory mathematics is recommended.

Intellectual Foundations Requirements **39–66 cr**

Total Required Credit Hours in Mathematics **53 cr**

A. Required Courses (35 cr)

MAT 161	Calculus I (4)
MAT 162	Calculus II (4)
MAT 163	Using Technology to Explore Calculus I (1)
MAT 164	Using Technology to Explore Calculus II (1)
MAT 202	Introduction to Linear Algebra
MAT 241	Computational Tools for Applied Mathematicians I
MAT 263	Calculus III
MAT 264	Using Technology to Explore Calculus III (1)
MAT 270	Discrete Mathematics
MAT 366	Computational Tools for Applied Mathematicians II
MAT 381	Probability Theory
MAT 382	Mathematical Statistics
MAT 495	Project

B. Concentration Courses Selected by Advisement (18 cr)

Students must choose one of three concentrations:

Concentration in Statistics

Required Courses (6 cr)

MAT 383	Applied Statistics I
MAT 484	Applied Statistics II

Select four courses from the following (18 cr):

MAT 315	Differential Equations
MAT 316	Intermediate Differential Equations
MAT 319	Mathematical Biology
MAT 370	Applied Networks
MAT 390	Introduction to Operations Research
MAT 404	Applications of Linear Algebra
MAT 411	Complex Variables
MAT 417	Introduction to Real Analysis I
MAT 461	Numerical Analysis
MAT 481	Stochastic Processes
MAT 490	Seminar
MAT 499	Independent Study

Concentration in Numeric Computation

Required Courses (6 cr)

MAT 390 Introduction to Operations Research

MAT 461 Numerical Analysis

Select four courses from the following (18 cr):

MAT 315	Differential Equations
MAT 316	Intermediate Differential Equations
MAT 318	Mathematical Modeling
MAT 319	Mathematical Biology
MAT 370	Applied Networks
MAT 383	Applied Statistics I
MAT 404	Applications of Linear Algebra
MAT 411	Complex Variables
MAT 417	Introduction to Real Analysis I
MAT 471	Introduction to Topology
MAT 481	Stochastic Processes
MAT 490	Seminar
MAT 499	Independent Study

Concentration in Computational Discrete Mathematics

Required Courses (6 cr)

MAT 318 Mathematical Modeling

MAT 390 Introduction to Operations Research

Select four courses from the following (18 cr):

MAT 315	Differential Equations
MAT 316	Intermediate Differential Equations
MAT 319	Mathematical Biology
MAT 370	Applied Networks
MAT 383	Applied Statistics I
MAT 401	Introduction to Computability
MAT 404	Applications of Linear Algebra
MAT 411	Complex Variables
MAT 417	Introduction to Real Analysis I
MAT 461	Numerical Analysis
MAT 481	Stochastic Processes
MAT 490	Seminar
MAT 499	Independent Study

All College Electives 1-28 cr

Total Required Credit Hours 120 cr

MATHEMATICS EDUCATION (7-12, B.S.)

BS-NS MTS

Mathematics Department Bachelor of Science (HEGIS 1701.01)

National Council for Accreditation of Teacher Education (NCATE) Accredited
Bishop Hall 317 (716) 878-5621

The B.S. in mathematics with adolescent certification is directed to a career goal of teaching. This program includes the course requirements leading to New York State certification to teach mathematics in grades 7-12.

Admission Requirements: Four years of college preparatory mathematics is recommended.

Intellectual Foundations Requirements 39-66 cr

Total Required Credit Hours in Mathematics 41 cr

A. Required Courses (32 cr)

MAT 161	Calculus I (4)
MAT 162	Calculus II (4)
MAT 163	Using Technology to Explore Calculus I (1)
MAT 164	Using Technology to Explore Calculus II (1)
MAT 202	Introduction to Linear Algebra
MAT 263	Calculus III
MAT 264	Using Technology to Explore Calculus III (1)
MAT 270	Discrete Mathematics I
MAT 301W	Fundamentals of Abstract Algebra
MAT 322W	Modern Geometry
MAT 325	Probability and Statistics
MAT 417	Introduction to Real Analysis I

B. Electives (9 cr)

Select three courses from the following:

MAT 302	Abstract Algebra II
MAT 309	Discrete Mathematics II
MAT 315	Differential Equations
MAT 316	Intermediate Differential Equations
MAT 351	Elementary Theory of Numbers
MAT 366	Computer Mathematics II
MAT 370	Applied Networks
MAT 382	Topics in Mathematical Statistics
MAT 383	Applied Statistics
MAT 401	Introduction to Computability
MAT 404	Applications of Linear Algebra
MAT 411	Complex Variables
MAT 418	Introduction to Real Analysis II
MAT 431	Mathematical Logic
MAT 461	Numerical Analysis
MAT 471	Introduction to Topology
MAT 490	Seminar
MAT 495	Project
MAT 499	Independent Study

Total Required Credit Hours in Professional Education 25 cr

EDF 303	Educational Psychology
EDF 403	Historical and Philosophical Forces Influencing Secondary Education
EDU 416	Teaching Literacy in Middle and Secondary Schools
EDU 417	Adolescent Literacy
EXE 100	Nature and Needs of Individuals with Special Needs*
MED 200	Field Experience: Secondary Education and Related Careers
MED 300	Field Experience: Methods in the Teaching of Secondary School Mathematics (1)
MED 307	Uses of Technology in the Teaching of Mathematics
MED 308W	Methods in the Teaching of Secondary School Mathematics

MED 383W	Learning and Teaching Problem Solving	
<i>*EXE 100 fulfills an Intellectual Foundations requirement.</i>		
Total Required Credit Hours in Student Teaching		12 cr
MED 407	Student Teaching of Mathematics in Junior High/Middle School (6)	
MED 408	Student Teaching of Mathematics in Senior High School (6)	
All College Electives		0–3 cr
Total Required Credit Hours		120 cr

MATHEMATICS EDUCATION (7–12, 5–6 EXTENSION, B.S.)

BS-NS MTX

Mathematics Department Bachelor of Science (HEGIS 1701.01)

National Council for Accreditation of Teacher Education (NCATE) Accredited
Bishop Hall 317 (716) 878-5621

The B.S. program in mathematics with adolescent certification (5–6 extension) is directed to a career goal of teaching. This program includes the course requirements leading to New York State initial certification to teach mathematics in grades 5–12.

Admission Requirements: Four years of college preparatory mathematics is recommended.

Intellectual Foundations Requirements	39–66 cr
Total Required Credit Hours in Mathematics	41 cr

A. Required Courses (32 cr)

MAT 161	Calculus I (4)
MAT 162	Calculus II (4)
MAT 163	Using Technology to Explore Calculus I (1)
MAT 164	Using Technology to Explore Calculus II (1)
MAT 202	Introduction to Linear Algebra
MAT 263	Calculus III
MAT 264	Using Technology to Explore Calculus III (1)
MAT 270	Discrete Mathematics I
MAT 301W	Fundamentals of Abstract Algebra
MAT 322W	Modern Geometry
MAT 325	Probability and Statistics
MAT 417	Introduction to Real Analysis I

B. Electives (9 cr)

Select three courses from the following:

MAT 302	Abstract Algebra II
MAT 309	Discrete Mathematics II
MAT 315	Differential Equations
MAT 316	Intermediate Differential Equations
MAT 351	Elementary Theory of Numbers
MAT 366	Computer Mathematics II
MAT 370	Applied Networks
MAT 382	Topics in Mathematical Statistics
MAT 383	Applied Statistics
MAT 401	Introduction to Computability
MAT 404	Applications of Linear Algebra
MAT 411	Complex Variables
MAT 418	Introduction to Real Analysis II
MAT 431	Mathematical Logic
MAT 461	Numerical Analysis

MAT 471	Introduction to Topology Seminar
MAT 490	Seminar
MAT 495	Project
MAT 499	Independent Study

Total Required Credit Hours in Professional Education 31 cr

EDF 303	Educational Psychology
EDF 353	Human Development During Early Adolescence and Adolescence
EDF 403	Historical and Philosophical Forces Influencing Secondary Education
EDU 416	Teaching Literacy in Middle and Secondary Schools
EDU 417	Adolescent Literacy
EXE 100	Nature and Needs of Individuals with Special Needs*
MED 200	Field Experience: Secondary Education and Related Careers
MED 300	Field Experience: Methods in the Teaching of Secondary School Mathematics (1)
MED 307	Uses of Technology in the Teaching of Mathematics
MED 308W	Methods in the Teaching of Secondary School Mathematics
MED 309	Teaching Mathematics in the Middle School
MED 383W	Learning and Teaching Problem Solving

**EXE 100 fulfills an Intellectual Foundations requirement.*

Total Required Credit Hours in Student Teaching 12 cr

MED 406	Student Teaching of Mathematics in the Lower Middle Grades (6)
MED 408	Student Teaching of Mathematics in Senior High School (6)

Total Required Credit Hours 123 cr

MATHEMATICS EDUCATION (7–12, PTCP)

PBC-NS MTS

Mathematics Department Postbaccalaureate Teacher Certification Program (HEGIS 1701.01)

National Council for Accreditation of Teacher Education (NCATE) Accredited
Bishop Hall 317 (716) 878-5621

For information about this program, see the Graduate Catalog.

MATHEMATICS EDUCATION (7–12, 5–6 EXTENSION; PTCP)

PBC-NS MTX

Mathematics Department Postbaccalaureate Teacher Certification Program (HEGIS 1701.01)

National Council for Accreditation of Teacher Education (NCATE) Accredited
Bishop Hall 317 (716) 878-5621

For information about this program, see the Graduate Catalog.

MECHANICAL ENGINEERING TECHNOLOGY (B.S.)*

BS-SP MET

Technology of Science (HEGIS 0925)

Technology Accreditation Commission/Accreditation Board for Engineering and Technology (TAC/ABET) Accredited**

Upton Hall 315 (716) 878-6017

The bachelor's degree in the mechanical engineering technology program is designed to give the student a broad education in the areas of mechanical design, mechanics, stress analysis, thermosciences, and manufacturing. Graduates are in high demand and are employed by manufacturing companies, consulting firms, government agencies, testing laboratories, and other enterprises that require people with strong mechanically oriented backgrounds. Graduates work as mechanical designers developing new products, manufacturing supervisors solving problems of producing these products for performance or quality, as plant engineers improving or maintaining factories, and in technical sales selling these products. The duties of technologists may involve overseeing installation, operation, maintenance, and repair to ensure that machines and equipment are installed and functioning according to specifications; specifying system components; supervising drafters in developing the design of products; testing and evaluating products; and/or developing cost estimates.

*Evening study available.

Intellectual Foundations Requirements 63-75 cr

Major Requirements 36 cr

ENT 102	Intro. Equat. Solve
ENT 202	Intro. Engineering Econ.
ENT 301	Mechanics I
ENT 302	Mechanics II
ENT 303	Kinematics
ENT 311	Thermodynamics
ENT 312	Fluid Mechanics
ENT 314	Solid Modeling
ENT 331	Electrical Circuits and Devices I
ENT 335	Industrial Electronics
ENT 371	Electric Machines
ENT 401	Stress Analysis
ENT 402	Shock and Vibration Analysis
ENT 420	Prof. Exp. in MET
ENT 411	Heat Transfer
ENT 421	Machine Design I
ENT 422	Machine Design II
TEC 101	Technical Drawing
TEC 201	Materials Processing
TEC 311	Materials Science and Testing

Electives 0-10 cr

The following accreditation requirements can be included in the Intellectual Foundations requirements and electives:

- CHE 101 or CHE 111
- CHE 102 or CHE 111
- CIS 151
- MAT 110 or MAT 124 or MAT 311
- MAT 126 or MAT 161
- MAT 127 or MAT 162

PHY 107 or PHY 111
PHY 108 or PHY 112
SPC 205

Total Required Credit Hours

124 cr

**Technology Accreditation Commission/Accreditation Board for Engineering and Technology Inc. (TAC/ABET), 111 Market Place, Suite 1050, Baltimore, MD 21202, (410) 347-7700.

MEDIA PRODUCTION (B.A.)

BA-AH MDP

Communication Department Bachelor of Arts (HEGIS 0603)

Accrediting Council on Education in Journalism and Mass Communications (Accredited)
Bishop Hall 210 (716) 878-6008

This major (formerly called broadcasting) allows students flexibility to tailor a program based on production of audio and/or visual messages using various electronic media. It meets the needs of students preparing for a career integrating many elements: research, planning, writing and other aspects of preproduction; studio and field experience in technical production; postproduction activities, such as editing; and media management areas. Compare this major with communication studies, journalism, and public communication.

This is the only program in broadcasting and production at any SUNY school that is affiliated with the Accrediting Council on Education in Journalism and Mass Communications. Only four other undergraduate programs in New York State are accredited.

Career Opportunities: Students in media production prepare for careers in radio or audio production, television or video production, Web design, music production, media sales and management, related technical areas, and other fields that require a liberal arts education enhanced with production skills. Specific job titles associated with this major include writer, producer, director, videographer, editor, Web designer, and production manager.

The profile of a successful media production graduate is a person with strong skills in using computers, cameras, and other technical equipment, writing and speaking proficiency, keen ethical insight, analytical and creative competence, and management abilities.

Admission Requirements: Incoming freshmen and transfer students can declare the major. A 2.6 GPA in the major is needed to register for required upper-division courses (300- and 400-level).

See www.buffalostate.edu/communication for application forms and additional information, including a list of equivalent core courses at community colleges. Transfer students from two-year schools may apply only core courses toward this major for a maximum of 12 credits. Students generally require four semesters of study after completing communication core courses.

Academic Standards: Only grades of C or higher may be applied toward requirements for any communication degree; courses with lower grades must be repeated. Consis-

tent with standards of the Accrediting Council for Education in Journalism and Mass Communication, the number of communication courses that students may take is capped, encouraging a broad-based liberal arts education. The department encourages students to take minors or second majors, and requires evidence of an academic concentration or area of expertise outside the Communication Department.

Intellectual Foundations Requirements **39–66 cr**

Total Required Credit Hours in Media Production **42 cr**

A. Communication Core (12 cr)

- COM 100 Media Literacy
- COM 210 Introduction to Media Writing
- COM 215 Introduction to Visual Communication
- SPC 205 Introduction to Oral Communication

Note: Students must have a minimum GPA of 2.6 in the major to register for certain upper-division courses (300- and 400-level).

B. Major Requirements (21 cr)

- COM 304 Writing for Broadcast
 - COM 312 Basic Media Production
 - COM 317 Media Management
or COM 400 or Communication Law
 - COM 328 Intermediate Audio Production
 - COM 329 Intermediate Video Production
- Two of the following six courses:*
- COM 428 Advanced Audio Production
 - COM 429 Advanced Multicamera Studio Production
 - COM 431 Advanced Field Production
 - COM 432 Advanced Postproduction
 - COM 433 Advanced Television Documentary Production
 - COM 434 Advanced Video Production Practicum

C. Senior Seminar (3 cr)

- COM 450 Communication and Society

D. Communication Electives (6 cr)

- COM 488 Internship
or COM 495 or Independent Project
or COM 499 or Independent Study
or 300/400-level elective by advisement

All College Electives **12–39 cr**

Total Required Credit Hours **120 cr**

METALS/JEWELRY (B.F.A.)

BFA-AH MJD

**Design Department
Bachelor of Fine Arts (HEGIS 1009)**

National Association of Schools of Art and Design (NASAD) Accredited
Upton Hall 212 (716) 878-6032

The B.F.A. degree in metals/jewelry design is a studio-intensive program of study focused on developing the aesthetic, conceptual, and technical skills necessary to foster creativity as students work toward developing their individual identities as visual designers/artists. This degree offers students a specialized studio-oriented education in preparation for advanced or graduate studies, or for beginning careers as professional designers or artists.

Students begin with foundation courses in two-dimensional design, three-dimensional design, drawing, art history, and design history along with courses in ceramics, fibers, and wood. Major courses in metals/jewelry design and sculpture complete the requirements. Internship opportunities are available. The remaining credit hours are completed in required Intellectual Foundations courses and in other chosen studio courses.

Admission Requirements: There is no entrance portfolio review for admission. All students will enter the metals/jewelry design major as a bachelor of science (BS-AH MJD) and complete a selection of foundation and major course(s) before a commit-to-major portfolio review for admission into the bachelor of fine arts program (BFA-AH MJD). Commit-to-major portfolio reviews are conducted by faculty and generally take place during the sophomore year. After passing the portfolio review, to continue in the B.F.A. degree program a 3.0 GPA must be maintained in the major. Transfer students are urged to submit their portfolios the semester before transfer in order to facilitate placement in departmental courses and/or for possible commit-to-major portfolio review. Please call the Design Department for additional information. As a condition for graduation, each B.F.A student will be required to mount an individual exhibition of his/her work.

The Design Department reserves the right to retain students' work for official purposes, such as exhibitions, catalogs, teaching aids, or permanent collections and to use images of the students and their work for publicity and recruitment. Students are expected to assume the costs of materials used in courses. Some studio courses may have an additional charge for materials used in class.

The Design Department may be in the process of curricular revision. Please refer to the college Web site or the department for updated information.

Intellectual Foundations Requirements **39–66 cr**

Total Required Credit Hours in Metal/Jewelry Design **79 cr**

A. Foundation Courses (37 cr)

- DES 101 Introduction to Design: 2D I
- DES 103 Introduction to Design: 3D I
- DES 104 Introduction to Design: 3D II
- DES 220 Ceramics I
- DES 242 Fibers I
- DES 250 Wood Design I
- DES 312W History of Craft
- DES 414 Senior Seminar (4)
- FAR 101 Drawing I
- FAR 104 Themes and Issues in Contemporary Arts
- FAR 250 Art History I
- FAR 251 Art History II

B. Major Courses (30 cr)

- DES 230 Introduction to Jewelry Making
- DES 330 Applied Jewelry Techniques
- DES 331 Jewelry: Junior Studio
- DES 336 Metalsmithing
- DES 331 Jewelry: Junior Studio
or DES 337 or Metalsmithing: Junior Studio
- DES 338 Computer 3D Modeling and Rendering
- DES 431 Jewelry: Senior Studio (3, 3, 3)

C. Studio Electives Selected by Advisement (12 cr)

DES 320	Ceramics II
DES 342	Fibers II
DES 350	Technical Processes in Wood
DES 321 or DES 344 or DES 351	Ceramics: Junior Studio or Fibers: Junior Studio or Jewelry: Senior Studio
FAR 240	Introduction to Sculpture
FAR 341	Intermediate Sculpture I

All College Electives 0–2 cr

Total Required Credit Hours 120 cr

METALS/JEWELRY (B.S.)

BS-AH MJD

Design Department Bachelor of Science (HEGIS 1009)

National Association of Schools of Art and Design (NASAD) Accredited
Upton Hall 212 (716) 878-6032

The B.S. degree in metals/jewelry design is a studio degree with a strong academic component. This degree offers students a broadly grounded educational experience as a basis for beginning careers as professional designers or artists.

Students begin with foundation courses in two-dimensional design, three-dimensional design, drawing, and design history, along with courses in ceramics, fibers, and wood. Major courses in metal/jewelry design focus on developing the aesthetic, conceptual, and technical skills necessary to foster creativity as students work toward developing their individual identities as visual designers/artists. Internship opportunities are available. The remaining credit hours are completed in required Intellectual Foundations courses and in other academic subjects of the student's choosing. The academic component offers opportunities to gain a broader base of knowledge, as well as knowledge in other disciplines related to the major field of study.

Admission Requirements: There is no entrance portfolio review for admission. All students will enter the metals/jewelry design major as a bachelor of science (BS-AH MJD) and complete a selection of foundation and major course(s) before a commit-to-major portfolio review for continuation in the B.S. degree program. Commit-to-major portfolio reviews are conducted by faculty and generally take place during the sophomore year. After passing the portfolio review, to continue in the B.S. degree program a 2.5 GPA must be maintained in the major. Transfer students are urged to submit their portfolios the semester before transfer in order to facilitate placement in departmental courses and/or for possible commit-to-major portfolio review. Please call the Design Department for additional information.

The Design Department reserves the right to retain students' work for official purposes, such as exhibitions, catalogs, teaching aids, or permanent collections, and to use images of the students and their work for publicity and recruitment. Students are expected to assume the costs of

materials used in courses. Some studio courses may have an additional charge for materials used in class.

Intellectual Foundations Requirements 39–66 cr

Total Required Credit Hours in Metal/Jewelry Design 45 cr

A. Foundation Courses (24 cr)

DES 101	Introduction to Design: 2D I
DES 103	Introduction to Design: 3D I
DES 220	Ceramics I
DES 242	Fibers I
DES 250	Wood Design I
DES 312W	History of Craft
FAR 101	Drawing I
FAR 104	Themes and Issues in Contemporary Arts

B. Major Concentrations (21 cr)

DES 230	Introduction to Jewelry
DES 330	Applied Jewelry Techniques
DES 331	Jewelry: Junior Studio (3, 3)
DES 336	Metalsmithing
DES 431	Jewelry: Senior Studio (3, 3)

All College Electives 9–36 cr

Total Required Credit Hours 120 cr

MUSIC (B.A.)

BA-AH MUS

Music Department Bachelor of Arts (HEGIS 1005)

National Association of Schools of Music (Accredited)
Rockwell Hall 203 (716) 878-6401

The music major is a liberal arts program that provides students with the broad knowledge and skills to enjoy a lifetime of music, integrate music into a career, and, in some cases, perform as a vocalist or instrumentalist.

For current information regarding policies and procedures for music program acceptance, continuance, and completion, visit
www.buffalostate.edu/music/documents/handbook.pdf.

Intellectual Foundations Requirements 39–66 cr

Total Required Credit Hours in Musicianship 43 cr

MUS 122	Introduction to Music Studies (2)
MUS 206	Foundations of American Popular Music
MUS 218	Aural Perception I (1)
MUS 219	Aural Perception II (1)
MUS 230	Music Theory I
MUS 231	Music Theory II
MUS 302	Music History: Antiquity–Baroque
MUS 303	Music History: Classic–Modern
MUS 318	Aural Perception III (1)
MUS 319	Aural Perception IV (1)
MUS 321	Composition, Improvisation, and Arranging (2)
MUS 330	Music Theory III
MUS 331	Music Theory IV
MUS 440	Ethnomusicology
MUS 495	Capstone Project (1)

Total Required Credit Hours in Musical Performance 10 cr

MUS 171 MUS 173 MUS 271	Applied Instruction (4 semesters; 4 cr)
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MUS 273
 MUS 290 MUS Ensemble Requirements
 314 or (6 semesters; 6 cr)
 MUS 335

Music Electives	10 cr
All College Electives (Not Music)	1–28 cr
Total Required Credit Hours	120 cr

MUSIC EDUCATION (PRE-K–12, B.MUS.)

MUSB-AH MUE

Music Education in Music Department Bachelor of Music (HEGIS 1005)

National Association of Schools of Music (Accredited)
 Rockwell Hall 203 (716) 878-6401

The music education program leads to a New York State Initial Certificate for teaching general, vocal, and instrumental music in New York State schools at the pre-kindergarten through grade 12 levels. The program requires intensive study in music performance, music history, music theory, and methodology of teaching, with an emphasis on world music and urban culture.

For current information regarding policies and procedures for music program acceptance, continuance, and completion, visit www.buffalostate.edu/music/documents/handbook.pdf.

Intellectual Foundations Requirements 39–66 cr

Total Required Credit Hours in Basic Musicianship and Performance 70 cr

MUS 171 MUS 173 MUS 271 MUS 273 MUS 371 MUS 373 MUS 471	Applied Instruction (7 semesters; 7 cr)
MUS 290, MUS 314 or MUS 335	Ensemble Requirement (7 semesters; 7 cr)
MUS 113	Brass Techniques (1)
MUS 114	Percussion Techniques (1)
MUS 115	String Techniques (1)
MUS 116	Woodwind Techniques (1)
MUS 119	Vocal Pedagogy
MUS 122	Introduction to Music Studies and Careers (2)
MUS 206	Foundations of American Popular Music
MUS 218	Aural Perception I (1)
MUS 219	Aural Perception II (1)
MUS 220	Technology Applications for Music Education (2)
MUS 230	Music Theory I
MUS 231	Music Theory II
MUS 302	Music History: Antiquity-Baroque
MUS 303	Music History: Classic-Contemporary
MUS 318	Aural Perception III (1)
MUS 319	Aural Perception IV (1)
MUS 321	Composition, Improvisation, and Arranging (2)
MUS 322	Instrumental Conducting (2)
MUS 330	Music Theory III
MUS 331	Music Theory IV
MUS 333	Choral Conducting (2)
MUS 345	Elementary Methods of Music Instruction
MUS 346	Field Experience in Elementary Music (1)

MUS 353	Field Experience in Music for Exceptional Learners (1)
MUS 360	Secondary Instrumental Methods
MUS 361	Field Experience in Secondary Instrumental (1)
MUS 362	Secondary Choral Methods
MUS 363	Field Experience in Secondary Choral Music (1)
MUS 440	Ethnomusicology

Total Required Credit Hours in Professional Education 30 cr

EDF 203	School and Society
EDF 303	Educational Psychology
EDF 403	Historical and Philosophical Forces Influencing Secondary Education
EDU 211	Introduction to Literacy Instruction
EDU 416	Teaching Literacy in Middle and Secondary Schools
EXE 100	Nature and Needs of Individuals with Special Needs
MUS 457	Elementary Student Teaching (5)
MUS 458	Secondary Student Teaching (5)
MUS 460	Student Teaching Seminar (2)

In addition to the course requirements for music education majors, the class piano sequence is strongly recommended in the freshman and sophomore years of study:

MUS 161	Class Piano I (1)
MUS 162	Class Piano II (1)
MUS 261	Class Piano III (1)
MUS 262	Class Piano IV (1)

Total Required Credit Hours 139 cr

PAINTING (B.F.A.)

BFA-AH PTG

Fine Arts Department Bachelor of Fine Arts (HEGIS 1002)

National Association of Schools of Art and Design (NA-SAD) Accredited
 Upton Hall 502 (716) 878-6014

All freshmen and transfer students enter the B.F.A. program through required portfolio review. Those admitted as freshmen or as transfers with fewer than four semesters in college must be examined for the major prior to their last four semesters in the program. Students admitted as upper-division transfers must be examined for the major at the end of the first semester in the program.

The application for a major is the most critical evaluation in the program. Eligibility will be determined by a two-member faculty committee on the basis of an interview with the student and a review of his or her portfolio. Each B.F.A. student will be required to mount an individual exhibition of his or her work. It will be planned and installed with the advice of the student's faculty adviser, but no grade will be assigned. The Fine Arts Department reserves the right to retain students' artwork for official purposes, such as exhibits, catalogs, or teaching aids.

Admission Requirements: Admission to the B.F.A. program is based on an interview and portfolio examination by the Fine Arts Department. The portfolio is to be presented in person or mailed along with a statement of intent as stipulated by the department and should contain examples of work that the candidate believes best display his or her abilities.

Students are expected to assume the costs of materials they use in their courses. All studio courses may have an additional instructional charge for materials used in class.

Intellectual Foundations Requirements **39–66 cr**

Total Required Credit Hours in Fine Arts **78 cr**

A. Required Courses (45 cr)

DES 101	Two-Dimensional Design
FAR 101	Drawing I
FAR 102	Drawing II
FAR 103	Modeling
FAR 104	Themes and Issues in Contemporary Arts
FAR 210	Introductory Painting
FAR 220	Introductory Photography
FAR 230	Introductory Printmaking
FAR 240	Introductory Sculpture
FAR 250	Art History I
FAR 251	Art History II
FAR 363	Twentieth-Century Art
FAR 470	Senior Seminar in Fine Arts

Two art history electives.

B. Painting Courses (21 cr)

FAR 311	Intermediate Painting I
FAR 312	Intermediate Painting II
FAR 313	Advanced Painting (three courses) (9)
FAR 410	Senior Studio in Painting (6)

C. Art Electives (12 cr)

All College Electives **0–3 cr**

Total Required Credit Hours **120 cr**

PHILOSOPHY (B.A.)

BA-AH PHI

**Philosophy and Humanities Department
Bachelor of Arts (HEGIS 1509)**

Bishop Hall 231 (716) 878-5136

The B.A. degree in philosophy is fundamental to liberal education, especially in its emphasis on careful, critical thinking. It challenges students to examine their societal and personal beliefs and values so that they are more creatively and responsibly chosen. To the extent that philosophy emphasizes foundational issues, it also helps in the study of other disciplines. Philosophy majors are well prepared for law school and other specializations requiring a liberal education, including graduate studies in philosophy. The department also offers a minor in religious studies that deepens students' understanding of various religious traditions, and their own views about the nature and meaning of religion.

A departmental Honors program is also available. Students should contact the department chair for additional information.

Intellectual Foundations Requirements **39–66 cr**

Total Required Credit Hours in Philosophy **30 cr**

A. Required Courses (12 cr)

PHI 107	Introduction to Mathematical Logic
or PHI 103	or Introduction to Logic
	or Symbolic Logic

or PHI 307

PHI 317 Ancient Philosophy

PHI 318 Modern Philosophy

PHI 401 112 Seminar in Problems in Philosophy
or PHI 402 or Seminar in History of Philosophy

B. Electives (18 cr)

Select six courses from the following:

PHI 101	Introduction to Philosophy
PHI 102	Introduction to Ethics
PHI 110	Meaning of Life
PHI 204	Philosophy of Religion
PHI 207	Philosophy in Literature
PHI 210	Existentialism
PHI 300	Problems of Philosophy
PHI 301	History of Political Philosophy
PHI 302	Philosophy of Art and Beauty
PHI 304	Philosophy of Law
PHI 305	Philosophy of Language
PHI 308	Philosophy of Love and Sex
PHI 309	Knowledge and Justification
PHI 310	History of Ethics
PHI 312	Philosophy of Mind
PHI 314	Contemporary Ethics
PHI 324	Zen Buddhism
PHI 333	Philosophy of Natural Sciences
PHI 334	Philosophy of Social Sciences
PHI 347	Western Thought: Homer to Alexander
PHI 351	Ethics Bowl
PHI 495	Project
PHI 499	Independent Study

All College Electives **27–54 cr**

Total Required Credit Hours **120 cr**

PHOTOGRAPHY (B.F.A.)

BFA-AH PHO

**Fine Arts Department
Bachelor of Fine Arts (HEGIS 1011)**

National Association of Schools of Art and Design (NASAD) Accredited

Upton Hall 502 (716) 878-6014

The discipline emphasized in our B.F.A. program is art photography - specifically the creation of art to be displayed in museums, sold in galleries, or published in books. Graduates of our program may also find receptive employers in advertising, and editorial illustration.

A major is required to mount an individual exhibition of his or her work in their senior year. It will be planned and installed with the advice of the student's Senior Studio adviser, but no grade will be assigned.

Students are expected to assume the costs of certain materials and cameras (film and digital) needed to make photographs. Cameras and other photography equipment are not provided to do course work by the college. However, we do provide a well-equipped computer/digital-printing lab for color, a black-and-white film developing lab, and a print-enlarging lab to make traditional monochromatic silver prints. All photography courses have a materials fee. This fee covers chemistry, ink jet inks, certain ink jet pa-

pers, and some other materials. The fee does not cover film, cameras, flash equipment, and other equipment and supplies needed by all majors.

The study of photography in the Fine Arts emphasizes creativity, craft, and making memorable pictures. Our courses teach film and digital camera craft, traditional film developing and print enlarging, the use of electronic flash, the use of computers and ink jet printers, color management, and Photoshop as used by photographers. Some of our students go on to do graduate degrees and to teach. Our graduates include self-employed artists, freelance photographers, and teachers. The art world, advertising, photojournalism, education, and industry are some fields in which our graduates have found employment.

Admission Requirements: High school students applying for admission to the B.F.A. photography major need only state his/her intent to major in photography to be accepted to the major, assuming required G.P.A. and other college admissions standards are met. A portfolio is not required. A transfer student who has studied photography elsewhere seeking advanced placement may be accepted directly into the major, but must show a portfolio of photographs to be evaluated at the Area Coordinator's discretion, for appropriate placement here. The portfolio must contain 10, silver black-and-white, 8"x10" prints enlarged from film, and 10, 8.5"x11" color ink jet prints. These prints should represent the applicant's strongest pictures.

The Fine Arts Department reserves the right to retain students' artwork for use in exhibits, catalogs, or as teaching aids.

Intellectual Foundations Requirements	39–66 cr
Total Required Credit Hours in Fine Arts	78 cr
A. Required Courses (45 cr)	
DES 101	Two-Dimensional Design
FAR 101	Drawing I
FAR 102	Drawing II
FAR 103	Modeling
FAR 104	Themes and Issues in Contemporary Arts
FAR 210	Introductory Painting
FAR 220	Introductory Photography
FAR 230	Introductory Printmaking
FAR 240	Introductory Sculpture
FAR 250	Art History I
FAR 251	Art History II
FAR 363	Twentieth-Century Art
FAR 470	Senior Seminar in Fine Arts
Two art history electives.	
B. Photography Courses (21 cr)	
FAR 321	Intermediate Photography I
FAR 322	Intermediate Photography II
FAR 323	Advanced Photography (three courses) (9)
FAR 420	Senior Studio in Photography (6)
C. Art Electives (12 cr)	
All College Electives	0–3 cr
Total Required Credit Hours	120 cr

PHYSICS (B.A.)

BA-NS PHY

Physics Department Bachelor of Arts (HEGIS 1902)

Science Building 262 (716) 878-6726

The physics B.A. program provides a good concentration in physics courses and a broad distribution in the liberal arts. It prepares students for technical or technically related graduate school studies or employment.

Intellectual Foundations Requirements	39–66 cr
Total Required Credit Hours in Physics	33 cr
A. Required Core Courses (18 cr)	
PHY 111	University Physics I (or equivalent) (5)
PHY 112	University Physics II (or equivalent) (5)
PHY 213	University Physics III
PHY 305	Modern Atomic Physics I
PHY 320	Introduction to Theoretical Physics (4)
B. Electives in Physics (13 cr)	
PHY 306	Modern Physics II
PHY 310	Computational Physics Laboratory (2)
PHY 315	Heat and Thermodynamics
PHY 323	Statics
PHY 324	Electric Circuits
PHY 410	Advanced Physics Laboratory
PHY 425	Classical Mechanics (4)
PHY 435	Introduction to Quantum Mechanics
PHY 440	Electricity and Magnetism I
PHY 441	Electricity and Magnetism II
Total Required Credit Hours Outside the Major	12 cr
MAT 161	Calculus I
MAT 162	Calculus II
MAT 163	Using Technology to Explore Calculus I (1)
MAT 164	Using Technology to Explore Calculus II (1)
MAT 263	Calculus III
MAT 264	Using Technology to Explore Calculus III (1)
All College Electives	11–38 cr
Total Required Credit Hours	120 cr

PHYSICS (B.S.)

BS-NS PHY

Physics Department Bachelor of Science (HEGIS 1902)

Science Building 262 (716) 878-6726

The physics B.S. program gives a broad background in the fundamental concepts and applications of physics. This background is appropriate for further study in graduate school, or for scientific employment in physics or physics-related fields.

Students in this program may pursue a four-year physics degree or they may choose the "three-two" option.

Transfer students must take a minimum of 8 credit hours of upper-division courses, including PHY 410, in the Buffalo State Physics Department.

"Three-Two" Physics-Engineering Option

This program offers an ideal combination of basic and applied science. Students in the Cooperative (three-two) Physics-Engineering Program attend the college for three years pursuing a liberal arts curriculum in physics. After three years, students transfer to the engineering school of their choice and complete the requirements for an engineering degree in two more years. Cooperating engineering schools include Binghamton University and the University at Buffalo (both SUNY universities), and Clarkson University.

Intellectual Foundations Requirements **39–66 cr**

Total Required Credit Hours in Physics **44 cr**

A. Required Core Courses (22 cr)

PHY 111	University Physics I (5)
PHY 112	University Physics II (5)
PHY 213	University Physics III
PHY 305	Modern Physics I
PHY 310	Computational Physics Laboratory (2)
PHY 320	Introduction to Theoretical Physics (4)

B. Additional Required Courses for the "Three-Two" Option (22 cr)

PHY 306	Modern Physics II
PHY 323	Statics
PHY 324	Electric Circuits
PHY 440	Electricity and Magnetism I

Plus 10 credit hours of engineering courses, transferred from engineering school.

C. Additional Required Courses for Four-Year Physics B.S.-Only Degree (22 cr)

PHY 306	Modern Physics II
PHY 324	Electric Circuits
PHY 410	Advanced Physics Laboratory
PHY 425	Classical Mechanics (4)
PHY 435	Introduction to Quantum Mechanics
PHY 440	Electricity and Magnetism I
PHY 441	Electricity and Magnetism II

Total Required Credit Hours Outside the Major **15 cr**

MAT 161	Calculus I
MAT 162	Calculus II
MAT 163	Using Technology to Explore Calculus I (1)
MAT 164	Using Technology to Explore Calculus II (1)
MAT 263	Calculus III
MAT 264	Using Technology to Explore Calculus III (1)
MAT 315	Differential Equations

All College Electives **0–24 cr**

Total Required Credit Hours **120 cr**

PHYSICS EDUCATION (7–12, B.S.)

BS-NS PGS

Physics Department Bachelor of Science (HEGIS 1902.01)

National Council for Accreditation of Teacher Education (NCATE) Accredited
Science Building 262 (716) 878-6726

The physics B.S. degree program in secondary education leads to a New York State Initial Certificate for teaching both physics and general science in grades 7–12. Students

seeking admission to the B.S. physics education program should initially enroll in the B.S. physics program. After successfully completing at least two required physics courses at Buffalo State with a GPA in these courses of 2.75 or higher, students apply for admission to the B.S. physics education program during the semester they complete SED 200. A minimum GPA of 2.75 in physics courses is required for admission to SED 405, SED 407, and SED 408.

Intellectual Foundations Requirements **39–66 cr**

Total Required Credit Hours in Physics **34 cr**

PHY 111	University Physics I (5)
PHY 112	University Physics II (5)
PHY 213	University Physics III
PHY 305	Modern Physics I
PHY 306	Modern Physics II
PHY 310	Computational Physics Laboratory (2)
PHY 320	Introduction to Theoretical Physics (4)
PHY 324	Electric Circuits
PHY 410	Advanced Physics Laboratory
PHY 440	Electricity and Magnetism I

Total Required Credit Hours in Professional Education **24 cr**

EDF 303	Educational Psychology
EDU 416	Teaching Literacy in Middle and Secondary Schools
EDU 417	Adolescent Literacy
EXE 372	Foundations of Teaching Adolescents with Disabilities
SED 200	Field Experience in Secondary Science Education
SED 401	Techniques for Teaching Laboratory Activities in the Secondary Science Classroom
SED 405	Methods and Materials in Teaching Secondary School Science
SED 409	Seminar in Secondary Science Education

Total Required Credit Hours in Student Teaching **12 cr**

SED 407	Practice Teaching Science in the Middle School (6)
SED 408	Practice Teaching Science in the High School (6)

Total Required Credit Hours in Other Fields for Certification **41–47 cr**

A. One Year (or Equivalent) of a Foreign Language (0-6 cr)

B. Cognate Sciences (26 cr)

CHE 111	Fundamentals of Chemistry I (4)
CHE 112	Fundamentals of Chemistry II (4)
GES 101	Introductory Geology
GES 102	Historical Geology
GES 103	Introductory Geology Laboratory (1)

Select one course from the following:

GES 111	General Oceanography
GES 131	Introduction to Astronomy
GES 241	Meteorology

Select two courses from the following:

BIO 211	Introduction to Cell Biology and Genetics (4)
BIO 212	Introduction to Organismal Biology and Diversity (4)
BIO 213	Introduction to Ecology, Evolution, and Behavior (4)

C. Mathematics (15 cr)

MAT 161	Calculus I
MAT 162	Calculus II
MAT 163	Using Technology to Explore Calculus I (1)
MAT 164	Using Technology to Explore Calculus II (1)
MAT 263	Calculus III
MAT 264	Using Technology to Explore Calculus III (1)
MAT 315	Differential Equations

PHYSICS EDUCATION (7–12, 5–6 EXTENSION, B.S.)

BS-NS PGX

Physics Department Bachelor of Science (HEGIS 1902.01)

National Council for Accreditation of Teacher Education (NCATE) Accredited
Science Building 262 (716) 878-6726

The physics B.S. degree program in secondary education leads to a New York State Initial Certificate for teaching both physics and general science in grades 5–12. Students seeking admission to the B.S. physics education program should initially enroll in the B.S. physics program. After successfully completing at least two required physics courses at Buffalo State with a GPA in these courses of 2.75 or higher, students apply for admission to the B.S. physics education program during the semester they complete SED 200. A 2.75 GPA in physics courses is required for admission to SED 405, SED 407, and SED 408.

Intellectual Foundations Requirements 39–66 cr

Total Required Credit Hours in Physics 34 cr

PHY 111	University Physics I (5)
PHY 112	University Physics II (5)
PHY 213	University Physics III
PHY 305	Modern Physics I
PHY 306	Modern Physics II
PHY 310	Computational Physics Laboratory (2)
PHY 320	Introduction to Theoretical Physics (4)
PHY 324	Electric Circuits
PHY 410	Advanced Physics Laboratory
PHY 440	Electricity and Magnetism I

Total Required Credit Hours in Professional Education 30 cr

EDF 303	Educational Psychology
EDU 416	Teaching Literacy in Middle and Secondary Schools
EDU 417	Adolescent Literacy
EXE 372	Foundations of Teaching Adolescents with Disabilities
SED 200	Field Experience in Secondary Science Education
SED 310	Teaching Science in the Middle School
SED 401	Techniques for Teaching Laboratory Activities in the Secondary Science Classroom
SED 405	Methods and Materials in Teaching Secondary School Science
SED 409	Seminar in Secondary Science Education

Total Required Credit Hours in Student Teaching 12 cr

SED 407	Practice Teaching Science in the Middle School (6)
SED 408	Practice Teaching Science in the High School (6)

Total Required Credit Hours in Other Fields for Certification 38-44 cr

A. One Year (or Equivalent) of a Foreign Language (0-6 cr)

B. Cognate Sciences (23 cr)

CHE 111, CHE 112	Fundamentals of Chemistry I, II (4, 4)
GES 101	Introductory Geology
GES 103	Introductory Geology Laboratory (1)

Select one course from the following:

GES 111	General Oceanography
GES 131	Introduction to Astronomy
GES 241	Meteorology

Select two courses from the following:

BIO 211	Introduction to Cell Biology and Genetics (4)
BIO 212	Introduction to Organismal Biology and Diversity (4)
BIO 213	Introduction to Ecology, Evolution, and Behavior (4)

C. Mathematics (15 cr)

MAT 161	Calculus I
MAT 162	Calculus II
MAT 163	Using Technology to Explore Calculus I (1)
MAT 164	Using Technology to Explore Calculus II (1)
MAT 263	Calculus III
MAT 264	Using Technology to Explore Calculus III (1)
MAT 315	Differential Equations

Total Required Credit Hours

153 cr

PHYSICS EDUCATION (7–12, PTCP)

PBC-NS PGS

Physics Department Postbaccalaureate Teacher Certification Program (HEGIS 1902.01)

National Council for Accreditation of Teacher Education (NCATE) Accredited
Science Building 262 (716) 878-6726

The physics postbaccalaureate certification-only program in secondary education leads to a New York State Initial Certificate for teaching both physics and general science in grades 7–12. This program is intended for persons with a bachelor's degree in physics or a related field who are interested in obtaining certification to teach physics in secondary schools or general science in middle schools. A minimum GPA of 2.75 in physics courses is required for admission to SED 405, SED 407, and SED 408.

Total Required Credit Hours in Physics 34 cr

PHY 111	University Physics I (5)
PHY 112	University Physics II (5)
PHY 213	University Physics III
PHY 305	Modern Physics I
PHY 306	Modern Physics II
PHY 310	Computational Physics Laboratory (2)
PHY 320	Introduction to Theoretical Physics (4)
PHY 324	Electric Circuits
PHY 410	Advanced Physics Laboratory
PHY 440	Electricity and Magnetism I

Total Required Credit Hours in Professional Education 24 cr

EDF 303	Educational Psychology
EDU 416	Teaching Literacy in Middle and Secondary Schools
EDU 417	Adolescent Literacy
EXE 372	Foundations of Teaching Adolescents with Disabilities

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SED 200	Field Experience in Secondary Science Education	
SED 401	Techniques for Teaching Laboratory Activities in the Secondary Science Classroom	
SED 405	Methods and Materials in Teaching Secondary School Science	
SED 409	Seminar in Secondary Science Education	

Total Required Credit Hours in Student Teaching 12 cr

SED 407	Practice Teaching Science in the Middle School (6)
SED 408	Practice Teaching Science in the High School (6)

Total Required Credit Hours in Other Fields for Certification 38-44 cr

A. One Year (or Equivalent) of a Foreign Language (0-6 cr)

B. Cognate Sciences (23 cr)

CHE 111	Fundamentals of Chemistry I (4)
CHE 112	Fundamentals of Chemistry II (4)
GES 101	Introductory Geology
GES 103	Introductory Geology Laboratory (1)

Select one course from the following:

GES 111	General Oceanography
GES 131	Introduction to Astronomy
GES 241	Meteorology

Select two courses from the following:

BIO 211	Introduction to Cell Biology and Genetics (4)
BIO 212	Introduction to Organismal Biology and Diversity (4)
BIO 213	Introduction to Ecology, Evolution, and Behavior (4)

C. Mathematics (15 cr)

MAT 161	Calculus I
MAT 162	Calculus II
MAT 163	Using Technology to Explore Calculus I (1)
MAT 164	Using Technology to Explore Calculus II (1)
MAT 263	Calculus III
MAT 264	Using Technology to Explore Calculus III (1)
MAT 315	Differential Equations

Total Required Credit Hours 108 cr

PHYSICS EDUCATION (7-12, 5-6 EXTENSION, PTCP)

PBC-NS PGX

**Physics Department
Postbaccalaureate Teacher Certification
Program (HEGIS 1902.01)**

National Council for Accreditation of Teacher Education (NCATE) Accredited
Science Building 262 (716) 878-6726

The physics postbaccalaureate certification-only program in secondary education leads to a New York State Initial Certificate for teaching both physics and general science in grades 5-12. This program is intended for persons with a bachelor's degree in physics or a related field who are interested in obtaining certification to teach physics in secondary schools or general science in middle schools. A minimum GPA of 2.75 in physics courses is required for admission to SED 405, SED 407, and SED 408.

Total Required Credit Hours in Physics 34 cr

PHY 111	University Physics I (5)
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PHY 112	University Physics II (5)
PHY 213	University Physics III
PHY 305	Modern Physics I
PHY 306	Modern Physics II
PHY 310	Computational Physics Laboratory (2)
PHY 320	Theoretical Physics (4)
PHY 324	Electric Circuits
PHY 410	Advanced Physics Laboratory
PHY 440	Electricity and Magnetism I

Total Required Credit Hours in Professional Education 30 cr

EDF 303	Educational Psychology
EDU 416	Teaching Literacy in Middle and Secondary Schools
EDU 417	Adolescent Literacy
EXE 372	Foundations of Teaching Adolescents with Disabilities
SCI 323	Science as Inquiry
SED 200	Field Experience in Secondary Science Education
SED 310	Teaching Science in the Middle School
SED 401	Techniques for Teaching Laboratory Activities in the Secondary Science Classroom
SED 405	Methods and Materials in Teaching Secondary School Science
SED 409	Seminar in Secondary Science Education

Total Required Credit Hours in Student Teaching 12 cr

SED 407	Practice Teaching Science in the Middle School (6)
SED 408	Practice Teaching Science in the High School (6)

Total Required Credit Hours in Other Fields for Certification 38-44 cr

A. One Year (or Equivalent) of a Foreign Language (0-6 cr)

B. Cognate Sciences (23 cr)

CHE 111, CHE 112	Fundamentals of Chemistry I, II (4, 4)
GES 101	Introductory Geology
GES 103	Introductory Geology Laboratory (1)

Select one course from the following:

GES 111	General Oceanography
GES 131	Introduction to Astronomy
GES 241	Meteorology

Select two courses from the following:

BIO 211	Introduction to Cell Biology and Genetics (4)
BIO 212	Introduction to Organismal Biology and Diversity (4)
BIO 213	Introduction to Ecology, Evolution, and Behavior (4)

C. Mathematics (15 cr)

MAT 161	Calculus I
MAT 162	Calculus II
MAT 163	Using Technology to Explore Calculus I (1)
MAT 164	Using Technology to Explore Calculus II (1)
MAT 263	Calculus III
MAT 264	Using Technology to Explore Calculus III (1)
MAT 315	Differential Equations

Total Required Credit Hours 114 cr

POLITICAL SCIENCE (B.A.)

BA-NS PSC

**Political Science Department
Bachelor of Arts (HEGIS 2207)**

Classroom Building B218 (716) 878-6116

Political science is the study of government and politics. The major is divided into four areas: American politics,

international politics, comparative politics, and political theory. A variety of courses is offered in each of these areas. Minors are offered in public administration, political science, legal studies and international relations.

Students gain an understanding of government and politics through a combination of theoretical analysis and practical experience; interning in national, state, or local government; or participating in the Washington Program. Students are prepared for an array of career options in the public and private sectors. The department offers special advisement for graduate study, pre-law, and public administration.

The Bachelor of Arts program enables students to concentrate in international relations or public administration and policy, or to develop a more individualized program under the general political science concentration.

Intellectual Foundations Requirements 39–66 cr

Total Required Credit Hours in Political Science 37 cr

(19 of the 37 credit hours must be in 300- or 400-level courses)

A. Required Courses (16 cr)

- PSC 101 Introduction to Government and Politics
- PSC 102 Introduction to American Government and Politics
- PSC 203 Political Analysis
- PSC 204 Political Statistics
- PSC 399 Research Skills
- PSC 470 Senior Seminar

OR Internship

PSC 488

Students will choose one of the following concentrations:

GENERAL POLITICAL SCIENCE CONCENTRATION

B. Political Science Distribution Requirements (12 cr)

1. American Government and Politics (3 cr)

Must take one of the following courses:

- PSC 210 The American Presidency
- PSC 215 Urban Government
- PSC 218 African American Political Culture
- PSC 225 Women in American Politics
- PSC 310 American Political Parties
- PSC 311 Interest Groups
- PSC 312 Legislative Process
- PSC 315 State and Local Government and Politics
- PSC 316 Urban Ethnic Politics
- PSC 317 U.S. Constitutional Law
- PSC 320 U.S. Civil Liberties
- PSC 326 Politics and Media
- PSC 327 Practical Politics
- PSC 360 Public Administration
- PSC 364 American Public Policy
- PSC 410 Political Behavior and Public Opinion
- PSC 415 Urban Public Policy
- PSC 420 Contemporary Constitutional Issues
- PSC 485/ CRJ Moot Court
- 485/ SOC 485

2. International Relations (3 cr)

Must take one of the following courses:

- PSC 230 International Relations
- PSC 305 Environmental Policy
- PSC 308 International Organizations and International Law

- PSC 309 International Political Economy
- PSC 330 American Foreign Policy
- PSC 333 African International Relations
- PSC 335 International Relations of the Middle East
- PSC 336 Latin America in World Politics
- PSC 337 The Politics of Globalization

3. Comparative Government (3 cr)

Must take one of the following courses:

- PSC 240 European Political Systems
- PSC 340 Politics of Developing Countries
- PSC 341 Government, Politics, and Policies of the European Union
- PSC 342 Russian Politics
- PSC 345/ HIS Politics and History of the Middle East
- 313
- PSC 368 Comparative Public Administration
- PSC 370 Canadian Public Administration

4. Political Theory and Philosophy (3 cr)

Must take one of the following courses:

- PSC 250 Introduction to Law
- PSC 318 Democracy and Peace: Principles and Practices in the Urban Experience
- PSC 351 History of Political Thought I
- PSC 352 History of Political Thought II
- PSC 355 American Political Thought
- PSC 375 Race/Sex/Politics of Myth and Story
- PSC 450 Contemporary Political Thought

C. General Electives in Political Science (9 cr)

NOTE: Courses NOT used to fulfill Section B may also be used as Political Science electives.

- PSC 103 Great Political Issues
- PSC 306 Politics of Energy
- PSC 389 Topics in Political Science
- PSC 390 Italian American Experience
- PSC 495 Special Project
- PSC 497 Washington Semester
- PSC 499 Independent Study

INTERNATIONAL RELATIONS CONCENTRATION

B. Political Science Distribution Requirements (9 cr)

1. American Government and Politics (3 cr)

- PSC 210 The American Presidency

2. International Relations (3 cr)

- PSC 230 International Relations

3. Political Theory and Philosophy (3 cr)

- PSC 352 History of Political Thought II

C. Electives - International Relations (12 cr)

Choose two (2) courses from International Relations and two (2) from Comparative Government:

International Relations (6 cr)

- PSC 305 Environmental Policy
- PSC 308 International Organizations and International Law
- PSC 309 International Political Economy
- PSC 330 American Foreign Policy
- PSC 333 African International Relations
- PSC 335 International Relations of the Middle East
- PSC 336 Latin America in World Politics
- PSC 337 The Politics of Globalization

Comparative Government (6 cr)

- PSC 340 Politics of Developing Countries
- PSC 341 Government, Politics, and Policies of the European Union
- PSC 342 Russian Politics

PSC 345/ HIS 313	Politics and History of the Middle East
PSC 368	Comparative Public Administration
PSC 370	Canadian Public Administration

PUBLIC ADMINISTRATION AND POLICY CONCENTRATION

B. Political Science Distribution Requirements (12 cr)

1. American Government and Politics (3 cr)

PSC 360 Public Administration

2. International Relations (3 cr)

Must take one of the following courses:

- PSC 305 Environmental Policy
- PSC 308 International Organizations and International Law
- PSC 330 American Foreign Policy

3. Comparative Government (3 cr)

Must take one of the following courses:

- PSC 368 Comparative Public Administration
- PSC 370 Canadian Public Administration

4. Political Theory and Philosophy (3 cr)

Must take one of the following courses:

- PSC 250 Introduction to Law
- PSC 318 Democracy & Peace: Principles and Practices in the Urban Experience

C. Electives - Public Administration and Policy (9 cr)

- PSC 215 Urban Government
- PSC 315 State & Local Government and Politics
- PSC 364 American Public Policy
- PSC 415 Urban Public Policy

NOTE: IR/Comp/Theory courses NOT used to fulfill Section B may also be used as electives.

ADDITIONAL REQUIREMENT:

Out of 37 political science credits, 19 credits must be in the upper division.

All College Electives	17–44 cr
Total Required Credit Hours	120 cr

PRINTMAKING (B.F.A.)

BFA-AH PRT

**Fine Arts Department
Bachelor of Fine Arts (HEGIS 1009)**

National Association of Schools of Art and Design (NASAD) Accredited
Upton Hall 502 (716) 878-6014

All freshman and transfer students are welcomed into the BFA program.

Each B.F.A. student will be required to mount an individual exhibition of his or her work. It will be planned and installed with the advice of the student's faculty adviser, but no grade is assigned. The Fine Arts Department reserves the right to retain students' artwork for official purposes, such as exhibits, catalogs, or teaching aids.

Admission Requirements: Admission to the B.F.A. program is open. Newly declared majors need to schedule a

meeting with their new advisor in the major to review their work and become familiarized with the program's requirements.

Students are expected to assume the costs of materials they use in their courses. All studio courses may have an additional instructional charge for materials used in class.

Intellectual Foundations Requirements	39–66 cr
Total Required Credit Hours in Fine Arts	78 cr

A. Required Courses (45 cr)

- DES 101 Two-Dimensional Design
 - FAR 101 Drawing I
 - FAR 102 Drawing II
 - FAR 103 Modeling
 - FAR 104 Themes and Issues in Contemporary Arts
 - FAR 210 Introductory Painting
 - FAR 220 Introductory Photography
 - FAR 230 Introductory Printmaking
 - FAR 240 Introductory Sculpture
 - FAR 250 Art History I
 - FAR 251 Art History II
 - FAR 363 Twentieth-Century Art
 - FAR 470 Senior Seminar in Fine Arts
- Two art history electives.

B. Printmaking (21 cr)

- FAR 331 Intermediate Printmaking I
- FAR 332 Intermediate Printmaking II
- FAR 333 Advanced Printmaking (three courses) (9)
- FAR 430 Senior Studio in Printmaking (6)

C. Art Electives (12 cr)

All College Electives	0–3 cr
Total Required Credit Hours	120 cr

PSYCHOLOGY (B.A.)

BA-NS PSY

**Psychology Department
Bachelor of Arts (HEGIS 2001)**

Classroom Building C312 (716) 878-6215

Students in the B.A. degree program receive a broad and comprehensive background in the science of psychology, which will qualify them to seek entry to graduate or professional schools, or to apply for jobs that require a liberal arts training. The department's approach is both theoretical and empirical at all levels. The broad content areas represented include learning, perception, lifespan development and aging, animal behavior, industrial/organizational psychology, social processes, and normal and abnormal behavior.

B.A. Honors in Psychology: Departmental honors are for students who are performing exceptionally well in their courses. The honors designation is an adjunct to the B.A. degree with an added emphasis on independent work, and requires that students conduct a comprehensive original research project under the supervision of a faculty mentor. To be considered, students must have at least 24 credit

hours in psychology from Buffalo State with a minimum GPA of 3.5, and a minimum GPA of 3.25 in all courses taken at Buffalo State. In addition to the required courses in the B.A. degree program, honors students must take PSY 496 and PSY 498. A 39-credit-hour sequence of psychology courses is required for a B.A. honors degree. This requirement is identical to that of the B.A. degree except that PSY 496 is used as a psychology elective and PSY 498 is an additional required course. Students should see their adviser no later than the junior year for more information about the honors option.

Intellectual Foundations Requirements	39–66 cr
Total Required Credit Hours in Psychology	36 cr

A. Required Courses (15 cr)

PSY 101	Introduction to Psychology
PSY 306	Statistics in Psychological Research
PSY 450W	Research Methods in Psychology I: Introduction to Research Methods
PSY 471	History and Systems of Psychology
PSY 472W	Seminar on Psychology

B. Electives Selected by Advisement: 300-level (12 cr)

1. Select one course from each of the following three concentrations (9 cr):

Bio/Cognitive Psychology Concentration

PSY 304	Learning: Theory and Research
PSY 308	Sensation and Perception
PSY 321	Comparative Animal Behavior
PSY 340	Cognitive Psychology

Social/Developmental Psychology Concentration

PSY 325	Social Behavior
PSY 327	Adult Development and Aging I
PSY 355	Lifespan Developmental Psychology
PSY 356	Child Development
PSY 357	Adolescent and Young Adult Development
PSY 370	Environmental Psychology I

Clinical/Applied Psychology Concentration

PSY 310	Behavior Modification I
PSY 311	Personality: Theory and Research
PSY 365	Psychology in the Workplace
PSY 367	Organizational Behavior
PSY 375	Forensic Psychology
PSY 376	Health Psychology

2. Any additional 3 credit hours of psychology at the 300-level.

C. Electives Selected by Advisement: 400-level (9 cr)

1. Select one course from two of the following three concentrations (6 cr):

Bio/Cognitive Psychology Concentration

PSY 404	Theories of Learning
PSY 421	Physiological Psychology
PSY 430	Psycholinguistics: Language Structures and Processes
PSY 432	Human Motivation and Emotion
PSY 441	Introduction to Neuropsychology

Social/Developmental Psychology Concentration

PSY 415	The Competent Infant
PSY 416	Abnormal Child Psychology
PSY 417	The Atypical Infant
PSY 427	Adult Development and Aging II
PSY 470	Environmental Psychology II

Clinical/Applied Psychology Concentration

PSY 411	Abnormal Psychology
PSY 412	Community Psychology
PSY 440	Addictive Behaviors
PSY 466	Personnel Psychology
PSY 480	Psychotherapy: Theory, Research, and Procedures
PSY 481	Psychological Tests and Measurements

2. Any additional 3 credit hours of psychology at the 400-level; can include PSY 488, PSY 495, or PSY 499.

All College Electives	15–42 cr
Total Required Credit Hours	120 cr

PSYCHOLOGY (B.S.)

BS-NS PSY

**Psychology Department
Bachelor of Science (HEGIS 2001)**

Classroom Building C312 (716) 878-6215

A specialized B.S. degree in psychology is offered in the following concentrations: biological psychology, clinical psychology, environmental psychology, industrial/organizational psychology, psychology of aging, and psychology of infancy. The B.S. program is designed for a very limited number of students who seek an intensive preparation in one of the above areas. Emphasis is placed upon intensive practicum work and independent study. Students have the opportunity to work closely with a faculty mentor.

Admission Requirements:

1. The student must be enrolled in the B.A. program and be in good academic standing at the college before he or she can apply to the B.S. program.
2. The student applying for the B.S. program must have received a minimum grade of B in the first course of the required sequence of B.S. courses for that concentration.
3. For guidance in the application process, the potential B.S. applicant must meet with the faculty coordinator for the specialized B.S. concentration in which the student is interested.
4. A psychology department faculty member must formally sponsor the student.
5. The student must be able to complete a minimum of one academic year of supervised work with his or her sponsor in the B.S. program prior to graduation.
6. Final acceptance into the B.S. program requires approval of the candidate by the psychology department.

B.S. Honors in Psychology: Departmental honors are for students who are performing exceptionally well in their courses. The honors designation is an adjunct to the B.S. degree with an added emphasis on independent work, and requires that students conduct a comprehensive original research project under the supervision of a faculty mentor. To be considered, students must have at least 24 credit hours in psychology from Buffalo State with a minimum GPA of 3.5, and a minimum GPA of 3.25 in all courses taken at Buffalo State. In addition to the required courses

in the B.S. degree program, honors students must take PSY 496 and PSY 498. A 42-credit-hour sequence of psychology courses is required for a B.S. honors degree. PSY 496 and PSY 498 may be used, where applicable, as elective courses in these programs. Students should see their advisor no later than the junior year for more information about the honors option.

Intellectual Foundations Requirements	39–66 cr
Total Required Credit Hours in Psychology	39–42 cr

A. Required Courses (18 cr)

PSY 101	Introduction to Psychology
PSY 306	Statistics in Psychological Research
PSY 450W	Research Methods in Psychology I: Introduction to Research Methods
PSY 471	History and Systems of Psychology
PSY 472W	Seminar on Psychology
PSY 488	Internship
OR	
PSY 495	Project
OR	
PSY 499	Independent Study

B. Concentration Courses (21–24 cr)

Students are required to complete one of the following concentrations. At least two courses for each concentration must be at the 400 level (excluding the courses listed in group A).

Biological Psychology Concentration (24 cr)

PSY 304	Learning: Theory and Research
PSY 308	Sensation and Perception
PSY 321	Comparative Animal Behavior
PSY 376	Health Psychology
PSY 421	Physiological Psychology
PSY 441	Introduction to Neuropsychology

Elective courses selected by advisement (6 cr).

Clinical Psychology Concentration (24 cr)

PSY 311	Personality: Theory and Research
PSY 411	Abnormal Psychology
PSY 480	Psychotherapy: Theory, Research, and Procedures
PSY 481	Psychological Tests and Measurements

Elective courses selected by advisement (12 cr).

Environmental Psychology Concentration (24 cr)

PSY 370	Environmental Psychology I
PSY 470	Environmental Psychology II

Elective courses selected by advisement (18 cr).

Industrial/Organizational Psychology Concentration (24 cr)

PSY 365	Psychology in the Workplace
PSY 367	Organizational Behavior
PSY 466	Personnel Psychology

Elective courses selected by advisement (15 cr).

Psychology of Aging Concentration (21 cr)

PSY 327	Adult Development and Aging I
PSY 355	Lifespan Developmental Psychology
PSY 427	Adult Development and Aging II

Elective courses selected by advisement (12 cr).

Psychology of Infancy Concentration (21 cr)

PSY 355	Lifespan Developmental Psychology
PSY 415	The Competent Infant
PSY 417	The Atypical Infant

Elective courses selected by advisement (12 cr).

All College Electives	18–39 cr
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- Biological Psychology (18–36 cr)
- Clinical Psychology (18–36 cr)
- Environmental Psychology (24–36 cr)
- Industrial/Organizational Psychology (18–36 cr)
- Psychology of Aging (21–39 cr)
- Psychology of Infancy (21–39 cr)

Total Required Credit Hours	120 cr
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PUBLIC COMMUNICATION (B.A.)

BA-AH PCM

Communication Department Bachelor of Arts (HEGIS 0699)

Accrediting Council on Education in Journalism and Mass Communications (Accredited)
Bishop Hall 210 (716) 878-6008

This major allows students flexibility to tailor a program based on strategic communication through the disciplines of public relations, advertising, and related fields. It meets the needs of students preparing for a career in which research, strategic planning, implementation of creative tactics, and evaluation are central, whether to advance an organization, promote a product, or advocate a cause. Compare this major with communication studies, journalism, and media production.

This is the only program in public relations and advertising at any SUNY school that is affiliated with the Accrediting Council on Education in Journalism and Mass Communications. Only four other undergraduate programs in New York State are accredited.

Career Opportunities: Students in public communication prepare for careers in public relations and advertising, as well as fundraising, organizational communication, research, lobbying, marketing communication, and other fields that require a liberal arts education enhanced with communication expertise.

The profile of a successful public communication graduate is a person with strong writing and speaking proficiency, keen ethical insight, competence in research and planning, and skill in working effectively both independently and in teams.

Admission Requirements: Incoming freshmen and transfer students can declare the major. A 2.6 GPA in the major is needed to register for required upper-division courses (300- and 400-level).

See www.buffalostate.edu/communication for application forms and additional information, including a list of equivalent core courses at community colleges. Transfer students from two-year schools may apply only core courses toward this major for a maximum of 12 credits. Students generally require four semesters of study after completing communication core courses.

Academic Standards: Only grades of C or higher may be applied toward requirements for any communication degree; courses with lower grades must be repeated. Consistent with standards of the Accrediting Council for Education in Journalism and Mass Communication, the number of communication courses that students may take is

capped, encouraging a broad-based liberal arts education. The department encourages students to take minors or second majors and requires evidence of an academic concentration or area of expertise outside the Communication Department.

Intellectual Foundations Requirements 39–66 cr

Total Requirements 42 cr

A. Communication Core (12 cr)

- COM 100 Media Literacy
- COM 210 Introduction to Media Writing
- COM 215 Introduction to Visual Communication
- SPC 205 Introduction to Oral Communication

Note: Students must have a minimum GPA of 2.6 in the major to register for certain upper-division courses (300- and 400-level).

B. Major Requirements (18 cr)

- COM 301 Principles of Public Relations and Advertising
- SPC 307 Group Communication
- COM 308 Public Relations Writing
- COM 322 Communication Graphics
- or COM 336 or Web and Social Media Production
- COM 401 Applied Communication Research
- COM 418 Campaigns in Public Relations and Advertising

C. Senior Seminar (3 cr)

- COM 450 Communication and Society

D. Communication Electives (9 cr)

- COM 488 Internship
- or COM 495 or Independent Project
- or COM 499 or Independent Study
- or 300/400-level elective by advisement

All College Electives 12–39 cr

Total Required Credit Hours 120 cr

SCULPTURE (B.F.A.)

BFA-AH SCL

Fine Arts Department Bachelor of Fine Arts (HEGIS 1002)

National Association of Schools of Art and Design (NASAD) Accredited
Upton Hall 502 (716) 878-6014

High school students applying for admission to the B.F.A. sculpture major need only state his/her intent to major in sculpture to be accepted to the major, assuming required G.P.A. and other college admission standards are met. A portfolio is not required. All students, including transfer students, must undergo a formal portfolio review after completion of FAR342 (Intermediate II) or the equivalent course for a transfer student.

Each B.F.A. student will be required to mount an individual exhibition of his or her work. It will be planned and installed with the advice of the student's faculty adviser, but no grade will be assigned.

The Fine Arts Department reserves the right to retain student artwork for official purposes, such as exhibits, catalogs, or teaching aids.

Admission Requirements: Admission to the B.F.A. program for high school students is made by stating his/her intent to major in sculpture when applying to the college, assuming G.P.A. and other college admission standards are met. A portfolio is not required. All students, including transfer students, must undergo a formal portfolio review after completion of FAR342 (Intermediate II) or the equivalent course for a transfer student. The portfolio is to be presented in person or mailed along with a statement of intent as stipulated by the department and should contain examples of work that the candidate believes best display his or her abilities.

Students are expected to assume the costs of materials they use in their courses. All studio courses may have an additional instructional charge for materials used in class.

Intellectual Foundations Requirements 39–66 cr

Total Required Credit Hours in Fine Arts 78 cr

A. Required Courses (45 cr)

- DES 101 Two-Dimensional Design
 - FAR 101 Drawing I
 - FAR 102 Drawing II
 - FAR 103 Modeling
 - FAR 104 Themes and Issues in Contemporary Arts
 - FAR 210 Introductory Painting
 - FAR 220 Introductory Photography
 - FAR 230 Introductory Printmaking
 - FAR 240 Introductory Sculpture
 - FAR 250 Art History I
 - FAR 251 Art History II
 - FAR 363 Twentieth-Century Art
 - FAR 470 Senior Seminar in Fine Arts
- Two art history electives.

B. Sculpture (21 cr)

- FAR 341 Intermediate Sculpture I
- FAR 342 Intermediate Sculpture II
- FAR 343 Advanced Sculpture (three courses) (9)
- FAR 440 Senior Studio in Sculpture (6)

C. Art Electives (12 cr)

All College Electives 0–3 cr

Total Required Credit Hours 120 cr

SOCIAL STUDIES EDUCATION (7–12, B.S.)

BS-NS SSS

History and Social Studies Education Department Bachelor of Science (HEGIS 2201.01)

National Council for Accreditation of Teacher Education (NCATE) Accredited
Classroom Building C205 (716) 878-5412

The social studies B.S. degree program in secondary education prepares students to meet the educational requirements leading to New York State Initial Certification in Adolescence Education required to teach social studies in grades 7–12. The program supplies a knowledge base that provides the background knowledge necessary for teachers

to implement the NYS Learning Standards for students in grades 7–12.

Admission Requirements: Applicants must have a minimum cumulative GPA of 2.75, a minimum GPA of 2.75 in all history and social science courses.

Prerequisites for Student Teaching: See prerequisites for SSE 409 and SSE 410.

A departmental honors program is also available. Students should contact the department for additional information.

The social studies content core constitutes a 42-credit major in social studies that consists of study in economics, government, and a minimum of 30 credit hours of study in the history and geography of the United States and the world (see total required credit hours in social studies, below). All program majors are required to complete a minimum of 100 clock hours of field experience related to coursework prior to student teaching. These field experiences consist of observations, individual tutoring, and the teaching of small groups of students under the supervision of certified teachers. These experiences are an integral component of the pedagogical core courses specified in the previous section, with learning outcomes specified and their achievement evaluated by course instructors.

Students complete a minimum of 30–35 clock hours of field experience in each of three courses: SSE 200, SSE 303, and SSE 309. Another course, SSE/HIS 488, is available and will be used by transfer students and others who may have a deficiency in field experience. The department has established relationships with several "high-need" urban and suburban school districts where field experiences are held. All majors will have study and experiences that together provide a solid foundation for teaching in high-need schools.

To student teach, students are required to have a minimum cumulative GPA of 2.75 and a minimum GPA of 2.75 in the social studies major, as well as obtain a minimum grade of C in SSE 303 and SSE 309. All majors meeting these requirements must enroll in two practicum courses following completion of all other coursework and satisfaction of English and math competency requirements. Placements for these practica include urban and suburban settings. The urban placements may be in high-need districts that provide opportunities for student teachers to work with students from diverse backgrounds, including socio-economically disadvantaged students, students with disabilities, and students who are English-language learners. Experiences include individual and group instruction, daily and long-view planning, unit teaching, classroom management and routine procedures, use of audiovisual aids, community resources, record-keeping, evaluation procedures, and participation in the total school program.

Intellectual Foundations Requirements 39–66 cr

Program majors should enroll in an introductory psychology course, such as PSY 101, to satisfy their Intellectual Foundation requirements. It is recommended that majors take history courses to meet their Foundations of Civilizations requirements.

Total Required Credit Hours in Social Sciences 42 cr

A. History of the Western Hemisphere (12 cr)

Basic U.S. History

- HIS 106 History of American Life I
- HIS 107 History of American Life II
- HIS 415 History and Government of New York State
- Upper-division elective (any U.S., Canadian, or Latin American history course).

B. History of the Eastern Hemisphere (12 cr)

- HIS 230 World Civilizations

Select two courses from the following:

- HIS 115 Foundations of Western Civilization
- HIS 116 Europe Since 1500
- HIS 117 Twentieth-Century Europe

One world history elective (any Asian, African, or Middle-Eastern world history course).

C. Geography (6 cr)

- GEG 300 World Regional Geography

Select one course from the following:

- GEG 102 Human Geography
- GEG 206 Geography of New York State
- GEG 309 Introduction to Urban Geography
- GEG 320 Historical Geography of the United States
- GEG 360 Geography of Asia
- GEG 362 Geography of the United States and Canada
- GEG 364 Geography of Europe

D. Political Science (3 cr)

Select one course from the following:

- PSC 102 Introduction to American Government
- PSC 220 The Development of American Constitutional Law
- PSC 320 U.S. Civil Liberties

E. Economics (3 cr)

Select one course from the following:

- ECO 101 The Economic System
- ECO 201 Principles of Macroeconomics
- ECO 202 Principles of Microeconomics

F. Upper-Division Social Science Elective (3 cr)

G. Seminar (3 cr)

- HIS 300W Research and Writing Seminar

Total Required Credit Hours in Professional Education 30 cr

- EDF 303 Educational Psychology
- EDU 416 Teaching Literacy in Middle and Secondary Schools
- ENG 309 Teaching and Evaluating Writing
- EXE 100 Nature and Needs of Individuals with Special Needs
- OR
- EXE 372 Foundations of Teaching Adolescents with Disabilities
- PSY 357 Adolescent and Young-Adult Development
- SSE 200 Introduction to Secondary Teaching
- SSE 303 Methods and Materials in Teaching Middle School Social Studies
- SSE 309 Methods and Materials in Teaching High School Social Studies
- SSE 370 Computer Technology in the Social Studies Classroom
- SSE 402 Historical and Philosophical Foundations of Social Education
- OR
- SSE/HIS 407 The Teaching of History

Total Required Credit Hours in Student Teaching 12 cr

- SSE 409 Student Teaching of Social Studies in the Middle School (6)
- SSE 410 Student Teaching of Social Studies in Senior High School (6)

One Year (or Equivalent) of a Foreign Language 0-6 cr

Total Required Credit Hours 123 cr

SOCIAL STUDIES EDUCATION (7–12, 5–6 EXTENSION, B.S.)

BS-NS SSX

History and Social Studies Education Department Bachelor of Science (HEGIS 2201.01)

National Council for Accreditation of Teacher Education
(NCATE) Accredited

Classroom Building C205 (716) 878-5412

The social studies secondary education program prepares students to meet the educational requirements leading to New York State Initial Certification in Adolescence Education required to teach social studies in grades 7–12, with an extension for middle childhood that qualifies the holder to teach social studies in grades 5–9. The program supplies a knowledge base that provides the background knowledge necessary for teachers to implement the NYS Learning Standards for students in grades 5–12.

Admission Requirements: Applicants must have a minimum cumulative GPA of 2.75, a minimum GPA of 2.75 in all history and social science courses.

Prerequisites for Student Teaching: See prerequisites for SSE 409 and SSE 410.

A departmental honors program is also available. Students should contact the department for additional information.

The social studies content core constitutes a 42-credit major in social studies that consists of study in economics, government, and a minimum of 33 credit hours of study in the history and geography of the United States and the world (see "Total Required Credit Hours in Social Studies," below).

All program majors are required to complete a minimum of 150 clock hours of field experience related to coursework prior to student teaching. These field experiences consist of observations, individual tutoring, and the teaching of small groups of students under the supervision of certified teachers. These experiences are an integral component of the pedagogical core courses specified in the previous section, with learning outcomes specified and their achievement evaluated by course instructors.

Students complete a minimum of 30-35 clock hours of field experience in each of three courses: SSE 200, SSE 303, and SSE 309. Another course, SSE/HIS 488, will be used by students to complete the additional 50 clock hours in field experience required for the grades 5–6 extension. The department has established relationships with several "high-need" urban and suburban school districts where field experiences are held. All majors will have study and experiences that together provide a solid foundation for teaching in high-need schools.

To student teach, students are required to have a minimum cumulative GPA of 2.75 and a minimum GPA of 2.75 in

the social studies major, as well as obtain a minimum grade of C in SSE 303 and SSE 309. All majors meeting these requirements must enroll in two practicum courses following successful completion of all other coursework, and satisfaction of English and math competency requirements. Placements for these practica include urban and suburban settings. The urban placements may be in high-need districts that provide opportunities for student teachers to work with students from diverse backgrounds, including socio-economically disadvantaged students, students with disabilities, and students who are English-language learners. Experiences include individual and group instruction, daily and long-view planning, unit teaching, classroom management and routine procedures, use of audiovisual aids, community resources, record-keeping, evaluation procedures, and participation in the total school program.

Intellectual Foundations Requirements 39–66 cr

Program majors should enroll in an introductory psychology course, such as PSY 101, to satisfy their Intellectual Foundations requirements. It is recommended that majors take history courses to meet their civilizations requirements.

Total Required Credit Hours in Social Sciences 42 cr

A. History of the Western Hemisphere (15 cr)

HIS 106	History of American Life I
HIS 107	History of American Life II
HIS 308	History of Early Canada
OR	
HIS 316	History of Modern Canada
OR	
HIS 326	History of the Great Lakes Region
HIS 314	Modern Latin America
HIS 415	History and Government of New York State

B. History of the Eastern Hemisphere (15 cr)

HIS 230	World Civilizations
<i>Select two courses from the following:</i>	
HIS 115	Foundations of Western Civilization
HIS 116	Europe Since 1500
HIS 117	Twentieth-Century Europe
Two upper-division electives (any Asian, African, or Middle-Eastern world history courses).	

C. Geography (3 cr)

GEG 300	World Regional Geography
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D. Political Science (3 cr)

<i>Select one course from the following:</i>	
PSC 102	Introduction to American Government
PSC 220	The Development of American Constitutional Law
PSC 320	U.S. Civil Liberties

E. Economics (3 cr)

<i>Select one course from the following:</i>	
ECO 101	The Economic System
ECO 201	Principles of Macroeconomics
ECO 202	Principles of Microeconomics

F. Seminar (3 cr)

HIS 300W	Research and Writing Seminar
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Total Required Credit Hours in Professional Education 30 cr

EDF 303	Educational Psychology
EDU 416	Teaching Literacy in Middle and Secondary Schools
ENG 309	Teaching and Evaluating Writing
EXE 100	Nature and Needs of Individuals with Special Needs
OR	

EXE 372	Foundations of Teaching Adolescents with Disabilities
PSY 357	Adolescent and Young-Adult Development
SSE 200	Introduction to Secondary Teaching
SSE 303	Methods and Materials in Teaching Middle School Social Studies
SSE 309	Methods and Materials in Teaching High School Social Studies
SSE 370	Computer Technology in the Social Studies Classroom
SSE 402	Historical and Philosophical Foundations of Social Education
OR	
SSE/HIS 407	The Teaching of History

Total Required Credit Hours in Field Experience and Student Teaching 15 cr

SSE 409	Student Teaching of Social Studies in the Middle School (6)
SSE 410	Student Teaching of Social Studies in Senior High School (6)
SSE/HIS 488	Internship: Middle Childhood and Adolescence Education

One Year (or Equivalent) of a Foreign Language 0-6 cr

Total Required Credit Hours 126 cr

SOCIAL STUDIES EDUCATION (7–12, PTCP)

PBC-NS SXX

History and Social Studies Education Department Postbaccalaureate Teacher Certification Program (HEGIS 2201.01)

National Council for Accreditation of Teacher Education (NCATE) Accredited
Classroom Building C205 (716) 878-5412

The social studies education (7–12) postbaccalaureate certification-only program prepares persons with undergraduate degrees in history or social science, or with a 36-credit concentration in history and/or social science courses, to meet the disciplinary content and educational requirements leading to New York’s Initial Certificate in adolescence education required to teach social studies in grades 5–12. The program supplies the background knowledge necessary for teachers to implement the NYS Learning Standards for social studies in grades 5–12. It also meets the standards set by national professional organizations such as the National Council for the Social Studies and the National Council for the Accreditation of Teacher Education.

Admission Requirements: Applicants must have an existing undergraduate degree with a 36-credit concentration in history and/or social science courses, as well as a minimum 2.75 cumulative GPA; a minimum 2.75 GPA in all history and social science courses.

Students complete a minimum of 30–35 clock hours of field experience in each of three courses: SSE 200, SSE 303, and SSE 309. The department has established relationships with several high-need urban and suburban school districts where field experiences are held. All majors will have study and experiences that together provide a solid foundation for teaching in high-need schools.

To meet NCATE certification requirements, the total social studies subject matter coursework must include no less than 40 percent of a total four-year program, with an area of concentration of at least 18 semester hours in one academic discipline. The program of study must include economics, government, and a minimum of 30 semester hours of study in the history and geography of the United States and the world. All students’ history/social science coursework must include the following or the equivalent of the following:

Total Required Credit Hours in Content Area Courses 50 cr

A. Basic U.S. History (9 cr)

HIS 106	American Life I
HIS 107	American Life II
HIS 415	History and Government of New York State

B. Basic World History (9 cr)

HIS 230	World Civilizations
<i>Select two courses from the following:</i>	
HIS 115	Foundations of Western Civilization
HIS 116	Europe Since 1500
HIS 117	Twentieth-Century Europe

C. Other World History (6 cr)

Two Asian, Middle-Eastern, or African history courses

D. Geography (6 cr)

GEG 300	World Regional Geography
<i>Select one course from the following:</i>	
GEG 102	Human Geography
GEG 206	Geography of New York State
GEG 309	Introduction to Urban Geography
GEG 320	Historical Geography of the United States
GEG 360	Geography of Asia
GEG 362	Geography of the United States and Canada
GEG 364	Geography of Europe

E. Political Science (3 cr)

<i>Select one course from the following:</i>	
PSC 102	Introduction to American Government
PSC 220	Development of American Constitutional Law
PSC 320	U.S. Constitution/Civil Liberties

F. Economics (3 cr)

<i>Select one course from the following:</i>	
ECO 101	The Economic System
ECO 201	Principles of Macroeconomics
ECO 202	Principles of Microeconomics

G. Cultural Diversity (3 cr)

SSE/HIS 363	American Identity in Transition: Diversity and Pluralism in the United States
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H. History/Social Science Electives (11 cr)

Total Required Credit Hours in Professional Education 30 cr

EDF 303	Educational Psychology
EDU 416	Teaching Literacy in Middle and Secondary Schools
ENG 309	Teaching and Evaluating Writing
EXE 100	Nature and Needs of Individuals with Special Needs
OR	
EXE 372	Foundations of Teaching Secondary Students with Disabilities
PSY 357	Adolescent and Young Adult Development
SSE 200	Introduction to Secondary Teaching
SSE 303	Methods and Materials in Teaching Middle School Social Studies
SSE 309	Methods and Materials in Teaching High School Social Studies

SSE 370	Computer Technology in the Social Studies Classroom
SSE 402	Historical and Philosophical Foundations of Social Education
OR	
SSE/HIS 407	The Teaching of History

Total Required Credit Hours in Student Teaching 12 cr

To student teach, a student must have achieved a cumulative GPA of 2.75 or higher and a minimum 2.75 GPA in the social studies major, as well as obtain a grade of C or higher in SSE 303 and SSE 309.

SSE 409	Student Teaching of Social Studies in the Middle School (6)
SSE 410	Student Teaching of Social Studies in Senior High School (6)

Total Required Credit Hours 92 cr

SOCIAL STUDIES EDUCATION (7–12, 5–6 EXTENSION, PTCP)

PBC-NS SSX

History and Social Studies Education Department Postbaccalaureate Teacher Certification Program (HEGIS 2201.1)

National Council for Accreditation of Teacher Education (NCATE) Accredited
Classroom Building C205 (716) 878-5412

The social studies education (7–12; 5–6 extension) post-baccalaureate certification-only program prepares persons with existing undergraduate degrees who have a history or social science major to meet the disciplinary content and educational requirements leading to New York State’s Initial Certificate in adolescence education required to teach social studies in grades 5–12. The program supplies the background knowledge necessary for teachers to implement the NYS Learning Standards for social studies in grades 5–12. It also meets the standards set by national professional organizations such as the National Council for the Social Studies and the National Council for the Accreditation of Teacher Education.

Admission Requirements: Applicants must have an existing undergraduate degree with a 36-credit concentration in history and/or social science courses, as well as a minimum 2.75 cumulative GPA; a minimum 2.75 GPA in all history and social sciences courses.

Students complete a minimum of 30–35 clock hours of field experience in each of three courses: SSE 200, SSE 303, and SSE 309. Another course, SSE/HIS 488, will be used by students to complete the additional 50 clock hours in field experience required for the 5-6 extension. The department has established relationships with several high-need urban and suburban school districts where field experiences are held. All majors will have study and experiences that together provide a solid foundation for teaching in high-need schools.

Total Required Credit Hours in Content Area Courses 50 cr

A. History of the Western Hemisphere (15 cr)

HIS 106	American Life I
HIS 107	American Life II

HIS 308	History of Canada
HIS 314	Modern Latin America
HIS 415	History and Government of New York State

B. History of the Eastern Hemisphere (9 cr)

HIS 230	World Civilizations
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Select two courses from the following:

HIS 115	Foundations of Western Civilization
HIS 116	Europe Since 1500
HIS 117	Twentieth-Century Europe

C. Geography (6 cr)

GEG 300	World Regional Geography
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Select one course from the following:

GEG 102	Human Geography
GEG 206	Geography of New York State
GEG 309	Introduction to Urban Geography
GEG 320	Historical Geography of the United States
GEG 360	Geography of Asia
GEG 362	Geography of the United States and Canada
GEG 364	Geography of Europe

D. Political Science (3 cr)

Select one course from the following:

PSC 102	Introduction to American Government
PSC 220	Development of American Constitutional Law
PSC 320	U.S. Constitution/Civil Liberties

E. Economics (3 cr)

Select one course from the following:

ECO 101	The Economic System
ECO 201	Principles of Macroeconomics
ECO 202	Principles of Microeconomics

F. Cultural Diversity (3 cr)

SSE/HIS 363	American Identity in Transition: Diversity and Pluralism in the United States
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G. History/Social Science Electives (11 cr)

Total Required Credit Hours in Professional Education 30 cr

EDF 303	Educational Psychology
EDU 416	Teaching Literacy in Middle and Secondary Schools
ENG 309	Teaching and Evaluating Writing
EXE 100	Nature and Needs of Individuals with Special Needs
OR	
EXE 372	Foundations of Teaching Secondary Students with Disabilities
PSY 357	Adolescent and Young Adult Development
SSE 200	Introduction to Secondary Teaching
SSE 303	Methods and Materials in Teaching Middle School Social Studies
SSE 309	Methods and Materials in Teaching High School Social Studies
SSE 370	Computer Technology in the Social Studies Classroom
SSE 402	Historical and Philosophical Foundations of Social Education
OR	
SSE/HIS 407	The Teaching of History

Total Required Credit Hours in Student Teaching 15 cr

To complete the program, a student must have achieved a cumulative GPA of 2.75 or higher and a minimum 2.75 GPA in the major.

SSE 409	Student Teaching of Social Studies in the Middle School (6)
SSE 410	Student Teaching of Social Studies in Senior High School (6)
SSE/HIS 488	Internship: Middle Childhood and Adolescence Education (3 cr)

Total Required Credit Hours 95 cr

SOCIAL WORK (B.S.)*

BS-SP SWK

Social Work Department Bachelor of Science (HEGIS 2104)

Council on Social Work Education Accredited
Classroom Building C115 (716) 878-5705

The social work program prepares students for social work practice at the first professional level. Consistent with accreditation standards, the social work courses cover the following areas: human behavior and the social environment, social welfare policy and services, intervention methods, research, values and ethics, diversity, social and economic justice, populations at risk, and field instruction.

Social work is an upper-division major that builds on a liberal arts base. Academic evaluation includes GPA, class performance, and conduct that is ethical and professional. Interested students should contact the department for specific information on these academic standards.

Admission Requirements: Students are required to:

1. Complete 45 credit hours by the end of the semester in which the application is made.
2. Attain a minimum GPA of 2.5.
3. Successfully complete the English and mathematics basic skills competency requirements of the college in addition to BIO101.
4. Progress toward completing the liberal arts foundation (a recommended course in each of the following areas: sociology, psychology, political science, anthropology, economics, history, philosophy, literature, and the arts). A list of courses that fulfill these requirements is available in the department office and Web site.

*Evening courses available. Evening and weekend field education not guaranteed.

Intellectual Foundations Requirements 39–66 cr

BIO 101 or equivalent in human biology

Total Required Credit Hours in Social Work 42 cr

SWK 220	Introduction to Social Work
SWK 307	Human Behavior and Social Environment I
SWK 308	Human Behavior and Social Environment II
SWK 317	Research in Social Work
SWK 319	Dynamics of Poverty
SWK 320	Social Services Organizations
SWK 419	Social Welfare Policy
SWK 422	Interventive Methods I
SWK 423	Interventive Methods II
SWK 424	Interventive Methods III
SWK 493-494	Field Instruction (12 cr)

All College Electives 12–39 cr

Total Required Credit Hours 120 cr

SOCIOLOGY (B.A.)

BA-NS SOC

Sociology Department Bachelor of Arts (HEGIS 2208)

Classroom Building B307 (716) 878-5411

The B.A. degree in sociology presents a general program to prepare students for a wide variety of positions in business, industry, government, health-related services, or social services. It is also designed to prepare undergraduate students for graduate work in sociology, law, public administration, demography, or other social science disciplines. Its emphasis upon scholarly research culminates in the senior seminar, in which students experience the atmosphere and types of academic tasks prevalent in graduate work. The freedom of choice in selection of sociology courses permits students to develop a particular specialty within sociology, either to meet special career interests, or graduate program requirements. Although this program does not require either applied computer courses or internship experience, students are strongly advised to consider these courses in the selection of sociology electives.

Intellectual Foundations Requirements 39–66 cr

Total Required Credit Hours in Sociology 40 cr

A. Required Courses (22 cr)

SOC 100	Introduction to Sociology
SOC 300W	Methods in Social Research
SOC 301	Social Statistics (4)
SOC 330	Social Psychology
OR	
SOC 350	Power, Class, and Inequality
SOC 400W	Foundations of Sociological Thought
SOC 408W	Contemporary Sociological Theory
SOC 490	Seminar in Sociology

B. At Least One Course from Each of Three Clusters (9 cr)

Social Institutions Cluster

SOC 320	Sociology of the Family
SOC 323	Sociology of Education
SOC 360	Sociology of Work
SOC 362	Sociology of Organizations

Social Structure and Development Cluster

SOC 310	Sociology of Sex and Gender
SOC 333	Social Movements
SOC 340	Sociology of the City
SOC 351	Sociology of Race and Ethnicity

Deviance Cluster

SOC 370	Sociology of Deviant Behavior
SOC 380	Sociology of Crime
SOC 382	Sociology of Law
SOC 390	Juvenile Delinquency

C. Sociology Electives (9 cr)

At least three additional courses in sociology.

All College Electives 14–41 cr

Total Required Credit Hours 120 cr

SOCIOLOGY—APPLIED (B.S.)

BS-NS SOA

Sociology Department Bachelor of Science (HEGIS 2208)

Classroom Building B307 (716) 878-5411

The B.S. degree program emphasizes applied sociology and prepares students to conduct and administer sociological research for client organizations, such as business and financial institutions, labor organizations, criminal justice units, government agencies, health-related organizations, and a host of social service agencies. It also provides preparation for graduate study. The program rests upon a foundation of required core courses stressing research skills and sociological theory. Students select one of four clusters to emphasize a particular area of interest in the field.

Intellectual Foundations Requirements 39–66 cr

Total Required Credit Hours in Sociology 40 cr

A. Required Courses (19 cr)*

SOC 100	Introduction to Sociology
SOC 300W	Methods of Research
OR	
SOC 302W	Applied Social Research
SOC 301	Social Statistics (4)
SOC 400W	Foundations of Sociological Thought
SOC 486	Practicum in Applied Sociology
SOC 488	Internship in Sociology

*A number of courses are listed in more than one section. If a student selects one of these courses, it can be applied only in a single section. The student will choose where to apply the credit.

B. Cluster Requirement (9 cr)

Select three courses from one cluster:

Socialization through the Life Course

SOC 310	Sociology of Gender and Sex Roles
SOC 312	Women and Society
SOC 320	Sociology of the Family
SOC 321	African American Family
SOC 322	Sociology of Childhood and Youth
SOC 323	Sociology of Education
SOC 328	Sociology of Religion
SOC 330	Social Psychology
SOC 331	Sociology of Group Dynamics
SOC 352	Sociology of Aging
SOC 360	Sociology of Work
SOC 370	Sociology of Deviant Behavior
SOC 392	Sociology of Sexual Behavior

Deviance and Social Control

SOC 240	Social Problems
SOC 370	Sociology of Deviant Behavior
SOC 380	Sociology of Crime
SOC 382	Sociology of Law
SOC 383	Sociology of Punishment and Corrections
SOC 381	Sociology of Violence
SOC 389	Sociology of Murder
SOC 392	Sociology of Sexual Behavior
SOC 390	Sociology of Juvenile Delinquency
SOC 391	Sociology of Addiction
SOC 392	Sociology of Sexual Behavior
SOC 393	Sociology of Mental Illness

Community, Work, and Organizations

SOC 250	Sociology of Buffalo, New York
SOC 323	Sociology of Education
SOC 324	Sociology of Sport
SOC 328	Sociology of Religion
SOC 331	Sociology of Group Dynamics
SOC 333	Social Movements
SOC 340	Sociology of the City
SOC 350	Power, Class, and Inequality
SOC 351	Sociology of Race and Ethnicity
SOC 353	Environment and Society
SOC 360	Sociology of Work
SOC 361	Industrial Sociology
SOC 362	Sociology of Organizations
SOC 382	Sociology of Law
SOC 430	Sociology of International Development and Underdevelopment

C. Inequality Electives (6 cr)

Select two courses from the following:

SOC 250	Sociology of Buffalo, New York
SOC 310	Sociology of Gender and Sex Roles
SOC 312	Women in Society
SOC 321	African American Family
SOC 333	Social Movements
SOC 341	Sociology of Human Ecology
SOC 350	Power, Class, and Inequality
SOC 351	Sociology of Race and Ethnicity
SOC 352	Sociology of Aging
SOC 353	Environment and Society
SOC 360	Sociology of Work
SOC 380	Sociology of Crime
SOC 430	Sociology of International Development and Underdevelopment

D. Sociology Electives (6 cr)

Students may take any two courses in sociology that have not already been applied to the major. These include all of the courses for the B.S. listed above and all of those listed below.

SOC 491	Topical Seminar in Sociology
SOC 495	Special Project
SOC 499	Independent Study

All College Electives 14–41 cr

Total Required Credit Hours 120 cr

SPANISH EDUCATION (7–12, B.S.)

BS-AH SPS

Modern and Classical Languages Department Bachelor of Science (HEGIS 1105.01)

National Council for Accreditation of Teacher Education (NCATE) Accredited

Bishop Hall 122 (716) 878-5414

The Spanish secondary education program leads to eligibility for New York State initial certification to teach Spanish in grades 7-12.. Students develop Spanish language skills and study the structure and sound system of Spanish, the literature and culture of Spanish-speaking peoples, and explore the teaching and learning of foreign languages in school settings. The curriculum includes a series of field experiences. All students desiring this program may be admitted into the B.A. language and literature program, which functions as a pre-major for the B.S. program.

Prospective students who apply for admission to the B.S. program must fill out a Change of Major Form and complete two brief entrance essays – one in English and the other in Spanish – in the Modern and Classical Languages Department office (Bishop 122) after they have successfully completed 6 credits beyond SPA302. No student will be admitted with less than a 2.5 overall GPA, or with less than a 2.5 GPA in Spanish courses. Students must have a minimum GPA of 2.5 (overall and in Spanish), to enroll in the teaching practicum. Also, the student must complete an ACTFL-approved Oral Proficiency Interview (OPI) in order to demonstrate Advanced-Low Proficiency in Spanish. If Advanced-Low is not achieved, an additional upper-level Spanish course, chosen in consultation with the student's advisor, must be successfully completed.

Intellectual Foundations Requirements **39–66 cr**

Total Required Credit Hours in Spanish **36 cr**

A. Required Courses (27 cr)

SPA 301	Spanish Conversation and Composition
SPA 302	Spanish Conversation and Composition
SPA 305	Spanish Phonetics
SPA 306	The Civilization of Spain
SPA 307	Survey of Spanish Literature
and SPA 308	or Survey of Spanish American Literature
or SPA 310	
and SPA 311	
SPA 309	The Civilization of Latin America
SPA 415	Advanced Grammar and Composition
SPA 416	Advanced Conversation

B. Electives (9 cr)

Select three courses from the following:

SPA 303	Introduction to Spanish Literature
SPA 307	Survey of Spanish Literature*
SPA 308	Survey of Spanish Literature*
SPA 310	Survey of Spanish American Literature*
SPA 311	Survey of Spanish American Literature*
SPA 317	Business Spanish
SPA 405	Old Spanish
SPA 408	Twentieth-Century Spanish Literature
SPA 411	Spanish American Literature of the Nineteenth and Twentieth Centuries: Novel, Short Story, and Essay
SPA 421	Structure of Modern Spanish
SPA 496	Seminar I
SPA 497	Seminar II

* May be taken as an elective if not taken as a required course.

Total Required Credit Hours in Professional Education **24 cr**

EDF 303	Educational Psychology
EDF 403	Historical and Philosophical Forces Influencing Secondary Education
EDU 416	Teaching Literacy in Middle and Secondary Schools
EXE 372	Foundations of Teaching Adolescents with Disabilities
FLE 240	Introduction to Linguistics
FLE 300	Introduction to the Foreign Language Classrooms
FLE 340	Second Language Acquisition and Literacy
FLE 401	Teaching Foreign Language in Middle and High Schools

Total Required Credit Hours in Student Teaching **12 cr**

FLE 407/ SED 407	Student Teaching of Foreign Languages in the Middle/Junior High School (6)
FLE 408/ SED 408	Student Teaching of Foreign Languages in the High School (6)

SPANISH EDUCATION (7–12, PTCP)

PBC-AH SPS

**Modern and Classical Languages Department
Postbaccalaureate Teacher Certification
Program (HEGIS 1105.01)**

National Council for Accreditation of Teacher Education (NCATE) Accredited
Bishop Hall 122 (716) 878-5414

The Spanish (7-12) postbaccalaureate teacher certification program leads to eligibility for New York State initial certification to teach Spanish in grades 7-12. This program is designed for students who have earned a baccalaureate degree in Spanish or a related field from an accredited college or university and intend to complete the coursework required for New York State certification to teach Spanish in middle or high schools.

The program supplies the background knowledge necessary for teachers to implement the New York State Learning Standards for Languages Other Than English (LOTE) 7-12. It also meets the standards set by national professional organizations such as the American Council of Teachers of Foreign Languages (ACTFL) and the National Council for Accreditation of Teacher Education (NCATE).

Students are responsible for any additional certification requirements, including the Liberal Arts and Sciences Test (LAST), the Assessment of Teaching Skills--Written (ATS-W), Content Specialty Test (CST) in Spanish, Oral Proficiency Interview (OPI), and all seminars required for initial certification. It takes three to four semesters of coursework, field experiences, and student teaching to complete certification requirements.

To student teach, a student must have achieved a minimum GPA of 2.75 in Spanish coursework and overall, and must have earned a minimum grade of C in FLE300, FLE340 and FLE401. Also, the student must complete an ACTFL-Approved Oral Proficiency Interview (OPI) in order to demonstrate Advanced-Low Proficiency in Spanish. If Advanced-Low is not achieved, an additional upper-level Spanish course, chosen in consultation with the student's advisor, must be successfully completed.

After successfully completing the teacher certification program and passing all required tests, students are eligible to apply for New York State Initial Certification through the Teacher Certification Office, Caudell Hall, 112 Buffalo State College. No degree or certificate is awarded by Buffalo State College.

Financial Assistance: For financial aid purposes, students who are fully admitted into the program are considered fifth-year undergraduates, eligible for undergraduate loans, when applicable.

Admission Requirements.*

1. A bachelor's degree from an accredited college or university with a minimum cumulative grade point average (GPA) of 2.75 (4.0 scale), a major in Spanish language, literature, culture (or a closely related discipline with a minimum of 30 hours in Spanish).
2. A minimum GPA of 2.75 in Spanish coursework.
3. A completed application form submitted to the Graduate Office at Buffalo State College.
4. Official transcripts from all previous college/university work.**
5. A personal interview with the program coordinator, department chair, or other designated official.
6. Successful completion of two written essays (one English, one Spanish), administered by the department as part of the interview process.

*Applicants who do not meet these minimum requirements should contact an Modern and Classical Languages advisor.

**Students who received degrees from institutions outside the United States must have their transcripts evaluated by a recognized evaluation service.

Program Requirements

Required Residency Requirement * ** **6 cr**

SPA 303	Introduction to Spanish Literature
SPA 305	Spanish Phonetics
SPA 306	The Civilization of Spain
SPA 307, SPA 308	Survey of Spanish Literature
SPA 309	The Civilization of Latin America
SPA 310, SPA 311	Survey of Spanish American Literature
SPA 405	Old Spanish
SPA 415	Advanced Grammar and Composition
SPA 416	Advanced Conversation
SPA 495	Special Project
SPA 496	Seminar I

* All students required to take a minimum of 6 credit hours above the 302 level

** Students with undergraduate degrees are eligible, with instructor permission, to enroll in graduate level language and literature courses at Buffalo State College.

Professional Education Courses **24 cr**

EDF 303	Educational Psychology
EDF 403	Historical and Philosophical Forces Influencing Secondary Education
EDU 416	Teaching Literacy in Middle and Secondary Schools
EXE 372	Foundations of Teaching Adolescents with Disabilities
FLE 240	Introduction to Linguistics
FLE 300	Introduction to the Foreign Language Classroom
FLE 340	Second Language Acquisition and Literacy
FLE 401	Teaching Foreign Language in Middle and High Schools

Student Teaching Courses **12 cr**

FLE 407/ SED 407	Student Teaching of Foreign Languages in the Middle/Junior High School (6)
FLE 408/ SED 408	Student Teaching of Foreign Languages in the High School (6)

Total Required Credit Hours **42 cr**

Total Required Credit Hours **42 cr**

SPANISH LANGUAGE AND LITERATURE (B.A.)

BA-AH SPA

Modern and Classical Languages Department Bachelor of Arts (HEGIS 1105)

Bishop Hall 122 (716) 878-5414

This program develops the ability to communicate in Spanish and introduces students to the masterpieces of the literature of Spanish-speaking countries and the most significant aspects of Hispanic culture. Students are encouraged to study in Spain or Latin America in an approved program. This program also serves as a pre-major for students who wish to enter the Bachelor of Science in Spanish Education (7-12).

Intellectual Foundations Requirements **39-66 cr**

Total Required Credit Hours in Spanish **36 cr**

A. Required Courses (15 cr)

Majors may select either sequence of courses:

SPA 301, SPA 302 Spanish Conversation and Composition

Students take 9 cr in one of the following sequence areas

SPA 306 The Civilization of Spain

SPA 307 Survey of Spanish Literature

SPA 308 Spanish Conversation and Composition

or

SPA 309 The Civilization of Latin America

SPA 310, SPA 311 Survey of Spanish American Literature

B. Electives (21 cr)

Courses in Spanish at 300 and 400 levels selected by advisement.

SPA 303 Introduction to Spanish Literature

SPA 305 Spanish Phonetics

SPA 306 The Civilization of Spain

SPA 307 Survey of Spanish Literature

SPA 308 Survey of Spanish Literature

SPA 309 The Civilization of Latin America

SPA 310 Survey of Spanish American Literature

SPA 311 Survey of Spanish American Literature

SPA 317 Business Spanish

SPA 389 Topics Course

SPA 402 Spanish Drama of the Golden Age

SPA 404 Cervantes

SPA 405 Old Spanish

SPA 406 Nineteenth-Century Spanish Literature

SPA 408 Twentieth-Century Spanish Literature

SPA 409 Twentieth-Century Spanish Literature

SPA 411 Spanish-American Literature of the Nineteenth and Twentieth Centuries: Novel, Short Story, and Essay

SPA 412 Spanish-American Literature of the Twentieth Century

SPA 415 Advanced Grammar and Composition

SPA 416 Advanced Conversation

SPA 421 Structure of Modern Spanish

SPA 495	Special Project
SPA 496	Seminar I
SPA 497	Seminar II

All College Electives **30–42 cr**

Total Required Credit Hours **120 cr**

SPEECH-LANGUAGE PATHOLOGY (B.S.)

BS-SP SLP

Speech-Language Pathology Department Bachelor of Science (HEGIS 1220)

Ketchum Hall 208 (716) 878-5502

The undergraduate program in speech-language pathology prepares students in the fundamentals of normal acquisition of speech, language, and hearing, and provides an introduction to the field of communication sciences and disorders. The undergraduate curriculum provides students with necessary prerequisite courses for graduate study. The master's degree is necessary for the initial teaching certificate, the license to practice speech-language pathology, and for the Certificate of Clinical Competence (CCC) awarded by the American Speech-Language Hearing Association, www.asha.org. The speech-language pathology master's degree program is accredited by the Council on Academic Accreditation in Audiology and Speech-Language Pathology (CAA) of the American Speech-Language Hearing Association.

Admission Requirements: Transfer students are eligible to apply for admission to the department as a sophomore or junior. Undeclared BSC students are eligible to apply for admission to the department only after one semester of college study. A minimum GPA of 2.8 is required for admission, no exceptions.

Academic Performance Policy: Students who have a GPA of less than 3.0 in SLP-prefixed courses required for the major at the end of a semester will be placed on departmental probation. The student will then have one semester to raise their GPA to a 3.0 or greater in SLP-prefixed required courses or they will be dismissed from the department.

Intellectual Foundations Requirements **39–66 cr**

Total Required Credit Hours in the Major **43 cr**

EXE 100	Nature and Needs of Individuals with Special Needs
EXE 245	Community Service with Individuals with Special Needs
EDF 202	Child Development and Education
EDF 302	Educational Psychology: Elementary Education
SLP 302	Clinical Phonetics
SLP 303	Language Acquisition
SLP 304	Anatomy and Physiology of Speech and Hearing Mechanisms
SLP 305	Communication Disorders I
SLP 314	Audiology
SLP 328	Audiology Lab
SLP 329	Language Acquisition Lab
SLP 405	Communication Disorders II
SLP 411	Language Diagnosis and Remediation
SLP 412	Speech Acoustics and Perception
SLP 424	Organization and Administration of School Speech

SLP 428	and Language Programs Acoustics Lab
SLP 429	Clinical Observation

All College Electives **11-35 cr**

Recommended speech-language pathology electives:	
PSY 306	Statistics in Psychological Research
OR	
MAT 311	Introductory Probability and Statistics
AND	
SLP 400	Language and Literacy for Speech-Language Pathologists

Total Required Credit Hours **120 cr**

TECHNOLOGY EDUCATION (B.S.)

BS-SP TED

Technology Department Bachelor of Science (HEGIS 0839.01)

National Council for Accreditation of Teacher Education (NCATE) Accredited
Upton Hall 315 (716) 878-6017

The technology education program prepares students to teach technology and the technological systems utilized in problem solving. The four systems emphasized are construction, manufacturing, communication, and transportation. The program is laboratory oriented, teaching the important role of engineering a product or service through selecting and systemizing knowledge for the solution of a problem. Graduates are recommended for an initial certificate to teach technology education in grades K–12.

Intellectual Foundations Requirements **39–66 cr**

Total Required Credit Hours in Technology **33 cr**

TEC 101	Technical Drawing
TEC 123	Principles of Manufacturing
TEC 201	Materials Processing
TEC 300	Construction Systems
TEC 302	CAD/CAM
TEC 311	Materials Science and Testing
TEC 314	Electro Mechanicals
TEC 319	Technology and Values
TED 100	Introduction to Technology Education
TED 349	Communication Systems
TED 361	Transportation Systems

Total Required Credit Hours in Professional Sequence **27 cr**

CTE 301/ BME 301	Principles of Occupational Education
CTE 302/ BME 302	Curriculum and Evaluation in Occupational Education\
EDF 303	Educational Psychology
EDU 416	Teaching Reading in the Secondary School
TED 360W	Technology Education Methods and Evaluation
TED 450W	Professional Semester (6)
TED 451W	Professional Semester (6)

Total Required Credit Hours in Other Fields for Certification **15 cr**

CHE XXX	Core Chemistry (3)
EXE 372	Foundations of Teaching Adolescents with Disabilities
MAT XXX	Core Math (3)
MAT 124	Precalculus Mathematics

All College Electives	0–6 cr
Total Required Credit Hours	120 cr

TECHNOLOGY EDUCATION (PTCP)

PBC-SP TED

Technology Department Postbaccalaureate Teacher Certification Program (HEGIS 0839.01)

National Council for Accreditation of Teacher Education (NCATE) Accredited
Upton Hall 315 (716) 878-6017

This program is designed for students who have earned a baccalaureate degree in a technology-related field from an accredited college or university and intend to complete coursework required for New York State certification to teach technology. It generally takes at least three semesters for a person with a degree in engineering or architecture to complete this program.

The professional semester, also known as student teaching, is completed with two seven-week rotations: one in a middle school and one in a high school. Students are assigned to specific schools based on their qualifications; however, each student must complete one rotation in a school with a racially diverse population.

Admission Requirements:

1. A bachelor's degree from an accredited college or university.
2. Completion of 36 credit hours of coursework in technology or a technologically-related area, such as engineering, architecture, engineering technology, electrical technology, or industrial technology.
3. Evidence of coursework or professional experience from among the following areas: biotechnical systems, communication systems, structural systems, production systems, and transportation systems.

Applications for admission may be obtained online at www.buffalostate.edu/graduateschool or from the Graduate School, Cleveland Hall 204, (716) 878-5601.

Other Program Requirements: In addition to the required coursework, students must complete:

1. New York State Certification Exams: LAST, ATS-W, and CST. Registration materials for these exams may be obtained from the Teacher Certification Office, Caudell Hall 101.
2. Seminars:
 - a. S.A.V.E. (School Anti-Violence Education) workshop
 - b. Child abuse identification workshops
 - c. Drug and alcohol awareness seminar
 - d. Fire and arson safety seminar

Total Required Credit Hours in Technology Education		6 cr
TED 100	Introduction to Technology Education	
TED 360W	Technology Education Methods and Evaluation	

Total Required Credit Hours in Other Education 15 cr

BME 301	Principles of Occupational Education
BME 302	Curriculum and Evaluation in Business/Marketing Education
EDF 303	Educational Psychology
EDF 416	Teaching Reading in Secondary Schools
EXE 372	Teaching Adolescents with Disabilities

Professional Semesters 12 cr

TED 450W	Professional Semester (6)
TED 451W	Professional Semester (6)

Total Required Credit Hours 33 cr

TELEVISION AND FILM ARTS (B.A.)

BA-AH TFA

Television and Film Arts Bachelor of Arts (HEGIS: 0603)

Bishop Hall 210 (716) 878-3180

The television and film arts major (TFA) at Buffalo State—an interdisciplinary program encompassing the Communication, English, and Theater departments—prepares students for a variety of careers in the entertainment industry. The goal of the major is to teach the TFA student to hone his/her vision and storytelling skills, thus facilitating pursuits in such dynamic fields as screenwriting, producing, and directing.

The TFA program recognizes that creative content is paramount in today's age of multi-media and to that end, encourages its students to tell stories across all media. The program is dedicated to excellence in teaching and scholarship, cultural enrichment, and service, providing TFA majors with an appropriate mix of criticism, theory, practical application, and real-life internship opportunities passionately designed to help them succeed.

Required TFA Courses: This series of eight courses provides students with the foundational skills needed for success in the TFA major. The lower-division courses emphasize the history of storytelling, writing fundamentals, film as a vehicle for literature, and basic television production. The upper-division courses emphasize film criticism; collaboration across production roles; working independently as an "auteur"; and writing, producing, directing, and editing professionally produced stories exhibited in a public forum.

In addition to required courses, TFA offers electives related to two professional tracks: (1) writing and storytelling, and (2) directing and producing. Students may take all their major electives from a single track, or they can blend courses from both tracks.

Writing and Storytelling Track: This track is designed for the TFA major who wishes to pursue a career as a screenwriter. Students will write a full-length feature screenplay, and immerse themselves in the history of motion pictures and theater.

Directing and Producing Track: This track is designed for the TFA major who wishes to pursue a career as a director or producer. Students will write, produce, direct, and edit

advanced video projects, and be introduced to set design and the business of performing arts.

Admission Requirements: Admission to the television and film arts program is very competitive (15 students admitted each year) and based upon an application, letter of recommendation, and submission of creative work (including screenplays, short stories, poetry, and/or videos/films). All submitted materials are reviewed by the Television and Film Arts Advisory Committee.

Intellectual Foundations General Education Requirements **39–66 cr**

Total Required Credits Hours in TFA **42 cr**

A. Required Courses (24 cr)[†]

COM 329	Intermediate Television Production
ENG 303	Literature in Film
TFA 201	Introduction to Television and Film Arts
TFA 301	Story I: Analyzing Great Stories
TFA 304	Writing for Television and Film Arts
TFA 401	Story II: Producing Great Stories
TFA 420	Senior Project I
TFA 450	Senior Project II

B. Elective Courses (18 cr)[†]

The elective requirement can be satisfied by completing 18 credits in any of the courses below.

Writing and Storytelling Track

ENG 205	History of Cinema I
ENG 206	History of Cinema II
ENG 305	Creative Writing: Narrative*
ENG 350	Twentieth-Century Drama I
ENG 351	Twentieth-Century Drama II
ENG 402	Advanced Creative Writing*
TFA 460	Adaptation
THA 340	Playwriting

Directing and Producing Track

COM 432	Advanced Postproduction
TFA 480	Advanced Directing/Producing I
TFA 481	Advanced Directing/Producing II
THA 200	Voice and Diction
THA 226	Acting I
THA 325	Business of Performing Arts
THA 337	Set Design**

All College Electives **12–39 cr**

Total Required Credits **120 cr**

THEATER (B.A.)

BA-AH THA

Theater Department Bachelor of Arts (HEGIS 1506)

National Association of Schools of Theater (Accredited)
Donald Savage Theater Building 222 (716) 878-6416

The Theater Department introduces students to all aspects of theater and the entertainment industries. The theater season includes both faculty- and student-directed productions presented on campus. These productions are attended by members of both the college and the community.

Through advisement, students may focus their studies in the following concentrations: acting, directing/dramaturgy, design/technical, and general study. The department also emphasizes direct application of theater skills beyond the stage in the form of various outreach projects. High standards afford a foundation for careers in professional theater, television, and film. A 19-credit-hour minor program in theater is also available.

Intellectual Foundations Requirements **39–66 cr**

Total Required Credit Hours in Theater **42 cr**

A. Required Courses (26 cr)

THA 216	Theater Fundamentals
THA 226	Acting: Theory and Practice
THA 230	Theater Practicum I (1)
THA 231	Theater Practicum II (1)
THA 234	Introduction to Theater Design and Technology
THA 316	Script Analysis
THA 317	Theater History: Ancient to Baroque
THA 318	Theater History: Baroque to Modern
THA 330	Theater Practicum III (1)
THA 331	Theater Practicum IV (1)
THA 350	Directing
THA 416	Seminar in Theater Arts (1)

B. Electives by Advisement (16 cr)

Electives in a concentration: acting, directing, design-technical, or general study.

All College Electives **12–39 cr**

Total Required Credit Hours **120 cr**

URBAN AND REGIONAL ANALYSIS AND PLANNING (B.S.)*

BS-NS URP

Geography and Planning Department Bachelor of Science (HEGIS 2214)

Classroom Building A213 (716) 878-6216

Planning is an discipline concerned with effective change and development in a positive and beneficial manner. It has many sub-areas that range from land-use planning to public service planning. The program at Buffalo State provides students with a sound, fundamental knowledge of one of two principal concentrations: urban or community planning and environmental planning. Students majoring in the program are encouraged to develop their own secondary area of interest in planning.

**Evening study available.*

Intellectual Foundations Requirements **39–66 cr**

Total Required Credit Hours in the Major **40–42 cr**

A. Required Courses for Both Concentrations (24 cr)

GEG 199	Computers in Social Science
GEG 307	Conservation and Environmental Management
PLN/GEG 390	Quantitative Methods in Geography and Planning
PLN 315	Principles of Urban and Regional Planning
PLN/GEG 325	Remote Sensing and Mapping
PLN 412	Community Planning Agencies and Issues
PLN/GEG 430	Senior Thesis

Select one course from the following:
 PSC 203 Political Analysis
 SOC 300 Methods in Social Research¹

¹Prerequisites for SOC 300 are waived by the Sociology Department for urban and regional analysis and planning majors.

B. Concentration Electives (18 cr)

Select one of two concentrations:

1. Urban and Regional Planning Concentration Electives (18 cr)

Specialized required course (3 cr)

GEG 309 Urban Geography

Select five courses from the following (by advisement):

ECO 412 Urban Economics
 ECO 424 Econometrics
 GEG 305 Principles of Economic Geography
 GEG/PLN 310 Urban Transportation Planning
 GEG 425 Fundamentals of GIS
 GEG 427 Corporate Applications in GIS
 GEG 485 Interactive and Web-Based Mapping
 PLN/GEG 330 Land Resource Analysis and Planning
 PLN 340 Fundamentals of Zoning
 PLN 341 Housing and Real Estate
 PLN 401 Comprehensive Planning Principles
 PLN 488 Internship (3 cr maximum)
 PSC 215 Urban Government

2. Environmental Planning Concentration Electives (16–18 cr)

Students in this concentration must demonstrate college-level competency in general chemistry and general biology. These courses are taken outside of the major.

Select one course from the following:

BIO 212 Introduction to Organismal Biology and Diversity
 BIO 213 Introduction to Ecology, Evolution and Behavior

Select one course from the following:

CHE 101 General Chemistry I
 CHE 102 General Chemistry II

Electives selected by advisement (9–11 cr):

BIO 315 Ecology (4)
 BIO 418 Limnology (4)
 GEG 365 Soil Science and Management
 GEG 375 Principles of Hydrology
 GEG 386 Applied Climatology
 GEG 421 Watershed Analysis
 GEG 425 Fundamentals of GIS
 GEG 428 Environmental Assessment and Planning Applications in GIS
 GES 452 Hydrogeology
 PLN 360 Environmental Impact Assessment
 PLN 488 Internship (3 cr maximum)
 PLN 370 Water Resource Planning

All College Electives: Urban-Regional Planning Concentration 21–45 cr

All College Electives: Environmental Planning Concentration 21–41 cr

Total Required Credit Hours (Either Concentration) 120 cr

WOOD/FURNITURE (B.F.A.)

BFA-AH WFD

**Design Department
 Bachelor of Fine Arts (HEGIS 1009)**

National Association of Schools of Art and Design (NASAD) Accredited
 Upton Hall 212 (716) 878-6032

The B.F.A. degree in wood/furniture design is a studio-intensive program of study focused on developing the aesthetic, conceptual and technical skills necessary to foster creativity as the student works toward developing their individual identity as a visual designer/artist. This degree offers students a specialized studio-oriented education in preparation for advanced or graduate studies or for beginning careers as professional designers or artists.

Students begin with foundation courses in two-dimensional design, three-dimensional design, drawing, art history and design history along with courses in ceramics, fibers and metal/jewelry. Major courses in wood/furniture design complete the requirements. Internship opportunities are available. The remaining credit hours are completed in required Intellectual Foundations courses and in other chosen studio courses.

Admission Requirements: There is no entrance portfolio review for admission. All students will enter the wood/furniture design major as a bachelor of science (BS-AH WFD) and complete a selection of foundation and major course(s) before a commit-to-major portfolio review for admission into the bachelor of fine arts program (BFA-AH WFD). Commit-to-major portfolio reviews are conducted by faculty and generally take place during the sophomore year. After passing the portfolio review, to continue in the B.F.A. degree program a 3.0 GPA must be maintained in the major. Transfer students are urged to submit their portfolios the semester before transfer in order to facilitate placement in departmental courses and/or for possible commit-to-major portfolio review. Please call the Design Department for additional information. As a condition for graduation each B.F.A student will be required to mount an individual exhibition of his/her work.

The Design Department reserves the right to retain students' work for official purposes, such as exhibitions, catalogs, teaching aids, or permanent collections and to use images of the students and their work for publicity and recruitment. Students are expected to assume the costs of materials used in courses. Some studio courses may have an additional charge for materials used in class.

The Design Department may be in the process of curricular revision. Please refer to the college Web site or the department for updated information.

Intellectual Foundations Requirements 39–66 cr

Total Required Credit Hours in Wood/Furniture Design 79 cr

A. Foundation Courses (37 cr)

DES 101 Introduction to Design: 2D I
 DES 103 Introduction to Design: 3D I

FAR 101	Drawing I
FAR 104	Themes and Issues in Contemporary Arts
DES 104	Introduction to Design: 3D II
DES 220	Ceramics I
DES 230	Introduction to Jewelry
DES 242	Fibers I
FAR 250	Art History I
FAR 251	Art History II
DES 312W	History of Craft
DES 414	Senior Seminar (4)

B. Major Courses (30 cr)

DES 250	Wood Design I
DES 350	Technical Processes in Wood
TEC 101	Technical Drawing
DES 338	Computer 3D Modeling and Rendering
DES 351	Wood - Junior Studio (3, 3)
DES 451	Wood - Senior Studio (3, 3)
DES 451 or DES 488	or Wood Design internship (6)

C. Studio Electives Selected by Advisement (12 cr)

DES 320	Ceramics II
DES 330	Applied Jewelry Techniques
DES 336	Metalsmithing
DES 342	Fibers II
FAR 240	Introduction to Sculpture

All College Electives 0–2 cr

Total Required Credit Hours 120 cr

WOOD/FURNITURE (B.S.)

BS-AH WFD

Design Department Bachelor of Science (HEGIS 1009)

National Association of Schools of Art and Design (NASAD) Accredited
Upton Hall 212 (716) 878-6032

The B.S. degree in wood/furniture design is a studio degree with a strong academic component. This degree offers students a broadly grounded educational experience as a basis for beginning careers as professional designers or artists.

Students begin with foundation courses in two-dimensional design, three-dimensional design, drawing and design history along with courses in ceramics, fibers and metal/jewelry. Major courses in wood/furniture design focus on developing the aesthetic, conceptual and technical skills necessary to foster creativity as the student works toward developing their individual identity as a visual designer/artist. Internship opportunities are available. The remaining credit hours are completed in required Intellectual Foundations courses and in other academic subjects of the student's choosing. The academic component offers opportunities to gain a broader base of knowledge, as well as knowledge in other disciplines related to the major field of study.

Admission Requirements: There is no entrance portfolio review for admission. All students will enter the wood/furniture design major as a bachelor of science (BS-AH WFD) and complete a selection of foundation and ma-

ior course(s) before a commit-to-major portfolio review for continuation in the B.S. degree program. Commit-to-major portfolio reviews are conducted by faculty and generally take place during the sophomore year. After passing the portfolio review, to continue in the B.S. degree program a 2.5 GPA must be maintained in the major. Transfer students are urged to submit their portfolios the semester before transfer in order to facilitate placement in departmental courses and/or for possible commit-to-major portfolio review. Please call the Design Department for additional information.

The Design Department reserves the right to retain students' work for official purposes, such as exhibitions, catalogs, teaching aids, or permanent collections and to use images of the students and their work for publicity and recruitment. Students are expected to assume the costs of materials used in courses. Some studio courses may have an additional charge for materials used in class.

Intellectual Foundations Requirements 39–66 cr

Total Required Credit Hours in Wood/Furniture Design 45 cr

A. Foundation Courses (24 cr)

DES 101	Introduction to Design: 2D I
DES 103	Introduction to Design: 3D I
FAR 101	Drawing I
FAR 104	Themes and Issues in Contemporary Arts
DES 220	Ceramics I
DES 230	Introduction to Jewelry
DES 242	Fibers I
DES 312W	History of Craft

B. Major Concentrations (21 cr)

DES 250	Wood Design I
DES 350	Technical Processes in Wood
DES 338	Computer 3D Modeling and Rendering
DES 351	Wood - Junior Studio (3,3)
DES 451	Wood - Senior Studio (3,3)

All College Electives 9–36 cr

Total Required Credit Hours 120 cr

WRITING (B.A.)

BA-AH WRT

English Department Bachelor of Arts (HEGIS 1507)

Ketchum Hall 326 (716) 878-5416

The writing B.A. degree program offers students an opportunity to combine the study and practice of the craft of writing with the study of literature, theater, television and communication arts. The writing degree program allows for the development of skills in creative writing, journalistic writing, literacy writing, and/or professional writing. Students can take courses from a variety of disciplines to fulfill their requirements. The program is intended for students interested in the advanced study and practice of writing.

Admission Requirements: All applicants must submit a writing portfolio for acceptance into the program. Transfer

or uncommitted students must have a 2.5 minimum GPA in all previous college credits to enter the major, and must complete the College Basic Writing requirement to be accepted into the major. Freshman may be admitted to the program on a one-year probationary basis.

Intellectual Foundations Requirements **39–66 cr**

Total Required Credits in English **42 cr**

(24 credits must be upper-division)

A. Required Courses (12 cr)

ENG 190 Introduction to Literary Analysis and Interpretation

(Must be taken immediately after completion of freshman composition requirement or within first year of transfer to English Department.)

ENG 201 The Craft of Writing

(Should be taken soon after completion of freshman composition requirement or within first year of transfer to English Department. Serves a prerequisite for upper-division writing courses.)

ENG 410 Composition and Rhetorical Theory

ENG 490W Senior Seminar

B. Electives in Writing (15 cr)

Select five courses from the following areas: Students may choose to concentrate their studies in one primary area or may select freely from across the options.

Creative Writing

ENG 305 Creative Writing: Narrative

ENG 306 Creative Writing: Poetry

ENG 402 Advanced Creative Writing: Narrative

ENG 403 Advanced Creative Writing: Poetry

THA 470 Ensemble Theater

Professional Writing

ENG 245 Writing about the Arts

ENG 300W Writing for the Professions

COM 308 Public Relations Writing

COM 304 Writing for Broadcast (Radio, TV & Film)
or TFA 304 or Writing for Television and Film Arts

Journalism

COM 303 Writing for News Publication

COM 325 Feature and Magazine Article Writing

COM 390 Journalistic Writing

Literary Genres

ENG 247 Nature Writing

ENG 266 The Personal Essay

ENG 320 Autobiography/Memoir

ENG 325 Creative Nonfiction

C. Electives in Literature, Linguistics, or Film (15 cr)

Select five literature, linguistics, and film courses offered by the Communication, English, Modern and Classical Languages, and Theater Departments; at least two courses must be upper-division.

All College Electives **12–39 credits**

Total Required Credits **120 credits**

COURSE LISTINGS

Course Prefixes

AAS	AFRICAN AND AFRICAN AMERICAN STUDIES
AED	ART EDUCATION
ANT	ANTHROPOLOGY
ATS	ART THERAPY STUDIES
BIO	BIOLOGY
BME	BUSINESS AND MARKETING EDUCATION
BSC	INTELLECTUAL FOUNDATIONS
BUS	BUSINESS
CHE	CHEMISTRY
CHI	CHINESE
CIS	COMPUTER INFORMATION SYSTEMS
COM	COMMUNICATION
CRJ	CRIMINAL JUSTICE
CRS	CREATIVE STUDIES
CTE	CAREER AND TECHNICAL EDUCATION
CWP	COLLEGE WRITING PROGRAM
DAN	DANCE
DES	DESIGN
ECO	ECONOMICS
EDF	EDUCATIONAL FOUNDATIONS
EDU	EDUCATION
ENG	ENGLISH
ENS	ENVIRONMENTAL SCIENCE
ENT	ENGINEERING TECHNOLOGY
EXE	EXCEPTIONAL EDUCATION
FAR	FINE ARTS
FIN	FINANCE
FLE	FOREIGN LANGUAGE EDUCATION
FOR	FORENSIC CHEMISTRY
FRE	FRENCH
FST	FOOD TECHNOLOGY
FTT	FASHION AND TEXTILE TECHNOLOGY
GEG	GEOGRAPHY
GER	GERMAN
GES	GEOSCIENCES
GRK	GREEK
GST	GLOBAL STUDIES
HEW	HEALTH AND WELLNESS
HIS	HISTORY
HON	HONORS
HPR	HEALTH AND PHYSICAL RECREATION
HTR	HOSPITALITY AND TOURISM
HUM	HUMANITIES
IDE	INTERIOR DESIGN
INS	INDIVIDUALIZED STUDIES

ITA	ITALIAN
LAT	LATIN
LIB	LIBRARY RESEARCH
MAT	MATHEMATICS
MED	MATHEMATICS EDUCATION
MCL	MODERN AND CLASSICAL LANGUAGES
MST	MUSEUM STUDIES
MUS	MUSIC
NFS	NUTRITION AND FOOD SCIENCE
PHI	PHILOSOPHY
PHY	PHYSICS
PLN	PLANNING
PSC	POLITICAL SCIENCE
PSY	PSYCHOLOGY
REL	RELIGIOUS STUDIES
SAF	SAFETY STUDIES
SCI	GENERAL SCIENCE
SED	SCIENCE EDUCATION
SLP	SPEECH-LANGUAGE PATHOLOGY
SOC	SOCIOLOGY
SPA	SPANISH
SPC	SPEECH COMMUNICATION
SSE/SST	SOCIAL STUDIES EDUCATION
SWA	SWAHILI
SWK	SOCIAL WORK
TEC	TECHNOLOGY
TED	TECHNOLOGY EDUCATION
THA	THEATER ARTS
TFA	TELEVISION AND FILM ARTS
UNC	UNIVERSITY COLLEGE

Course Coding System

At the time of the printing of this catalog, all incoming students at Buffalo State College, both first-year and transfer students, are required to fulfill Intellectual Foundations requirements. Students starting their education before fall 2006 are required to fulfill general education (GE2K) requirements via petition and should consult their department adviser about whether that would be advantageous. See page 30 of this catalog for more information.

Banner codes are used to identify which Intellectual Foundations requirement(s) a course fulfills. The Intellectual Foundations codes are as follows:

AHIF	=	Foundations of Civilizations: American History
ARIF	=	Cognate Foundation: Arts
BWIF	=	Basic Writing
DIIF	=	Diversity
FLIF	=	Foreign Language

- HUIF = Cognate Foundations: Humanities
 MQIF = Mathematics/Quantitative Reasoning
 NSIF = Cognate Foundations: Natural Sciences
 NWIF = Foundations of Civilizations: Non-Western Civilizations
 OCIF = Basic Oral Communication
 SSIF = Cognate Foundations: Social Sciences
 TSIF = Technology and Society
 WCIF = Foundations of Civilizations: Western Civilization

Here's a sample course listing:

ANT 300
 INDIGENOUS PEOPLES OF WESTERN NORTH AMERICA
 3, 3/0; DIIF, NWIF
Prerequisite: ANT 100 or permission of instructor. Way of life of the original inhabitants of Western North America; reconstructing life during the seventeenth, eighteenth, and nineteenth centuries using archaeology, historical documents, and oral tradition. Tribal nations of the Plains, Northwest Coast, Southwest, Great Basin, Plateau, and California. Effects of European exploration and colonization and the persistence of indigenous Western North American peoples in the modern world.

Here's what it means:

ANT 300
 This is an anthropology course, number 300.
 INDIGENOUS PEOPLES OF WESTERN NORTH AMERICA
 Name of course.
 3, 3/0
 Number of semester credit hours the course earns,
 Number of lecture hours the class meets per
 week/Number of studio or lab hours per week.

DIIF, NWIF
 This course satisfies two requirements in Intellectual Foundations: Diversity (DIIF) and the Foundations of Civilizations Non-Western Civilizations (NWIF).

Prerequisites:
 Prerequisites or requirements you must fulfill before registering for a course. For this course, students must have taken ANT 100 first.
 The remainder of the course listing describes the subject matter.

AAS - AFRICAN AND AFRICAN AMERICAN STUDIES

AAS 100
 INTRODUCTION TO AFRICANA STUDIES
 3, 3/0; DIIF
 Critical and systematic study of the historical and contemporary thought and experiences of continental and diasporic African peoples. Overview of the social, political, and economic forces that shaped and continue to affect continental and diasporic African experiences. The agency, creativity, perspectives, and experiences of African peoples. Contemporary issues affecting Africans and African Americans.

AAS 101
 BEGINNING SWAHILI I
 3, 3/0
 The fundamentals of Swahili with emphasis on the spoken and written language.
 Equivalent course: SWA101

AAS 102
 BEGINNING SWAHILI II
 3, 3/0
 Prerequisite: AAS/SWA 101 or permission of instructor. Continuation of AAS/SWA 101.
 Equivalent course: SWA102

AAS 189
 TOPICS COURSE
 3, 0/0

AAS 201
 INTERMEDIATE SWAHILI I
 3, 3/0; FLA
 Prerequisite: AAS/SWA 102 or permission of instructor. Further development of basic skills with emphasis on reading and writing.
 Equivalent course: SWA201

AAS 202
 INTERMEDIATE SWAHILI II
 3, 3/0
 Prerequisite: AAS/SWA 201 or permission of instructor. Continuation of AAS/SWA 201.
 Equivalent course: SWA202

AAS 218
 AFRICAN AMERICAN POLITICAL CULTURE
 3, 3/0
 Political beliefs, attitudes, and practices that pertain to African American politics in a cultural context; causality and linkage inherent in the reciprocal relationship between African Americans and the American political system.
 Equivalent course: PSC218

AAS 221
 THE HISTORY OF BLACK EDUCATION IN AMERICA
 3, 3/0
 The role of blacks in the American educational system. Changes that have taken place to improve or retard education for blacks. Approaches for providing meaningful education for blacks now and in the future.
 Equivalent courses: EDF221

AAS 222
 THE DEVELOPMENT OF MODERN EDUCATION IN AFRICA
 3, 3/0
 Educational changes in Africa from the colonial era to the present and their effects on social and political issues in Africa and abroad.
 Equivalent courses: EDF222

AAS 230
 SURVEY OF AFRICAN AMERICAN DANCE
 3, 0/0;
 Technique, practice, readings, and projects in dance and black culture; current practices of black dance in relation to Euro-American techniques.
 Equivalent course: DAN230

AAS 234
 HISTORY OF THE BLACK DANCE MOVEMENT
 3, 3/0;
 The development of African American dance and the contributions of African American dancers; emphasis on how traditional African dance forms evolved into and influenced the contemporary dance vernacular.
 Equivalent course: DAN234

AAS 240
 AFRICAN AMERICAN LITERATURE
 3, 3/0; HUIF
 African American slave narratives, poetry, fiction, essays, and drama from the eighteenth century to 1940. The influence of spirituals, gospel, the blues, jazz, sermons, and folktales on African American writing; the Harlem Renaissance of the 1920s and 1930s; and the development of African American revolutionary thought.
 Equivalent course: ENG240

AAS 241

AFRICAN AMERICAN LITERATURE SINCE 1940

3, 3/0

Realism, naturalism, modernism, and postmodernism in African American literature; black revolutionary thought and artistry in the 1960s and 1970s; neo-slave narratives; African American poetry, fiction, essays, and drama from 1940 to the present; influence of spirituals, gospel, the blues, jazz, sermons, and folktales on contemporary African American writing.

AAS 304

MODERN JAZZ

3, 3/0

An explanation of the history and development of modern jazz from 1941 to the present.

Equivalent course: MUS305

AAS 305

PEOPLES OF AFRICA

3, 3/0

Cross-cultural comparisons of indigenous and modern African nations. Emphasis is placed upon regional, linguistic, social, political, religious, economic, and aesthetic characteristics, as well as historical and recent population migrations on the African continent and the surrounding islands.

Equivalent course: ANT305

AAS 306

HISTORY OF AFRICA TO 1919

3, 3/0

Indigenous development and early empires of Africa; the impact of Islam; Western contact and the slave trade; the development of European colonialism; the partition of Africa and colonial administrative policies of the European powers; the waning of European power as a result of World War I.

Equivalent course: HIS306

AAS 321

THE AFRICAN AMERICAN FAMILY

3, 3/0; DIIF

The relationship of American social institutions and the African American family; familial relations within the African American family. Useful for students who will interact with a diverse population in their careers, e.g., education and service occupations.

Equivalent course: SOC321

AAS 322

AFRICAN AMERICAN HISTORY

3, 3/0

Heritage of black Americans; African Americans' existence under slavery; their role in influencing historical events; activity in the Civil War period; the freed men during reconstruction; migration to the north and adjustment to urban life. African American leaders, institutions, and ideas, and their impact on modern America.

Equivalent course: HIS322

AAS 333

AFRICAN INTERNATIONAL RELATIONS

3, 3/0

African international politics vis-à-vis international relations theory, models, and concepts; power; multipolarity; bipolaritypan-Africanism, North-South debate; approaches to international politics; and state and international organizations as international actors

Equivalent course: PSC333

AAS 341

AFRICAN-AMERICANS AND CIVIL RIGHTS

3, 3/0

History of the landmark court decisions, laws, and governmental policies regarding the civil rights of African Americans. Examines some of the historic relationships among race, racism, law, and public policy in America. Focuses on resistance, protest, and the quest for equality in America.

Equivalent course: HIS341

AAS 351

SOCIOLOGY OF RACE AND ETHNICITY

3, 3/0; DIIF

The study of racial and ethnic groups in American and other societies; focuses on forms, causes, and effects of prejudice and ethnic conflicts, and the changing relationships of these groups to the larger society. Possible solutions to social problems involving issues of race and ethnicity are also explored.

Equivalent course: SOC351

AAS 425

RACE, ETHNICITY, AND THE ADMINISTRATION OF JUSTICE

3, 3/0

The current state of race relations in society and the criminal justice system. Examination of the historical experiences of different racial and ethnic groups in the United States, including the use of law and the criminal justice system as a means of social subordination, affecting the criminality of minority groups and informal aspects of criminal justice, such as power, discretion, and authority.

Equivalent course: CRJ425

AAS 468

READINGS IN AFRICAN AMERICAN HISTORY

3, 3/0

Prerequisite: Upper-division status. Major historical writings on selected periods and topics in African American history. Readings, discussions, and writing book reviews and bibliographic essays.

Equivalent course: HIS468

AAS 469

BLACK PROTEST AND LEADERSHIP IN THE U.S. IN THE TWENTIETH CENTURY

3, 3/0

The black protest movements and leaders in twentieth-century America.

Equivalent course: HIS469

AAS 499

INDEPENDENT STUDY

3-9, 0/0

Prerequisite: Faculty adviser permission must be secured prior to registration.

AED - ART EDUCATION

AED 100

ESSENTIALS OF VISUAL ARTS

3, 4/0; ARIF

Non-art majors only. The development of visual and perceptual awareness through expressive learning processes inherent in the visual arts. Experience with a variety of media that will accommodate individual interpretations of art concepts that generate the formations, judgments, and decisions of a liberally educated individual.

Equivalent course: AED100W

AED 200

FUNDAMENTALS OF ART INQUIRY

3, 3/0; ARIF

Establishes the individual student's critical framework for looking at works of art and develops his or her knowledge and understanding of contemporary art. This is achieved by studying the application of the elements of art and principles of composition, discussions about artists and their work, and visiting art museums.

Equivalent course: AED200W

AED 300

FOUNDATIONS IN ART EDUCATION

3, 4/0

Prerequisites: Art education major or department chair permission and successful completion of English composition/basic communication and mathematics skills competency requirements. A writing-intensive introductory course that integrates instructional planning, learning theories, and teaching practices with the visual arts in education and society. Required for education majors.

Equivalent course: AED300W

AED 301
THEORETICAL CONSTRUCTS IN ART EDUCATION
3, 4/0

Prerequisites: Art education major, AED 300W, or department chair permission, and one course in psychology. AED 301 is a writing intensive course that examines traditional and contemporary theories and practices relevant to current art education environments, learners, and communities and is required for art education majors.
Equivalent course: AED301W

AED 302
FUNCTIONS AND PRACTICE IN ART EDUCATION
3, 4/0

Prerequisites: Art education major, AED 300W, AED 301W, and one course in sociology or anthropology. Studies of contemporary theories, functions, and practices in the visual arts including context, content, and processes necessary in the design of instructional planning, implementation, and evaluation of visual art teaching. Practicum experiences in local educational settings. Required for art education majors.
Equivalent course: AED302W

AED 303
ELEMENTARY STUDENT TEACHING IN ART
6, 0/0; OCIF

Prerequisites: Art education major, AED 302W, ATS 325, satisfaction of departmental requirements, and approval of AED coordinator of student teaching. Students are assigned to a supervised elementary teaching placement for five full days a week for approximately seven consecutive weeks. Students are required to effectively demonstrate content knowledge, pedagogical preparation, instructional delivery, classroom management, knowledge of student development, collaboration with school professionals, and reflective practice.

AED 304
SECONDARY STUDENT TEACHING IN ART
6, 0/0; OCIF

Prerequisites: Art education major, AED 302W, ATS 325, satisfaction of departmental requirements, and approval of AED coordinator of student teaching. Students are assigned to a supervised secondary teaching placement for five full days a week for approximately seven consecutive weeks. Students are required to effectively demonstrate content knowledge, pedagogical preparation, instructional delivery, classroom management, knowledge of student development, collaboration with school professionals, and reflective practice.

AED 310
ART MEDIA AND METHODS EXPLORATION
3, 3/0

Prerequisites: For ATS minors: ATS 320 and one visual arts studio course, or instructor permission; for AED majors: Junior or senior status, or instructor permission. Development of practical skill and knowledge in art media, methods, and resources for educational and/or therapeutic purposes. Hands-on exploration of culturally diverse traditional and non-traditional art tools and materials that are appropriate for school and community settings; media analysis for application to promoting developmental and/or therapeutic goals.

AED 315
ARTS IN LIVING
3, 4/0; WCIF

Contemporary and historic art forms as they apply to everyday living. Discussion and analysis of the individual significance and interrelatedness of architecture, industrial design, the graphic arts, painting, sculpture, music, and theater arts in the context of the history of Western civilization. Participation in creative activities related to the course.
Equivalent course: AED315W

AED 365
SEMINAR IN FEMINIST ART AND CRITICISM
3, 3/0

Prerequisites: Fulfillment of English composition/basic communication requirement and sophomore status. Women's creative achievements in visual art. Varieties of feminist visual art and criticism and their relationship to contemporary culture. Portrayal of women and the ways in which cultural definitions of gender shape artistic expression.

AED 398
COMPUTER APPLICATIONS FOR ART EDUCATORS
3, 2/2

Prerequisite: Art education major or permission of instructor. In-depth lab experience that serves to expose art education students to a basic understanding of the computer and software. Uses for the computer in the public school art classroom. Required for art education majors.
Equivalent course: AED198

AED 400
STUDENT TEACHING SEMINAR
3, 3/0

Relationship of art education theories to teaching practices used in the contemporary school art program. Crucial issues in art education. Problems of beginning art teachers. The value of current professional literature in the resolution of issues and problems. Required for art education majors. To be taken concurrently with or immediately following student teaching.

AED 488
INTERNSHIP
1-12, 0/0

Prerequisites: Upper-division status and/or permission of instructor, minimum cumulative GPA of 2.5, and background coursework appropriate to the internship setting. Guided, supervised field experiences for qualified students in community-based agencies or settings. Interns apply and enhance knowledge gained through formal instruction demonstrating operational skills as practitioners in prospective specializations.

AED 495
SPECIAL PROJECT
1-3, 0/0

Prerequisite: Upper-division status. Project undertaken and meeting hours arranged individually with instructor.

AED 499
INDEPENDENT STUDY
3-12, 0/0

Prerequisites: Sophomore, junior, or senior status and minimum cumulative GPA of 2.5 (overall, previous semester, and in major courses). Studies arranged and meeting hours undertaken individually with instructor.

ALT - ARTS AND LETTERS

ALT 495
SPECIAL PROJECT
1-3, 0/0

ALT 499
INDEPENDENT STUDY
3-12, 0/0

AMT - APPLIED MATHEMATICS

AMT 495
APPLIED MATHEMATICS PROJECT
3, 3/0; OCIF

Prerequisites: Senior status or instructor permission. Independent research project in applied mathematics under the direction of the instructor. Composition of a written report and oral presentations of findings.
Equivalent courses: AMT495, MAT495

ANT - ANTHROPOLOGY

ANT 100
HUMAN ORIGINS
3, 3/0; NSIF

Introduction to physical anthropology and archaeology. Physical anthropology portion focuses on evolutionary theory and genetics, the human fossil record, and the study of non-human primates. Archaeology reconstructs past cultures. Discusses the basics of archaeological data and dat-

ing methods. Transformation from a hunting-and-gathering lifestyle to one based on food production and the consequences of this transformation, which include, in some instances, the development of complex sociopolitical institutions and state societies.

ANT 101
UNDERSTANDING CULTURE
3, 3/0; NWIF

Human behavior and culture; formation of personality; nature of social structure, interaction, and the satisfaction of human needs. Cross-cultural comparisons. Recommended as a first or second course in anthropology.

ANT 189
TOPICS COURSE
1-3, 3/0

ANT 220
CASE STUDIES IN PHYSICAL ANTHROPOLOGY
3, 3/0; NSIF

Introduction to physical anthropology through detailed examination of exemplary case studies covering a broad range of topics in physical anthropology. The process of inquiry in physical anthropology, including initial conception of the research question, methodology, results, and conclusions. Ethics of physical anthropology research.

ANT 244
FOLKLORE AND LIFE
3, 3/0; SSIF

Prerequisite: CWP102. Introduction to the major genres of folklore and folk life and their function in contemporary society; including roots music, ethnic and occupational folklore, rites of passage and calendar customs, and traditional narratives. The relationship between folklore and popular culture.
Equivalent courses: ANT244W

ANT 250
HISTORICAL ARCHAEOLOGY
3, 3/0; AHIF

Prerequisite: ANT 100. Archaeology of the United States from 1500 through the American Civil War. Material life and diversity of sociocultural experiences in the United States during this period.

ANT 300
INDIGENOUS PEOPLES OF WESTERN NORTH AMERICA
3, 3/0; DIIF, NWIF

Prerequisite: ANT100. Way of life of the original inhabitants of Western North America; reconstructing life during the seventeenth, eighteenth, and nineteenth centuries using archaeology, historical documents, and oral tradition. Tribal nations of the Plains, Northwest Coast, Southwest, Great Basin, Plateau, and California. Effects of European exploration and colonization and the persistence of indigenous Western North American peoples in the modern world.

ANT 301
INDIGENOUS PEOPLES OF EASTERN NORTH AMERICA
3, 3/0; DIIF, NWIF

Prerequisite: ANT 100. The way of life of the original inhabitants of Eastern North America. Reconstructing life during the sixteenth and seventeenth centuries using archaeology, historical documents, and oral tradition. Details of the early seventeenth-century Wendat/Huron Haudenosaunee/Five Nation Iroquois and Powhatan confederacies. Highlights the effects of European exploration and colonization and the persistence of indigenous Eastern North American peoples in the modern world.

ANT 303
THE ANTHROPOLOGY OF EUROPE
3, 3/0; WCIF

Prerequisite: ANT101. Introduction to the anthropology of Europe and European culture. The course discusses the traits and development of distinctive cultural features of European peoples through cultural histories of Europe in general and ethnographic case studies. It related the development and influence of Western civilization to other regions of the world.

ANT 305
PEOPLES OF AFRICA
3, 3/0; NWIF

Prerequisite: ANT 101. Cross-cultural comparisons of indigenous and modern African nations. Emphasis is placed upon regional, linguistic, social, political, religious, economic, and aesthetic characteristics as well as historic and recent population migrations on the African continent and the surrounding islands.

Equivalent course: AAS305

ANT 306
PEOPLES OF ASIA
3, 3/0; NWIF

Prerequisite: ANT 101. Cross-cultural comparisons of indigenous and modern nations of Asia. Emphasis on regional, linguistic, social, political, religious, economic, and aesthetic characteristics as well as historic and recent population migrations on the Asian continent and surrounding islands.

ANT 307
URBAN ANTHROPOLOGY
3, 3/0; DIIF, NWIF

Prerequisite: ANT 101. Study of the origins and evolution of cities around the world; their impact upon the human family and other social relationships, and the physical environment. Early and recent viewpoints on life in cities, suburbs and rural communities.

ANT 308
ARCHAEOLOGICAL METHOD
6, 0/0

Prerequisite: ANT 100. Laboratory and field methods in archaeology. Opportunity for practical experience with various archaeological techniques.

ANT 310
MESOAMERICAN ARCHAEOLOGY
3, 3/0

Prerequisites: ANT 100. Overview of ancient civilizations of Mesoamerica, including Olmecs, Maya, Monte Alban, Teotihuacan, Toltecs, and Aztecs using archaeological evidence, hieroglyphic texts, iconography, and ethnohistorical sources. Comparative analysis of art, architecture, religion, political structure, economic and social organization of societies in Mesoamerica from archaic foraging groups through Spanish contact.

ANT 312
ARCHAEOLOGY OF NORTH AMERICA
3, 3/0

Prerequisite: ANT 100. Prehistory of North America beginning with earliest human presence, including the Paleo-Indian period; Archaic, Woodland, and Mississippian in the East; periods comparable in time in the West.

ANT 315
RESEARCH METHODS IN CULTURAL ANTHROPOLOGY
3, 3/0

Prerequisite: ANT 101. Research methods in cultural anthropology covering fieldwork, participant-observation, sampling, measurements, documentation, statistical and cross-cultural methods.

Equivalent course: ANT315W

ANT 321
PRIMATOLOGY
3, 3/0

Prerequisite: ANT 100. Study of living prosimians, monkeys, and apes, including taxonomy, social organization, feeding and ranging, community ecology, and conservation; field studies of natural populations.

Equivalent course: ANT321W

ANT 324
THE HUMAN SKELETON
3, 3/0

Prerequisite: ANT 100. Hands-on experience with natural human skeletons to learn all bones, landmarks, and features of the bones; how to determine the side of the body the bone came from, determine if a bone is from a male or female, estimate age at death, and estimate stature of the individual.

Equivalent courses: ANT325, CRJ325

ANT 325
FORENSIC ANTHROPOLOGY
3, 3/0
Prerequisite: ANT 324. Forensic applications of the recovery and identification of human skeletal remains. Determination of age, sex, and ancestry. Also taphonomy, differentiating human from animal remains, analysis and significance of traumas, and search and recovery techniques.
Equivalent course: CRJ325

ANT 326
THE HUMAN FOSSIL RECORD
3, 3/0
Prerequisite: ANT 100. Human evolution as derived from the fossil record examination of major fossil hominid discoveries, their interpretation, and their place in the development of the human species.

ANT 327
INTRODUCTION TO MEDICAL ANTHROPOLOGY
3, 3/0; NWIF
Prerequisite: ANT 101. An overview of the history and development of concepts and practices of medicine worldwide. Theories and procedures in illness, sickness, health and well-being in and from a variety of cultural perspectives, historical and contemporary, East and West. Stone Age, folk, shaman, traditional Western and herbal medicine, including healing and religion, homeopathy, and anthropological study of health-care institutions.
Equivalent course: HEW327

ANT 329
WORLD PREHISTORY
3, 3/0; NWIF
Prerequisite: ANT 100. An overview of the major developments in human culture as inferred from the archaeological record. Past cultures of hunter-gatherers, the first farmers, and early civilizations will be described as well as their legacy for the modern world.

ANT 330
PACIFIC ISLANDERS
3, 3/0; NWIF
Prerequisite: ANT101. Introduction to Pacific Islanders including origins, languages, ecology, cultural identity and agency, political struggles. Experience of indigenous communities. Representations of the Pacific originating inside and outside the region. Encounters and transformation by first inhabitants, explorers, missionaries, colonists, and recent global flows of people, culture, and capital.

ANT 340
WOMEN IN ANTHROPOLOGICAL PERSPECTIVE
3, 3/0
Prerequisite: ANT 101. The study of women's position with attention to political, social, and cultural influences on female status in a cross-cultural perspective.

ANT 341
ART AND CULTURE IN ANTHROPOLOGICAL PERSPECTIVE
3, 3/0
Prerequisite: ANT 100. Selected examples of prehistoric art and of the art of Native Americans, Oceania, and Africa. Includes the present renaissance in art among these peoples and in these areas.
Equivalent course: ANT341W

ANT 344
FOLKLORE & FANTASY IN POPULAR CULTURE: FROM MIDDLE-EARTH TO HOGWARTS
3, 3/0
Prerequisites: CWP 102 or equivalent, upper class standing. How J. R. R. Tolkien, the creator of modern fantasy writing, based his *mythology* for England, on the work of 18th and 19th century folklorists. Influence of the work of myth scholars, primarily Joseph Campbell, on George Lucas and other film makers in the *Star Wars*, trilogies and similar films and television series. Creation of folk groups (fandoms) based on fantasy novels and films, especially since the rise of the Internet.

ANT 350
GLOBAL MARRIAGE PRACTICES
3, 3/0
Prerequisite: ANT 101 or SOC 100. Cross-cultural and comparative study of marriage practices through an examination of kinship, gender, and economy. Interdisciplinary materials in anthropology, sociology, history, and popular culture.

ANT 362
URBAN FOLKLORE
3, 3/0
Prerequisite: ANT 244. Folklore in the urban environment. The role of folklore in the creation and preservation of ethnic, occupational and community identity. Folklore in the media and popular culture.
Equivalent course: ANT362W

ANT 365
PRACTICING ANTHROPOLOGY
3, 3/0
Prerequisite: ANT 101. The application of anthropology and anthropological perspectives to contemporary community and world issues and problems. Focus on the practice of anthropology as a career outside academia, in social services, international relations, government positions, community organizing, etc. The relevance of anthropological principles in day-to-day life.

ANT 367
CULTURE AND ECOLOGY
3, 3/0
Prerequisite: ANT 101. Overview of the anthropological study of culture and ecology-environmental anthropology-the evolutionary and comparative study of various cultures' relations, both biological and cultural, to their environments. Industrial and nonindustrial adaptations to and understandings of the environment. Human-to-nature relations, the study of place, and environmentalism.

ANT 370
THE ANTHROPOLOGY OF CONTEMPORARY ISSUES
3, 3/0
Prerequisite: ANT 101. An anthropological perspective of some of the principal dilemmas of the contemporary world, including technological, demographic, ideological, and cultural problems, which provide much of the content of our daily news and have implications for the survival of our species.
Equivalent course: ANT370W

ANT 377
ANCIENT CIVILIZATION
3, 3/0; NWIF
Prerequisite: ANT 100. Examination of the nature of early civilizations; possible factors involved in both their rise and fall. Old World civilizations studied: Mesopotamia, Egypt, the Indus Valley, China, the Aegean Islands, and Europe (Greece and Italy). New World civilizations examined: Mesoamerica and the Andes region of South America. Similarities and differences considered.

ANT 380
LANGUAGE AND CULTURE
3, 3/0
Prerequisite: ANT 101. Concepts of language and culture as symbolic systems. Introduction to phonetics, phonemics, morphemics, syntax, and semantics from a cross-cultural and cross-lingual perspective. Exploration of the relationship between grammatical structure and modes of perception and cognition as related to world views and systems of values, with special emphasis on the Sapir-Whorf hypothesis and the work of Chomsky.

ANT 381
RELIGION, MAGIC, AND CULTURE
3, 3/0; NWIF
Prerequisite: ANT101. Descriptions and analysis of world religious beliefs and practices, universal phenomena with many manifestations. Examination of the place of religion and spirituality in widely diverse cultures, including discussion of magic, trance, altered states, cults, Wicca, Santeria, voodoo, and late-twentieth-century religions.

ANT 385
VISUAL ANTHROPOLOGY
3, 3/0; TSIF

Prerequisites: ANT 101 or SOC 100. How technology of the still camera transformed relationship to imagery, perception of time and movement through splitting and flattening of representations into "realistic" images. Basics of still cameras as a research tool; how to collect informants' images as data. Meaning, use of images, representations, and power of visual data.

ANT 388
FOLKLORE & TECHNOLOGY: AMERICAN ROOTS MUSIC
3, 3/0

Prerequisites: Upper class standing. The richness and diversity of American roots music, with emphasis on the relationship of roots music to folklore and popular culture. Ways in which mediated transmission and technology have contributed to the development of and dissemination of roots music.

ANT 389
TOPICS IN ANTHROPOLOGY
3, 3/0

Prerequisite: One course in the natural or social sciences, upper-division status, or permission of instructor. Analysis of current areas of research interest in anthropology. Emphasis on using concepts and methods from the subfields of anthropology to study a specific problem or series of problems.
Equivalent course: ANT389

ANT 400
ANCIENT MATERIALS
3, 3/0; TSIF

Prerequisite: ANT 329 or ANT 312. The study of technology and production in its broadest sense. Raw materials used to create material culture as defined archaeologically, such as stone, bone, wood, clay, and metal. Datasets from ethnographic and archaeological films and reports; hands-on experimental archaeology projects. How archaeologists use material culture as evidence for past human behavior, e.g., measurement of lithic flakes, creating typologies of ceramic shards.

ANT 405
HISTORY OF ANTHROPOLOGICAL THOUGHT
3, 3/0

Prerequisite: ANT 101. Important contributions in the development of anthropological theory to the present. Includes theories of Boas, Kroeber, Lévi-Strauss, Malinowski, and Tylor.
Equivalent course: ANT405W

ANT 412
SEMINAR IN ANTHROPOLOGY
3, 3/0

Prerequisite: ANT 101. The concept of culture and ethnographic research. Value of cultural anthropology and ethnographic research and their relevance to problems faced by people today. Intellectual, social, and political trends that have shaped the development of the field of cultural anthropology. Cultural anthropological theory, research design, research practice.

ANT 415
SEMINAR IN ARCHAEOLOGY
3, 3/0; OCIF

Prerequisites: ANT 328 or ANT 312. Value of archaeology and its relevance to the problems faced by people today. Benefits from archaeology and how they are achieved. Intellectual, social, and political trends that have shaped the development of the field of archaeology. Archaeological theory and research design in depth. Negotiating between the different stakeholders in archaeological projects. Oral and written communication of archaeological findings.

ANT 418
SEMINAR IN PHYSICAL ANTHROPOLOGY
3, 3/0

Prerequisites: CWP 102; ANT 100; upper class standing; or instructor permission. Value of physical anthropology and its relevance to the problems faced by people today. Benefits from physical anthropology and how they are achieved. Intellectual, social, and political trends that have shaped the development of the field of physical anthropology. Physical

anthropological theory and research design in depth. Negotiating between the different stakeholders in physical anthropological projects. Written communication of physical anthropological findings.
Equivalent course: ANT418

ANT 488
INTERNSHIP IN ANTHROPOLOGY
1-12, 0/0

supervised fieldwork in community agencies, organizations, and milieus where students develop and apply practical and anthropological knowledge and skills. Students interact in diverse cultural settings, and experience and establish connections of potential use in the job market. Preparatory conferences, ongoing seminars with the faculty supervisor, a log/journal of the field experience, and a final report.

ANT 498
HONORS RESEARCH
3, 0/0

Prerequisites: 3.5 Cumulative GPA, Majors/Minors Only.

ANT 499
INDEPENDENT STUDY
3-9, 0/0

ATS - ART THERAPY STUDIES

ATS 320
INTRODUCTION TO ART AND THERAPY
3, 3/0

Prerequisite: Junior or senior status. For ATS minors: two approved human service courses, or instructor permission. Introduction to the theory and practice of art therapy. Exploration of art as a means of assessment and treatment for child, teen, and adult populations in various therapeutic settings such as hospitals, mental health clinics, nursing homes, and developmental centers. Clinical case material presentations and exploration of personal creative processes.

ATS 325
ART FOR CHILDREN WITH SPECIAL LEARNING NEEDS
3, 3/0; DIIF

Prerequisites: For ATS minors: ATS 320 and one approved human service course, or instructor permission; for AED majors: AED 301 and 3.0 GPA in major, or instructor permission. Examining the role of art as it relates to development of children with special learning needs due to disability and/or adverse environmental circumstances. Emphasis on differentiated instruction, therapeutic teaching, roles of the art educator and the art therapist, and cultural competence. 30 hours of supervised fieldwork takes place in approved settings that serve children with special learning needs.

BIO - BIOLOGY

BIO 100
PRINCIPLES OF BIOLOGY
3, 3/0; NSIF

Non-majors only. The unifying principles of modern biology with special emphasis on cell biology, metabolism, and genetics.

BIO 101
HUMAN BIOLOGY
3, 3/0; NSIF

Non-majors only. Biological principles of the human condition with particular emphasis on physiology of normal body function with regard to nutrition, disease, psychoactive agents, reproduction and contraception, and aging. Contemporary health-related issues.

BIO 104
ENVIRONMENTAL BIOLOGY
3, 3/0; NSIF, TSIF

Non-majors only. Biological aspects of global environmental problems. Principles of ecology.
Equivalent course: BIO104W

BIO 210
MICROBIOLOGY
3, 2/2

Prerequisite: BIO 100. Non-majors only. Morphology and physiology of bacteria. General application to household science, sanitation, hygiene, and infectious disease.

BIO 211
INTRODUCTION TO CELL BIOLOGY AND GENETICS
4, 3/3; NSIF

The chemicals of life and their hierarchical organization in cells. Cell organelles. Metabolism and energy transformations. Cell division, gene expression, Mendelian and population genetics. Biotechnology in human health, nutrition and society.

BIO 212
INTRODUCTION TO ORGANISMAL BIOLOGY AND DIVERSITY
4, 3/3; NSIF

Origins and history of life. Functional biology of animals and plants studied in an integrated fashion. Survey of morphology, physiology, development, reproduction and life cycles of animals, plants, fungi and microbes.

BIO 213
INTRODUCTION TO ECOLOGY, EVOLUTION, AND BEHAVIOR
4, 3/3; NSIF

Population, community and ecosystem ecology; human impact on the environment. The Darwinian revolution, evolution of populations and the formation of new species. Principles of animal behavior.

BIO 300
BIostatISTICS
4, 3/3

Prerequisites: Algebra, upper-division status. Statistical inference as a guide to decision making during biological investigations. Elements of experimental design. Exploratory data analysis. Tabular, graphical, and written interpretation of results. Application of inferential techniques including confidence intervals, t-tests, analysis of variance, chi-square analysis of contingency tables, and linear regression and correlation.

BIO 301
CELL PHYSIOLOGY
4, 3/3

Prerequisites: BIO 211 and CHE 201. Basic concepts in cell physiology with an emphasis on transport across cell membranes, cell communication, and excitability of nerve and muscle cells. Labs introduce students to a variety of techniques employed to study cell physiology including biochemistry, cellular electrophysiology, and fluorescence microscopy.

BIO 303
GENETICS
4, 3/3; OCIF

Prerequisites: BIO 211, CHE 111 and CHE 112. Principles of Mendelian, molecular and population genetics. Classic and molecular experimental methods for studying of gene structure, transmission, expression. Equivalent course: BIO303W

BIO 305
MOLECULAR BIOLOGY
4, 3/1

Prerequisites: BIO 211, CHE 201. Structure, organization, and function in living matter at the molecular level.

BIO 308
HUMAN ANATOMY AND PHYSIOLOGY
3, 3/0

Prerequisites: BIO 100 or BIO 211, and upper-division status. Physiology and pertinent anatomy of the major organ systems of the human body including consideration of clinical health and disease. Not applicable as a biology elective for students pursuing a B.A. in biology.

BIO 309
LABORATORY IN HUMAN ANATOMY AND PHYSIOLOGY
1, 0/0

Prerequisites: BIO 100 or BIO 211 and upper-division status. Human anatomy and functions of the major anatomical systems using the techniques of rigorous animal dissection (e.g., cats and sheep organs) and

physiological experiments. Not applicable as a biology elective for students pursuing a B.A. in biology.

BIO 314
ADVANCED CELL BIOLOGY
4, 3/3

Prerequisites: BIO 211 and CHE 201. In-depth examination of the cell. Emphasis on the contribution of the molecular approach to the understanding of cell structure and functions, in particular, the contribution of recombinant DNA technology. Equivalent course: BIO314

BIO 315
ECOLOGY
4, 3/3

Prerequisites: BIO 212, BIO 213, CHE 111, CHE 112. Ecosystems, biotic communities, interspecific and intraspecific relationships, biogeochemical cycles, energy flow, population ecology, introduction to analysis of community composition, effects of humanity in modifying natural environments. Several half-day or all-day field trips may be required. Equivalent course: BIO315W

BIO 316
BIOLOGY OF PROKARYOTES
4, 2/6

Prerequisites: BIO 211, CHE 111, CHE 112. Microorganisms and techniques of observing their morphology, growth characteristics, and distribution. The relationship of microorganisms to human activities. Equivalent course: BIO316W

BIO 321
COMPARATIVE VERTEBRATE ANATOMY
4, 3/3

Prerequisites: BIO 212 and BIO 213. Function, evolution, and development of the diversity of vertebrate structure. Rigorous dissections of representative vertebrate morphologies (e.g., preserved sharks, amphibians, cats, etc.).

BIO 322
HUMAN HEREDITY
3, 3/0

Prerequisites: BIO 100 and upper-division status. Non-majors only. Human inheritance and the social implications of genetics to modern society.

BIO 325
ICHTHYOLOGY
4, 3/3

Prerequisites: BIO 212 and BIO 213. Study of the biology of fishes: structure and function (anatomy and physiology), systematics, evolution, diversity, zoogeography, and ecology.

BIO 350
GENES IN POPULATIONS
4, 3/3; OCIF

Prerequisites: BIO 211, CHE 111, CHE 112, and upper-division status. Processes that cause populations to change over time; mutation, natural selection, genetic drift, and gene flow. Application of population genetic principles to problems in conservation biology and forensic genetic analysis.

BIO 402
COMPARATIVE ANIMAL PHYSIOLOGY
4, 3/3

Prerequisites: BIO 211, BIO 212, CHE 201. Study of hormonal control, neural processing, sensory mechanisms, circulation, gas exchange, digestion, muscles, energetics, and thermoregulation using vertebrate and invertebrate examples.

BIO 405
ORGANIC EVOLUTION
3, 3/0

Prerequisites: BIO 212, BIO 213, BIO 303. Empirical foundation of evolutionary theory. Emphasizes the dynamics of the process of evolution, especially as it relates to individual variation within an interbreeding population, to the variation pattern on the population level, and to the origin of species; more recent trends, such as introgressive hybridization, polyploidy, apomixis, and genetic homeostasis are developed.

Equivalent course: BIO405W

BIO 408
PLANT PHYSIOLOGY
4, 3/3

Prerequisites: BIO 211, BIO 212, CHE 201. Physiological processes in plants, including photosynthesis, respiration, osmosis, translocation, transpiration, effects of hormones, soil nutrients, and tropisms.

BIO 414
MAMMALOLOGY
3, 2/3

Prerequisites: BIO 212 and BIO 213. Introduction to the study of mammals, living and extinct, including a survey of the diversity of mammalian life history strategies, behavior, ecology, morphology, and physiology. Required field trips, collection techniques, and preparation of study materials.

BIO 418
LIMNOLOGY
4, 3/3

Prerequisites: BIO 212, BIO 213, CHE 111, and CHE 112. Physical, chemical, and biological factors that influence freshwater life and the ecological interactions in freshwater communities. Lectures, demonstrations, and field trips.

BIO 421
INVERTEBRATE STRUCTURE AND FUNCTION
3, 2/2

Prerequisites: BIO 212 and BIO 213. Functional approach to the morphology, physiology, adaptation, ecology, reproduction, and evolution of invertebrates.

BIO 428
VERTEBRATE STRUCTURE AND FUNCTION
4, 3/3

Prerequisites: BIO 212 and BIO 213. Comparative study of vertebrates with emphasis on their anatomy, adaptations, ecology, and phylogenetic relationships.

BIO 429
FISHERIES BIOLOGY
4, 3/3

Prerequisites: BIO 212 and BIO 213. Ecology and management of fish populations. Sampling techniques and fisheries-management techniques (including stocking, hatcheries, and aquaculture programs). Feeding, behavior, and life history of fishes.

BIO 430
STREAM ECOLOGY
4, 3/3

Prerequisites: BIO 212, BIO 213, upper-division status; a course in statistics recommended. Biological, chemical, geomorphic, and hydrologic features affecting the ecology of flowing water systems. Emphasis on freshwater invertebrate life histories, adaptations, and community structure in shallow streams.

BIO 450
RECOMBINANT DNA TECHNOLOGY
4, 2/4

Prerequisites: BIO 303 or BIO 350, CHE 201. Extensive hands-on experience using the techniques of biotechnology. Emphasis on techniques involving the construction of recombinant DNA molecules and their analysis.

BIO 488
BIOLOGY INTERNSHIP
1-15, 0/0

Prerequisites: Minimum cumulative and biology GPA of 2.5; BIO 211, BIO 212, BIO 213; faculty adviser and department chair permission. An opportunity to apply learned principles and methodologies in a workplace setting.

BIO 495
SPECIAL PROJECT
1-3, 0/0

Prerequisites: Faculty adviser and department chair permission.

BIO 498
HONORS RESEARCH
1-3, 0/0

Prerequisites: BIO 211, BIO 212, and BIO 213; completion of 70 or more credit hours; minimum GPA of 3.4 in biology major and minimum cumulative GPA of 3.0. Independent investigation of an original scientific problem, completed over two semesters with transition to the second semester dependent upon satisfactory completion of research proposal during the first semester. Submission of a final written report of investigation and an oral presentation of work at a scientific meeting.

BIO 499
INDEPENDENT STUDY
3-12, 0/0

Prerequisites: Faculty adviser and department chair permission.

BME - BUSINESS AND MARKETING EDUCATION

BME 301
PRINCIPLES OF BUSINESS/MARKETING AND TECHNOLOGY
EDUCATION
3, 3/0

Introduction to the teaching of occupational education courses in public schools; principles, philosophy, and objectives; historical development of occupational education and the development of current issues for an occupational education program.

Equivalent courses: BME301W

BME 302
CURRICULUM AND EVALUATION IN BUSINESS/MARKETING AND
TECHNOLOGY EDUCATION
3, 3/0

Introduction to the curriculum and evaluation in business/marketing and technology education. State curriculum and standards, lesson planning, student learning, and curriculum evaluation.

Equivalent course: BUS302

BME 303
INSTRUCTIONAL STRATEGIES IN BUSINESS AND MARKETING
3, 3/0

Instructional strategies dealing with classroom management, classroom environment, and educational technologies. 100 hours of field experience prior to student teaching required.

Equivalent course: BUS303

BME 411
APPLIED TEACHING METHODS IN BUSINESS/MARKETING
3, 3/0

Prerequisites: BME/CTE 301 and BME/CTE 302. Basic principles and methods of teaching business and marketing subjects. Prepares the student to effectively teach subjects in this area.

Equivalent course: BUS411

BME 415
STUDENT TEACHING IN BUSINESS EDUCATION
6, 0/0

Prerequisites: Senior standing; completion of business core area and BME 411; 2.5 cumulative average in major subject area; 2.0 cumulative average in total program; C or better in CWP 101 and CWP 101; satisfactory completion of (or exemption from) prerequisite EXE 100 Student Speech Clinic if referred. Full-time teaching in a public school for one semester under the supervision of a master teacher and a college supervisor.

Equivalent course: BUS415

BME 416
STUDENT TEACHING IN BUSINESS EDUCATION
6, 0/0

Prerequisites: Senior standing; completion of business core area and BME 411; 2.5 cumulative average in major subject area; 2.0 cumulative average in total program; C or better in CWP 101 and CWP 101; satisfactory completion of (or exemption from) prerequisite EXE 100 Student Speech

Clinic if referred. Full-time teaching in a public school for one semester under the supervision of a master teacher and a college supervisor.
Equivalent course: BUS416

BME 495
SPECIAL PROJECT
3, 0/0

BSC - UNIVERSITY COLLEGE

BSC 101
FOUNDATIONS OF INQUIRY
3, 3/0

Introduction to the Intellectual Foundations program and liberal arts education. Focused on critical and creative thinking, and research skills applied to interdisciplinary topics. Identification, analysis, and evaluation of arguments' elements, form, strength, and validity. Emphasis on critical reading, argument construction, intellectual curiosity, fair-mindedness, and exploration of beliefs and values.
Equivalent course: HON100

BUS - BUSINESS

BUS 116
INTRODUCTION TO BUSINESS
3, 3/0

Modern business functions. Economic and social aspects, organization and management, operations, marketing functions, management control and decision making, financial risk and management, and career information for a changing business climate.

BUS 117
INTRODUCTION TO RETAILING
3, 3/0

Role and function of retailing as a channel of distribution, the relationship and responsibilities to the producer and consumer.

BUS 189
TOPICS COURSE
1-3, 0/0

BUS 201
FOUNDATIONS OF LEADERSHIP
3, 3/0

History of leadership and leadership as an ongoing process of challenge, growth, and development. Students learn the foundational concepts of leadership, assess their own leadership styles, and discuss issues relevant to leadership. Provides opportunities for the practice of leadership skills in campus and community organizations.
Equivalent courses: CRS201, UNC201

BUS 212
INTRODUCTION TO ACCOUNTING
3, 3/0

Introduction to the accounting cycle and double-entry bookkeeping. Students analyze business transactions, apply rules of debits and credits, and prepare income statements and balance sheets.

BUS 300
INTERNATIONAL BUSINESS
3, 3/0

Prerequisite: Business major. Concepts, theories, and practices of international business and the multinational corporation. Global nature of the world economy. Environmental constraints, regional issues, and functional business operations.

BUS 305
WORKFORCE DIVERSITY IN THE TWENTY-FIRST CENTURY
3, 3/0; DIIF

Prerequisite: Junior/senior status. Workforce diversity as the positive acknowledgment of the way in which people are different. Recognizes gender, age, religion, and cultural background, and work and life respon-

sibilities. Teamwork develops an understanding and awareness of cultural diversification in the workforce.

BUS 312
FINANCIAL ACCOUNTING
3, 3/0

Introduction to the fundamental accounting theories and methods underlying financial statements and the use of accounting information by decision makers.

BUS 313
MANAGERIAL ACCOUNTING
3, 3/0

Prerequisite: BUS 312. Managerial accounting focuses on accumulating, processing, reporting, and interpreting decision-relevant financial information which are used in managing an organization. Topics include cash flow analysis, time value of money, cost behavior, budgeting, and elements of cost accounting.

BUS 320
PRINCIPLES OF MARKETING
3, 3/0

Survey course on concepts, policies, and marketing goods and services. Includes consumer behavior, target markets, marketing programs and ethics.

BUS 321
MARKETING ON THE INTERNET
3, 3/0

Prerequisite: BUS 320, business major. Foundations and rationale for Internet marketing. Marketing objectives and strategies for Web sites, online promotion, and advertising. Web site design tools, research on customers, and legal and ethical issues. Students evaluate Web sites and design their own online marketing sites.

BUS 323
SALES METHODS AND TECHNIQUES
3, 3/0

Prerequisite: BUS 320, business major. Foundation in sales principles and techniques. Emphasis on the personal development of sales skills, analysis of characteristics, behavior, and motivation of buyers, and the use of the selling process to achieve customer satisfaction.
Equivalent course: BME323W

BUS 324
BUSINESS COMMUNICATION
3, 3/0

Prerequisite: BUS 360, business major. Fundamental principles and tools for effective communication within organizations. Experiential exercises will be used to assist in developing written and oral communication skills.
Equivalent course: BUS324W

BUS 325
HUMAN RESOURCE MANAGEMENT
3, 3/0

Prerequisite: Business major. Theoretical and practical knowledge in the major areas of human resource management including selecting, training, developing, evaluating and compensating employees.

BUS 327
ADVERTISING CONCEPTS AND PRACTICES
3, 3/0

Prerequisite: BUS 320, business major. Introduction to the field of advertising, including discussion of research, target marketing media selection and evaluation, goal setting and budgeting, and the development of advertising campaigns.

BUS 329
SALES MANAGEMENT
3, 3/0

Prerequisite: BUS 320, business major. Sales management function within modern organizations including sales-force operation, sales strategies, leadership, ethics, recruitment, selection, and motivation of staff. Sales management as a vital business function within the context of a global economy.

BUS 330

MARKETING MANAGEMENT

3, 0/0

Prerequisite: BUS 320, business major. Marketing-oriented thinking in today's competitive environment; analyzing needs, identifying opportunities, and bringing valued offers to targeted customer groups; analyzing, planning, implementing, and controlling marketing strategies. Includes recent themes: customer relationship management, technology/Internet revolution, brand building, and global marketing from a marketing manager's perspective.

BUS 334

BUSINESS LAW I

3, 3/0

Legal principles applicable to business enterprises and operations including advisory and judicial systems; contracts and sales; commercial paper, secured transactions, property, torts, and appropriate sections of the Uniform Commercial Code.

BUS 335

BUSINESS LAW II

3, 3/0

Prerequisite: BUS 334, business major. The nature of real and personal property; trusts, wills and estates; creditor's rights and secured transactions; government regulation of business; administrative law; insurance, and evidence. Topics may include taxation of income, arbitration in resolving contract disputes, and Rule 10 b-5 of the Securities and Exchange Commission.

BUS 340

SECURITIES

3, 3/0

Prerequisite: Junior/senior status. Securities and securities markets. Emphasis on investment markets and their interaction with the macroeconomics system.

Equivalent course: BUS340W

BUS 341

COMMODITIES

3, 3/0

Prerequisite: Junior/senior status. Commodities futures trading. Special emphasis on terminology, hedging procedures, trading procedures, and price-making influences.

BUS 347

RETAIL MANAGEMENT

3, 3/0

Prerequisite: BUS 320, business major. Introduction to trends and developments in retailing and to the operation of retail organizations. Strategic planning, financial control, merchandising, site selection, store organization, pricing and promotion.

BUS 348

ELECTRONIC COMMERCE

3, 3/0

Prerequisite: BUS 320, business major. Introduction to the principles and practices of electronic commerce including EDI, electronic payment, online promotion, electronic shopping and distribution, online stores and malls, security, intellectual property rights, and legal issues. Select tools and skills required for navigating the Internet and creating a Web site.

BUS 350

CURRENT PRACTICES IN BUSINESS TECHNOLOGY

3, 3/0

Prerequisite: BUS 360, business major. Instruction in the use of information technology and business computer applications including spreadsheets, graphic presentations, networking, database management, word processing and office automation. Emphasis on using computers and computer-based information in the decision-making process.

BUS 360

PRINCIPLES OF MANAGEMENT

3, 3/0

Introduction to the basic functions of management, including strategic and operational planning, developing organizational structure and behavior, leadership, motivation, and effective control systems.

Equivalent course: BUS360W

BUS 363

BUSINESS IN THE WESTERN HEMISPHERE

3, 3/0

Prerequisite: BUS 360, business major. Survey of business practices in the Western Hemisphere including economic, cultural and political differences among countries, regional trade agreements, and trade practices. Select countries are compared in terms of management, marketing and human resources practices, organizational communications, and business ethics.

BUS 365

ENTREPRENEURSHIP

3, 3/0

Prerequisite: BUS 360, business major. The functions performed by entrepreneurs such as searching for opportunities and gathering resources to convert into growth-oriented, profitable ventures. Students conduct research, identify opportunities, and prepare a business plan.

BUS 366

MANAGEMENT INFORMATION SYSTEMS

3, 3/0

Prerequisites: CIS 101 and BUS 360, business major. A balanced framework for the successful management of today's increasingly complex array of information. Tools for dealing with and improving the management of information in a variety of business settings using application software such as Microsoft Office.

BUS 367

STRATEGIC MANAGEMENT OF INNOVATION AND TECHNOLOGY

3, 3/0

Prerequisite: BUS 360, business major. Strategic management in newly created and established firms from the perspectives of various functional groups (e.g., research and development, manufacturing, management, and marketing) and levels of general management (business, project, corporate) involved in the process of technological innovation.

BUS 368

SPORTS MANAGEMENT AND MARKETING

3, 3/0

Prerequisite: BUS 360, business major. The administration, coordination, and evaluation of event-related sports. Open to business and non-business majors. Provides professional and general education base for careers in sports and recreational management and marketing.

BUS 369

ORGANIZATIONAL CHANGE AND DEVELOPMENT

3, 3/0

Prerequisite: BUS 360, business major. The process of organizational change; conceptual foundation, principles, and practical applications for use in the design and development of organizations to improve organizational effectiveness in dynamic and competitive environments.

BUS 378

BUSINESS PROFESSIONAL PRACTICE

1-12, 3/0

Business majors may elect to take up to 12 credit hours of field experience. Introductory, part-time experience usually generates 3 credit hours, whereas a full-time culminating experience could generate as many as 12 credit hours. Credit, training, and evaluation criteria to be arranged by business instructor in charge of field experience.

BUS 403

CONSUMER BEHAVIOR

3, 3/0

Prerequisite: BUS 320, business major. Psychological, sociological, and cultural factors that influence consumer behavior and decision making. Emphasis on the importance of understanding consumer behavior in formulating marketing programs and marketing strategies.

BUS 404

MARKETING RESEARCH

3, 3/0

Prerequisite: BUS 320, business major. Research methods and techniques used to collect data and provide information for solving marketing problems, design, sampling, data collection, analysis and interpretation, and

report preparation. Orientation from the perspective of users of marketing research.

BUS 410
ACCOUNTING ANALYSIS
3, 3/0

Prerequisites: BUS 313 and junior/senior status. Management fundamentals and economic concepts of the firm. Application of accounting concepts and techniques in preparing, presenting, and interpreting the accounting information used by management in planning and controlling operations.

BUS 412
INCOME TAXATION
3, 3/0

Fundamentals of federal income taxation. Course focuses on concepts related to gross income, deductions, credits, and property transactions.

BUS 413
TAXATION OF CORPORATIONS
3, 3/0

Prerequisite: Junior/senior status. Federal taxation of corporate income and shareholders; includes organizing and capitalizing the corporate entity, determining tax liability, dividends and other non-liquidating distributions, stock redemptions, liquidations, and other corporate entities, such as S corporations and LLCs.

BUS 417
INTERNATIONAL ACCOUNTING
3, 3/0

Prerequisites: Business major and completion of BUS 312, BUS 313, and ECO 314. Designed to familiarize students with the accounting issues arising from national differences in accounting systems, standards, terminology, disclosure patterns, tax policies, fluctuations in exchange and inflation rates, and managerial options for dealing with these issues.

BUS 420
INTERNATIONAL MARKETING
3, 3/0

Prerequisite: BUS 320, business major. Concepts, theory, and practice of international marketing. Competitive global environment, trade issues, cultural factors, and global marketing strategy formulation and implementation.

BUS 424
INTERNATIONAL BUSINESS COMMUNICATION
3, 3/0

Prerequisite: BUS 324, business major. Preparation for the complex communication tasks encountered in the world of international business. Cultural aspects that influence communication including language, environment and technology, social organization, contexting, authority conception, nonverbal communication, and temporal conception. Emphasis on understanding social and cultural differences and developing effective communication strategies for the global corporation.

BUS 425
INTERNATIONAL AND CROSS-CULTURAL TRAINING
3, 3/0

Prerequisite: Business major. Analysis, selection, design, implementation, and evaluation of training programs to increase functional capabilities in international and multicultural environments. Emphasis on communication strategies, human response to cultural settings, and procedures for increasing performance.

BUS 426
CREATIVE OPPORTUNITIES IN LEADERSHIP AND MANAGEMENT PRACTICES
3, 3/0

Prerequisites: BUS 360 and BUS 325, junior/senior status. Detailed analysis of creative problem-solving techniques. Case problems and business projects that reinforce management functions and approaches. Places students in the role of an individual manager and team members in practical application of management theory.

Equivalent course: BUS426W

BUS 428
ADVANCED MERCHANDISING
3, 3/0

Prerequisite: BUS 326 or permission of instructor. Techniques of merchandising fashion apparel, accessories, housewares, major and minor appliances, and furniture. Major approaches used in planning and analyzing sales and stock records, and the use of operating and financial data to make profitable merchandising decisions as well as market planning.

BUS 430
STRATEGIC MANAGEMENT
3, 3/0

Prerequisite: Business major; senior status. Methods and techniques commonly used in strategic management decision making. Provides a background in strategic analysis and implementation of strategy in a competitive global environment. Employs competitive simulations, case studies, and applied research projects.

BUS 440
BUSINESS SENIOR SEMINAR
3, 3/0

Prerequisite: Senior status. Designed to help business students in the transition to professional employment. Career paths and employment opportunities, employee-benefit packages and policies, Affirmative Action programs, Equal Employment Opportunity, on-the-job considerations, and related subjects.

Equivalent course: BUS440W

BUS 460
PRODUCTION AND OPERATIONS MANAGEMENT
3, 3/0

Prerequisite: BUS 360. Overview of the major concepts and models in the production and operations process in manufacturing and services organizations. Includes detailed examination of production systems, materials planning, project management, and quality.

Equivalent course: TEC460

BUS 473
INTERNATIONAL MANAGEMENT
3, 3/0

Prerequisite: BUS 360, business major. Through an approach that blends theory and practical exercises, students will learn the fundamentals of managing in a global economy.

BUS 490
FIELD EXPERIENCE
1-3, 0/0

Prerequisites: Junior/senior status, permission of instructor. Provides non-business students the opportunity to have experience related to their majors in public or private agencies, business organizations, or educational institutions.

CHE - CHEMISTRY

CHE 100
CHEMISTRY AND SOCIETY
3, 3/0; NSIF

Non-mathematical approach to the study of matter. Presentation of the fundamentals of chemistry followed by socially relevant topics such as toxic waste management, environmental pollution, space technology, agricultural chemistry, chemistry of consumer products, food processing, polymers, and plastics.

CHE 101
GENERAL CHEMISTRY I
3, 2/3; NSIF

Basic principles of chemistry, including atomic and molecular structure; gasses, liquids, solids, and solutions; chemical reactions; acids and bases. Not open to chemistry majors.

CHE 102
GENERAL CHEMISTRY II
3, 2/3

Prerequisite: CHE 101. Continuation of CHE 101. Includes chemical equilibria, electrochemistry, metals and nonmetals, some fundamentals of

organic chemistry, polymers, fibers and plastics, natural products, and some fundamentals of biochemistry. Not open to chemistry majors.

CHE 111
FUNDAMENTALS OF CHEMISTRY I
4, 3/3; NSIF

Fundamental principles of chemistry covering the nature and structure and properties of the atom, chemical bonding, geometry of molecules, the periodic table, states of matter, stoichiometry, and solution chemistry.

CHE 112
FUNDAMENTALS OF CHEMISTRY II
4, 3/3

Prerequisite: CHE 111. Continuation of CHE 111. The concepts of kinetics, equilibria, and energetics and preparative materials for further study in chemistry or other areas of science. Laboratory work in qualitative inorganic semimicroanalysis and physicochemical experiments.

CHE 201
ORGANIC CHEMISTRY I
3, 3/0

Prerequisite: CHE 112. Chemistry of carbon compounds. Bonding, stereochemistry, and structural theory. Fundamental reactions of the functional groups considered from the mechanistic standpoint.

CHE 202
ORGANIC CHEMISTRY II
3, 3/0

Prerequisite: CHE 201. Continuation of CHE 201. The reactions and mechanisms of organic functional groups including aromatic compounds, alcohols, aldehydes, carboxylic acids, and acid derivatives. Spectroscopic techniques (IR, UV, NMR) for the identification of organic molecules are also included.

CHE 203
ORGANIC CHEMISTRY LABORATORY I
1, 0/3

Prerequisite: CHE 112. Laboratory techniques in organic chemistry including distillation, crystallization, extraction, sublimation, and chromatography are learned by application to the synthesis and purification of organic compounds. Experiments chosen from a variety of possible topics such as isolation of natural products, separation of mixtures, and synthesis.

CHE 204
ORGANIC CHEMISTRY LABORATORY II
1, 0/3

Prerequisite: CHE 203. Prerequisite or concurrent registration: CHE 202. Continuation of CHE 203. Synthesis, isolation, purification, and identification of organic compounds with emphasis placed on spectroscopic methods of structure determination. Experiments chosen from a variety of possible topics such as multistep synthesis, mechanistic studies, and qualitative organic analysis.

CHE 301
ANALYTICAL CHEMISTRY
4, 2/6

Prerequisite: CHE 112. Theory and laboratory applications of quantitative analytical chemistry. Gravimetric, volumetric, electrochemical, and spectrophotometric methods.

CHE 305
PHYSICAL CHEMISTRY I
3, 3/0

Prerequisites: CHE 203 and PHY 112. Prerequisite or concurrent registration: MAT 263. The first semester of a two-semester sequence in physical chemistry. Topics include gas laws, laws of thermodynamics, state functions, thermochemistry, chemical equilibria, Maxwell relations, and chemical potential.

CHE 306
PHYSICAL CHEMISTRY II
3, 3/0

Prerequisite: CHE 305 and MAT 263. The second semester of a two-semester sequence in physical chemistry. Topics include quantum chemistry, atomic and molecular structure, molecular and atomic spectroscopies, kinetic theory of gases, and kinetics.

CHE 307
PHYSICAL CHEMISTRY LABORATORY I
1, 0/0

Prerequisites: CHE 204, CHE 301, and CHE 305 or concurrent registration. A laboratory study of the principles of physical chemistry covered in CHE 305. Topics include colligative properties, electrical conductance, azeotropic mixtures, adsorption equilibria, and determination of equilibrium constants. Data analysis is required.
Equivalent course: CHE307W

CHE 308
PHYSICAL CHEMISTRY LABORATORY II
1, 0/0

Prerequisites: CHE 307 and CHE 306 or concurrent registration. A laboratory study of principles of physical chemistry covered in CHE 306. Topics include determination of rate laws; ultraviolet, visible, and infrared spectroscopy; and photochemistry. Data analysis using statistical methods and error analysis is required.
Equivalent course: CHE308W

CHE 310
LITERATURE OF CHEMISTRY
1, 1/0

Prerequisite or concurrent registration: CHE 201. Sources of chemical literature. Experiences in chemical information searching and retrieval, including examples of computer searching.

CHE 312
CHEMISTRY AND CRIMINALISTICS
3, 3/0

Prerequisite: CHE 102, CHE 201, or CHE 321. Chemistry as an investigative aid in the process of criminal justice. General chemical techniques used in criminal investigations. The function of the criminalist from the gathering of evidence to the final presentation of expert testimony.

CHE 315
ENVIRONMENTAL CHEMISTRY AND TECHNOLOGY
3, 3/0; TSIF

Prerequisite: CHE 112 or CHE 102. Discussion of chemical reactions in air, water, and soil. Effect of human activities on the chemical environment. Alternative energy sources, pollution-control methods and devices.

CHE 321
PRINCIPLES OF ORGANIC CHEMISTRY
4, 1/3

Prerequisite: CHE 102 or CHE 112. Survey of organic chemistry including functional groups and their chemical behavior. Not open to chemistry or forensic chemistry majors.

CHE 322
BIOLOGICAL CHEMISTRY
4, 3/0

Prerequisite: CHE 202 or CHE 321. Structure and functions of the substances of biochemical interest found in living systems, supplemented by illustrative laboratory work. Not open to chemistry or forensic chemistry majors.

CHE 331
PRINCIPLES OF PHYSICAL CHEMISTRY
3, 3/0

Prerequisites: CHE 202, MAT 126 or MAT 162, PHY 108 or PHY 112, or permission of instructor. A one-semester survey course exploring the principles of physical chemistry, oriented toward the needs of forensic chemistry majors and students in environmental and health related sciences. Topics include thermodynamics, kinetics, quantum chemistry, and atomic and molecular spectroscopies.

CHE 360
INTRODUCTION TO INORGANIC CHEMISTRY
3, 3/0

Prerequisites: CHE 202. Descriptive inorganic chemistry of the main group and transition metal elements. Atomic structure and trends in the periodic table. Theories of chemical bonding. Introduction to crystal field, ligand field and molecular orbital theories. Inorganic chemistry of important industrial processes, including metallurgy. Role of metal ions in biological systems.

CHE 399
INTERNSHIP IN CHEMISTRY

1-6, 0/0

Prerequisite: Permission of instructor. Hands on experience in approved research and/or development project of current interest to local chemical industry.

CHE 403
INSTRUMENTAL ANALYSIS

4, 2/6

Prerequisites: CHE 301 and CHE 305 or CHE 331. Chemical analysis and structure determination through study of the theory and operation of instruments involving visible, ultraviolet, infrared, and atomic absorption spectrophotometry; emission spectroscopy, colorimetry; flame photometry; chromatography; nuclear magnetic resonance spectroscopy.

CHE 406
ANALYTICAL TOXICOLOGY

2, 1/3

Prerequisites: MAT 311 and CHE 301. Introductory analytical toxicology for pharmaceutical, forensic, and clinical analysis. Exploration of the main categories of inorganic and organic toxins, sample collection and treatment, chromatographic separation, spectroscopic and mass spectral determination of various toxic compounds in clinical, forensic, and environmental samples.

CHE 430
ORGANIC CHEMISTRY III

3, 3/0

Prerequisite: CHE 305. Advanced topics in theoretical and physical organic chemistry with emphasis on reaction types, mechanisms, and structure.

CHE 460
INORGANIC CHEMISTRY

3, 3/0

Prerequisite: CHE 305 or CHE 331. Introduction to modern inorganic chemistry, with special emphasis on periodic variations of structural and bonding patterns among inorganic compounds of the main group and transition elements. Kinetic and thermodynamic factors that govern the preparation and stabilities of inorganic compounds.

Equivalent course: CHE400

CHE 461
INORGANIC CHEMISTRY LABORATORY

2, 0/6

Prerequisite: CHE 301. Prerequisite or concurrent registration: CHE 460. Laboratory experience in the synthesis and characterization of selected inorganic compounds using a variety of techniques.

Equivalent course: CHE400

CHE 460
ADVANCED INORGANIC CHEMISTRY

3, 2/3

Prerequisites: CHE 202, CHE 204, CHE 305, CHE 360, and CHE 306 or concurrent. Physical inorganic and transition metal chemistry. Development of symmetry and its applications to the spectroscopy of inorganic systems. Crystal field, ligand field and molecular orbital theories. Organometallic chemistry, homogenous and heterogeneous catalysis. Metal ions in bioinorganic systems, inorganic materials. Advanced synthetic methods and methods of characterization.

CHE 470
BIOCHEMISTRY I

3, 3/0

Prerequisites: CHE 202; BIO 211 recommended. Study of the molecular structure and function of the four major classes of biomolecules: proteins, nucleic acids, lipids, and carbohydrates. Examination of enzyme kinetics, mechanism, and regulation. Examination of the molecular nature of DNA replication and an introduction to recombinant DNA technology.

Equivalent course: CHE401

CHE 471
BIOCHEMICAL TECHNIQUES

2, 1/3; OCIF

Prerequisites: CHE 204 and CHE 301. Prerequisite or concurrent registration: CHE 470. Techniques used in the collection and analysis of experimental data on biochemical systems. Participation in laboratory experiments illustrating biochemical techniques and general biochemical principles. Practice in recording and disseminating data collected in a modern biochemistry laboratory, including record keeping via a laboratory notebook, organizing and writing a scientific report, and giving an oral presentation on scientific results.

CHE 472
BIOCHEMISTRY II

3, 3/0

Prerequisites: CHE 202, CHE 470, BIO 211. A continuation of CHE 470 Biochemistry I. Examination of metabolic processes in living systems. Relationship of metabolic enzyme activity to cellular control. The chemistry of genetic information, storage and expression.

CHE 495
SPECIAL PROJECT

1-3, 0/0

Prerequisite: Faculty project adviser permission.

CHE 499
INDEPENDENT STUDY

3-12, 0/0

Prerequisite: Faculty project adviser permission.

CHI - CHINESE

CHI 101
BEGINNING CHINESE I

3, 3/0; FLA

Fundamentals of Mandarin Chinese with an emphasis on the spoken and written language.

CHI 102
BEGINNING CHINESE II

3, 3/0; FLA

Prerequisite: CHI 101 or equivalent. Continuation of CHI 101.

CHI 201
INTERMEDIATE CHINESE I

3, 3/0

Prerequisite: CHI 102 or equivalent. Further development of Mandarin Chinese with an emphasis on reading and writing.

CHI 202
INTERMEDIATE CHINESE II

3, 3/0

Prerequisite: CHI 201 or equivalent. Continuation of CHI 201.

CHI 301
CHINESE CONVERSATION AND COMPOSITION I

3, 3/0

Prerequisites: CHI 202. Practice in spoken and written Mandarin Chinese.

CHI 302
CHINESE CONVERSATION AND COMPOSITION II

3, 3/0

Prerequisites: CHI 301. Practice in spoken and written Mandarin Chinese.

CHI 389
TOPICS COURSE

3-9, 0/0

CIS - COMPUTER INFORMATION SYSTEM

CIS 101

COMPUTER FUNDAMENTALS

3, 3/0

The character, organization, and use of the computer. The function of the basic components of the computer. A broad survey of application software, as well as its impact on society. Hands-on experience using common software applications such as word processing, spreadsheets, databases, and communications required.

Equivalent course: ISM101

CIS 105

INFORMATION TECHNOLOGY AND SOCIETY

3, 3/0; TSIF

The impact of information technology (IT) on social, ethical, legal, economic, privacy, intellectual property, and personal issues. Contemporary issues and challenges as affected by historical IT developments (Internet, databases, networks, communications, etc.) Students use current technology to support investigations of related topics and to communicate findings.

CIS 151

COMPUTER-BASED INFORMATION PROCESSING I

3, 3/0

Description of computers, concepts of languages and programming. Basic properties of computer languages such as branching, looping, array handling, subprograms and functions and their application to the solution of a variety of problems. Emphasis on structured programming language with enhancement of programming skills through use of a contemporary computer programming language to write applications programs. Required for majors. Prospective CIS majors must earn a minimum grade of C in this course.

Equivalent course: ISM151

CIS 251

COMPUTER-BASED INFORMATION PROCESSING II

3, 3/0

Prerequisite: CIS 151 or equivalent. Continuation of CIS 151. Pointers, data structures, files, lists, abstract data types, and classes. Emphasis on structured programming process using a high-level language.

Equivalent course: ISM251

CIS 315

COMPUTER ORGANIZATION

3, 3/0

Prerequisite: CIS 151. This course breaks the basic organization of a computer system into a hierarchy of basic levels. Examination of CPU organization, digital logic level, micro-architecture level, and parallel architectures. How each of these levels and components interact to produce a working computer system. Focus is not solely on hardware but more broadly covers the interconnection between the fundamental building blocks of a computer and the relationship between hardware and software.

Equivalent course: ISM315

CIS 361

FUNDAMENTAL CONCEPTS IN OBJECT-ORIENTED PROGRAMMING

3, 0/0

Prerequisite: CIS 151. An introduction to object-oriented programming. Introduces transfer students who have had the equivalent programming experience in a procedural-oriented environment to the paradigms of the object-oriented environment. Required for CIS majors who have no previous experience with object-oriented programming.

CIS 370

SYSTEMS ANALYSIS AND DESIGN

3, 3/0

Prerequisite: CIS 151. Introduction to information analysis and system design. Topics include the systems concepts, defining a system, systems analysis, hardware elements, software elements, case studies. Required for majors.

Equivalent courses: CIS370W, ISM370

CIS 375

PROGRAMMING FOR THE INTERNET ENVIRONMENT I

3, 3/0

Prerequisite: CIS 151 or equivalent. Overview of the Internet and its components, protocols, and software. Students create and maintain Web pages to distribute and collect information and to validate user input, and write applications specifically for the Internet environment.

CIS 380

MICROCOMPUTER APPLICATIONS

3, 3/0

Prerequisite: CIS 370. Representative microcomputer software packages are used to solve advanced business application problems. Hands-on lab projects form a significant component of the course. Systematic design principles emphasized. Analytical features and data management techniques applied. Integration of data from different packages are practiced. Equivalent course: ISM380

CIS 391

INFORMATION SYSTEMS PROJECT MANAGEMENT

3, 3/0

Prerequisite: CIS 370. An examination of current practices in Project Management as applied to Information Systems projects. Hands-on experience with the skills, tools, and techniques required in different phases of an information system project's life cycle, including project selection, project planning, project staffing and organization, task scheduling, project scope management, budgeting and progress reporting, risk management, quality management, project communications and use of appropriate project management software tools.

CIS 400

VISUAL BASIC PROGRAMMING FOR THE WINDOWS ENVIRONMENT

3, 3/0

Prerequisite: CIS 251 or CIS 361. Students gain experience with an object-oriented, event-driven programming language using a modern integrated development environment. Students write programs utilizing basic data types, control structures, multiple forms, user-defined classes, arrays, and collections and access data from forms, files, and databases.

CIS 405

COMPREHENSIVE COBOL PROGRAMMING

3, 3/0

Prerequisite: CIS 251 or CIS 361. Intensive study of COBOL and its use in commercial applications, with emphasis on COBOL fundamentals and advanced features, program design and style, and file handling. Programming projects involve commercially-oriented applications programs.

Equivalent course: ISM405

CIS 410

COMPUTER OPERATING SYSTEMS

3, 3/0

Prerequisite: CIS 315. Computer operating systems, their functions, components, scheduling and execution of jobs, task management, and interrupts. A comparison and exploration of contemporary operating systems. Equivalent course: ISM410

CIS 411

DATABASE SYSTEMS

3, 3/0

Prerequisite: CIS 370. The basic concepts and uses of data and database systems. Topics include organization, analysis, and function of database systems. Components of representative relational, network and hierarchical databases will be presented along with programming and design. Equivalent course: CIS411W

CIS 413

MULTIMEDIA WEB PROGRAMMING

3, 3/0

Prerequisites: CIS 251 or CIS 361, CIS 375. Integration of text, graphics, animation, and audio and video sources to create multimedia products deliverable via the World Wide Web. Programming with animation, data processing, dynamic content creation, and component manipulation. Emphasizes object-oriented capabilities of contemporary multimedia development tools, objects, methods, events, properties, and functions.

CIS 420

DATABASE MANAGEMENT SYSTEMS

3, 3/0

Prerequisite: CIS 411. Advanced concepts of database management, including data modeling, features and uses of database management systems, data and database administration, and data dictionary.

Equivalent course: ISM420

CIS 425

OBJECT-ORIENTED DEVELOPMENT

3, 3/0

Prerequisites: CIS 251 or CIS 361, CIS 370. Object-oriented approach to programming and design, including its history and rationale. Students gain hands-on programming experience using an appropriate object-oriented language.

CIS 427

E-COMMERCE SYSTEMS AND TECHNOLOGIES

3, 3/0

Prerequisites: CIS 370 and CIS 375. Examines technological advancements along with business and organizational issues of electronic commerce. The technological context includes an understanding of tools and concepts such as Web servers, client/servers, communication networks, and e-commerce software. The business context includes components such as payment methods, fulfillment policies, privacy, security, and international issues.

CIS 435

COMPUTER SEMINAR

3, 3/0

Prerequisite: Permission of instructor. Selected topics from subjects not covered in formal courses.

CIS 442

ADVANCED SYSTEMS APPLICATIONS

3, 3/0

Prerequisite: CIS 411. Information systems in complex organizations. Techniques of information systems analysis and design. Detailed study of a representative real-world information system. Case studies, group work, and oral presentations.

Equivalent courses: CIS442W, ISM442

CIS 470

DATA COMMUNICATIONS

3, 3/0

Prerequisites: CIS 151, CIS 315. A comprehensive study of data transmission, packet transmission, and internetworking concentrating on principles. Topics include, but are not limited to, underlying hardware, packet switching, Internet protocols, and network applications.

Equivalent course: ISM470

CIS 471

NETWORKING LABORATORY I

3, 1/2

Prerequisites: CIS 410, CIS 470. Hands-on experience in installing, configuring, and administering a modern operating system in a networked environment. Topics include network topologies, paradigms, protocols, services, computer security, intrusion recover and privacy.

CIS 473

ENTERPRISE SYSTEMS DESIGN AND ADMINISTRATION

3, 3/0

Prerequisites: CIS 251 or CIS 361, CIS 410, CIS 470. Knowledge and skills needed to be a successful member of an enterprise IT technology support group. Discussion includes roles, responsibilities, policies, procedures, and ethical issues. Projects include administration tasks, design issues, implementation plans, and performance-monitoring strategies.

Installation and administration of enterprise-wide network hardware and software.

CIS 475

PROGRAMMING FOR THE INTERNET ENVIRONMENT II

3, 3/0

Prerequisites: CIS 251 or CIS 361, CIS 375, CIS 411. Server-side programming on the Internet. Contemporary server side-programming environment to distribute and collect information, validate user input, and

provide dynamic Web content. Forms, databases, templates, cookies and session tracking and their use in dynamic site development examined.

CIS 488

INTERNSHIP

3-15, 3/0

Prerequisites: CIS 380, upper-division status, and permission of instructor. Qualified students are placed in functioning organizations to work as trainees, on special projects or studies, or in a relevant aspect of information systems.

Equivalent course: ISM488

CIS 495

SPECIAL PROJECT

1-3, 0/0

CIS 499

INDEPENDENT STUDY

3-12, 0/0

COM - COMMUNICATION

COM 100

MEDIA LITERACY

3, 3/0; HUIF, TSIF

Role of mass media in the lives of individuals and society; exploration of development structure and technology of media, as well as social, economic, ethical, and related issues; focuses on roles of both consumers and producers of media.

Equivalent courses: COM100W, JBS100

COM 210

CONVERGED MEDIA WRITING

3, 2/2

Prerequisite: CWP 101 with minimum grade of C. Practice in organizing and writing for print and digital media; introduction to news, feature, and advocacy writing; application to journalism, public relations, and advertising.

COM 215

INTRODUCTION TO VISUAL COMMUNICATION

3, 3/0

Analysis of production and consumption of visual information; exploration of the role of images in the communication process; application to journalism, broadcasting, public relations, advertising, and digital media.

COM 301

PRINCIPLES OF PUBLIC RELATIONS AND ADVERTISING

3, 2/2

Prerequisite: GPA of 2.6 in a communication major; SPC 205, COM 210, COM 215 or acceptance into upper-division major. Principles of strategic integrated communication (public relations and advertising); based on model of formative research, strategy, tactics, evaluation, exploration of public relations and advertising via theoretical base, ethical principles, social responsibilities, functions, and professional aspects.

Equivalent courses: COM301W, JBS301

COM 302

PRINCIPLES OF JOURNALISM

3, 2/2

Prerequisites: GPA of 2.6 in a communication major; COM 210, COM 215. Overview of journalism and its historical, ethical, and professional base; focus on news sources, with practice in information-gathering techniques.

Equivalent courses: COM302W, JBS302

COM 303

PRINT NEWS I: REPORTING

3, 2/2

Prerequisite: GPA of 2.6 in a communication major; ENG 191 or COM 210. Practice in news writing for print and online publications; theory, form, and techniques in writing news; focuses on leads and various types of reporting scenarios; experience in writing under deadline pressure.

Equivalent course: COM303W

COM 304

WRITING FOR BROADCAST (TV, RADIO, FILM)

3, 2/2

Prerequisite: COM 210. Practice in organizing and writing for radio, audio media, television, and other visual media; writing in various formats, including commercials, promotional announcements, documentaries, corporate video, and narrative scripts.

Equivalent courses: COM201, COM304, TFA304W

COM 308

PUBLIC RELATIONS WRITING

3, 3/0

Prerequisites: GPA of 2.6 in a communication major; ENG 191 or both COM 210 and COM 301. Intensive practice in writing for all types of public relations situations; focus on writing for both news media and organizational media for purposes of both information and advocacy.

Equivalent courses: COM308W, JBS308

COM 310

INTERNATIONAL COMMUNICATION

3, 3/0

Prerequisite: Upper-division status. Analysis of the role of international communication in today's global society through a comparative study of the world's press and broadcasting systems. Includes journalistic values of other countries, differing philosophies of broadcasting, and the process of international communication within the framework of North-South, social, economic, and political divisions of the late twentieth century.

Equivalent courses: COM310W, JBS310

COM 312

BASIC MEDIA PRODUCTION

3, 2/2

Prerequisite: COM 215. Exploration of basic concepts and processes of video and audio media production and editing, including hands-on experience in studio and field production, and both video and audio postproduction; Discussion of career options.

COM 317

MEDIA MANAGEMENT

3, 3/0

Prerequisite: Junior/Senior standing. Theory and practice in broadcast management for radio and television stations, cable networks, online digital media; focus on structure, budget, sales, regulations, and audience-building aspect of programming and management.

Equivalent course: JBS317

COM 319

PRINT NEWS II: EDITING

3, 2/2

Prerequisites: GPA of 2.6 in a communication major; COM 210. Theory and practice of copy editing, headline writing, and preparation of news for publication and online presentation; analysis and evaluation of news content; practice in working under time pressure.

Equivalent course: JBS319

COM 322

COMMUNICATION GRAPHICS

3, 2/2

Prerequisites: GPA of 2.6 in a communication major; COM 215. Theory and practice of information design for organizational and mass media; application for print, digital, and other communication media.

Equivalent course: JBS322

COM 325

FEATURE WRITING

3, 3/0

Prerequisites: GPA of 2.6 in a communication major; COM 210 or ENG 191. Theory and advanced practice in writing magazine articles, newspaper features, and similar stories for online publications; writing for specialized audiences; introduction to freelance procedures.

Equivalent courses: COM325W, JBS325

COM 328

INTERMEDIATE AUDIO PRODUCTION

3, 2/2

Prerequisite: COM 312. Continuing study of theory, aesthetics, and fundamentals of audio production; emphasis on commercial production for radio and other audio media; introduction to in-studio production setting.

Equivalent course: JBS328

COM 329

INTERMEDIATE VIDEO PRODUCTION

3, 2/2

Prerequisite: COM 312. Continuing study of the theory, aesthetics, and fundamentals of video production; emphasis on visual, auditory, and motion elements of communication in television and video; practice in studio production setting.

Equivalent course: JBS329

COM 335

TALK RADIO/TALK TELEVISION

3, 3/0

Prerequisite: Upper-division status. Introduction to various aspects of talk radio and talk television; differences between news reporters and talk-show hosts; relationship with sales and audience analysis; attention to roles of producer, program director, and promotions.

COM 336

COMMUNICATION AND WEB PUBLISHING

3, 2/2

Prerequisite: GPA of 2.6 in a communication major. Introduction to the role of the World Wide Web in mass communication fields, including beginning and advanced training in Web page design, Web strategies, and an introduction to related software.

COM 337

ELECTRONIC NEWS I: PRODUCING

3, 2/2

Prerequisites: GPA of 2.6 in a communication major; COM 210. News writing and producing for electronic media in studio setting; theory, form, and techniques of writing and presenting news for radio and television; practice in reporting, writing, and presentation under deadline pressure.

Equivalent courses: COM337W, JBS337

COM 338

ELECTRONIC NEWS II: REPORTING

3, 2/2

Prerequisite: COM 337. News reporting for electronic media in non-studio locations; practice in reporting, writing, and news presentation under deadline pressure; techniques of using cameras and editing equipment.

COM 340

PHOTOJOURNALISM

3, 4/0

Prerequisite: COM 303 or Basic techniques of news photography as practiced by newspapers and magazines, with laboratory and field assignment experience. Note: 35mm camera with meter and full manual controls required.

COM 341

FUNDRAISING

3, 3/0

Theory and practice of fundraising and organizational philanthropy; focus on planning, organization, management, marketing, and practical approaches that nonprofit organizations use to raise money from private sources.

COM 389

TOPICS COURSE

1-9, 0/0

COM 390

SPECIAL TOPICS: JOURNALISTIC WRITING

3, 3/0

Prerequisites: GPA of 2.6 in a communication major; COM 210 or ENG 191. Specialized reporting; includes extensive study, research, analysis, and journalistic writing on a special topic, such as sports, business, health, technical, or environmental reporting.

Equivalent course: COM390W

COM 392
PUBLIC RELATIONS IN SPORTS
3, 3/0

Prerequisite: CWP 101, COM 301, or admission to sports management minor. Sports public relations and its role in intercollegiate and professional athletics; process and practice of sports information and media relations; topics include writing formats, publications, crisis management, game management, current events, law, and ethics.

COM 400
COMMUNICATION LAW
3, 3/0

Prerequisites: GPA of 2.6 in communication major; upper-division status. Study of freedom of speech and the press in the United States, particularly the rights and responsibilities of the media and constraints placed on them under law: libel, privacy, journalistic privilege, free press/fair trial, obscenity, advertising law.

Equivalent courses: COM400W, JBS400

COM 401
APPLIED COMMUNICATION RESEARCH
3, 3/0

Prerequisites: GPA of 2.6 in a communication major; COM 301. Applied research techniques in communication fields; students do original research using content analysis, focus groups, and/or surveys.

Equivalent course: JBS401

COM 405
NEWS REPORTING
3, 2/1

Prerequisites: COM 337, COM 303 and either COM 338 or COM 325. Supervised reporting and editing experience through laboratory practice resulting in online publication; theory and practice in news gathering, writing, editing, capturing visual and audio elements of news stories, working under deadline pressure; emphasis on news judgment, research, accuracy, data gathering, interviewing, editing, diversity, legal issues and journalistic ethics.

COM 410
MASS COMMUNICATION HISTORY
3, 3/0

Prerequisite: Upper-division status. Historical survey of the technology and social evolution of journalism and the broadcasting industries, including an analysis of their roles in American society.

Equivalent courses: COM410W, JBS410

COM 418
CAMPAIGNS IN PUBLIC RELATIONS AND ADVERTISING
3, 2/2

Prerequisites: GPA of 2.6 in a communication major; COM 301, COM 308. Capstone experience in strategic integrated communication based on public relations and advertising; experience in developing campaigns for actual clients, with focus on formative research, strategy, tactics, and evaluation, as well as client presentation.

Equivalent courses: COM418W, JBS418

COM 428
ADVANCED AUDIO PRODUCTION
3, 2/2

Prerequisite: COM328. Capstone experience in producing audio; emphasis on multi-track recording, mixing, music and voice editing.

COM 429
ADVANCED MULTI-CAMERA STUDIO PRODUCTION
3, 2/2

Prerequisite: COM329. Capstone experience in studio television production using news and/or other genres requiring advanced skills; requires hands-on practice in studio-based productions.

Equivalent course: JBS429

COM 431
ADVANCED FIELD PRODUCTION
3, 2/2

Prerequisite: COM312. Capstone experience in producing and directing field video productions for on-campus/off-campus viewing; students

specialize in field productions in non-studio locations; use of portable cameras, lighting and sound equipment; production in remote studio settings.

COM 432
ADVANCED POST-PRODUCTION
3, 2/2

Prerequisite: COM312. Capstone experience in video post-production; emphasis on post-production editing and editor's role in visual storytelling; hands-on approach to developing both artistic insight and practical skills in editing.

COM 433
ADVANCED TV DOCUMENTARY PRODUCTION
3, 2/2

Prerequisite: COM312. Capstone experience in producing and directing television documentaries, with hands-on experience in planning, writing, shooting and editing; focus on analysis and evaluation of documentary productions.

COM 434
ADVANCED VIDEO PRODUCTION PRACTICUM
3, 2/2

Prerequisite: COM329. Capstone experience in producing video programming for client- and college-generated on-campus/off-campus uses. Students staff a full production team for public affairs, community service, promotions, entertainment, and other types of programming.

COM 450
COMMUNICATION AND SOCIETY
3, 3/0

Prerequisites: GPA of 2.6 in a communication major; completion of 90 credit hours. Role of communication in society; exploration of contemporary issues in mass media and related disciplines; focus on ethical responsibilities of communication professionals.

Equivalent course: COM450W

COM 488
INTERNSHIP
1-15, 1/0

Prerequisites: GPA of 2.6 in a communication major and permission of instructor. COM 301 and COM 308 for internships in public communication major. COM 304 and COM 328 or 329 for internships in media production major. COM 302 and COM 303 or 337 for internship in journalism major. Supervised field experiences in a professional setting for students who have completed extensive academic preparation in the discipline. Fifty hours of fieldwork per credit.

COM 495
SPECIAL PROJECT
1-3, 3/0

Prerequisites: GPA of 2.6 in a communication major and permission of instructor.

COM 499
INDEPENDENT STUDY
3-12, 3/0

Prerequisites: GPA of 2.6 in a communication major and permission of instructor.

CRJ - CRIMINAL JUSTICE

CRJ 101
INTRODUCTION TO CRIMINAL JUSTICE
3, 3/0; SSIF

An introductory analysis of the agencies and processes of the criminal justice system, including an examination of patterns of crime and victimization; underlying ideologies; procedures, functions and structure; fundamental legal concepts; interaction between various social groups and the criminal justice system; and organization, discretion and decision-making of police, criminal courts, and correctional services.

CRJ 201
CRIMINAL LAW
3, 3/0

Prerequisite: CRJ 101. The study of substantive criminal law through the analysis of judicial opinions and textual material. In-depth coverage of the elements of crime, such as intent, actus reus, and concurrence, examined within the statutory definition of several different offenses and studied within the context of defenses such as justifications, among others.

CRJ 202
THE POLICE PROCESS
3, 3/0

Comprehensive introduction to the basic elements of policing in the United States, designed to acquaint students with the most current knowledge about police organizations, police officers, police work, and police problems.

Equivalent course: CRJ202W

CRJ 204
THE CORRECTIONAL PROCESS
3, 3/0

The correctional process from sentencing to parole. Examines legal and administrative processes used in establishing postconviction remedies, criminal sanctions, and social controls on adult offenders. Emphasis on understanding the structure and function of the American correctional system and the processes in establishing correctional custody and treatment.

CRJ 250
INTRODUCTION TO INTELLIGENCE ANALYSIS
3, 3/0

Survey course that introduces students to the discipline of intelligence in the areas of national security, business, and law enforcement. Provides students with an understanding of how intelligence systems function, how they are used by policymakers, and how they are managed and controlled. Covers such intelligence topics as history, ethics, psychology, and analytical techniques.

CRJ 301
POLICE ORGANIZATION AND MANAGEMENT
3, 3/0

Prerequisites: CRJ 101 or permission of instructor, upper-division status. Analysis of administrative theory and practice in police systems with emphasis on organization and function, and on issues unique to those systems.

CRJ 302
CRIMINAL JUSTICE AND THE COMMUNITY
3, 3/0

Patterns of crime in the community and the community's response. Differences between urban and suburban areas, as well as by age, gender, and race. Practices and effects of diversion, community-based corrections, victim-witness programs, crime watch, court watch, restitution, mediation, and dispute-resolution programs.

Equivalent course: CRJ302W

CRJ 303
CRIME, IDEOLOGY, AND THE ADMINISTRATION OF JUSTICE
3, 3/0; OCIF

Prerequisite: CRJ 101. The social, political, cultural and economic forces that shape the historical and contemporary ideologies of crime. The influences of different ideologies of crime on the policies and practices of the criminal justice system.

CRJ 305
THE JUVENILE JUSTICE SYSTEM
3, 3/0

Prerequisites: CRJ 101, and upper-division status. The structure and function of the juvenile justice system. Statutes and court decisions used to determine jurisdiction over youth. Critical decision-making stages of the juvenile court process. Review of the research concerning the relative effectiveness of treatment and social control programs for youth. Emphasis on the historical, cultural, social, and legal influences governing the processes, priorities, and practices of juvenile justice.

CRJ 306
PROBATION, PAROLE, AND COMMUNITY CORRECTIONS
3, 3/0

Prerequisites: CRJ 101 and upper-division status. Review of probation, parole, and community corrections; their histories and organizational structures; the nature and effects of the process by which offenders are handled, as well as the dynamics and trends toward change in the field of probation, parole, and community-based corrections.

CRJ 307
COMPARATIVE CRIMINAL JUSTICE SYSTEM
3, 3/0

Prerequisite: CRJ 101. The major contemporary criminal justice systems and their operations under various cultural contexts. The social, economic, political, and ideological forces that have impacted present-day systems. Methodological issues of comparative research.

Equivalent course: CRJ307W

CRJ 308
CRIME PREVENTION
3, 3/0

Prerequisite: CRJ 101. The nature and effects of three levels of efforts at crime prevention: those administered by the formal justice system to prevent offenders from repeating offenses, those designed to deal with people identified as likely to commit crime, and those designed to modify the physical and social environments that foster crime.

CRJ 315
RESEARCH METHODS IN CRIMINAL JUSTICE
3, 3/0

Prerequisites: CRJ 101, ECO 305 or equivalent statistics course, and upper-division status. Introduction to the research process as practiced in criminal justice: definition of problem, delineating theory, various methods of data collection, examination of validity and reliability. Research devices used in everyday criminal justice. Students participate in some aspect of research.

Equivalent course: CRJ315W

CRJ 317
CONSTITUTIONAL ISSUES IN CRIMINAL JUSTICE
3, 3/0

Prerequisites: CRJ 101 and upper-division status. Constitutional issues in criminal justice through a review of United States Supreme Court decisions regarding law enforcement, prosecution, defense, judicial process, corrections, and community supervision; additional constitutional issues related to the administration of justice.

CRJ 320
CRIMINAL COURTS
3, 3/0

Prerequisite: CRJ 101. The trial criminal courts, with emphasis on courts for adult offenders. Legal, social, and political processes that affect the dynamics of the criminal trial process. Problems, possible reforms, and decision-making of the participants. Interrelationships that affect and influence court decisions and justice.

CRJ 355
CRIME ANALYSIS
3, 3/0

Prerequisite: Junior level status or instructor permission. Crime analysis terminology, techniques, and methodologies. The role and responsibilities of a crime analyst, including the need for analysts to utilize cross-jurisdictional data and provide objective results to policymakers and law enforcement decision-makers.

CRJ 402
ADVANCED ADMINISTRATION IN CRIMINAL JUSTICE
3, 3/0

Prerequisites: CRJ 101; upper-division status; and completion of introductory course in public administration, business management, or criminal justice administration. Advanced course in management concepts and issues applicable to the administration of criminal justice agencies. Emphasis on a systems model of organizational analysis. External environment of crime control policy and its impact upon agency operations. Internal agency management. The responsibilities and functions of crime control agency managers.

CRJ 404

WHITE-COLLAR AND CORPORATE CRIME

3, 3/0

Prerequisites: CRJ 101, CRJ 303, and upper-division status. Physical and financial harm caused by wayward corporations, corporate officials, employees, and other white-collar offenders. Emphasis on ethical and legal decision making and regulatory monitoring, and control of white-collar and corporate activity.

CRJ 406

CORRECTIONAL INSTITUTIONS AND PROGRAMS

3, 3/0

Prerequisites: CRJ 101, CRJ 204, and upper-division status or permission of instructor. Comprehensive survey of adult institutional corrections systems, their programs and services, and the policies and procedures governing the operational, legal, and structural context of correctional environments. Emphasis on the research literature focused on the impacts and outcomes of various correctional intervention strategies.

Equivalent course: CRJ406W

CRJ 408

PROSEMINAR IN CRIMINAL JUSTICE

3, 3/0

Investigation, examination, and discussion of topics of current interest in criminal justice. Techniques and analysis of criminal justice research.

Equivalent course: CRJ408W

CRJ 409

ADVANCED ISSUES IN LAW ENFORCEMENT

3, 3/0

Prerequisites: CRJ 101, CRJ 202, and upper-division status or permission of instructor. Advanced course on contemporary issues in law enforcement. Provides insight and depth into a broad range of topics and exposes students to experts and specialists from various relevant disciplines.

CRJ 410

ORGANIZED CRIME

3, 3/0

Prerequisites: CRJ 101, CRJ 303, and upper-division status. Views on organized crime, the controversy surrounding the phenomenon, and efforts at control. Definition of organized crime, its developmental history, and models that define the structure of organized crime in the United States. Theories that explain the existence of organized crime, activities that constitute the "business" of organized crime, the relationship between organized crime and official corruption, techniques used to combat organized crime, and policy implications inherent in responses to organized crime.

CRJ 420

ADVANCED ISSUES IN PUNISHMENT AND CORRECTIONS

3, 3/0

Prerequisites: CRJ 101, CRJ 204; upper-division status. Critical analysis of contemporary policies, practices, and issues arising from the control and punishment of criminal offenders. Emphasis on the complexity of recent issues, such as disparity in criminal sentencing, use of the death penalty, institutional overcrowding, treatment of institutionalized people, and community supervision of nonincarcerated offenders. Focus of analysis will vary with interests of faculty and students.

CRJ 425

RACE, ETHNICITY, AND THE ADMINISTRATION OF JUSTICE

3, 3/0; DIIF

Prerequisites: CRJ 101 and upper-division status. The current state of race relations in society and the criminal justice system; the historical experiences of different racial and ethnic groups in the United States and their relation to law and the criminal justice system as victims, offenders, and officials in criminal justice institutions.

Equivalent course: AAS425

CRJ 430

GENDER AND THE ADMINISTRATION OF JUSTICE

3, 3/0; DIIF

Prerequisites: CRJ 101 and upper-division status. The mutual effects between gender and aspects of criminal justice, including victimization, criminality, law, and the criminal justice process. Includes perspectives on the historical subordination of women, and how law and the criminal justice system can be used to ameliorate that subordination.

CRJ 440

DRUGS, CRIME, AND DRUG POLICY

3, 3/0

Prerequisites: CRJ 101 and CWP 102. The nature and impact of drug abuse in America and the relationship to criminal behavior. The historical and ideological foundations of national drug-control policy as well as contemporary control and intervention strategies.

CRJ 450

TERRORISM AND CRIMINAL JUSTICE

3, 3/0

The phenomenon of terrorism from a criminal justice perspective. The history of the phenomenon and contemporary terrorism in both its domestic and international manifestations; theories about terrorism; analytic methods for investigating and combating it, whether perpetrated by state or non-state actors.

CRJ 455

ADVANCED INTELLIGENCE ANALYSIS

3, 3/0

Prerequisite: CRJ 250. Advanced-level continuation of CRJ 250. Introduces a variety of analytical techniques; provides advanced knowledge, understanding, and application of these techniques; promotes critical thinking and report-writing skills.

Equivalent course: CRJ350

CRJ 470

ADVANCED SEMINAR IN CRIMINAL JUSTICE

3, 3/0; OCIF

Prerequisites: CWP 102, CRJ 101, CRJ 303, CRJ 315, upper division status, and at least 24 credit hours of criminal justice coursework. Integration of knowledge acquired throughout the criminal justice curriculum into a holistic conception of criminal justice theory, practice, research, and planning. Emphasis on developing advanced scholarship, conceptualization, and critical thinking through writing within the discipline.

Equivalent course: CRJ470W

CRJ 485

MOOT COURT

3, 3/0; OCIF

Prerequisite: Upper-division status. Simulation of a trial court or appellate court proceeding involving teams of students acting as prosecutor/plaintiffs' attorneys, defense attorneys, and witnesses. Students develop case strategy, analyze evidence, integrate legal precedent, prepare a written brief, question witnesses, and present oral arguments to the court in opening and closing statements. Final project is a mock trial presentation held in a formal courtroom setting.

Equivalent courses: PSC485, SOC485

CRJ 488

INTERNSHIP IN CRIMINAL JUSTICE

3-15, 3/0

Prerequisites: Senior-level standing, 3.0 GPA, and permission of instructor. A comprehensive, supervised field experience in criminal justice and related social service agencies. Requires a minimum of 10 hours of work in the agency during a 14-week period (140 total hours) and a weekly academic seminar on campus. The purpose of the internship is to integrate knowledge learned in the academic environment with the experience of day-to-day work in a professional environment.

CRJ 495

SPECIAL PROJECT

1-3, 0/0

CRJ 499

INDEPENDENT STUDY

3-12, 0/0

CENTER FOR STUDIES IN CREATIVE S

CRS 201 FOUNDATIONS OF LEADERSHIP 3, 3/0

History of leadership and leadership as an ongoing process of challenge, growth, and development. Students learn the foundational concepts of leadership, assess their own leadership styles, and discuss issues relevant to leadership. Provides opportunities for personal awareness and promotes effective leadership-skills development. Includes opportunities for the practice of leadership skills in campus and community organizations. Equivalent courses: BUS201, UNC201

CRS 205 INTRODUCTION TO CREATIVE STUDIES 3, 3/0

Recognition and nurturing of creative potential. Focus on the creative person, the creative process, the creative product, and the creative environment. Further emphasis on the interactive nature of these elements and individual application in personal and professional settings.

CRS 302 CREATIVE APPROACHES TO PROBLEM SOLVING 3, 3/0

Prerequisites: CRS 205, CWP 101, and CWP 101. Creative problem-solving methods and techniques. Emphasis on the application of creative problem solving to challenges, goals, and opportunities students face in their personal and professional lives. Equivalent course: CRS302W

CRS 303 CREATIVE LEADERSHIP THROUGH EFFECTIVE FACILITATION 3, 3/0

Learn and practice creativity concepts as they relate to leadership; examination of individual leadership styles and specific methods and techniques to apply concepts and skills.

CRS 304 DEVELOPING CREATIVE PROBLEM-SOLVING FACILITATION SKILLS 3, 3/0

Prerequisites: CRS 205 and CRS 302. Develop and apply facilitation and leadership skills in a variety of settings. Participate in supervised practice using creative problem-solving techniques with groups and individuals.

CRS 320 APPLICATIONS OF CREATIVITY AND INNOVATION 3, 3/0

Prerequisite: CRS 205. Exploration of creative processes within a creative environment that produce novel and useful products. The nature of creative people; examination of personal experience in the application of creativity in the arts, science, education, and business. Personal creative ability developed through class activities, readings, and interaction.

CRS 389 TOPICS IN CREATIVE STUDIES: APPLYING INTERDISCIPLINARY PRINCIPLES 3, 0/0

This interdisciplinary course examines major principles of creativity and their applications to everyday life—personal, social, professional, avocational. Explores the nature of creative persons and those factors that encourage or inhibit creative expression. Examines research for its various implications and applications. Guest speakers from a variety of disciplines examine creativity from their diverse viewpoints. Participation in the creative process in a variety of ways.

CRS 435 EXPERIENCES IN LEADERSHIP 3, 3/0

As the culminating course in leadership, the capstone experience is designed to synthesize prior coursework and serve as a transition to professional leadership opportunities. This will be primarily achieved through an applied leadership experience in which students will be required to employ knowledge and skills gained from prior courses in the minor program. To enable students to develop an understanding of leadership in

applied contexts, they will have the opportunity to interact with and learn from successful leaders in the Western New York region. Finally, students will be required to articulate a vision of themselves as future leaders in their respective professions and communities.

CTE - CAREER AND TECHNICAL EDUCATION

CTE 100 COMPREHENSIVE THEORETICAL TRADE OR TECHNICAL SKILLS 15, 0/0

Credit is awarded for satisfactory completion of trade theory. Assessment of competency is based on verification of four years' employment in a trade normally taught in vocational high school programs. Graduates of community college technical programs in appropriate trades are required to verify two years' employment. The National Occupational Competency Testing Institute Examination and/or other assessment techniques may be used to determine credit of 15 semester hours. Equivalent course: VTE100

CTE 200 COMPREHENSIVE TRADE OR TECHNICAL PERFORMANCE SKILLS 15, 0/0

Credit is awarded for satisfactory completion of trade theory. Assessment of competency is based on verification of four years' employment in a trade normally taught in vocational high school programs. Graduates of community college technical programs in appropriate trades are required to verify two years' employment. The National Occupational Competency Testing Institute Examination and/or other assessment techniques may be used to determine credit of 15 semester hours. Equivalent course: VTE200

CTE 301 PRINCIPLES OF BUSINESS/MARKETING AND TECHNOLOGY EDUCATION 3, 3/0

Introduction to the teaching of occupational education courses in public schools; principles, philosophy, and objectives; historical development of occupational education and the development of current issues for an occupational education program.

CTE 302 CURRICULUM AND EVALUATION IN BUSINESS/MARKETING AND TECHNOLOGY EDUCATION 3, 3/0

Introduction to the curriculum and evaluation in business/marketing and technology education. State curriculum and standards, lesson planning, student learning, and curriculum evaluation. Equivalent course: VTE302

CTE 306 LABORATORY MANAGEMENT 3, 3/0

Organizational factors that influence the success of career-technical education teachers. Includes facility planning, redesign, and managerial phases of the career-technical teacher's responsibilities. Equivalent course: VTE306

CTE 311 CAREER MENTORING INTERNSHIP 3, 1/2

Prerequisites: CTE major, CTE 302. Overview of career awareness for exploration, guidance, and workplace skills. Classroom pedagogy and field experiences provide mentoring opportunities with middle school and high school students or with adults seeking retraining for new career choices. Majors obtain teaching skills while providing service to the community at off-campus locations during class times. Includes demonstrations of various trade skills and career fairs. Classes meet on and off campus.

CTE 350
SCHOOL AND COMMUNITY RELATIONSHIP FIELD EXPERIENCE
3, 1/2
Prerequisite: CTE major. Overview of school and community relations. Classroom and field experience involves students in the concepts of planning and executing a successful vocational -career promotional event. Students are placed off campus at community sites and/or middle school or high school locations. Thirty hours of internships and promotional events at off-site locations are required.

CTE 402
ASSESSMENT TECHNIQUES IN CAREER AND TECHNICAL SUBJECTS
3, 3/0
Prerequisite: CTE 302. Overview of assessment in classroom, laboratory, internship, and clinical situations. Principles of effective assessment include different approaches and methods of assessment, evaluation, and testing techniques. Addresses portfolio development, reflective journals, authentic and performance assessment, and objective testing as applicable to career and technical subjects.

CTE 404
METHODS OF TEACHING CAREER AND TECHNICAL SUBJECTS
3, 3/0
Basic principles and methods of teaching career and technical subjects. Prepares craftspeople, technicians, and engineers to effectively impart knowledge to learners.
Equivalent course: VTE404

CTE 413
STUDENT TEACHING CAREER AND TECHNICAL EDUCATION
6, 0/6
Prerequisites: CTE 302, CTE 404, and NOCTI Trade Examination or equivalent. Career and technical education major and completion of at least 18 credits in CTE required courses. Supervised teaching in career-technical classes in selected career-technical schools, in various types of schools and communities. Three hundred hours of practice teaching in off-site campus programs required. Conferences and reports based upon teaching assignments are required. Seminar discussions consist of professional problems of the beginning teacher. Students should be prepared to accept assignment at any school designated by the student-teacher coordinator. Student-teaching assignments are located throughout Western New York.
Equivalent course: VTE413

CTE 415
PROFESSIONAL DEVELOPMENT SEMINAR
3, 3/0
Prerequisite: Successful completion of the basic writing requirement. Synthesis of pedagogical courses and practice-teaching experience. Analysis of problems that confront teachers.
Equivalent courses: CTE415W, VTE415

CTE 421
OCCUPATIONAL EDUCATION FOR INDIVIDUALS WITH SPECIAL NEEDS
3, 3/0
Planning, coordinating, and delivering programs for individuals with special needs found in secondary and postsecondary schools, rehabilitation centers, and correctional facilities. Development of methods and techniques for teaching and assessing the work potential of individuals with special needs. Development of self-help devices/adaptive equipment. Identifying instructional resources.
Equivalent course: VTE421

CTE 435
CURRICULAR PROBLEMS OF CAREER AND TECHNICAL SCHOOLS
3, 3/0
Prerequisites: CTE 302 and CTE 404. Basic principles and foundations of curriculum development for trade and technical programs. Technological, sociological, and educational factors that effect change in curriculum. The integral parts of a curriculum and newer concepts of curriculum programs and materials. Emphasis on curricular problems of teachers and administrators in their individual schools.

CTE 492
OCCUPATIONAL PRACTICUM
6, 3/3
Prerequisites: CTE 100 and CTE 200 (NOCTI Trade Examination) or equivalent; career and technical education major. Advanced specialization development for students with prior occupational experience such as on-the-job upgrading, occupational workshops, and in-service institutes. May be taken for credit more than once by advisement.

CTE 495
SPECIAL PROJECT
3, 0/0

CTE 497
SPECIAL WORKSHOP
3, 0/0

CTE 499
INDEPENDENT STUDY
3-12, 0/0

CWP - COLLEGE WRITING PROGRAM

CWP 099
DEVELOPMENTAL COLLEGE WRITING
0, 3/0
A skill-building course designed to reinforce sentence and paragraph structure through emphasis on structure, unity, and coherence. Appropriate for both native students and non-native English-speaking students needing skill enhancement in Standard American English.
Equivalent course: ENG099

CWP 101
COLLEGE WRITING I
3, 3/0; BCBW
Initiation into all phases of the writing process. The study and writing of expository and analytic prose, patterns of organization, and the features of good writing. Writing assignments emphasize rhetorical strategies and essay structure. ESL sections are appropriate for non-native speakers of English.
Equivalent course: ENG101

CWP 102
COLLEGE WRITING II
3, 3/0; BCBW
Prerequisite: CWP 101 or its equivalent. (See College Writing Program Office, 130 South Wing for placement procedures.) Prerequisite: CWP 101 or equivalent. (See College Writing Program Office, South Wing 130 for placement procedures.) Writing assignments emphasize argument and persuasion, advanced rhetorical strategies, analysis/synthesis, and research methods.
Equivalent course: ENG102

DAN - DANCE

DAN 200
BEGINNING MODERN TECHNIQUE I TO MODERN TECHNIQUE I
3, 1/4; ARIF
Basic tenets and fundamental principles of modern dance. Students develop an understanding of the dancer as the interpretive artist through technical dance instruction, historical introduction and significance, and aesthetic discovery. Students attend live dance performance.

DAN 201
TEACHING CREATIVE MOVEMENT FOR CHILDREN
3, 1/4
Preparation to teach creative movement to children, kindergarten through sixth grade. Emphasis on studio work directing noncompetitive creative play, cooperative group problem solving, and structured improvisations.

DAN 214

INTRODUCTION TO DANCE TECHNIQUES

3, 3/0

Prerequisites: None A studio course designed to introduce the novice student to various artistic dance genres. Students will develop an understanding of the dancer as a performing artist through the physical practice of a variety of dance techniques: body as the instrument for dance, kinesthetic awareness, a codified terminology, and the influential aesthetic elements that define various dance techniques. Students will attend live dance performance.

DAN 220

BEGINNING BALLET I TO BALLET TECHNIQUE I

3, 1/4; ARIF

Intensive introduction to basic principles of classical ballet. Students develop an understanding of classical dance through the instruction of basic ballet technique, a codified terminology, and the influential aesthetic and historical foundations. Students attend live dance performance.

DAN 224

DANCE APPRECIATION

3, 3/0; ARIF

Survey course examining the cultural and aesthetic values of ethnic, social, and concert dance; the significance of dance for ceremony, ritual, commercial entertainment, and artistic expression. Students attend live dance performance.

DAN 230

SURVEY OF AFRICAN AMERICAN DANCE

3, 1/4; DIIF

The continuity of African American dance from traditional African to contemporary American through dance technique. Introduction to several dance forms: traditional, modern, and jazz; the cultural history that influenced these dance forms; and the contributions of significant choreographers. Students attend live dance performance.
Equivalent course: AAS230

DAN 234

THE HISTORY OF THE BLACK DANCE MOVEMENT

3, 3/0; DIIF

The development of African American dance and the contributions of African American artists through lecture and film. Emphasis on the evolution of traditional African dance forms and their influence on the contemporary dance vernacular. Students attend a live dance performance.
Equivalent course: AAS234

DAN 250

JAZZ DANCE

3, 6/0

Prerequisite: DAN 200, DAN 220, or equivalent. Technique, studies, and compositional problems illustrating the diverse possibilities of jazz dance, with special attention to the ethnic foundation of this form.

DAN 302

MODERN DANCE TECHNIQUE II

3, 6/0

Prerequisite: DAN 200 or permission of instructor. Fundamental principles of movement in relation to dynamics, rhythm, and space. Introduction to improvisation and modern dance history; designed to develop and strengthen technical dance skills.

DAN 303

DANCE COMPOSITION

3, 6/0

Techniques of composition; practical research in choreography through improvisation; creation of individual and group compositions.

DAN 310

DANCE FOR THE MUSIC THEATER

3, 6/0

Continuation of DAN 250 emphasizing the technique and history of the diverse dance forms required in the music theater.

DAN 312

MODERN DANCE TECHNIQUE III

3, 6/0

Continuation of DAN 302. Emphasis on expanding and deepening technical range, quality of movement, and creative ability through improvisation and modern dance history.

DAN 320

REHEARSAL AND PRODUCTION

1, 0/0

Students participate in building a finished dance production, including audition, dance rehearsals, technical rehearsals, and performances. By audition only. May be repeated.

DAN 330

BALLET II TO BALLET TECHNIQUE II

3, 3/0

Prerequisite: DAN 220 or permission of instructor. Comprehensive examination of the technique and historical background of ballet explored in depth through studio work and lecture; emphasis on strengthening technical range and understanding of basic concepts and vocabulary.

DAN 340

BALLET III TO BALLET TECHNIQUE III

3, 3/0

Continuation of DAN 330. Intermediate-level ballet technique course with emphasis on applications of idiokinetics.

DAN 350

TAP DANCE FOR THE STAGE: ELEMENTARY

1, 2/1

First course in a two-semester sequence for majors and minors in the performing arts. Minimum two hours of outside practice weekly plus familiarity with selected readings. Students comprehend and execute an elementary vocabulary of stage tap.

DAN 401

TEACHING DANCE

3, 3/0

The methods and materials used in teaching dance to students of various ages and backgrounds, explored through research and practical teaching experience. Anatomical and kinesiological principles, injury prevention and treatment.

DAN 450

TAP DANCE FOR THE STAGE: INTERMEDIATE

1, 2/0

Prerequisite: DAN 350 or permission of instructor. Advanced vocabulary, styles, and solo/duet work. Some creative work required. Comprehend and execute a substantial portion of traditional Broadway requirements.

DAN 495

SPECIAL PROJECT

1-3, 0/0

DAN 499

INDEPENDENT STUDY

3, 0/0

DES - DESIGN

DES 101

INTRODUCTION TO DESIGN TWO DIMENSIONAL I

3, 0/6

Basic skills and concepts in two-dimensional design. Logical and intuitive approaches to pure form and natural sources. Emphasis on development of individual solutions.

DES 102

INTRODUCTION TO DESIGN TWO DIMENSIONAL II

3, 6/0

Prerequisite: DES 101. Continuation of DES 101, involving in-depth assignments stressing composition and form, idea development, design process, and color dynamics, while strengthening skills and control.

DES 103
INTRODUCTION TO DESIGN THREE DIMENSIONAL I
3, 0/6
Fundamentals of three-dimensional design, with emphasis on the development of skills related to spatial manipulation via form and structure. Development of manipulative skills in various media.

DES 104
INTRODUCTION TO DESIGN THREE DIMENSIONAL II
3, 6/0
Prerequisite: DES 103. Advanced concepts and manipulation skills related to three-dimensional design. Conceptualization, visualization, and evaluation related to design objectives.

DES 114
WORKSHOP IN CRAFTS
3, 4/0; ARIF
Hands-on creative studio experience in ceramics, fibers, metals/jewelry, or wood/furniture design. Non-art majors only.

DES 190
DESIGN SYMPOSIUM
3, 3/0; ARIF
Introductory design course open only to non-majors. Basic concepts and language of design, the application of those concepts in the human environment, and the historical and cultural reference to those concepts.

DES 220
CERAMICS I
3, 0/6
Exploration of clay as a medium of expression. Methods of forming. Preparation and application of glaze. Firing; theory, study of form and function.

DES 230
INTRODUCTION TO JEWELRY MAKING
3, 4/0
Prerequisite: DES 101. Exploration of materials and processes in jewelry making, emphasizing creative design.
Equivalent course: DES230

DES 242
FIBERS I
3, 0/6
Introduction to traditional and current trends in weaving and surface design, including table-loom weaving, batik, and silkscreen printing. Assignments develop good design through creative expression.
Equivalent courses: DES240, DES245

DES 250
WOOD DESIGN I
3, 2/2
Wood as a medium for expression and object design; technical and aesthetic problems.
Equivalent course: DES250

DES 270
VISUAL COMMUNICATION I
3, 0/6
Prerequisites: DES 101, DES 102, DES 103. Introductory course in communication design involving basic design problems including logotype, stationary, and page layout. Examination of design and printing processes, as well as professional practices and issues.
Equivalent course: DES270

DES 271
LETTERING AND TYPOGRAPHY I
3, 0/0
Prerequisite: DES 270. Uses of typographic forms in graphic design; problems in expression and appropriate application and layout; type specification, indication, copy fitting; origins of the Western alphabet.

DES 277
COMPUTER GRAPHICS I
3, 0/6
Prerequisite: DES 101. Introduction to the Macintosh computer as a graphic design tool. Develop a working understanding of a graphic design

page-layout and drawing program. Class sessions include visual presentations, hands-on tutorials, and critiques of assignments.

DES 307
COLOR THEORY
3, 4/2
Prerequisite: DES 102. Origins, meaning, and dimensions of color; lectures and studio problems in various media, exploring the compositional effects of color.
Equivalent course: DES307

DES 312
HISTORY OF CRAFT: INDUSTRIAL REVOLUTION TO THE PRESENT
3, 3/0
Prerequisite: DES 215. Historical and theoretical foundations of crafts from the Industrial Revolution to the present. Developments in crafts in traditional forms, hand-based production methods, new technologies, new media and new concepts of craft, and specific cultural and intellectual contexts.
Equivalent course: DES312W

DES 314
HISTORY OF GRAPHIC DESIGN: INDUSTRIAL REVOLUTION TO THE PRESENT
3, 0/0
Prerequisite: DES 215 or permission of instructor. Examination of the history and theoretical foundations of graphic design from the Industrial Revolution to the present. Developments in graphic design are considered in relation to new technologies and new media and to specific cultural and intellectual contexts.
Equivalent course: DES314W

DES 320
CERAMICS II
3, 4/0
Prerequisite: DES 220. Exploration of ceramic form, glaze, and firing methods through assigned problems and individual interests. Lecture and laboratory in glaze materials and glaze design.
Equivalent course: DES320

DES 321
CERAMICS: JUNIOR STUDIO
3-12, 0/0
Prerequisite: DES 320. Advanced study and experience in the total ceramic process through assigned problems according to individual personal interests.

DES 329
ENAMELING FOR JEWELRY
3, 0/6
Exploration of traditional and contemporary methods of enameling for jewelry design.

DES 330
APPLIED JEWELRY TECHNIQUES
3, 0/6
Prerequisite: DES 230. Basic and advanced jewelry techniques including lost-wax casting and stone setting. Continued emphasis on the personal, conceptual, and creative development of jewelry design.
Equivalent course: DES330

DES 331
JEWELRY: JUNIOR STUDIO
1-12, 0/4
Prerequisite: DES 330. Advanced exploration of materials and processes used in jewelry making with emphasis on design aspects. Individually selected projects.
Equivalent course: DES331

DES 336
METALSMITHING
3, 0/0
Prerequisite: DES 235 or DES 330. Advanced concentration in metal-working as a continuation of forming techniques introduced in DES 235.

DES 337
METALSMITHING: JUNIOR STUDIO
3-12, 0/0
Prerequisite: DES 336. Practical application of metalworking techniques with emphasis on raising, forging, welding, riveting, casting, spinning, and other forming methods. Parallel study of leading designers, craftspeople. Tutorial relationship with instructor. Extra class assignments, including minimum studio hours equal to class hours.

DES 338
COMPUTER THREE-DIMENSIONAL MODELING AND RENDERING
3, 2/4
Exploration of the capabilities of computer modeling and rendering software, especially for craft area majors.

DES 342
FIBERS II
3, 0/6
Prerequisite: DES 242. Intermediate exploration in traditional and experimental techniques of weaving and surface design, including floor-loom weaving and photographic silkscreen printing with an emphasis on creative expression.

DES 344
FIBERS: JUNIOR STUDIO
3, 0/6
Prerequisites: DES 242 and DES 342. Study and experience in complex weaving and surface design, including multiple-harness weaving and application of printing techniques; aesthetic and functional considerations.

DES 350
WOOD DESIGN II
3, 0/6
Prerequisite: DES 250. Exploration into the design and fabrication of wooden objects. Emphasis on developing design and craftsmanship skills through assigned problems.
Equivalent course: DES350

DES 351
WOOD DESIGN: JUNIOR STUDIO
3-12, 4/0
Prerequisite: DES 350. Design and creation of a major project in wood, approached from the viewpoint of the designer-craftsperson, using a range of techniques and hand, power, and machine tools as needed.
Equivalent course: DES351

DES 374
ADVERTISING DESIGN
3-6, 4/0
Prerequisites: DES 271 and DES 380. Principles of advertising design as visual communication, motivation, and persuasion. Problems in advertising and publication design. Illustration, media, and techniques. Typographic design and reproduction processes.

DES 377
COMPUTER GRAPHICS II
3, 0/6
Prerequisite: DES 277. Intermediate-level course using computer-imaging programs. Creative problem solving with photomontage, posters, and publication design assignments. Visual presentations, hands-on tutorials, and critiques of assignments.
Equivalent course: DES478

DES 378
WEB DESIGN I
3, 2/4
Introduction to interactive Web design from the perspective of communication design. Introduces the student to the history of the Internet, industry-standard site-creation, software, and testing and evaluation. Integrates design aesthetics information, organization, image preparation, and intuitive interface design and navigation

DES 380
ILLUSTRATION
3, 0/6
Prerequisite: DES 270. Creative problem solving illustration assignments. In-depth exploration of illustration media and techniques. Examination of professional practice and business issues.

DES 389
TOPICS COURSE
3, 0/0

DES 414
SENIOR SEMINAR/EXHIBITION
4, 3/2
A series of lectures and discussions concerning topics such as self-presentation concepts. Job and professional interviews. Business practices, recordkeeping, and taxes. Legal contracts and copyrights. Exhibitions and promoting personal work.

DES 421
CERAMICS: SENIOR STUDIO
3-12, 8/0
Prerequisite: DES 321. Development and presentation of the student's personal direction in clay, culminating in a portfolio presentation and a final show.

DES 431
JEWELRY: SENIOR STUDIO
3-12, 0/0
Prerequisite: DES 331. Concentration of studio work by the senior major in jewelry. Students plan and execute a series of problems and projects in consultation with the instructor.

DES 444
FIBERS: SENIOR STUDIO
3, 0/6
Prerequisites: DES 242, DES 342, and DES 344. Concentration of studio work in surface design and weaving by senior fiber majors. Students plan and execute a series of problems and projects in consultation with the instructor, leading to an exhibition. Portfolio preparation for graduating seniors.

DES 451
WOOD DESIGN: SENIOR STUDIO
3-12, 0/0
Prerequisite: DES 351. Concentration of studio work by senior wood majors. Students plan and execute a series of problems and projects in consultation with the instructor.

DES 473
GRAPHIC DESIGN
3-9, 2/2
Prerequisite: DES 380. Advanced problems in advertising, publication, and packaging design. Materials, techniques, and computer processes used in preparation of visual and design presentations/mechanicals. Emphasis on individual solutions to problems typical of those confronting the professional graphic designer.

DES 475
GRAPHIC DESIGN PRACTICUM
1-6, 0/0
Prerequisite: Completion of all required courses in graphic design specialization. Practical experience in an advertising agency, design studio, or corporate design office under the sponsorship of an art director, working two days a week for 6 credit hours. Or experience with practical problems in a simulated agency situation, working 10 hours a week for 3 credit hours. Admission by permission of graphic design advisers after portfolio review.

DES 479
MULTIMEDIA COMPUTER DESIGN
3, 0/6
Prerequisites: DES 277 and DES 377. Introduction to computer design and the authoring process in multimedia. Experience with digital images, video, and sound using current software, culminating in creative interactive presentations and Web page documents.

DES 480
ILLUSTRATION II
3, 0/6

Prerequisite: DES 380. Advanced problems and creative solutions in editorial and advertising illustration using computer drawing software programs. In-depth examination of business issues and professional practice in the illustration field.

DES 488
INTERNSHIP
1-12, 3/0

Prerequisite or corequisite: DES 460. Guided, supervised exposure to professional design operations through on-the-job experience in an authorized design firm, department, studio, or showroom. For 3 credit hours, student completes 120 contract hours, provides a written report of the work experience, and receives written evaluation from the employer.

DES 495
SPECIAL PROJECT
1-3, 0/0

DES 499
INDEPENDENT STUDY
3-12, 0/0

DMP - DIGITAL MUSIC PRODUCTION

DMP 221
INTRODUCTION TO SOUND RECORDING AND REINFORCEMENT
3, 3/0

Prerequisite: Instructor permission. Introduction to the history, technology, and future of analog and digital audio systems and their application. The physics of sound and the art and science of live sound reinforcement and recording including acoustics, microphone selection and placement, signal processing, mixing, loudspeaker design, editing, digital audio workstation software, MIDI, and sound system design for live venues.

DMP 321
RECORDING TECHNIQUES
3, 3/0

Prerequisite: DMP 221 or instructor permission. Examination of electronic audio systems and their application, including the art and science of sound recording and reinforcement of instrumental and vocal music in live and studio situations. Topics include practical applications of microphone selection and placement, signal processing, mixing, amplification, loudspeaker types, digital audio editing software, MIDI, and sound system design for live venues.

Equivalent course: MUS222

DMP 350
ELECTRONIC MUSIC COMPOSITION I
3, 2/2

The creative use of sound and music through the exploration of technology, history, theory, and practice of electronic music since the 1920s. Provides students with a wide range of technical, theoretical, and aesthetic concepts aimed at developing and strengthening music composition skills. The technological nature of the class encompasses the learning of fundamental software tools while favoring a critical-thinking approach to the unique expressive power of electronic music composition.

DMP 495
SPECIAL PROJECT
1-3, 0/0

ECO - ECONOMICS

ECO 101
THE ECONOMIC SYSTEM
3, 3/0; SSIF

Overview course. Development of fundamental economic concepts, basic economic institutions and their history, and contemporary economic issues. Supply and demand, markets, gross domestic product (GDP), inflation and recession, and the role of government. Economic issues such as

energy, environment, education, and health care included when appropriate. Will not count toward the credit hour requirement of majors.

ECO 103
ECONOMIC HISTORY OF THE UNITED STATES
3, 3/0; AHIF

The history of the United States from an economic perspective. U.S. history is understood by studying the development of economic institutions and social change. Causes and effects of changing labor organization and relations, production technique, business and industrial organization, trade patterns, and economic policy.

Equivalent course: ECO103W

ECO 104
HISTORY OF ECONOMIC DEVELOPMENT IN THE THIRD WORLD
3, 3/0

A history of economic development in Asia, Africa and Latin America for those with no previous college-level background in economics. The course concentrates on the experience of formerly colonized countries over the past 200 years as part of a broad outline of world economic history since 1492.

ECO 189
TOPICS COURSE
1, 0/0

ECO 201
PRINCIPLES OF MACROECONOMICS
3, 3/0; SSIF

The major economic forces—consumer expenditure, business investment, and government spending—and their influence on national income. Money and banking, monetary and fiscal policies, inflation and recession, economic growth, and international monetary problems. Either ECO 201 or ECO 202 may be taken first.

ECO 202
PRINCIPLES OF MICROECONOMICS
3, 3/0; SSIF

Individual units in the economy—consumers, firms, and resource owners—and how their decisions influence market prices and industrial output. Supply and demand, competition and monopoly, corporations, capitalism and socialism, labor, and international trade. Either ECO 201 or ECO 202 may be taken first.

ECO 220
ECONOMICS OF SPORTS
3, 3/0

The principles of economic analysis through investigation of the sports industry. Profits, labor conflicts, and other special features of professional and collegiate sports.

ECO 300
LABOR ECONOMICS
3, 3/0

Prerequisite: ECO 202. Competing theories of labor-market operation in market economies. Problems of labor markets (such as unemployment and discrimination). History of the evolution of labor markets in the United States and the role of government in affecting outcomes. Current issues, including increasing international competition in product and labor markets, the impact of technological change in altering workforce skill and educational requirements, and structural change in compensation and occupational distribution.

ECO 301
ECONOMICS OF LABOR RELATIONS
3, 3/0

Present-day techniques in labor-management negotiations, the collective bargaining agreement, the development and structure of organized labor, labor law, and labor economics.

ECO 302
WOMEN IN THE ECONOMY
3, 0/3; DIIF

Prerequisite: ECO 201 or ECO 202 recommended. Analysis of the economic status of women in the United States and other selected nations as compared to men's status and differentiated by age, race, ethnicity, and marital status.

Equivalent course: ECO302W

ECO 304
MONEY AND BANKING
3, 3/0

Prerequisites: ECO 201. The nature and function of money. The American monetary system and the role of the banking system. The structure and functions of the Federal Reserve System. Fundamental monetary theory and its relation to monetary policy. Current problems relating to the impact of monetary policy on prices and employment.

ECO 305
STATISTICS FOR ECONOMICS
3, 3/0; MQIF

Introduction to elementary statistical principles, descriptive statistics, and statistical inference. Applications in economics, business, and criminal justice. Required for majors.

ECO 307
INTERMEDIATE MICROECONOMICS
3, 3/0

Prerequisites: ECO 202 and MAT 110 or equivalent. Advanced study of individual units in the economy and how their decisions influence market prices and industry output. Includes the theory of consumer demand, the theory of the firm, resource allocation, income distribution, and welfare economics. Required for majors.

Equivalent course: ECO307W

ECO 308
INTERMEDIATE MACROECONOMICS
3, 3/0

Prerequisites: ECO 201 and MAT 110 or equivalent. Advanced study of aggregate economic activity and its influence on national income. Includes Classical and Keynesian theory, monetary and fiscal policies, business cycles, forecasting, and economic growth. Required for majors.

Equivalent course: ECO308W

ECO 312
URBAN ECONOMICS
3, 3/0

Prerequisite: ECO 202 or permission of instructor. Application of economic analysis to urban growth, land use, poverty, housing, segregation, pollution, congestion, and urban public finance.

Equivalent course: ECO312

ECO 320
MANAGERIAL ECONOMICS
3, 3/0

Prerequisites: ECO 202, ECO 305, and MAT 110 or equivalent. Using economic analysis to formulate and provide guides to the solution of management decision and control problems, and the development of appropriate business policies.

ECO 325
INDUSTRIAL ORGANIZATION
3, 3/0

Prerequisite: ECO 202 or permission of instructor. The links between economic theory and structure, conduct, and performance of national and international industry over time. Designed for economics and business majors. Emphasis on price theory, inter- and intra-firm relationships, and industrial policy.

ECO 350
PUBLIC FINANCE
3, 3/0

Prerequisites: ECO 202. The nature and growth of public expenditures; principles of taxation; federal, state, and local revenue; introduction to fiscal policy and theory; significance of public debt; selected problems in intergovernmental fiscal relations.

Equivalent course: ECO350W

ECO 355
THE ECONOMICS OF ENERGY AND THE ENVIRONMENT
3, 3/0

Prerequisite: ECO 202 or permission of instructor. Micro- and macroeconomic activity imposed by the availability of energy resources and by environmental considerations. Alternative policy strategies relating to

energy and the environment are evaluated in terms of their economic impact.

ECO 360
INTRODUCTION TO THE ECONOMIC ANALYSIS OF LAW
3, 3/0

Prerequisite: ECO 307 or permission of instructor. Introduction to the study of law from an economic perspective. No prior knowledge of law is required, and all economic concepts needed are presented. Uses economic concepts and reasoning to explain and predict consequences of legal rules. Includes important issues found in court cases involving contracts, property law, liability, and environmental law.

ECO 389
TOPICS COURSE
1-3, 0/0

ECO 401
INTERNATIONAL ECONOMICS
3, 3/0

Prerequisites: ECO 201 and ECO 202; ECO 307 recommended. Basic theories of international trade. The international monetary mechanism and the institutions that facilitate its operation. Foreign economic policy and contemporary problems relating to tariffs, payments, balances, devaluation, and gold as a means of setting international payments in balances.

Equivalent course: ECO401W

ECO 403
COMPARATIVE ECONOMIC SYSTEMS
3, 3/0

Prerequisites: ECO 201 and ECO 202 or permission of instructor. Essential characteristics of different market economies as they have evolved to the present, their strengths and weaknesses, increasing social control, trading and monetary unions, contrast with socialist systems.

Equivalent course: ECO403W

ECO 404
ECONOMIC DEVELOPMENT
3, 3/0

Prerequisite: Minimum of two economics courses. The difficulties of economic development, industrialization, and worldwide poverty. Competing theories of economic growth and structural change. Problems of population, natural resources, and environment. The growing interdependency of the U.S. and lesser-developed countries' (LDCs) economies. The crucial role of women in development, as well as ethnic and other social and cultural relationships. LDCs debt crisis and international finance. Macro- and microeconomic planning models. The policy-making process, development strategies, and specific case studies of LDCs in Africa, Asia, and Latin America.

Equivalent course: ECO404W

ECO 405
HISTORY OF ECONOMIC THOUGHT
3, 3/0

Prerequisites: ECO 201 and ECO 202 or permission of instructor. The attempts of key economic thinkers from Aristotle to the present to analyze economic phenomena and provide guidance for economic policy.

Equivalent course: ECO405W

ECO 407
POLITICAL ECONOMY CLASSICS
3, 3/0

Prerequisite: ECO 201 or ECO 202. In-depth study of classic political economic thought, including Adam Smith's *Wealth of Nations*; David Ricardo's *Principles of Political Economy and Taxation*; Karl Marx's *Das Kapital*, Volume I; and John Maynard Keynes's *General Theory*. Relationships between these classics and modern economic thought and socioeconomic phenomena.

ECO 411
REGIONAL ECONOMIC ANALYSIS
3, 3/0

Prerequisites: ECO 201 and ECO 202 or permission of instructor; MAT 110 recommended. Analysis of location on economic activity, urbanization patterns, and regional growth and development. Techniques in measuring the level of economic activity of a region, using Western New

York as a model. The impact of the Buffalo urban area on the development of the surrounding region.

Equivalent courses: ECO411W, GEG411

ECO 412
URBAN ECONOMICS
3, 3/0

Prerequisite: ECO 201 or ECO 202 or permission of instructor. Application of economic analysis to urban growth, land use, poverty, housing, segregation, pollution, congestion, and urban public finance.

Equivalent course: ECO412W

ECO 424
ECONOMETRICS
3, 3/0

Prerequisites: MAT 126, ECO 201 or ECO 202, and ECO 305 or equivalent statistics course. Introduction to applied statistical analysis, with primary emphasis on business and economic applications. Provides quantitative background for graduate study in economics, business, public administration, and related social science, as well as for many types of employment.

Equivalent course: ECO424W

ECO 488
INTERNSHIP
3-12, 0/0

Prerequisites: ECO 201, ECO 202, and one relevant elective; minimum cumulative GPA of 2.75; upper-division status. Application and integration of economic concepts and methodologies in an off-campus field setting, under the direction of a faculty sponsor, with the cooperation of a designated field supervisor. A maximum of 3 credit hours of ECO 488, ECO 495, or ECO 499 may be applied toward the major.

ECO 490
SENIOR SEMINAR
3, 3/0; OCIF

Prerequisites: ECO 305, ECO 307, ECO 308, and senior standing. ECO 424 recommended. Capstone course required of all senior economics and finance majors. Investigation and oral presentation of findings of selected advanced topics in economics and finance. Senior thesis on a topic in economics or finance required.

ECO 495
SPECIAL PROJECT
1-3, 0/0

Prerequisites: Permission of instructor. A maximum of 3 credit hours of ECO 488, ECO 495, or ECO 499 may be applied toward the major.

ECO 498
HONORS RESEARCH
0, 0/0

Prerequisite: Admission to honors program in economics. A review of the literature and development of the theoretical issues relevant to the research topic.

ECO 499
INDEPENDENT STUDY
3-12, 0/0

Prerequisites: Permission of instructor. A maximum of 3 credit hours of ECO 488, ECO 495, or ECO 499 may be applied toward the major.

EDF - EDUCATIONAL FOUNDATIONS

EDF 202
CHILD DEVELOPMENT AND EDUCATION
3, 3/0

Introduction to the study of child behavior and development with emphasis on implications for teaching and learning. Focus on the child in school, from early childhood through preadolescence. Includes child-study and observation methods; theories of development; nature and sources of individual development from biological, cultural, and behavioral perspectives, with emphasis on cognitive, social, emotional, and physical areas of development as they apply to the classroom. Required for elementary education and exceptional education majors according to program; elective for others beyond freshman level.

EDF 203
SCHOOL AND SOCIETY
3, 3/0

Prerequisite: Successful completion of the basic writing requirement. Education as a function of a democratic society. Sociological and historical backgrounds of schools. Current issues and problems affecting schools. Objectives, control, and financial support of education in New York State and the United States. Directed observation. Required of elementary-education and exceptional-education majors according to program; elective for others beyond freshman level.

Equivalent course: EDF203W

EDF 221
THE HISTORY OF BLACK EDUCATION IN AMERICA
3, 3/0

The role of blacks in the American educational system. Changes that have taken place in order to improve or retard education for blacks. Approaches for providing meaningful education for blacks now and in the future.

Equivalent course: AAS221

EDF 222
THE DEVELOPMENT OF MODERN EDUCATION IN AFRICA
3, 3/0

Educational changes in Africa from the colonial era to the present and their effect on social and political issues in Africa and abroad.

Equivalent course: AAS222

EDF 225
ETHNIC STUDIES IN THE ELEMENTARY SCHOOL
3, 3/0

Ethnic diversity in American life and education. Cultural minorities, e.g., Native Americans, blacks, Spanish-speaking groups, Jews. White ethnic groups and mainstream American life and education.

Equivalent course: AAS225

EDF 302
EDUCATIONAL PSYCHOLOGY: ELEMENTARY EDUCATION
3, 3/0

Prerequisites: EDF 202, CWP 101, CWP 101, upper-division status. Learners, the learning process, evaluating learning, and establishing a classroom environment to maximize learning.

Equivalent course: EDF302W

EDF 303
EDUCATIONAL PSYCHOLOGY: MIDDLE AND SECONDARY EDUCATION
3, 3/0

Prerequisites: CWP 101, CWP 101, upper-division status. Psychological principles underlying learning and effective teaching. The effect of social and personality factors on learning, assessment, and evaluation of individual progress. Diagnosis of difficulties in learning, discipline, programming, and planning as related to instruction. Directed observation.

Equivalent course: EDF303W

EDF 311
FAMILY VIOLENCE
3, 3/0

Prerequisite: Successful completion of the basic writing requirement. Comprehensive overview and critical investigation into the field of family violence. Includes child abuse, dating violence, spouse abuse, sibling violence, adolescent maltreatment, parent abuse, and elder abuse. Explores history, prevalence, susceptibility factors, patterns of social interaction, demographics, sexual and emotional abuse, and the violence-prone personality. Theoretical perspectives on family violence, including cycle theory of violence, integrated within broader social science perspectives.

Equivalent courses: EDF311W, SOC311

EDF 345
PARENTING
3, 3/0

Prerequisite: Successful completion of the basic writing requirement. Relevant issues facing parents and professionals who work with them in today's changing society. Includes classical and current research, with emphasis on practical application and implication. Developmental approach to understanding parent-child relationships. Working more effectively with parents of varied cultural backgrounds, family structures, lifestyles, and at-risk factors.

Equivalent course: EDF345W

EDF 346
TEENAGE SEXUALITY
3, 3/0

Teenage sexuality and factors influencing its emergence. The incorporation of sexuality education into the teaching-learning process at home and in school. Cooperative efforts by parents and teachers. Development of skills in communicating with teenagers about their sexuality. Strategies for teens to deal with sexuality concerns more effectively. Community resources for teens, parents, teachers. Special issues and problems.

Equivalent course: CFS346

EDF 353
HUMAN DEVELOPMENT DURING EARLY ADOLESCENCE AND ADOLESCENCE
3, 3/0

Introduction to preadolescent and adolescent behavior and development, with emphasis on implications for teaching. Includes the nature of adolescence, developmental and behavioral characteristics, learning and education, problems and issues of adolescents in today's society, ways teachers can study adolescents, and self-understanding.

EDF 403
HISTORICAL AND PHILOSOPHICAL FORCES INFLUENCING SECONDARY EDUCATION
3, 3/0

Prerequisite: Successful completion of the basic writing requirement. European, religious, and secular influences in American education. Evolving concepts of education in a democracy. Social and economic pressures in education. Development of the secondary school. Conflicting philosophies in current education.

Equivalent course: EDF403W

EDF 495
SPECIAL PROJECT
3, 0/0

EDF 497
WORKSHOP
1-3, 0/0

EDF 499
INDEPENDENT STUDY
3, 0/0

EDU - EDUCATION

EDU 121
TUTORING STUDENTS WITH A DIVERSE LANGUAGE BACKGROUND
1-3, 0/0

The amount of course credit will be decided upon by individual student contact. Prerequisite: Completion of all GE2K general education/IF cognates in math and English with a minimum grade of C. Develops socio-cultural awareness and trains tutors for community-based experiences. Prepares students for experiences and unique interactions between culture and education while providing strategies to help second-language learners access the core curriculum.

EDU 201
INTRODUCTION TO EDUCATION
3, 3/0

Early Majors. Introduction to elementary school teaching. Application of major theories, consideration of developmentally appropriate practices relative to New York State Learning Standards. Introduction to classroom organization, classroom management, and multi-cultural education; participation in the reflective writing process emphasized. Field experience required.

Equivalent course: EDF201

EDU 211
INTRODUCTION TO LITERACY
3, 3/0

Prerequisite: Early and full majors. Prerequisite or co-requisite: EDU 201/EDF 201 or equivalent. Current literacy theories and practices supportive of diverse populations and congruent with New York State Learning Standards. School-based or field placement activities that support course objectives are required.

EDU 220
PROGRAMS FOR INFANTS AND TODDLERS
3, 3/0

Early and Full Majors only. Prerequisites: EDF 202, EDU 201/EDF 201, EDU 211. Introduction to the field of early childhood education. Familiarity with the developmental needs and program requirements for infants and toddlers. Students plan developmentally appropriate activities to use with these age groups and implement them in a field placement. Special attention is given to the assessment of young children in the field placement.

Equivalent course: ECS405

EDU 234
HOLISTIC CURRICULUM TUTORIAL
3, 3/0

Prerequisite: Math and English competency, permission of instructor. Develops an understanding of brain function relating to emergent literacy and teaching, particularly as it pertains to academically challenged children. Following introductory theory classes, students tutor at-risk youngsters in a supervised setting at one of the Buffalo schools, twice each week for the duration of the semester.

EDU 310
TEACHING SOCIAL STUDIES IN THE ELEMENTARY SCHOOL
3, 0/0; DI2A, DIGE, DIIF

Majors only. Prerequisite: EDU 211 with a C or higher. Current trends and pedagogical issues in social studies standards-based education. Development and implementation of creative extensions of social studies through visual and performing arts.

Equivalent course: EDU310

EDU 311
THE TEACHING OF READING AND OTHER LANGUAGE ARTS IN THE ELEMENTARY SCHOOL
6, 6/0

Majors only. Prerequisite: Admission to program; upper-division status; overall cumulative GPA of 2.5 or higher; cumulative GPA of 2.5 in these courses: EDF 202, EDF 203, EDF 302; EDU 201/EDF 201, EDU 211 (exceptional education students may substitute EXE 360 for EDU 201/EDF 201.) Builds methodological practice from the theoretical scaffold of literacy knowledge and teaching established in EDU 211 and the survey course EDU 201/ EDF 201. Participation in classroom practice while exploring in-depth curricular, theoretical, and practical educational frameworks. Junior participants apply skills and processes they have learned in previous courses to teach language arts across the curriculum. Students plan, implement and evaluate lessons incorporating the NYS standards for English Language Arts; practice and evaluate assessment tools and processes; become reflective practitioners; demonstrate effective techniques for instructional organization in a professional development school.

Equivalent course: EDU311

EDU 312
THE TEACHING OF SCIENCE AND MATHEMATICS
6, 6/0

Full Majors only. Prerequisites: overall cumulative GPA 2.5 or higher; cumulative GPA of 2.5 in the professional sequence, and a C or higher in EDU 311W. Basic curriculum course for elementary teachers. Students participate in classroom practice while exploring in-depth curricular, theoretical, and practical educational frameworks. Students plan, implement, and evaluate lessons incorporating the NYS standards for mathematics, science and technology; practice and evaluate assessment tools and processes; become reflective practitioners; demonstrate effective techniques for instructional organization in a professional development school.

EDU 326
EARLY LITERACY AND LANGUAGE DEVELOPMENT
3, 3/0
Full Early Childhood or Combined Childhood/Early Childhood majors.
Prerequisites: Overall and Professional Sequence GPAs of 2.5 or higher,
EDF 202, C or higher in EDU 311W. May be taken concurrently with
EDU 329. Exploration of principles, practices and materials for providing
children, Birth-Preschool, with strong foundation to support early literacy
skills and language development. Examines theoretical influences on
language development, relationship between oral language and early
literacy, children's literature, curriculum and assessment. Consideration of
implications for enhanced literacy and language outcomes for all children.
Equivalent course: EDU426

EDU 329
INTEGRATED THEMATIC INSTRUCTION FOR YOUNG CHILDREN
6, 6/0
Early Childhood and Combined Childhood/Early Childhood Majors only.
Prerequisites: Overall and Professional Sequence GPAs of 2.5 or higher,
EDU 211, EDU 220, EDU 311W with a grade of C or higher. Use of
knowledge of child development and learning to provide opportunities
that support the physical, social, emotional, cognitive, and aesthetic de-
velopment of preschool, kindergarten, and primary-grade children. Les-
sons are taught in a professional development school.
Equivalent course: ECS329

EDU 375
INTEGRATION OF TECHNOLOGY IN EDUCATION
3, 3/0; TSIF
Early and Full Majors. Prerequisites: EDU 211. Provides the pre-service
teacher with an awareness of the current range of instructional and adap-
tive technologies. Emphasis on curricular integration of technology within
the general and special education classroom, and connections between
instructional technology and the broader role of technology in society.
Equivalent course: EXE375

EDU 400
PRACTICUM IN ELEMENTARY TEACHING I
6, 0/6; OCIF
Prerequisites: Full majors only. Minimum overall cumulative GPA of
2.5; minimum grade of C in teaching methods courses related to specific
major (EDU 220, EDU 310W, EDU 311W, EDU 312, or EDU 329).
Minimum GPA of 2.5 in major courses, successful completion of English
composition/basic communication and mathematics competency require-
ments. Intended as the teacher candidate's culminating experience. This
is the first supervised teaching experience of two school settings at two
developmental levels five full days a week for approximately seven to
eight consecutive weeks. Teacher candidates are required to effectively
demonstrate content knowledge, pedagogical preparation, instructional
delivery, classroom management, knowledge of student development,
collaboration with school professionals, and reflective practice. Extension
teacher candidates or exceptional education teacher candidates will take
EDU 400 and EDU 404. Early Childhood and Combined Early Child-
hood/Childhood majors will take EDU 400 and EDU 410.

EDU 401
PRACTICUM IN TEACHING: INTERMEDIATE
6, 0/6
Prerequisites: Full childhood majors only. Minimum cumulative GPA of
2.50; minimum grade of C in methods courses related to respective major
(EDU 310W, EDU 311W, EDU 312); minimum cumulative 2.5 GPA in
major courses; successful completion of English composition/basic com-
munication and mathematics competency requirements. Intended as the
teacher candidate's culminating experience. Supervised teaching in ele-
mentary grades five full days a week for approximately seven to eight
consecutive weeks. Individual conferences and seminars with college
supervisor. Tutorial and group instruction. Daily and long-range planning,
teacher-pupil planning, unit teaching, audiovisual aids, classroom man-
agement, record keeping, evaluation techniques.

EDU 402
SEMINAR IN EDUCATION
1-3, 1-3/0
Nature and function of a philosophy of education. Teaching research
methods and techniques, crucial issues in education, problems of begin-
ning teachers. To be taken concurrently with EDU 400, EDU 401 and/or

EDU 410. Required for all childhood, early childhood, and combined
education majors.
Equivalent course: EDU402W

EDU 404
PRACTICUM IN ELEMENTARY TEACHING FOR EX ED & MIDDLE
SCHOOL EX STUDENTS
6, 0/0; OCIF
Prerequisites: Extension and Exceptional Education majors only. Mini-
mum cumulative GPA of 2.5; minimum grade of C in teaching methods
courses (EDU 310W, EDU 311W, and EDU 312). Minimum GPA of 2.5
in professional sequence/major courses. For elementary education teacher
candidates seeking certification in childhood/exceptional education, or
childhood with a middle school extension. Intended as the teacher candi-
date's culminating experience. Supervised teaching experience in an
elementary grade setting five full days a week for approximately seven to
eight consecutive weeks. Teacher candidates are required to effectively
demonstrate content knowledge, pedagogical preparation, instructional
delivery, classroom management, knowledge of student development,
collaboration with school professionals, and reflective practice.

EDU 410
PRACTICUM IN EARLY CHILDHOOD TEACHING
6, 0/6
Prerequisites: Early Childhood and Combined Education Majors only.
Minimum cumulative GPA of 2.5; minimum grade of C in methods
courses related to respective major (EDU 220, EDU 310W, EDU 311W,
EDU 312, or EDU 329); minimum cumulative 2.5 GPA in major courses;
successful completion of English composition/basic communication and
mathematics competency requirements. Intended as the teacher candi-
date's culminating experience. Provides supervised teaching experience
in an early childhood classroom five full days per week for approximately
seven to eight consecutive weeks. Effective demonstration of content
knowledge, pedagogical preparation, instructional delivery, classroom
management, knowledge of student development, collaboration with
school professionals, and reflectivity of practice.

EDU 411
PARENTS, SCHOOLS, AND COMMUNITY
3, 3/0
Prerequisite: Early childhood and combined childhood/early childhood
majors only; this course may be taken concurrently with student teaching
or in a previous semester. Designed to assist students in building partner-
ships among parents, schools, and diverse communities. Students will
learn how to collaborate with families and implement family involvement
strategies during student teaching. Special attention will be given to link-
ing families with services offered in the school and community.
Equivalent courses: EDU420, EXE411

EDU 416
TEACHING LITERACY IN MIDDLE AND SECONDARY SCHOOLS
3, 3/0
Majors. Upper division status. Special problems in reading encountered
in middle and secondary schools. Includes the reading process, reading
skills, and techniques for assessing developing reading skills. Special
emphasis on critical reading in content areas.
Equivalent course: SED305

EDU 417
ADOLESCENT LITERACY
3, 3/0
Math and Science Teacher Education Majors. Prerequisites: EDU 416 or
equivalent and fulfillment of English composition/basic communication
requirement, upper-division status. The development of literacy in adoles-
cents. Topics will include adolescents' multiple literacies, assessing read-
ing and writing abilities, reading materials other than the textbook, teach-
ing reading and writing across the curriculum, and strategies for working
with struggling readers and writers.
Equivalent course: EDU417W

EDU 499
INDEPENDENT STUDY
3-12, 0/0

ENG - ENGLISH

ENG 130
BIBLICAL AND CLASSICAL LITERATURE
3, 3/0; WCIF

Works selected from Biblical literature and from Latin and Greek literature before Constantine.

ENG 151
INTRODUCTION TO POETRY
3, 3/0; HUIF

Verbal and formal techniques of English and American poetry. Prosody, verse forms, conventions, genres, diction, and imagery. Social and historical contexts. Representative authors and periods.
Equivalent course: ENG151W

ENG 160
INTRODUCTION TO LITERATURE AND FILM
3, 3/0; HUIF

Analysis of film as the creative and critical interpretation of fiction or drama; how such films respond to aesthetic, cultural, technological, political, and ideological influences, both in the source text and in the contemporary moment.

ENG 190
INTRODUCTION TO LITERARY INTERPRETATION
3, 3/0

Prerequisites: CWP 101 and CWP 101, or the equivalent. The basic types of responses to literature; the defining characteristics of poetry, fiction, and drama; as well as the skills of close reading of literary texts. Students should take this class immediately after completing the freshman writing requirement or within the first year of transferring into the English major.
Equivalent course: ENG190W

ENG 200
FIELD EXPERIENCE IN SECONDARY ENGLISH EDUCATION
3, 3/0

Prerequisites: Standing in the English Education Major or Post Baccalaureate Certification Program. Introduction to the secondary school as an institution and to the teaching of English as a profession. Required observations of teaching English and other areas, 7-12. Limited experimentation with teaching secondary English.

ENG 201
THE CRAFT OF WRITING
3, 3/0

Prerequisite: Fulfillment of English composition/ basic communication requirement. Demystifying the act of writing by studying, discussing, and practicing models of the composing process.

ENG 205
HISTORY OF CINEMA I
3, 3/0; HUIF

This course provides the student with an understanding of cinema history from 1890 to 1960. Students will examine trends in cinema's aesthetic forms, technical breakthroughs, innovators, cultural antecedents, and impact.

ENG 206
HISTORY OF CINEMA II
3, 3/1; HUIF

This course provides the student with an understanding of cinema history since 1960. Students will examine representative trends in cinema's aesthetic form, technical breakthroughs, key innovators, cultural antecedents and cultural impact.
Equivalent course: ENG206W

ENG 210
BRITISH LITERATURE I: SPECIAL TOPICS
3, 3/0; HUIF

A study of selected topics, themes, and authors in British literature before 1700.
Equivalent course: ENG110

ENG 211
SURVEY OF BRITISH LITERATURE II: SPECIAL TOPICS
3, 3/0; HUIF

A study of selected topics, themes, and authors in British literature from 1700 to 1900.
Equivalent course: ENG111

ENG 220
AMERICAN LITERATURE I: SPECIAL TOPICS
3, 3/0; HUIF

Survey of the various genres of influential American writing-including biographies, captivity and slave narratives, essays, poems, short stories and criticism, as well as Gothic, epistolary, sentimental, and Romantic novels -produced between the late seventeenth century and the mid-nineteenth century.
Equivalent course: ENG140

ENG 221
AMERICAN LITERATURE II: SELECTED TOPICS
3, 3/0; HUIF

A study of topics, themes, and authors in American literature after the Civil War.
Equivalent course: ENG141

ENG 230
COMPARATIVE LITERATURE
3, 3/0; HUIF

Prerequisites: None. Comparative analyses of the ways in which literary periods, genres, movements, and social forms are shaped by the languages and cultural contexts through which they come into being.

ENG 231
WOMEN IN LITERATURE
3, 3/0; DIIF, HUIF

The images of women in literature as they reflect attitudes about women and their roles. Emphasis on authors and eras varies with instructors. May be taken for credit more than once.
Equivalent course: ENG231W

ENG 240
AFRICAN AMERICAN LITERATURE TO 1940
3, 3/0; HUIF

African American slave narratives, poetry, fiction, essays, and drama from the eighteenth century to 1940; the influence of spirituals, gospel, blues, jazz, sermons, and folktales on African American writing; the Harlem renaissance of the 1920s and 1930s; and the development of African American revolutionary thought.
Equivalent course: AAS240

ENG 241
AFRICAN AMERICAN LITERATURE SINCE 1940
3, 3/0; DIIF, HUIF

Realism, naturalism, modernism, and postmodernism in African American literature; black revolutionary thought and artistry in the 1960s and 1970s; neo-slave narratives; African American poetry, fiction, essays, and drama from 1940 to the present; influence of spirituals, gospel, the blues, jazz, sermons, and folktales on contemporary African American writing.

ENG 243
INTRODUCTION TO LATINO/A LITERATURE
3, 3/0; DIIF, HUIF

Introductory study of themes, ideas, and movements in Latino/a literature from the mid-nineteenth century to the present.

ENG 247
NATURE WRITING
3, 3/0

Prerequisite: ENG 102. Students develop an understanding of the nonfiction prose genre of nature writing and improve their ability to produce original works in the genre. Class focuses on reading and analyzing nature writing for its stylistic and thematic features and emphasizes specific writing skills. Explores the connection between the natural and human worlds and various attitudes toward nature as conveyed in examples of the genre.

ENG 252
BRITISH MODERNISM
3, 3/0; HUIF
British modernism, roughly the period from 1900 to 1940. The historical, intellectual and cultural background as well as the study of some of the major literary figures and their work.

ENG 253
TWENTIETH-CENTURY LITERATURE II
3, 3/0
Literature in English from 1945 to the present.

ENG 255
3, 3/0; HUIF
Various examples of influential short fiction produced around the world since the nineteenth century. Familiarizes students with various literary techniques involved in the craft of short fiction.
Equivalent course: ENG355

ENG 260
CHILDREN'S LITERATURE
3, 3/0
Prerequisite: Sophomore, junior, or senior status. Types of children's literature, with attention to the principles of book selection and reading interests of children.

ENG 266
THE PERSONAL ESSAY
3, 3/0
The personal essay and how it both relates to and diverges from more objective forms of essays often encountered in academic contexts. Students practice close reading of essays and compose original essays with peer and instructor evaluations.

ENG 300
WRITING FOR THE PROFESSIONS
3, 3/0
Prerequisite: Fulfillment of English composition/ basic communication requirement. Practice for students who wish to improve their competence in writing and editing for a variety of professions.
Equivalent course: ENG300W

ENG 301
ADVANCED COMPOSITION
3, 3/0
Prerequisite: Fulfillment of English composition/ basic communication requirement. Practice in writing expository papers. Writing assignments emphasize stylistic strategies, diction, and revision.
Equivalent course: ENG301W

ENG 303
LITERATURE IN FILM
3, 3/1
The motion picture as a vehicle for literature. Analysis and comparison of verbal and pictorial forms.
Equivalent course: ENG303W

ENG 304
FORMS OF FILM
3, 3/1
Breadth and depth of selected film forms. Emphasis on the film as art, medium of communication, and social document. May be taken for credit more than once when content varies.
Equivalent course: ENG304W

ENG 305
CREATIVE WRITING: NARRATIVE
3, 3/0
Prerequisite: Fulfillment of English composition/ basic communication requirement. The writing of narrative.
Equivalent course: ENG305W

ENG 306
CREATIVE WRITING: POETRY
3, 3/0
Prerequisite: Fulfillment of English composition/ basic communication requirement. The writing of poetry.

Equivalent course: ENG306W

ENG 309
TEACHING AND EVALUATING WRITING
3, 3/0
Prerequisite: Fulfillment of English composition/ basic communication requirement. Methods for teaching and evaluating writing. Includes theories of composition and rhetoric, approaches to teaching composition, ways to respond to writing-in-progress and completed texts, methods of measuring growth, and means to evaluate writing performance.
Equivalent course: ENG309W

ENG 310
MODERN EUROPEAN LITERATURE
3, 3/0
Prerequisite: ENG 190 or permission of instructor. Selected European writers after 1600.

ENG 311
METHODS IN TEACHING LANGUAGE
3, 3/0
Prerequisite: Fulfillment of English composition/ basic communication requirement. English-language teaching strategies for secondary education majors. Grammar, usage, and mechanics instruction; the history of English; the right to one's own language; sociopolitical dimensions of language; discussions of correctness within a range of discourse levels; instruction in family-literacy practices.
Equivalent course: ENG311W

ENG 313
MILTON
3, 3/0
Prerequisite: ENG 190 or permission of instructor. A study of Milton's oeuvre with emphasis on Paradise Lost.
Equivalent course: ENG413

ENG 314
CHAUCER
3, 3/0
Prerequisite: ENG 190 or permission of instructor. A selection of Chaucer's works, including some Canterbury Tales.
Equivalent courses: ENG314W, ENG411

ENG 315
SHAKESPEARE I
3, 3/0
Prerequisite: ENG 190 or permission of instructor. Shakespeare's work to 1600: the sonnets, early tragedies, histories, and comedies.
Equivalent course: ENG315W

ENG 316
SHAKESPEARE II
3, 3/0
Prerequisite: ENG 190 or permission of instructor. Shakespeare's works after 1600: the problem plays, major tragedies, and romances.
Equivalent course: ENG316W

ENG 317
SHAKESPEARE FOR FUTURE TEACHERS
3, 3/0
Prerequisite: ENG 190 or permission of instructor. Intensive study of the Shakespeare plays most often taught in high school English classes. Emphasis on strategies for teaching Shakespeare and on particular needs of high school teachers in multicultural settings.

ENG 322
REPRESENTATIVE WRITERS
3, 3/0
Prerequisite: ENG 190 or instructor permission. Selected works of a single writer or group of related writers. Supplemental readings of other writers of the period.

ENG 325
CREATIVE NON-FICTION
3, 3/0
Prerequisite: ENG 201 or permission of instructor. Reading and writing creative nonfiction, an essay form that consciously uses the stylistic features of fiction and poetry.

ENG 330
LITERATURE OF THE BIBLE
3, 3/0
Prerequisite: ENG 190 or permission of instructor. The Bible as literature.
Equivalent course: ENG330W

ENG 331
FRENCH LITERATURE IN TRANSLATION
3, 3/0
Prerequisite: ENG 190 or permission of instructor. Selected masterpieces of contemporary French literature in translation. Knowledge of French not required. French majors must obtain department chair and permission of course instructor.
Equivalent course: FRE331

ENG 332
RUSSIAN LITERATURE IN TRANSLATION
3, 3/0
Prerequisite: ENG 190 or permission of instructor. Writers such as Gogol, Pushkin, Turgenev, Goncharova, Tolstoy, Dostoyevsky, and Chekhov. Knowledge of Russian not required.
Equivalent course: RUS332

ENG 335
MEDIEVAL AND RENAISSANCE EUROPEAN LITERATURE
3, 3/0
Prerequisite: ENG 190 or instructor permission. A study of selected themes, ideas, and movements of European literature in the medieval and Renaissance periods.

ENG 337
MODERN EUROPEAN LITERATURE
3, 3/0
Prerequisite: ENG 190 or instructor permission. Selected themes, ideas, and movements of European literature from the Renaissance to postmodernity.

ENG 345
WORLD LITERATURE AFTER 1945
3, 3/0
Prerequisite: ENG 190 or permission of instructor. Post-World War II literature around the globe. Poetry and fiction along with the cultural background of at least two continents.
Equivalent course: ENG345W

ENG 346
NON-WESTERN LITERATURE AFTER 1945
3, 3/0
Prerequisite: ENG 190 or permission of instructor. Non-Western literature: poetry, fiction, and drama along with historical and cultural backgrounds of literature outside Europe and North America.

ENG 350
TWENTIETH-CENTURY DRAMA I
3, 3/0
Prerequisite: ENG 190 or permission of instructor. Drama from the 1880s to the end of World War II of such playwrights as Ibsen, Strindberg, Chekhov, Lorca, Synge, O'Casey, and O'Neill.

ENG 351
TWENTIETH-CENTURY DRAMA II
3, 3/0
Prerequisite: ENG 190 or permission of instructor. Drama since World War II; Epic theater, absurdism, and theater of cruelty; discussions of such playwrights as Brecht, Ionesco, Beckett, Genet, Miller, Albee, Pinter, Baraka, and Arabal.

ENG 353
NATIVE AMERICAN LITERATURE
3, 3/0; DIIF
Prerequisites: Three credit hours of literature or permission of the instructor. Selected aspects of traditional sacred and secular tales and contemporary American Indian literature in its cultural, historical and aesthetic contexts.

ENG 354
ETHNIC AMERICAN MINORITY LITERATURE
3, 3/0; DIIF
The background, development, and contemporary contribution of ethnic American minority literature (folk, poetry, short story, novel, biography, and play) and individual authors. The literary characteristics of the literature, its contribution to the field of American literature, and its place in today's society.
Equivalent course: ENG354W

ENG 356
FUTURISTIC FICTION
3, 3/0
Prerequisite: ENG 190 or permission of instructor. The background, development, and present status of futuristic fiction. Short-story and novel forms. The quality of the literature and its place in today's society.
Equivalent course: ENG356W

ENG 361
CONTEMPORARY LITERATURE
3, 3/0
Prerequisite: Fulfillment of English composition/ basic communication requirement. Reading, discussion, and analysis of literature written in the last 25 years. Literary features and literary theories.

ENG 370
FOUNDATIONS OF LANGUAGE
3, 3/0
The structure of language with emphasis on English, relation to speech and writing. Language families and their relationships. Language change. Significance of regional and social dialects.
Equivalent courses: ENG370W, ENG470

ENG 380
THE HISTORY OF THE PRINTED BOOK
3, 2.5/0; TSIF
Prerequisites: ENG190W and 6 credit hours of literature. Analysis of the printed book as a physical, historical, social, and literary object. Course requires original bibliographical research.

ENG 385
GENDER AND SEXUALITY IN LITERATURE
3, 3/0; DIIF
Prerequisite: ENG 190 or instructor permission. Elements of gender and sexuality in British, American, or world literature: themes, historical periods, philosophies, theories, and movements. May be taken for credit up to three times when content varies.

ENG 390
LITERARY CRITICISM AND THEORY
3, 3/0
Prerequisites: ENG 190, 3 credits of literature, English major status. The major movements, critics, and ideas that comprise modern literary theory, such as formalism, psychoanalytical theory, feminism, Marxism, new historicism.

ENG 402
ADVANCED CREATIVE WRITING: NARRATIVE
3, 3/0
Prerequisite: Fulfillment of English composition/ basic communication requirement. Creative workshop for students who wish to attempt longer forms of narrative than the short story.
Equivalent course: ENG402W

ENG 403
ADVANCED CREATIVE WRITING: POETRY
3, 3/0
Prerequisite: Fulfillment of English composition/ basic communication requirement. Creative workshop for students experienced and/or talented in the writing of poetry.
Equivalent course: ENG403W

ENG 410
COMPOSITION AND RHETORICAL THEORY
3, 3/0
Prerequisite: ENG 201. Trends in contemporary composition and rhetorical theory with an emphasis of the theory of discourse communities. Students develop skills in producing critical, theoretical, creative, and rhetorical discourse.

ENG 415
SEVENTEENTH-CENTURY ENGLISH LITERATURE
3, 3/0
Prerequisites: ENG 190 and 3 credit hours of literature, or permission of instructor. Literature of seventeenth-century England.
Equivalent course: ENG415W

ENG 416
EIGHTEENTH-CENTURY ENGLISH LITERATURE
3, 3/0
Prerequisites: ENG 190 and 3 hours of literature or instructor permission. Literature of eighteenth-century Britain.

ENG 418
THE BRITISH NOVEL, 1800-1900
3, 3/0
Prerequisites: ENG 190, or permission of the instructor. An exploration of British novels written between 1800 and 1900.

ENG 419
ROMANTIC MOVEMENT IN ENGLISH LITERATURE
3, 3/0
Prerequisites: ENG 190 and 3 credit hours of literature, or permission of instructor. Representative English romantic writers.
Equivalent course: ENG419W

ENG 420
EARLY VICTORIAN LITERATURE
3, 3/0
Prerequisites: ENG 190 and 3 credit hours of literature, or permission of instructor. English writers 1832-1859.
Equivalent course: ENG420W

ENG 421
LATER VICTORIAN LITERATURE
3, 3/0
Prerequisites: ENG 190 and 3 credit hours of literature, or permission of instructor. English writers 1859-1914.

ENG 422
JAMES JOYCE AND HIS CONTEMPORARIES
3, 3/0
Prerequisites: ENG 190 and 3 credit hours of literature, or permission of instructor. The major fiction of James Joyce. Supplemental readings of other writers of the period.
Equivalent course: ENG422W

ENG 441
THE ROMANTIC MOVEMENT IN AMERICAN LITERATURE
3, 3/0
Prerequisites: ENG 190 and 3 hours of English literature, or permission of the instructor. Texts that exemplify the American Transcendental and Romantic traditions of New England, and their impact on American literature, philosophy and politics.
Equivalent course: ENG441W

ENG 442
THE AMERICAN NOVEL TO 1900
3, 3/0
Prerequisites: ENG 190 and 3 credit hours of literature or instructor permission. Representative American novels to 1900. Includes major modes

of American fiction and the relationships among them. Historical, social, and artistic developments of the American novel to 1900.

ENG 443
AMERICAN POETRY AFTER 1900
3, 3/0
Prerequisites: ENG 190 and 3 credit hours of literature, or instructor permission. The rich and diverse terrain of American poetry of the twentieth century from a historical perspective. Major figures, major movements, and the interrelationships among them.

ENG 444
THE AMERICAN NOVEL AFTER 1900
3, 3/0
Prerequisites: ENG 190 and 3 credit hours of literature, or instructor permission. Representative American novels after 1900. Includes major modes of American fiction and the relationships among them. Historical, social, and artistic developments of the twentieth century.

ENG 445
AMERICAN REALISM
3, 3/0
Prerequisites: ENG 190 and 3 credit hours of literature, or permission of instructor. A focused study of a major American literary movement, Realism, its major and minor figures, and the historical and cultural milieu of nineteenth-century America out of which Realism emerged.

ENG 454
TWENTIETH-CENTURY NOVEL I
3, 3/0
Prerequisites: ENG 190 and 3 credit hours of literature, or permission of instructor. Major British and American novels from 1914 to 1945.

ENG 455
THE BRITISH NOVEL AFTER 1900
3, 3/0
Prerequisites: ENG 190 and 3 credit hours of literature, or permission of instructor. A study of major twentieth-century British novels. Philosophies and theories suggested by the texts, including modernism and post-modernism, and the cultural climate since 1900 explored.
Equivalent course: ENG455W

ENG 461
YOUNG-ADULT LITERATURE
3, 3/0
Prerequisites: ENG 190 and 3 credit hours of literature, or permission of instructor. Literature appropriate to students in grades 7-12.
Equivalent course: ENG461W

ENG 463
METHODS, MATERIALS, AND PROFESSIONAL DEVELOPMENT FOR TEACHERS OF ENGLISH
6, 6/0; OCIF
Prerequisites: EDF 303, ENG 200; minimum cumulative GPA of 2.75 in major. Methods and materials necessary to become an effective teacher of English. Includes secondary school curriculum, New York State standards for the language arts, planning, assessment, and classroom management. Additional emphasis on professional development with on-site observations, practice teaching sessions, and interactions with public-school teachers and personnel.

ENG 464
STUDENT TEACHING IN MIDDLE SCHOOL/JUNIOR HIGH SCHOOL ENGLISH
6-12, 30/0
Prerequisites: ENG 200, ENG 309, ENG 462 or ENG 463, EDF 303, EDF 403, and EDU 416; minimum cumulative GPA of 2.0, 2.75 in English, and professional education courses. Full-time practice teaching, five days a week for seven weeks in a middle school/junior high school situation. College supervision biweekly. Elementary extension students teach one situation. Required for upper-division students in secondary English and elementary education extension students.

ENG 465
STUDENT TEACHING IN SENIOR HIGH SCHOOL ENGLISH
6, 0/0
Prerequisites: ENG 200, ENG 309, ENG 462 or ENG 463, EDF 303, EDF 403, and EDU 416; minimum cumulative GPA of 2.0, 2.75 in English, and professional education courses. Full-time practice teaching, five days a week for seven weeks in a senior high school situation. College supervision biweekly. Required for upper-division students in secondary English.

ENG 488
INTERNSHIP
1-15, 0/0
Prerequisites: Minimum cumulative GPA of 2.0; upper-division status. Field experiences that supplement departmental academic offerings; geared to students' interests. Faculty intern supervisor and department chair permission necessary.

ENG 490
SENIOR SEMINAR
3, 3/0; OCIF
Prerequisites: ENG 190 and 3 credit hours of literature, or permission of instructor. Advanced study of a literary theme, genre, author, period, or theoretical approach.
Equivalent course: ENG490W

ENG 495
SPECIAL PROJECT
3, 0/0

ENG 499
INDEPENDENT STUDY
3-12, 0/0
Substantial research project in literary criticism, literary history, textual studies, or a related field.

ENS - ENVIRONMENTAL SCIENCE

ENS 100
URBAN ENVIRONMENT SCIENCE
3, 3/0; NSIF, TSIF
Survey of environmental science exploring the consequences to Buffalo from environmental and technological changes over the past century. Strong interdisciplinary focus with emphasis on the connections between our urban environment and human health. Topics include air and water quality, environmental stresses in the urban ecosystem, and environmental exposure to urban pollution and human health.

ENS 300
ENVIRONMENTAL CASE STUDIES
3, 3/0
Prerequisites: Completion of IF natural science requirement and upper division standing. Examines environmental literature and case studies on historically important and current environmental issues. Distinctions between facts, opinions and value judgments to evaluate and judge real situations. Global in scope; social contexts and national and global environmental policies.
Equivalent course: ENS410

ENT - ENGINEERING TECHNOLOGY

ENT 100
THE AGE OF ENERGY
3, 3/0; TSIF
Energy needs of society and the drive to use renewable energy sources and more efficient forms of transportation; technological, societal, ethical, and economic impact of societies' energy needs; impact on quality of life issues; hands-on student team projects focusing on solar, wind, hydro; increased efficiency topics such as hybrid/electrical vehicles and house lighting.

ENT 101
TECHNICAL DRAWING
3, 0/0
Survey of projection theory, multi-view projection, spatial relationships, and visualization of point, lines, planes and solids; size and shape description through sketching, and computer-aided drawing; standards and conventions, auxiliary views, revolutions, tolerance, dimensions, geometric tolerances, and pictorials.

ENT 102
INTRODUCTION TO EQUATION-SOLVING SOFTWARE
1, 1/0
Use of current industry-standard computer software programs that allow users to enter and manipulate mathematical equations; perform calculations; and analyze, plot, and document data. These engineering software programs are invaluable tools to technology majors, who combine engineering principles with mathematics to describe physical phenomena.

ENT 202
INTRODUCTION TO ENGINEERING ECONOMICS AND PROJECT MANAGEMENT
1, 1/0
Prepares students to estimate, plan, and manage projects. Provides exposure to techniques to better prepare students for problems seen in industry.

ENT 300
ANALYTICAL METHODS FOR TECHNOLOGISTS
3, 3/0
Prerequisite: MAT 126. Application of calculus and analytic geometry to problems in technology. Introduction to ordinary differential equations used to analyze mechanical and electrical quantities in technology.

ENT 301
MECHANICS I
3, 2/3
Prerequisites: PHY 107 and MAT 126. Basic principles and applications of statics; equilibrium of rigid bodies, freebody diagrams, friction, centroids, moments of inertia, trusses, frames and machines, and equilibrium of particles.

ENT 302
MECHANICS II
3, 2/3
Prerequisites: ENT 300 and ENT 301. Principles of dynamics applied to the forces on and motion of rigid bodies and particles; kinematics, kinetics, and energy and momentum methods for both particles and rigid bodies; introduction to mechanical vibration included.

ENT 303
KINEMATICS
3, 2/3
Prerequisite: ENT 302. Relative motion of machine parts; graphical and analytical techniques presented for position, velocity and acceleration analysis of linkages, chains, rolling bodies, gears and miscellaneous.

ENT 311
THERMODYNAMICS
3, 2/3
Prerequisite: ENT 301. Basic principles of classical thermodynamics and their applications to various engineering technology areas; technical applications of heat-power systems, refrigeration systems, combustion and psychometrics, and HVAC systems.

ENT 312
FLUID MECHANICS
3, 2/3
Prerequisite: ENT 311. Introduction to the basic phenomena and principles of fluid flow; fluid properties, fluid statics, conservation of mass, and energy; study of the basic fluid mechanics concepts to the analysis of pipe and duct flow; measurement of fluid properties, pressures, velocities, and forces.

ENT 314
SOLID MODELING
3, 2/3
Prerequisites: TEC 101 and ENT 301. Three-dimensional (3-D) parts and assembly creation; defining high-level features like cuts and holes in

addition to low-level geometry; using parametric modeling; 3-D solid modeling; introduction to finite element concepts for stress and heat testing.

ENT 321
ANALYSIS OF MANUFACTURING PROCESSES
3, 2/3

Prerequisites: TEC 201 and MAT 126. Quantitative analysis of materials processing and manufacturing; casting processes; stress-strain relationships; bulk deformation; sheet metal forming; powder metallurgy; machining and joining processes; surface modifications and nontraditional manufacturing processes.

ENT 331
ELECTRICAL CIRCUITS AND DEVICES I
3, 3/2

Prerequisite: ENT 331. Essential industrial machines and automation topics such as discrete and analog process control, switches and sensors, control systems, industrial controls, LabView, PLCs, and data acquisition. Laboratory exercises provide practical applications of the industrial electronics that engineering technology graduates are likely to encounter.

ENT 335
INDUSTRIAL ELECTRONICS
3, 2/3

Prerequisite: ENT 331. Essential industrial machines and automation topics, such as discrete and analog process control, switches and sensors, control systems, industrial controls, LabView, programmable logic controllers, and data acquisition. Laboratory exercises provide practical applications of the industrial electronics that engineering technology graduates are likely to encounter.

ENT 341
ELECTRONICS
3, 3/2

Prerequisite: ENT 331. Introductory analysis of electronic circuits, with emphasis on semiconductor devices.

ENT 342
NETWORKS
3, 3/0

Prerequisites: ENT 300 and ENT 331. Signal analysis, circuit parameter, time domain circuit, steady state and transient solution, Laplace transforms and applications, topics in frequency domain, network functions, theorems, sinusoidal steady state analysis from pole-zero plots. Introduction to network synthesis.

ENT 351
ANALOG ELECTRONICS
3, 2/3

Prerequisites: ENT 341. Analysis and design of electronic circuits (discrete and integrated) with emphasis on linear analog applications and use of computer simulation software.

ENT 352
DIGITAL ELECTRONICS
3, 3/2

Prerequisite: ENT 351. Analysis and design of electronic circuits, discrete and integrated, with emphasis on pulse and digital applications.

ENT 361
PROGRAMMABLE LOGIC CONTROLLERS (PLCS)
3, 2/3

Prerequisite: ENT 331 or TEC 314 or equivalent. A comprehensive treatment of programmable logic controllers (PLCs). Prior knowledge of PLCs is not required. Familiarity with the DOS or MS Windows operating systems is helpful. The standard PLC programming languages are examined: ladder logic, sequential function charts, function block diagrams, instruction lists, structured text, and high-level languages such as Basic, Pascal and C. Numerous laboratory exercises with four PLC brands give students broad exposure to programming, troubleshooting, networking, and PLC system design and startup.

ENT 365
MANUFACTURING SYSTEMS DESIGN
3, 3/0

Prerequisite: ENT 321. Introduction of product development; production control; requirements and selection of machines/labor; material handling equipment selection; storage and warehousing; computer-aided plant layout; site selection and location; facility location analysis and its impact on manufacturing.

ENT 371
ELECTRIC MACHINES
3, 2/3

Prerequisite: ENT 331. DC and AC machines and transformers are studied as an integral part of electric power systems. Single and three-phase induction and synchronous machines, DC motors and fractional horsepower motors, including stepper motors. Solid-state motor control; computer tools for study of motor performance. Laboratory experiments illustrate motor performance and measurement techniques.

ENT 392
MATERIAL SELECTION AND DESIGN FOR MANUFACTURING
3, 2/3

Prerequisites: ENT 301, ENT 321, and TEC 311. Introduction to materials properties for design of structures and components, design/selection/failure of materials, and selection of ferrous/nonferrous/ceramics and polymeric materials.

ENT 401
STRESS ANALYSIS
3, 2/3

Prerequisites: ENT 300, ENT 301, ENT 311. Techniques used to predict stress and strain caused by loads or other effects in structural members and machine elements; use of analytical, numerical and experimental methods.

ENT 402
SHOCK AND VIBRATION ANALYSIS
3, 2/3

Theoretical, analytical, and experimental methods used in the analysis of shock and vibration in machine elements and structures; free and forced vibration of one and multidegree of freedom systems with introduction to lumped parameter systems and continuous systems; familiarity with instrumentation and experimental techniques developed by performing hands-on laboratory experiments.

ENT 404
DESIGN OF AUTOMATED MANUFACTURING SYSTEMS
3, 2/3

Prerequisites: ENT 361 and ENT 392. Design for automation; mechanization of parts handling; automated manufacturing and assembly; numerical control and CAD/CAM; industrial robots and implementation, machine vision, microprocessors, principles of lean manufacturing, computer integrated manufacturing, and automated factory.

ENT 411
HEAT TRANSFER
3, 2/3

Prerequisite: ENT 312. Heat transfer and its application to various engineering technology areas; extension of thermodynamics and fluid flow analysis. Topics include conduction, convection, radiation, and current areas.

ENT 414
MANUFACTURING ANALYSIS
3, 3/0

Prerequisite: Upper-division status in ENT or TEC. Analysis of product design and development, economic analysis, break-even analysis, life cycle approach, capacity planning, manufacturing operations economy, allocation of resources, human factors, machines and maintenance, quality control and assurance, measurement of productivity and its effects on manufacturing economics.

ENT 420

PROFESSIONAL EXPERIENCE IN MECHANICAL ENGINEERING TECHNOLOGY

1, 1/0

Corequisites/Prerequisites: ENT 411, ENT 421, ENT 335. Prerequisites: ENT 401, ENT 331, ENT 311, ENT 312, ENT 301, ENT 302, TEC 311 and TEC 201. Exposure to professional engineering design concepts/methodologies; MET portfolio development and evaluation of MET subject matter necessary for the senior design project; senior design project proposal development. Required for mechanical engineering technology program.

ENT 421

MACHINE DESIGN I

3, 2/3

Prerequisites: ENT 303 and ENT 401. Techniques used to design and specify machine elements, i.e., shafts, springs, fasteners, belts, clutches, brakes, chains, bearings, gears, cams, etc.

Equivalent course: ENT421W

ENT 422

MACHINE DESIGN II

3, 2/3

Prerequisite: ENT 420. Advanced topics in machine design. Students design a major project involving preliminary analysis, working drawings, fabrication, and testing of a prototype. Required for mechanical engineering technology majors.

Equivalent course: ENT422W

ENT 431

DIGITAL SYSTEMS I

3, 3/2

Prerequisite: ENT 331. Boolean algebra, combinational circuit analysis and design, gates, sequential circuits, flip-flops, counters, logic types, interfacing, A/D inverters, encoders/decoders, mux/demux, and memory devices. Experiments are designed to develop facility in analyzing, testing, troubleshooting, and designing digital circuits.

ENT 432

MICROPROCESSORS

3, 2/3

Prerequisite: ENT 431. An introduction to the theory and application of microprocessors and microcontrollers, including programming, interfacing, prototyping and troubleshooting.

ENT 433

MICROPROCESSOR APPLICATIONS AND ROBOTICS

3, 3/2

Prerequisite: ENT 432. Theoretical and practical background of the technology used in the application of microprocessors. Programming hardware, interfacing, and application of microprocessors. The elements of robotics with emphasis on the construction and programming of robots.

ENT 441

COMMUNICATION TRANSMISSION TECHNOLOGY

3, 2/3

Prerequisite: ENT 331, PHY 108, or PHY 112. Introduction to the development and technology of digital, RF, microwave and optical fiber communications including transmission line types and characteristics, components, measurement of reflections, power, impedance, and wavelength. Signal structure and protocols used in data communications; computer analysis and design of digital and carrier communication circuits.

ENT 442

RF AND MICROWAVE COMMUNICATIONS

3, 2/3

Prerequisite: ENT 441. Introduction to wireless communication technology. Free-space and near-earth propagation effects, including RF safety, multipath, and antennas are covered. Receiver and transmitter design, components, and performance. Emphasis on digital representation of signals and transmission of digital data, types of modulation and channel capacity; systems and applications.

ENT 445

POWER ELECTRONICS

3, 0/0

Prerequisites: ENT 331, ENT 341 (could be taken as corequisite). The operation of modern, high-power electronic devices as applied to controls, electric machines, and power systems; power diodes, silicon-controlled rectifiers, thyristors, BJTs, MOSFETs, and IGBTs; applications to rectifiers, inverters, controlled rectifiers, AC voltage control, DC step-up and step-down systems, high-voltage DC (HVDC), and flexible AC transmission systems (FACTS); perform laboratory experiments using electrical instrumentation and computer analysis tools; required for power/ machines option of electrical engineering technology majors.

ENT 461

CONTROL SYSTEMS I

3, 3/2

Prerequisites: ENT 341, ENT 342, ENT 302, and senior status. Applies frequency domain techniques to open-loop and closed-loop systems with emphasis on stability and performance. Classical methods of control engineering are presented: Laplace transforms and transfer functions, root locus analysis, Routh-Hurwitz stability analysis, steady-state error for standard test signals, and second-order system approximations. MATLAB is introduced and utilized extensively for computer-aided analysis. Laboratory exercises provide practical application of the control-system theory.

ENT 462

CONTROL SYSTEMS II

3, 2/3

Prerequisite: ENT 461. Project centered. Students build, tune, simulate, and model a system (such as a magnetic levitation apparatus) for the purpose of demonstrating skills acquired during previous academic work. Project focuses on practical application of the control-system theory developed in Control Systems I.

Equivalent course: ENG462W

ENT 465

ELECTRICAL DESIGN

3, 2/3

Advanced topics in electrical and system design, the design process, and project management; a major design project that includes preliminary analysis, working drawings or schematics, fabrication, and testing of a prototype.

Equivalent course: ENT465

ENT 471

POWER SYSTEMS I

3, 2/3

Prerequisite: ENT 331. Basic elements of power systems, energy sources, substation configuration, load cycles, balanced three-phase circuits, power factor correction, transmission line configurations and impedance, voltage regulation of transformers, and the per unit system. Load flow, fault analysis, and economic operations.

ENT 472

POWER SYSTEMS II

3, 2/3

Prerequisite: ENT 471. The symmetrical component method is used for fault analysis. Power system demand calculations, relay protection applications, supervisory control, power quality, and system reliability are introduced.

ENT 495

SPECIAL PROJECT

1-3, 0/0

ENT 497

WORKSHOP

1-3, 0/0

ENT 499

INDEPENDENT STUDY

3-12, 0/0

EXE - EXCEPTIONAL EDUCATION

EXE 100

NATURE AND NEEDS OF INDIVIDUALS WITH SPECIAL NEEDS
3, 3/0; DIIF

Individuals who are exceptional due to factors of intelligence, physical development, behavior, and sensory abilities. The causes, characteristics, and implications-educational, social, and vocational-of individuals who deviate from the average or normal. Required for exceptional education majors.

EXE 245

COMMUNITY SERVICE WITH INDIVIDUALS WITH SPECIAL NEEDS
1-9, 0/0

Service in community agencies with individuals who are exceptional. May be taken for 1, 2, or 3 credit hours.

EXE 360

FOUNDATIONS OF TEACHING INDIVIDUALS WITH DISABILITIES
3, 3/0

Prerequisite: EXE 100. Corequisite: EXE 361. Adaptations and instructional procedures necessary for effective instruction of students with disabilities in various educational settings. Must be taken concurrently with EXE 361.

EXE 361

FIELD EXPERIENCE IN FOUNDATIONS OF TEACHING
INDIVIDUALS WITH DISABILITIES

1, 1/0

Prerequisite: EXE 100. Corequisite: EXE 360. Application of adaptations and instructional procedures learned in EXE 360. Must be taken concurrently with EXE 360.

EXE 362

BEHAVIOR AND CLASSROOM MANAGEMENT
3, 3/0

Prerequisite EXE 100. Corequisite: EXE 363; exceptional education major. Managing the classroom environment to facilitate effective instruction. Various models of behavior management. Exceptional education majors must take this course concurrently with EXE 363. Equivalent courses: EDF362, EXE306

EXE 363

FIELD EXPERIENCE IN BEHAVIOR MANAGEMENT
1, 1/0

Prerequisites: exceptional education major; EXE 100, EXE 360. Corequisite: EXE 362. Application of principles of behavior management learned in EXE 362 through on-site participation. Must be taken concurrently with EXE 362. Required for exceptional education majors.

EXE 364

EDUCATING STUDENTS WITH SEVERE DISABILITIES
3, 3/0

Prerequisites: EXE 100; exception education major. Characteristics and needs of individuals with severe disabilities and those of their families. Methods to teach and support individuals and families.

EXE 365

EVALUATION AND ASSESSMENT IN SPECIAL EDUCATION
3, 3/0

Prerequisites: EXE 100, EXE 360, EXE 361, EXE 362, EXE 363. Corequisite: EXE 366. Introduction to the educational evaluation and assessment of students with disabilities.

Equivalent course: EXE365W

EXE 366

FIELD EXPERIENCE IN EVALUATION AND ASSESSMENT
1, 1/0

Prerequisites: EXE 100, EXE 360, EXE 361, EXE 362, EXE 363. Corequisite: EXE 365. Application of principles of evaluation and assessment learned in EXE 365W through on-site participation.

EXE 367

CURRICULUM FOR CHILDREN WITH MILD DISABILITIES
3, 3/0

Description and discussion of curricular design and implementation for children with disabilities.

Equivalent course: EXE367

EXE 368

FIELD EXPERIENCE IN CURRICULUM FOR CHILDREN WITH MILD
DISABILITIES

2, 2/0

Prerequisites: EXE 100, EXE 360, EXE 361, EXE 362, EXE 363. Corequisite: EXE 367. Application of curriculum design and implementation for children with disabilities.

EXE 371

FOUNDATIONS OF TEACHING CHILDREN WITH DISABILITIES
3, 3/0

Prerequisite: EDU 211. Adaptations, procedures, and management systems necessary for effective instruction of children with disabilities in general education settings.

EXE 372

FOUNDATIONS OF TEACHING ADOLESCENTS WITH DISABILITIES
3, 3/0

Prerequisite: EXE 100. Adaptations and instructional procedures necessary for effective instruction of adolescents with disabilities. Recommended for secondary education majors.

EXE 375

INTEGRATION OF TECHNOLOGY IN EDUCATION
3, 3/0; TSIF

Prerequisite: EDF 202. Course enrollment is limited to childhood, early childhood, secondary and exceptional education majors. Can be taken during student teaching for childhood education majors. This course is designed to provide the pre-service teacher with an awareness of the current range of instructional and adaptive technologies. Emphasis is placed on factors relating to curricular integration of technology within the general and special education classroom. Students receive hands-on experience with the use of instructional software, web sites and adaptive/assistive technologies.

Equivalent course: EDU375

EXE 389

TOPICS COURSE
1-3, 0/0

EXE 420

PRACTICUM IN SPECIAL EDUCATION
6, 3/0

Prerequisites: Minimum grade of C in EXE 365, EXE 366, EXE 367 or EXE 369, EXE 368, or EXE 370; minimum cumulative GPA of 2.5 (overall and in major courses). Practice teaching with students with disabilities in public school classes, private agencies, or residential settings.

EXE 495

SPECIAL PROJECT
1-3, 0/0

EXE 499

INDEPENDENT STUDY
3-12, 0/0

FAR - FINE ARTS

FAR 100

INTRODUCTION TO FINE ARTS
3, 6/0; ARIF

The critical bases of procedures in the fine arts. Introductory problems in studio performance. Lecture and studio experience. Non-art majors only.

FAR 101
DRAWING I
3, 3/2; ARIF
Fundamentals of drawing based primarily on the study and representation of objects and nature forms, with problems of analysis, composition, and structure in various media. Includes both lecture and studio experiences.

FAR 102
DRAWING II
3, 0/6
Prerequisite: FAR 101. Drawing the nude using various media with an emphasis on proportion, anatomy, and pictorial structure. Lecture and studio experience.

FAR 103
MODELING
3, 4/0
Modeling as an introductory experience in the exploration of three-dimensional form. Development of perceptual and analytical attitudes. Lectures and modeled work dealing with the human figure.

FAR 104
THEMES AND ISSUES IN THE CONTEMPORARY ARTS
3, 3/0
Introduction to important figures, movements, and concepts in recent art, architecture, and design. Develops students' abilities to visually analyze works of art and to think critically about the role of art and the artist/designer in society. To be taken by all visual arts majors during their first year attending Buffalo State College.

FAR 189
TOPICS COURSE
3-6, 3/0

FAR 210
INTRODUCTORY PAINTING
3, 4/0
Prerequisite: FAR 101. Introduction to the methods, techniques, standards, and values of painting. Exploration of color, form, and compositional problems. Lecture and studio experiences.

FAR 220
INTRODUCTORY PHOTOGRAPHY
3, 0/6
Fundamentals of 35mm camera craft, black-and-white film developing, exposure metering, print finishing and presentation. Introduction to the use of Photoshop, Mac computer, film scanner, and ink jet printer for digital imaging. Lectures, darkroom and fieldwork. Note: 35mm camera with built-in exposure meter and manual mode capability required.

FAR 230
INTRODUCTORY PRINTMAKING
3, 4/0
Prerequisite: FAR 101. Introduction to printmaking and its basic processes and techniques, involving demonstrations, lectures, and studio experiences in one or more areas such as intaglio, lithography, and relief.

FAR 240
INTRODUCTORY SCULPTURE
3, 4/0
Prerequisite: FAR 101. The fundamentals of sculptural form. Additive, subtractive, and constructive approaches to sculpture through lecture and studio experiences.

FAR 250
ART HISTORY I
3, 3/0; ARIF
World history of painting, sculpture, architecture, and related arts from the Paleolithic period to the end of the medieval period.

FAR 251
ART HISTORY II
3, 3/0; ARIF
World history of painting, sculpture, architecture, and related arts from the thirteenth to the twentieth centuries.

FAR 300
DRAWING III
3, 0/6
Prerequisite: FAR 102. Continuation of FAR 102, with emphasis on the human figure and its relationship to an environment and pictorial structure. Lecture and studio experience. Course may be repeated twice.

FAR 311
INTERMEDIATE PAINTING I
3, 4/0
Prerequisite: FAR 210. Continuation of FAR 210, working toward a greater awareness of a personal statement. Lecture and studio experience.

FAR 312
INTERMEDIATE PAINTING II
3, 4/0
Prerequisite: FAR 311. Continuation of FAR 210 and FAR 311, allowing opportunity for more thorough fundamental awareness at a more intense concentration. Lecture and studio experience.

FAR 313
ADVANCED PAINTING
3-9, 4/0
Prerequisite: FAR 312. Advanced painting, with media, style, and content based on individual needs. Concentration on individually selected areas of painting. Lecture and studio experience. Course may be repeated three times.

FAR 316
PAINTING IN SIENA
3, 4/0
Prerequisite: FAR 210 (for art credit); no prerequisite for non-art credit. Upper-level painting course, taught in Siena, Italy. Students work at their level of experience, in the materials and techniques available in Siena.

FAR 321
INTERMEDIATE PHOTOGRAPHY I
3, 0/6
Prerequisite: FAR 220. An intermediate course in photography emphasizing the making of creative images. Intermediate 35mm camera technique and the use of on-camera electronic flash are taught. The basic Zone system is taught to improve exposure metering skills, to introduce controls for monitoring the development of film, and to familiarize students with contrast curves used in Photoshop. Includes lectures, equipment demonstrations, computer instruction, and fieldwork. Note: 35mm camera with built-in exposure meter, electronic flash, and tripod required.

FAR 322
INTERMEDIATE PHOTOGRAPHY II
3, 0/6
Prerequisite: FAR 321. Intermediate use of computer, Photoshop, film scanning, ink jet printing, and color management to make creative pictures. Builds upon intermediate skills and introduces digital camera use for computer-based imagemaking in photography. Introduces large format ink jet printing. Includes lectures, equipment demonstrations, and fieldwork. Note: Digital camera (5 mega-pixel or better), 35mm camera, electronic flash, and tripod required.

FAR 323
ADVANCED PHOTOGRAPHY
3-9, 4/0
Prerequisite: FAR 322. Devoted to creative work in photography and its integration with digital technology. Advanced camera skills are taught using medium-format and digital cameras. Advanced film exposure and lighting techniques are taught, as well as basic use of Illustrator, Painter, and Poser software. A medium format camera (120/220 film size), tripod, hand-held exposure meter, on-camera and portable studio flash are required. An internship taken concurrently with the last semester of Advanced Photography is encouraged. Course may be repeated up to three times.

FAR 325
HISTORY OF PHOTOGRAPHY
3, 3/0
The invention and development of photography from the early-nineteenth century to the present. Photography as art, science, communication, and influence upon social patterns and customs.

FAR 328
STUDIO PHOTOGRAPHY
3, 0/6
Prerequisite: FAR 220. Introduction to current studio practices used to produce still photographs for commercial and other uses. Medium-format camera, view camera, and studio-lighting techniques. Emphasis on directed and fabricated photographic images. Professional-quality camera, hand-held light meter, and tripod required.

FAR 331
INTERMEDIATE PRINTMAKING I
3, 4/0
Prerequisite: FAR 230. Continuation of FAR 230. Emphasis on personal expression and creative possibilities. Includes lecture, demonstrations, and studio experience.

FAR 332
INTERMEDIATE PRINTMAKING II
3, 0/6
Prerequisite: FAR 331. Continued exploration of printmaking with emphasis on personal expression and creative possibilities. Includes lecture, demonstrations, and studio experience.

FAR 333
ADVANCED PRINTMAKING
3-9, 0/6
Prerequisites: FAR 331 and FAR 332. Advanced printmaking. Media determined by the student in consultation with the instructor. Includes lecture and studio experiences. May be repeated three times.

FAR 335
PAPERMAKING
3-9, 4/0
Prerequisite: One studio course in fine arts or design. The theory and practice of handmade papermaking involving demonstrations, lectures, and studio experience. Required for B.F.A. printmaking majors.

FAR 341
INTERMEDIATE SCULPTURE I
3, 4/0
Prerequisite: FAR 240. Further exploration of sculptural form with more complete study of numerous sculptural approaches and techniques. Practice in planning and executing sculpture projects.

FAR 342
INTERMEDIATE SCULPTURE II
3, 4/0
Prerequisite: FAR 341. Continuation of FAR 341 with further emphasis on exploration of variations within each technique and approach. Development of personal modes of expression.

FAR 343
ADVANCED SCULPTURE
1-9, 4/0
Prerequisite: FAR 342. Concentration on individually selected areas of development in sculpture based on personal interest, needs, and experience. May be repeated three times.

FAR 345
FIGURE MODELING
3, 4/0
Prerequisite: FAR 240. Figure modeling as a basic sculptural discipline. Portrayal and interpretation of the human form. Anatomy lectures and work with live models.

FAR 346
SCULPTURE IN SIENA
3, 3/0
Prerequisite: FAR 240 (for art credit); no prerequisite for non-art credit. Upper-level course in sculpture taught in Siena, Italy. Students work at their level of experience, in the materials and techniques available in Siena.

FAR 352
ART AND CULTURE OF ISLAM
3, 3/0
Prerequisites: FAR 250 and FAR 251. The art of Islam in its cultural context, beginning in the seventh century A.D. and terminating in the twentieth century A.D. The development of Islamic art in relation to the Islamic system of life and belief and regional variations in Islamic art, both sacred and secular are explored throughout the eastern Mediterranean, the Medieval West and the Near East.
Equivalent course: FAR352W

FAR 353
ART AND CULTURE OF EGYPT AND THE NEAR EAST
3, 3/0
Prerequisites: FAR 250 and FAR 251. The ancient art and culture of Egypt and the Near East from their beginnings in the Neolithic period circa ninth millennium B.C. through the Roman conquest. The cultural and environmental context of art in Egypt and the Near East with emphasis on the development of civilization in the fourth millennium B.C., on craft specialization, and on ethnic diversity resulting in regional styles in art.
Equivalent course: FAR353W

FAR 354
ART AND CULTURE OF GREECE
3, 3/0
Prerequisites: FAR 250 and FAR 251. The history of art in the cultural and environmental context of Greece from its beginnings in the Neolithic period, ca. 6000 B.C. through the Roman Conquest (first century B.C.). The architecture, sculpture, painting, and minor arts of Greece studied in their cultural context.
Equivalent course: FAR354W

FAR 356
EARLY MEDIEVAL ART
3, 3/0
Prerequisites: FAR 250 and FAR 251. The art and culture of Europe, Byzantium, and the Near East in the context of the development of Christianity from its early roots through the early twelfth century A.D. Regional forms in art, including sacred and secular building construction, manuscript illumination, metalworking, enameling, and sculpture are examined with emphasis on historical context and religious and philosophical meaning.
Equivalent course: FAR356W

FAR 357
LATE MEDIEVAL ART
3, 3/0
Prerequisites: FAR 250 and FAR 251. Architecture, sculpture, painting and the decorative arts of the period from ca. 1100 A.D. through the end of the fourteenth century A.D. The new aesthetic of Gothic in the context of philosophical and theological developments in Western Europe, the Crusades, and the growth of cities.
Equivalent course: FAR357W

FAR 358
EARLY RENAISSANCE ART IN ITALY
3, 3/0
Prerequisites: FAR 250 and FAR 251, except in Siena. Painting, sculpture, and architecture of fifteenth-century Italy. Special attention to Donatello, Brunelleschi, and Alberti. Consideration of important earlier artists and movements, and of the aesthetic implications of the rebirth of classical tradition in Western civilization.

FAR 359
HIGH RENAISSANCE AND MANNERISM
3, 3/0
Prerequisites: FAR 250 and FAR 251. Italian art and architecture of the sixteenth century. Special attention to Bramante, Leonardo, Raphael, and Michelangelo, and the emergence of Mannerism.
Equivalent course: FAR359W

FAR 361
ITALIAN BAROQUE ART
3, 3/0
Prerequisites: FAR 250 and FAR 251. Architecture, sculpture, and painting in Italy during the seventeenth and eighteenth centuries. Emphasis on key centers such as Rome, Venice, Turin, and Naples.

FAR 362
NINETEENTH-CENTURY ART
3, 3/0
Prerequisites: FAR 250 and FAR 251. Architecture from the neoclassicism of the Adam brothers to the skyscraper. Painting from David to Cézanne in France, the Nazarenes, and Pre-Raphaelites in Germany and England. Sculpture from Houdon and Canova to Rodin in relationship to the social, political, economic, and intellectual climate of the times.

FAR 363
TWENTIETH-CENTURY ART
3, 3/0
Prerequisites: FAR 250 and FAR 251. Major trends and works of the twentieth century. Emphasis on historical, artistic, judgmental, and cultural meanings as they reflect twentieth-century and past civilizations. Includes painting, sculpture, architecture, and other areas.
Equivalent course: FAR363W

FAR 364
ART AFTER 1940
3, 3/0
Prerequisites: FAR 250 and FAR 251. Survey of modern and contemporary art in the United States and Europe from approximately 1940 to the present. Painting, sculpture, performance, and video art will be examined in terms of style and/or political-historical contexts. Among others, the course examines the art of Jackson Pollack, Andy Warhol, Lucian Freud, Romare Bearden, Maya Lin, Cindy Sherman, and Mark Tansey.

FAR 365
AMERICAN ART I
3, 3/0
Prerequisites: FAR 250 and FAR 251. Architecture, painting, and sculpture in the United States from the seventeenth century to World War I.

FAR 367
BAROQUE OF NORTHERN EUROPE
3, 3/0
Prerequisites: FAR 250 and FAR 251. Architecture, sculpture, and painting of the seventeenth and eighteenth centuries in Northern Europe. Emphasis on development in France, Holland, and Germany.
Equivalent course: FAR367W

FAR 369
ART OF THE MIDDLE AGES
3, 3/0
Prerequisite: Junior status or permission of instructor. Art of the Middle Ages from the Early Christian period through the end of the Gothic period (ca. third century A.D. - fourteenth century A.D.). Reading, analysis, lecture and discussion of the styles, cultural contexts and regional variations in the medieval art of Europe, the Mediterranean, and the Near East.

FAR 371
ART CRITICISM AND THEORY
3, 3/0
Prerequisite: Junior status or permission of instructor. Modern and Post-Modern art criticism and theory in a historical context; reading, analysis, lecture, and discussion of selected texts pertaining to Formalism, Iconography and Semiotics, Modernism, Post-Modernism, Media and Communication, Gender, the "Other" and Institutional Critique.

FAR 372
MASTERWORKS OF ARCHITECTURE
3, 0/0
Introduction to masterworks of architecture, emphasizing architecture as a living organism. Buildings selected from various periods and cultures. Styles from early civilizations to the present day, including places of worship and interment, public and commercial structures, and private residences.
Equivalent course: FAR372W

FAR 373
VENETIAN ART AND CULTURE, 1300-1800
3, 3/0
Prerequisites: Art History I (FAR 250) and II (FAR 251)The history of Venetian architecture, sculpture, and painting considered within historical, geographical and cultural contexts from the fourteenth through the eighteenth century. Students will undertake original research and will carry out individual projects.

FAR 380
ART OF AFRICA
3, 3/0
The history of art in Africa from prehistory through the twentieth century. Arts from diverse regions of the continent are examined in their cultural context, with an emphasis on local and regional variations in style and iconography in the domestic, sacred, and royal arts. African responses to the development of slavery, imperialism, and other external stimuli are considered in relation to the use and trade of raw materials and the creation of new symbolic forms.

FAR 389
TOPICS COURSE
3, 0/0

FAR 400
DRAWING IV
3, 0/6
Prerequisite: FAR 300. Advanced drawing with media and content based on individual needs. Concentration on individually selected area of development in drawing. Use of model. Lecture and studio experiences. Course may be repeated twice.

FAR 410
SENIOR STUDIO IN PAINTING
6, 8/0
Prerequisites: FAR 313, painting major, senior status. A 6 credit-hour concentration of studio work. Students plan and execute a series of problems and projects in consultation with major adviser.

FAR 420
SENIOR STUDIO IN PHOTOGRAPHY
6, 0/12
Prerequisites: FAR 323, photography major, senior status. A 6 credit-hour concentration of studio work by the senior major in photography. Students outline, plan, and execute a complex and related series of pictures to be made during the semester, which result in a skillful, intelligent, and coherent body of work.

FAR 430
SENIOR STUDIO IN PRINTMAKING
6, 8/0
Prerequisites: FAR 333, printmaking major, senior status. A 6 credit-hour concentration of studio work. Students plan and execute a series of problems and projects in consultation with major adviser.

FAR 440
SENIOR STUDIO IN SCULPTURE
6, 8/0
Prerequisites: FAR 343, sculpture major, senior status. A 6-credit-hour concentration of studio work. Students plan and execute a series of problems and projects in consultation with major adviser.

FAR 469
ART AND ARCHITECTURE IN SIENA
3, 0/0
Firsthand study of Gothic and Renaissance art in Siena, Italy. Includes classroom lectures and visits to the city's major monuments and collections.

FAR 470
SENIOR SEMINAR IN FINE ARTS
3, 3/0
Prerequisites: FAR 313, FAR 323, FAR 333, or FAR 343; fine arts major. Final evaluative process regarded as a culminating experience in the program. Discussions and lectures in major areas. Theory and significance of selected problems. Critical analysis of the student's work resulting in the preparation of a professional portfolio.

Equivalent course: FAR470W

FAR 471
SENIOR SEMINAR IN ART HISTORY
3, 3/0

Prerequisites: FAR 454, FAR 457, and FAR 459; senior status; art history major; or permission of instructor. Readings, discussions, and research on selected problems in the history of art from antiquity to the twentieth century. Emphasis on gathering and interpreting source material.

FAR 488
INTERNSHIP
1-15, 0/0

Prerequisites: Permission of faculty supervisor; minimum cumulative GPA of 2.0; background of courses or experiences within area of interest; permission of student adviser or major department chair and supervising faculty member and chair of credit-granting department. Guided, supervised field experiences (experiential learning).

FAR 495
SPECIAL PROJECT
1-3, 0/0

FAR 497
WORKSHOP
3, 0/0

FAR 499
INDEPENDENT STUDY
3-12, 0/0

FIN - FINANCE

FIN 110
PERSONAL FINANCE
3, 3/0

Prerequisite: Successful completion of mathematics basic skills competency requirement. Basics of personal and household finance. Saving, debt reduction, home and automobile financing, retirement planning, investment, and insurance.
Equivalent course: ECO110

FIN 314
CORPORATION FINANCE
3, 3/0

Prerequisites: ECO 201, BUS 312. Introduction to analytical techniques and terminology of corporate financial management. Includes the financial environment, yield-curve analysis, ratio analysis, the DuPont system, proforma balance sheets and income statements, the Capital Asset Pricing Model, the intrinsic value of stocks and bonds, the time value of money, capital budgeting, and working capital management.
Equivalent course: ECO314

FIN 345
ESTATE PLANNING
3, 3/0

Prerequisite: Upper-division status. Provides financial security during retirement years and facilitates the intended and orderly disposition of property upon disability or death. Addresses concepts and techniques of lifetime financial planning that may lead to increases in one's estate and the conservation of existing assets. Includes a critical evaluation of traditional planning techniques and analysis of major advanced methods, including various living trusts, irrevocable life insurance trusts, charitable remainder trusts, and family-limited partnerships.
Equivalent course: ECO345

FIN 370
TECHNICAL ANALYSIS OF FINANCIAL MARKETS
3, 3/0

Study of the market action of financial products such as securities, bonds, futures, and derivatives through the use of charts and figures. Effects of business, economic, and social "realities" and perceptions on price in financial markets. Market models and theory and the practices and instruments of market players. Technical analysis as a forecasting tool of both market and economic trends in various time frames.

FIN 400
INTERNATIONAL FINANCE
3, 3/0

Prerequisites: ECO 201, ECO 202, and FIN 314; ECO 308 recommended. Basic theories in international finance and applications, including analysis of exchange-rate markets, international capital markets, multinational capital budgeting, cash management, and international banking. Provides a strong background in international financial markets and international financial policy.
Equivalent course: ECO400

FIN 414
INVESTMENT MANAGEMENT
3, 3/0

Prerequisite: FIN 314. Operating and efficiency characteristics of security markets. The application of institutional, technical, and theoretical approaches to security analysis and evaluation of investment portfolios.
Equivalent course: ECO414

FIN 415
CASES IN CORPORATION FINANCE
3, 3/0

Prerequisite: FIN 314; ECO 307 recommended. Application of the case approach to problems in business finance. Includes working capital financing, term borrowing, capital budgeting, and mergers and acquisitions.
Equivalent course: ECO415

FIN 416
ADVANCED CORPORATION FINANCE
3, 3/0

Prerequisites: ECO 307 and FIN 314. Advanced study of the practice and theory of corporation finance, focusing on topics not covered in introductory corporation finance. Includes advanced debt policy, options, leasing, mergers, international financial management, and pension plans.
Equivalent course: ECO416

FIN 417
DERIVATIVE SECURITIES
3, 3/0

Prerequisite: FIN 314. How modern securities are created from their basic components. Includes circus swaps, artificial Treasury bills, artificial cash, synthetic puts, and portfolio insurance products.
Equivalent course: ECO417

FIN 418
BOND MARKETS
3, 3/0

Prerequisite: FIN 314. Introduction to bond management. Includes bond pricing, yield measurements, return measurements, duration, convexity, Treasury securities, agency securities, corporate debt, municipal bonds, the term structure of interest rates, mortgage loans, pass-through securities, CMOs, return characteristics of derivative products, and bond hedging using options and futures.
Equivalent course: ECO418

FIN 499
INDEPENDENT STUDY
3-12, 0/0

FLE - FOREIGN LANGUAGE EDUCATION

FLE 201
INTRODUCTION TO TECHNOLOGY IN FOREIGN LANGUAGE EDUCATION
3, 3/0; TSIF

Prerequisite: Official enrollment in French or Spanish foreign language education program. Introduction to the uses and limitations of technology in language instruction with particular emphasis on the principled use of computer-assisted instruction, situated within standards- and research-based language pedagogy.

FLE 240
INTRODUCTION TO LINGUISTICS

3, 3/0

A general introduction to the study of language, including syntax, morphology, phonetics, phonology, semantics, sociolinguistics, discourse analysis, and language change.

FLE 300
INTRODUCTION TO THE FOREIGN LANGUAGE CLASSROOM

3, 3/0

Prerequisites: FRE/SPA 302; consent of foreign language education coordinator. Introduction to the research and standards that inform professional foreign language teaching. Thirty-five clock hours in a middle, high, or senior high school in a variety of field-based tasks. Conducted by school and college staff.

FLE 340
SECOND LANGUAGE ACQUISITION AND LITERACY

3, 3/0

Prerequisites: Consent of foreign language education coordinator. Introduction to the main components that underpin second-language acquisition and literacy theory, including inter-language systems and sociocultural, psychological, and personality factors. Classroom observations in a middle, high, or senior high school. Conducted by school and college staff. Required for all B.S. French and Spanish Education majors (BS-AH-FRS/SPS) and Foreign Language Education Postbaccalaureate Teaching Certification (PBC-AH-FRS/SPS) students.

FLE 401
TEACHING FOREIGN LANGUAGE IN MIDDLE AND HIGH SCHOOLS

3, 3/0

Prerequisites or corequisites: Completion of the ACTFL Oral Proficiency Interview. FLE 300, EDF 303, and EDF 403. Exploration of the research and standards that inform professional foreign language teaching. Students in modern and classical languages teacher certification programs should take this course immediately before FLE 407 and FLE 408 (student teaching). Conducted by school and college staff.
Equivalent course: FLE401

FLE 407
STUDENT TEACHING OF FOREIGN LANGUAGES IN THE MIDDLE/JUNIOR HIGH SCHOOL

6, 0/0

Prerequisites: Minimum GPA of 2.5 for all requirements in language of specialization and in professional education; minimum grade of C in FLE 405 and FLE 406; consent of modern and classical languages education coordinator. Teaching under supervision in a middle school or junior high school five days a week, with additional participation in school program. Evaluation by college and school personnel.
Equivalent course: SED407

FLE 408
STUDENT TEACHING OF FOREIGN LANGUAGES IN THE HIGH SCHOOL

6, 0/0

Prerequisites: Minimum GPA of 2.5 for all requirements in language of specialization and in professional education; minimum grade of C in FLE 405 and FLE 406; consent of modern and classical languages education coordinator. Teaching under supervision in a senior high school five days a week, with additional participation in school program. Evaluation by college and school personnel.
Equivalent course: SED408

FLE 497
WORKSHOP

3, 0/0

FLE 499
INDEPENDENT STUDY

1-12, 0/0

FOR - FORENSIC SCIENCE

FOR 122
SCIENTIFIC CRIMINAL EVIDENCE ANALYSIS

3, 3/0; TSIF

Scientific techniques that have been adapted and applied to the detection and investigation of crimes. Collection techniques, analytical processes, and value of scientific evidence from the point of view of forensic scientists. Different disciplines, specialties, and careers available in forensic science.

FOR 312
CHEMISTRY AND CRIMINALISTICS

3, 3/0; EMGC

Prerequisites: FOR 122, CHE 201, and MAT 311. CHE 301 or concurrent. Chemistry as an investigative aid in the process of criminal justice. General chemical techniques used in criminal investigations. Relevant laws and legal issues that impact on the scientific evidence. The overall function of the criminalist from the gathering
Equivalent course: CHE312

FOR 412
INTERNSHIP IN CRIMINALISTICS

1-3, 0/0

Prerequisites: CHE 312, CHE 403, permission of instructor, and senior status. Field experience in a forensic laboratory involving routine and research work in forensic chemistry. Note: Police laboratories sometimes require background checks and/or drug screens prior to placement. While not required by the college, these can affect students' abilities to complete the program.

Equivalent course: CHE412, CHE412W

FOR 414
FORENSIC CHEMISTRY LABORATORY

4, 2/4

Prerequisites: CHE 112. Instruction and laboratory experiences in a wide range of forensic chemistry topics, including experiments in DNA for human identification, identification of illicit drugs, determination of blood alcohol and other blood work, hair and fiber analysis, arson, toxicology, crime-scene processing, fingerprint examination, and analysis of firearms and bullets. Careers in forensic science and practice presenting scientific evidence.

Equivalent course: CHE414

FOR 416
OPTICAL MICROSCOPY

2, 1/2

Prerequisites: CHE 312 and PHY 112. Introductory optical microscopy for forensic physical analysis; fundamental theory of microscopy; physical properties of materials (refractive index, density, etc.); basic topics in optics (electromagnetic radiation, refraction, reflection, interference, etc.); operation, varieties, and capabilities of optical microscopes; and applications in analysis of physical evidence, such as pattern analysis, hair, fiber, and minerals.

FOR 495
SPECIAL PROJECT

1-3, 0/0

Prerequisite: Faculty project adviser permission.

FRE - FRENCH

FRE 101
BEGINNING FRENCH I

3, 3/0; FLA

Fundamentals of French with an emphasis on the spoken and written language.

FRE 102
BEGINNING FRENCH II

3, 3/0; FLA

Prerequisite: FRE 101. Continuation of FRE 101. Fundamentals of French with an emphasis on the spoken and written language.

FRE 201
INTERMEDIATE FRENCH I
3, 3/0
Prerequisite: FRE 102. Further development of basic skills with emphasis on reading and writing.

FRE 202
INTERMEDIATE FRENCH II
3, 3/0
Prerequisite: FRE 201. Continuation of FRE 201. Further development of basic skills with emphasis on reading and writing.

FRE 301
FRENCH CONVERSATION AND COMPOSITION
3, 3/0
Prerequisite: FRE 202. Practice in spoken and written French.

FRE 302
FRENCH CONVERSATION AND COMPOSITION
3, 3/0
Prerequisite: FRE 202. Practice in spoken and written French.

FRE 305
PHONETICS AND ORTHOGRAPHY
3, 3/0
Prerequisites: FRE 301 and FRE 302. Introduction to French phonetics and applied linguistics.

FRE 306
LITERATURE AND CULTURE OF FRANCE FROM PREHISTORY TO THE RENAISSANCE
3, 3/0
Prerequisite: FRE 301 or 302. Survey of the literature of France from prehistory to the Renaissance and its relationship to French history and culture.

FRE 307
LITERATURE AND CULTURE OF FRANCE FROM RENAISSANCE TO REVOLUTION
3, 3/0
Prerequisite: FRE 301 or 302. Survey of literature of France in the sixteenth, seventeenth, and eighteenth centuries and its relationship to French history and culture.

FRE 308
LITERATURE AND CULTURE OF FRANCE IN THE NINETEENTH CENTURY
3, 3/0
Prerequisite: FRE 301 or FRE 302. Survey of literature of France in the nineteenth century and its relationship to French history and culture.

FRE 309
LITERATURE AND CULTURE OF FRANCE IN THE TWENTIETH CENTURY
3, 3/0
Prerequisite: FRE 301 or FRE 302. Survey of the literature of France in the twentieth century and its relationship to French history and culture.

FRE 331
FRENCH LITERATURE IN TRANSLATION
3, 3/0
Selected masterpieces of contemporary French literature in translation. Knowledge of French not required. French majors and minors must obtain department chair and permission of course instructor.
Equivalent courses: ENG331, FRE331W

FRE 412
STUDIES IN THE FRENCH NOVEL
3, 3/0
Prerequisite: FRE 307, FRE 308, or FRE 309. French and Francophone novels from the Middle Ages to the present. Includes historical introduction to the novel as social phenomenon and introduction to the formal development of the French and Francophone novel. May be limited to one historical period. May be repeated once where content varies.

FRE 415
ADVANCED GRAMMAR AND COMPOSITION
3, 3/0
Prerequisites: FRE 301 and FRE 302. Advanced topics of French grammar with work in French composition.

FRE 416
ADVANCED CONVERSATION AND COMPOSITION
3, 3/0
Prerequisites: FRE 301 and FRE 302. Advanced conversation dealing with contemporary French civilization and institutions. Recommended for secondary education majors.

FRE 495
SPECIAL PROJECT
1-3, 0/0

FRE 496
SEMINAR I
3, 3/0
Prerequisite: Permission of instructor. Topic chosen by instructor.

FRE 497
SEMINAR II
1-3, 3/0
Prerequisite: Permission of instructor. Topic chosen by instructor.

FTT - FASHION AND TEXTILE TECHNOLOGY

FTT 100
CONSTRUCTION FUNDAMENTALS
1, 1/1
Fundamental construction techniques used in the apparel industry; proficiency in basic construction details using both domestic and industrial sewing equipment.

FTT 109
FUNDAMENTALS OF APPAREL CONSTRUCTION
3, 2/2
Basic beginning techniques of apparel construction using commercially available patterns; introduction to sewing equipment, measuring techniques, fabric selection, fit, and alterations; evaluation and comparison of garments completed as assignments to similar apparel available through retail sources.

FTT 110
SURVEY OF THE TEXTILE AND APPAREL INDUSTRY
3, 3/0
Introductory survey course of the global textile and fashion industry; overview of the textile/apparel design product development process; design principles and elements; quality of the finished product; how fashion designers, consumer groups, and marketing researchers influence design.
Equivalent courses: FST107, FTT107

FTT 150
INTRODUCTION TO FASHION MERCHANDISING
3, 3/0
An introduction to fashion merchandising, including basic market structure, operational patterns in merchandising, and the marketing of fashion.

FTT 200
INTRODUCTION TO HAND KNITTING
3, 2/2
Gain experience in beginning hand-knit design. Emphasis on the basic principles of hand knitting, structure and types of hand stitches, traditional and ethnic knit designs, and development of original hand-knit designs.

FTT 206
INTRODUCTION TO TEXTILES
3, 3/0
Introduction to the care, selection, and use of textile products; study of fibers, yarns, fabric construction, color application, and finishes in relation to fabric behavior, fabric maintenance, and fabric performance. Ap-

appropriate for majors and non-majors with little or no background in chemistry.

Equivalent course: FST206

FTT 208
INTRODUCTION TO FASHION TECHNOLOGIES
3, 2/2

Introduction to a variety of off-the-shelf software programs; preliminary multidisciplinary hands-on experience of how they are used in the fashion industry.

Equivalent course: FST208

FTT 224
PATTERN DRAFTING AND GRADING FOR INDUSTRY
3, 2/2

Prerequisite: FTT 109. Introduction to technical patternmaking skills; emphasis on development of basic drafting and grading skills; students produce a drafted sloper that will be graded into a graded nest.

Equivalent course: FTT325

FTT 250
FASHION BUYING AND MERCHANDISING PRINCIPLES
3, 3/0

Prerequisite: FTT 150. Mathematical factors involved in profitable merchandising; concepts, practices, and procedures, as well as the calculations and interpretations of figures related to operations of stores.

FTT 300
KNIT TECHNOLOGY I
3, 2/2

Prerequisite: FTT 206 or permission of instructor. Basic principles of computerized machine weft knitting; understanding the relationships of yarn, color, stitch types, and gauge; charting and producing stitch designs by machine.

Equivalent course: FTT414

FTT 303
FASHION ILLUSTRATION/DRAWING I
3, 2/2

Foundation skills in fashion illustration; the fashion figure, poses, and garment and fabric sketching; includes illustration of a garment collection for professional portfolio development.

Equivalent courses: FST303, THA303

FTT 304
PATTERN DEVELOPMENT FOR INDUSTRY
3, 2/2

Prerequisite: FTT 208 or permission of instructor. Creation of original painted motifs for printed fashion fabrics that are targeted for the apparel and home product market; professional methods of transforming a variety of media into commercial digital surface patterns (using off-the-shelf software); color reduction and cleaning; basic repeat development; color-way development based on awareness of current color and graphic trends, marketability, and industry standards.

FTT 306
TEXTILE EVALUATION
3, 2/2

Prerequisites: FTT 110, FTT 206. Advanced-level course in textiles; provides an understanding of fabric-performance evaluation; emphasis on standard test methods used by textile/apparel industry; equipment and techniques used in determining selected physical and aesthetic properties of textile products.

Equivalent course: FTT336

FTT 308
FASHION CAD (COMPUTER AIDED DESIGN)
3, 2/2

Prerequisite: FTT 208 or permission of instructor. Intermediate, multidisciplinary skill expansion for apparel/textile surface product design, development, and presentation using world-standard off-the-shelf design software and specialized plug-ins.

FTT 310
SEWN PRODUCTS INDUSTRY
3, 3/0

Prerequisites: FTT 306 or permission of instructor. Overview of the apparel manufacturing industry: structure and organization of the industry, design sources, techniques of pattern development, selection of raw materials, manufacturing processes, and quality specifications of the finished product.

Equivalent courses: FST410, FTT310W

FTT 324
INDUSTRIAL APPAREL ASSEMBLY
3, 2/2

Prerequisite: FTT 224. Focus on design room techniques utilized in both couture and mass production of apparel. Emphasis on equipment; appropriate selection of style, color, and fiber content of construction materials; alteration techniques used to achieve proper-fitting garments and mastery of selected couture; and industrial construction processes.

FTT 325
PATTERN DRAFTING AND GRADING
3, 2/2

Prerequisite: FTT 109. Introduction to technical patternmaking skills; emphasis on the development of basic drafting and grading skills. Students produce a drafted sloper that will be graded into a graded nest.

FTT 326
APPAREL DESIGN I: FLAT PATTERN
3, 2/2

Prerequisites: FTT 109 and FTT 325 or permission of instructor. Introduction to flat-pattern method of pattern making; emphasis on design and completion of selected items of apparel developed from a master pattern.

FTT 327
APPAREL DESIGN II: COMPUTERIZED PATTERN MAKING
3, 2/2

Prerequisites: FTT 325 and FTT 326 or permission of instructor. Apparel patterns modified and graded through the use of industrial CAD/CAM software; hand pattern drafting techniques adapted to the computer by grading a basic sloper and applying pattern manipulations in order to create a variety of garment style patterns for mass production.

FTT 328
APPAREL DESIGN III: DRAPING
3, 2/2

Prerequisites: FTT 109, FTT 325, and FTT 326 or permission of instructor. Clothing design using the draping technique is a pattern-making method that is visual and aesthetic. Emphasis is on the creation of basic garment patterns using draping method. Experience with the manipulation of a variety of two-dimensional fabrics to cover three-dimensional forms using a variety of fabrics to achieve individualized designs.

FTT 348
HISTORY OF COSTUME
3, 3/0

Survey of dress from earliest period to the present with emphasis on the societal influences that evoke changes in and recurrence of fashion trends.

FTT 349
HISTORY OF TEXTILES
3, 3/0; NWIF

Prerequisites: FTT 206 and junior standing or permission of instructor. Political, cultural, and economic effects of textile production throughout the world. Use of fibers, yarns, fabric construction, color application, and finishes in relation to development of technology, labor movements, and social issues during historic periods on a global basis.

Equivalent courses: FTT349W, FTT449

FTT 350
FASHION MERCHANDISING APPLICATIONS
3, 3/0

Prerequisite: FTT 250. Hands-on experience with spreadsheet package used in the retailing industry for tasks, such as inventory management, pricing, assortment planning, etc. Strategies for next season/year based on analysis and evaluation of data. Preparation of profit/loss and presentation of financial report using PowerPoint.

FTT 355

RESEARCH IN FASHION MERCHANDISING

3, 3/0

Prerequisite: FTT 150. Introduction to merchandising research; exploration of various research techniques; characteristics of qualitative and quantitative studies.

FTT 358

FASHION FORECASTING AND CONSUMER ISSUES

3, 2/2

Prerequisite: FTT 110 or permission of instructor. Study of designer's work; consumer segmentation and adoption process; analysis of current trends in apparel in order to forecast for specific markets; storyboard presentation.

FTT 410

ADVANCED PRODUCT DEVELOPMENT

3, 3/0

Prerequisite: FTT 306, 310, FTT 326, or permission of instructor. Advanced apparel production; principles and practices of sourcing raw materials and the costing of finished garments; types of production systems and the sequence of construction operations used to produce selected items of apparel.

FTT 412

CAD: APPAREL AND TEXTILE DESIGN FOR INDUSTRY

3, 2/2

Prerequisite: FTT 206, FTT 208, or permission of instructor. Advanced techniques for off-the-shelf design software; development of basic understanding and design skills on an industrial print pattern design system; market research relative to textile/apparel coordinate product development; advanced textile/apparel coordinate product development; advanced apparel/textile design portfolio development for professional product presentation.

FTT 413

CAD: WEAVE FOR INDUSTRY

3, 2/2

Prerequisite: FTT 206, FTT 208, or permission of instructor. Transition of designing woven designs on paper to industrial design software; develop colorways for repeat designs on 8 24harness looms; designs are applied to end products for merchandising collections targeting specific markets; advanced portfolio-quality presentations.

FTT 450

ISSUES IN FASHION AND TEXTILE INDUSTRY

3, 3/0

Prerequisites: FTT 110, FTT 206, FTT 306, FTT 310 or permission of instructor. Integration of tracks in fashion textile technology. Overview of global issues facing the textile and apparel industry. Differing methods of organization and their inherent structural characteristics; national and international scope of the industry related to textiles, merchandising, and apparel manufacturing companies. Discussion of contemporary issues in American textile and apparel industry, including governmental controls, global trade policies, and labor issues.

Equivalent course: FTT450W

FTT 451

SENIOR PROJECT

3, 3/0

Prerequisites: Completion of all required courses up to and including FTT 300-level core courses, and all 300-level courses required for the concentration: apparel design, fashion merchandising, and product development or permission of instructor. Visiting students exempt. Culminating experience taken by senior-level students after completion of all prerequisites; projects will vary from year to year but will provide students with the opportunity to integrate all previous academic experiences depending on their area of concentration; projects will include the design, production, and merchandising of an apparel line.

FTT 452

FASHION SHOW PRODUCTION

3, 2/2

Prerequisite: Upper-division status or permission of instructor. Planning and production of a fashion-promotion event. Utilization of fashion skills to participate in individual and group activities leading to the presentation of a major fashion show.

FTT 455

ISSUES IN MERCHANDISING AND FASHION RETAILING

3, 3/0

Prerequisite: FTT 250 or permission of instructor. Theory, principles, and practice of apparel merchandising to retail sector; marketing structures at retail level; responsibilities at management level; financial and control functions; case-study analysis.

FTT 488

INTERNSHIP/FIELD EXPERIENCE

1-6, 0/0

Prerequisites: Upper-division status and permission of instructor. Provides an opportunity to integrate academic knowledge in guided and supervised field experiences (experiential learning) with institutions, businesses and educational organizations, social and/or government agencies in area of interest to students as part of their degree program. Approval for experiential learning situations must be obtained from either the student's adviser or the department chair within which the student is a major, the supervising faculty member, and the chair of the department within which the credit will be given. Internship includes structured, supervised field participation, meetings with instructor for response to experiences, and written or other assignments. Students must have at least a 2.5 GPA and background within the area of interest to be considered for this experience. May be taken for a maximum of 6 credits.

FTT 495

SPECIAL PROJECT

1-3, 0/0

FTT 497

WORKSHOP

1-3, 0/0

FTT 499

INDEPENDENT STUDY

3-12, 0/0

GEG - GEOGRAPHY

GEG 101

WORLD NATURAL ENVIRONMENTS

3, 3/0; NSIF

Nature of geography; earth-sun relationships; maps and map interpretation; and classification, distribution, and origins of the major elements of the natural environment: weather, climates, soils, natural vegetation, landforms, and developmental processes.

GEG 102

HUMAN GEOGRAPHY

3, 3/0; SSIF

Introduction to cultural geography through the application of five themes: religion, diffusion, ecology, interaction, and landscape. The distribution of value systems, ethnicity, language, religion, and population as indices of human variety. Cultural impacts of globalization.

GEG 120

CAVERN STUDIES

1, 1/0

The development and unique environment of solution caves. Students will explore caves while on a weekend field trip, studying cave development and the formation of depositional features. Other topics include cave climatology, biology, chemistry, and the application of survey/mapping techniques.

GEG 199

INTRODUCTION TO COMPUTER USE IN THE SOCIAL SCIENCES

3, 3/0

Hands-on introduction to the application of computers to applied social research problems. Includes review of past practices, current uses, and future trends. Students analyze data using computers to develop insight into the use of computers for social improvement.

Equivalent courses: SOC199, SST199

GEG 206
GEOGRAPHY OF NEW YORK STATE
3, 3/0
Landforms, regions, climates, and natural resources; distribution of population; location and functions of cities; development of transportation; utilization and conservation of soil, mineral, forest, wildlife, and water resources; industrial development.

GEG 241
METEOROLOGY
3, 3/0; NSIF
An introduction to weather, including the makeup of the atmosphere, seasonality, heat and radiation balance, temperature, humidity, and precipitation, atmospheric motion, atmospheric pressure and wind, air masses and fronts, severe weather, meteorological instrumentation, local weather, climate controls, and synoptic forecasting. Includes laboratory modules. Emphasis on the relationship between weather systems, technology, and humans.
Equivalent course: GES241

GEG 300
WORLD REGIONAL GEOGRAPHY
3, 3/0
National and state geography standards; concept of region; map essentials; physical, cultural, economic, and political geography fundamentals within selected regions.
Equivalent course: GEG200

GEG 303
GLOBAL CLIMATOLOGY
3, 3/0
Prerequisite: GEG 101. Study of the earth's climate through analysis of climatic controls, classification schemes, and feedback cycles. Includes an examination of past climates and global climate change scenarios.
Equivalent course: GEG303W

GEG 305
PRINCIPLES OF ECONOMIC GEOGRAPHY
3, 3/0
Prerequisite: ECO 202. Introduction to the theoretical study of economic geography; location theory; theoretical spatial distribution of economic activities, including agriculture, manufacturing, urban land use, services, and transportation.

GEG 307
CONSERVATION AND ENVIRONMENTAL MANAGEMENT
3, 3/0
Prerequisites: One natural science course. Globalization, recent technological advancement, and effects on resource conservation and environmental management in the face of increased pressure from society. Current resources, globalization of environmental issues and pollution, new technologies and economic impacts.
Equivalent course: GEG307W

GEG 309
URBAN GEOGRAPHY
3, 3/0; DIIF
Prerequisite: One social science course. Internal spatial structure of American metropolitan areas and their relationships. Spatial arrangements of land uses; ethnics, racial and economic composition of the population; dynamics of population growth and change; influence of minorities on cities and suburbs; geographic consequences of poverty and segregation on growth and change; transportation and fiscal problems confronting local governments.
Equivalent course: GEG309W

GEG 310
URBAN TRANSPORTATION PLANNING
3, 3/0
Prerequisite: GEG 309 or PLN 315. Comparative study of the modes of transportation, transportation planning, and the benefits and effects of transportation. Emphasis on application to urban transportation. The importance of accessibility to the development of a modern metropolitan transportation system.
Equivalent course: PLN310

GEG 316
WATERSHED POLLUTION
3, 3/0
Pre-requisites: CHE 101 or equivalent. Important pollutants and toxic chemicals generated by anthropogenic activities and their transport, transformation, and fate within watersheds. Impacts of these pollutants on soil, forest, and aquatic ecosystems using specific case studies.

GEG 320
HISTORICAL GEOGRAPHY OF THE UNITED STATES
3, 3/0
Approach and methods of historical geography, exploration and discovery, regional variation of cultural landscapes, origins and dispersals of selected cultural traits.

GEG 325
REMOTE SENSING AND MAPPING
3, 0/0
Prerequisite: GEG 101 or GEG 307 or GES 101. Fundamental elements of maps, air photographs, and satellite images, and the methodology of interpreting them. Spatial data sources, data presentation, globe and map grids, and the use of maps, air photos, satellite images, and global positioning systems (GPS) to identify, present, and study spatial phenomena.
Equivalent course: PLN325

GEG 330
LAND RESOURCE ANALYSIS AND PLANNING
3, 3/0
Prerequisite: PLN 315. The principles of land resource management with emphasis on land-use patterns, controls, and policies. Attention to urban, suburban, and rural land-use situations.
Equivalent course: PLN330

GEG 340
HISTORICAL-URBAN ANALYSIS OF THE BUFFALO METROPOLITAN AREA
3, 3/0
The metropolitan Buffalo area, the nature of the city, and its growth and problems related to past growth from a historical-geographical viewpoint.
Equivalent course: HIS340

GEG 345
BAHAMAS FIELD EXPERIENCE
3, 1/4
Prerequisites: Sophomore or higher standing. A 10-day field study of San Salvador, Bahamas. Coral reefs, sand flats, karst landscapes, vegetation, dunes, caves, indigenous peoples, Columbus' landfall, historic sites, island culture. Emphasis on lab and field activities.

GEG 359
ARCTIC GEOGRAPHY FROM AN INUIT PERSPECTIVE
3, 3/0; NWIF
Prerequisite: Once Social Science Course. A study of the physical, political, economic and cultural environments of Arctic regions from an Inuit perspective. Topics focus on interaction between the Arctic environment and its peoples before and after Euro-American contact. Students will also study contemporary issues in today's Arctic.

GEG 360
GEOGRAPHY OF ASIA
3, 3/0; NWIF
Prerequisite: One social science course. A regional geographic analysis of south, east, and southeast Asia. Overview of the continent's natural environment. Examination of the principal elements of the cultural environment: demography and ethnicity, urbanization, economy, and political structure. Interaction between the physical and cultural environments.
Equivalent course: GEG205

GEG 362
GEOGRAPHY OF THE UNITED STATES AND CANADA
3, 3/0
Prerequisite: Once Social Science Course. Basic geographic elements of North America including the natural environment, natural resources, economic activities, population, and urbanization.
Equivalent course: GEG202

GEG 364
GEOGRAPHY OF EUROPE
3, 3/0; WCIF
Prerequisite: One social science course. Physiographic regions, landforms, climate, vegetation, soils, and drainage patterns. Culture regions, language, religion, population, migration, politics, economics, and impacts on the natural environment. Interdependence of regions within Europe and within the global context. Excludes the former Soviet Union.
Equivalent course: GEG252

GEG 365
SOIL SCIENCE AND MANAGEMENT
3, 3/0
Prerequisite: GEG 101 or GES 101. Introduction to the study of soils, including physical and chemical properties, weathering and soil formation, productivity and management for agriculture, soil erosion and conservation, engineering properties, soil classification. Includes regular laboratory assignments and fieldwork to enhance understanding of soil properties.

GEG 375
PRINCIPLES OF HYDROLOGY
3, 3/0
Prerequisite: GEG 101 or GES 101. Principles of hydrology and its relationship to water resource management. Emphasis on describing the processes governing surface and groundwater movement. Field trip provides example of the practical application of hydrologic principles.

GEG 382
WEATHER FORECASTING
3, 3/0
Prerequisites: Upper-division status and GEG 101 or GES 241. A focus on synoptic and dynamic meteorology, as applied to weather forecasting. Weather conditions will be diagnosed using various case studies. Learn how to develop and to present weather forecasts. Emphasis on practice and interpretation of daily weather and modeled data.
Equivalent course: GES445

GEG 383
SEVERE AND UNUSUAL WEATHER
3, 3/0
Prerequisites: GEG 101 or GEG 241 or GES 241 or equivalent. In-depth look at meteorological phenomena related to severe and unusual weather-related events and patterns, weather-analysis tools, climate-change outlooks, and social implications; planning and management strategies to prepare and respond to severe and unusual weather.

GEG 384
ATMOSPHERIC SCIENCE
3, 3/0
Prerequisite: Upper-division status. Study of the earth's atmosphere as a unique place. Emphasis on atmospheric structure and composition, dynamics of motion, moisture and clouds, atmospheric chemistry, regional and local air pollution, aurora displays, and optical phenomena. Includes a study of atmospheres ranging from those of other planets to indoor air.

GEG 385
PALEOCLIMATOLOGY
3, 3/0
Prerequisite: GEG 101. Methods and theories used in reconstructing and dating past climates. Focus on the past 2 million years, including proxies such as ice cores, sediment sequences, packrat middens, tree rings, corals, and historical data. Causes of climate change and human interactions emphasized.

GEG 386
APPLIED CLIMATOLOGY
3, 3/0
Prerequisites: Upper-division status; GEG 101, GEG 241 or GES 241. Use of climatic information in various aspects of our lives to solve practical problems with environmental, social, and economic implications. The importance of climate on agriculture, human health, severe weather management, litigation, commerce, architecture, and city planning.

GEG 390
QUANTITATIVE METHODS IN GEOGRAPHY AND PLANNING
3, 3/0
Prerequisites: Upper-division status and GEG 199. Introduction to statistical methods with a focus on spatial and time-series data analysis in geography and planning applications. Statistical theory is reinforced through application of commonly used computer software to solve real world problems.
Equivalent course: PLN390

GEG 396
RESEARCH METHODS
3, 3/0
Prerequisites: GEG 199, GEG 390, and 6 upper division credits in GEG/PLN courses. Research theories, designs, and methods relevant to conducting research in geography and planning. Research designs and methodologies for approaches with human subjects, human/social geography, physical geography, field-based research, and planning projects. Development of a research project proposal.
Equivalent courses: GEG396, PLN396W

GEG 405
URBAN ANALYSIS USING GIS
3, 3/0
Prerequisite: GEG 425; GEG 309. Growth of cities in a national system. Relationships among cities. Regional growth within the national system. Central place theory and urban hierarchies. Role of urban geography in urban planning. The role of planning on a regional scale.

GEG 406
GEOGRAPHY OF RETAILING
3, 3/0
Prerequisites: Upper-division status; ECO 202 or GEG 305. The spatial structure of markets and how geography has a critical role in the location and success of retail activity. Presents the theoretical and practical application of locational analysis for retail businesses. Focus on the use of Geographic Information Systems in the retail location process.

GEG 409
INDUSTRIAL GEOGRAPHY
3, 0/0
Prerequisites: Upper-division status. The manufacturing sector, firms, and industrial location process and activities that have taken place in the United States; production methods and processes; industrial districts and the principal factors that affect the locations of firms; local and regional development; globalization.
Equivalent courses: ECO409, GEG409W

GEG 415
PROSEMINAR
3, 3/0
Investigation, examination, and discussion of topics of current interest in geography. Techniques and analysis of geographic research.

GEG 416
GEOGRAPHIES OF DEVELOPMENT
3, 3/0
Prerequisites: Upper division status. Development theories, progress, issues, and challenges in developing regions around the globe. In-depth analyses of factors influencing development policies and outcomes; impact of globalization on development efforts and practices in developing areas around the world.

GEG 419
GLOBALIZATION, TECHNOLOGY, COMPETITION, AND SERVICE ECONOMIES
3, 3/0; TSIF
Examination of globalization, technological advancements in recent years, and their effects on the service industry and competitiveness of firms and nations. In-depth studies of the U.S. service sector, competitive strategies, globalization, and new technologies.

GEG 421
WATERSHED ANALYSIS
3, 3/0
Prerequisites: Upper-division status; GEG 101 or GES 101. Introduction to the systematic analysis of stream dynamics of watersheds and the im-

part of humans on these dynamics. Emphasizes the importance of physical, chemical, and biological processes in watershed management. Class discussion and a class project will focus on a practical watershed assessment problem.

GEG 423
BIOGEOGRAPHY
3, 3/0

Prerequisite: Upper-division standing. Global patterns of species distributions and the historic, environmental, and biological processes underlying these patterns. Spatial patterns of nature's geographic variation at multiple levels, from individuals to ecosystems to biomes. Impacts of humans and climate change on biogeography.

GEG 425
FUNDAMENTALS OF GIS
3, 3/0

Prerequisite: GEG 199 or CIS 101. Geographic information systems (GIS) and computer cartography. Principles and methods of spatial data automation, models and structures of spatial databases, spatial analysis and map display in computerized environment. Computer mapping principles including scales, map projections, symbolization, coloring strategy, and thematic mapping.

GEG 426
ARCVIEW APPLICATIONS
3, 3/0

Prerequisite: GEG 199 or CIS 101. Experience in the use of the desktop Geographic Information System, ArcView GIS, and its application in a variety of private- and public-industry sectors including retailing, health care, urban and regional planning, and transportation.

GEG 427
CORPORATE APPLICATIONS IN GIS
3, 3/0

Prerequisites: GEG 199 or CIS 101. This course is composed of a series of lectures, class assignments and projects that are designed to teach students the fundamentals and application of Geographic Information Systems (GIS) and geographic analysis within a business environment. Students will learn how to conduct specialized business GIS related projects. These projects range from data integration to market assessment and site assessment.

GEG 428
ENVIRONMENTAL ASSESSMENT AND PLANNING APPLICATIONS IN GIS
3, 1.5/1.5

Prerequisite: GEG 425 or equivalent. Advanced concepts of GIS with a focus on spatial analytical applications in GIS for environmental assessment and planning. GIS theories and software implementations are presented through lecture and hands-on practice to solve real world environmental and planning problems.

GEG 429
ADVANCED TOPICS IN GIS
3, 3/0

Prerequisites: GEG 425; GEG 427 or GEG 428 and GEG 390 or equivalent statistics course. Builds from the topics covered in GEG 425 Fundamentals of GIS, focusing more on digital representation of the human and physical environment, including location referencing from a human perspective, database design, data quality issues (how to identify and document errors), spatial statistical analysis using GIS, the fourth dimension (time) in GIS, and understanding spatial analysis algorithms and models. Introduces programming in a GIS environment.

GEG 430
SENIOR THESIS
3, 3/0

Prerequisites: SOC 300 or PSC 203; GEG 390 and senior geography or planning major. Seminar to do research in geography or planning and presentation of selected research-related topics by the department faculty. Required for geography majors and urban-regional analysis and planning majors.

Equivalent courses: GEG430W, PLN430

GEG 461
ISSUES IN SOUTHEAST ASIA ENVIRONMENT AND SUSTAINABLE DEVELOPMENT
3, 3/0; OCIF

Prerequisite: Junior or senior standing. Geography, environmental problems, and solutions using a sustainable development framework for countries of Southeast Asia. Sustainable development and environmental management theory in the context of case studies for the region.

GEG 478
GLOBAL CHANGE
3, 3/0

Prerequisite: GEG 101. Interdisciplinary study of the principles needed to understand human impacts on the natural environment. Climate variability and global warming; nutrient cycling; land-use issues; connections and feedbacks among climate, ecosystems, and biogeochemistry; impacts of global change on society; policy measures; potential solutions.

GEG 480
AIR POLLUTION APPLICATIONS
3, 3/0

Prerequisites: Upper-division status; GEG 101; GEG 199 or an equivalent course, GEG 384, and GEG 390 or an equivalent course. Receptor, dispersion, and risk assessment modeling techniques to determine the source, fate, and impact of air pollutants. Overview of atmospheric deposition, regional transport, and global circulation models.

GEG 485
INTERACTIVE AND WEB-BASED MAPPING
3, 3/0

Prerequisite: GEG 425. Different approaches to communicating with maps on the Internet. How to create Web-based mapping applications.

GEG 488
INTERNSHIP
1-12, 3/0

Prerequisites: GEG 101 and 6 credit hours of geography or planning coursework at the upper-division level; minimum cumulative GPA of 2.5; background of courses or experience within area of interest; adviser and department chair permission. Guided, supervised field experiences that complement the academic program.

GEG 495
SPECIAL PROJECT
1-3, 0/0

GEG 499
INDEPENDENT STUDY
3-12, 0/0

GER - GERMAN

GER 101
BEGINNING GERMAN I
3, 3/0; FLA

Fundamentals of German with emphasis on the spoken and written language.

GER 102
BEGINNING GERMAN II
3, 3/0; FLA

Prerequisite: GER 101. Continuation of GER 101.

GER 201
INTERMEDIATE GERMAN I
3, 3/0

Prerequisite: GER 102. Further development of basic skills with emphasis on reading and writing.

GER 202
INTERMEDIATE GERMAN II
3, 3/0

Prerequisite: GER 201. Continuation of GER 201.

GER 301
GERMAN CONVERSATION AND COMPOSITION I
3, 3/0
Prerequisite: GER 202. Practice in spoken and written German with emphasis on the spoken language.

GER 302
GERMAN CONVERSATION AND COMPOSITION II
3, 3/0
Prerequisite: GER 202. Practice in spoken and written German with emphasis on the written language.

GER 337
MODERN GERMAN LITERATURE IN TRANSLATION
3, 3/0
Prerequisite: One literature course. Literary trends, ideas, and techniques of modern German literature as manifested in selected works of major German literary figures. German minors must obtain department chair and course instructor permission.
Equivalent courses: GER337W, HUM337

GER 389
TOPICS COURSE
3, 0/0

GER 495
SPECIAL PROJECT
3, 0/0

GER 497
WORKSHOP
3, 0/0

GES - GEOSCIENCES

GES 101
INTRODUCTORY GEOLOGY
3, 3/0; NSIF
Introduction to physical geology; the earth and the processes operating on and within it; the formation of rocks and minerals; volcanoes, earthquakes, mountain building, continental drift, plate tectonics, glaciers, and the ice ages. Concurrent registration in GES 103 is recommended for geology and earth science majors.

GES 102
HISTORICAL GEOLOGY
3, 0/0; NSIF
Introduction to the history of the earth from its formation 4.5 billion years ago. The role of continental drift, seafloor spreading, and plate tectonics in its development. The evolution of life as shown in the fossil record.

GES 103
INTRODUCTORY GEOLOGY LABORATORY
1, 0/2
Prerequisite or corequisite: GES 101. Identification of rocks and minerals. Map and aerial photograph interpretation.

GES 111
GENERAL OCEANOGRAPHY
3, 3/0; NSIF, TSIF
Introduction to the science of the sea, including biological, physical, chemical, geological, and environmental aspects of oceanography.
Equivalent course: GES111W

GES 131
INTRODUCTORY ASTRONOMY
3, 3/0; NSIF
Non-mathematical survey of the astronomical universe. Survey of the sun, planets, ns, comets, stars, and galaxies. Observation, planetarium, and laboratory sessions supplement lectures.

GES 223
ENVIRONMENTAL EARTH SCIENCE
3, 3/0; NSIF, TSIF
An investigation of the impact of society on the natural environment. Examines natural resources; global climate change; and soil, water, and land use issues. The complex interrelationship of global systems and societies' attempts to control or alter them. The unique perspective of geoscientists to environmental issues.

GES 224
GEOLOGIC HAZARDS
3, 3/0; NSIF
Catastrophic geologic events, with an emphasis on earthquakes, volcanism, and landslides. Includes causes, physical effects, prediction, and social implications.

GES 232
THE SOLAR SYSTEM
3, 3/0; NSIF, TSIF
Makeup and characteristics of our solar system; formation hypotheses; geologic processes acting on solar system bodies; comparison of the planets; the search for other solar systems and life elsewhere. Expansion of solar system exploration due to advances in technology and its effect on society.

GES 241
METEOROLOGY
3, 0/0; NSIF
An introduction to weather, including the makeup of the atmosphere, seasonality, heat and radiation balance, temperature, humidity, and precipitation, atmospheric motion, atmospheric pressure and wind, air masses and fronts, severe weather, meteorological instrumentation, local weather, climate controls, and synoptic forecasting. Includes laboratory modules. Emphasis on the relationship between weather systems, technology, and humans.
Equivalent course: GEG241

GES 300
SEDIMENTOLOGY
3, 2/2
Prerequisites: GES 101 and GES 103. Introduction to the dynamics of erosion, transport, deposition of sedimentary particles, modern and ancient sedimentary environments.

GES 301
STRATIGRAPHY
3, 3/0
Prerequisites: GES 101, GES 103, and GES 300. Prerequisite or corequisite: GES 102. Basic principles and interpretation of the stratigraphic record, with emphasis on the practical application of stratigraphic data in interpretation of earth history and exploration for fossil fuels and groundwater resources.

GES 302
INVERTEBRATE PALEONTOLOGY
4, 4/0
Prerequisite: GES 101. Prerequisite or corequisite: GES 102. Invertebrate fossils and their stratigraphic distribution.

GES 303
MINERALOGY AND PETROLOGY
4, 3/2
Prerequisites: GES 101 and GES 103; one semester chemistry recommended. Crystals, minerals, and rocks, emphasizing description, identification, and origin.

GES 307
GEOMORPHOLOGY
4, 3/2; OCIF
Prerequisite: GES 101 or GEG 101. Internal and external processes and structural controls that shape the surface of Earth and other solid solar system bodies. Emphasis on selected geologic environments. Field trips required.

GES 310

GREAT LAKES ENVIRONMENTAL ISSUES

3, 3/0

Prerequisite: Upper-division status or permission of instructor. Introduction to environmental problems and their causes in the Great Lakes region. Environmental history of the Great Lakes. Case studies of current environmental problems and ongoing restoration efforts.

GES 314

GEOLOGICAL OCEANOGRAPHY

3, 3/0

Prerequisite: GES 111 or equivalent. The sediments, structure, and history of the ocean basins.

GES 315

MARINE ENVIRONMENTS

3, 0/0

Prerequisite: GES 111 or equivalent. Survey of coastal and deep-sea environments, with focus on the interaction of physical, chemical, biological, and geological processes operating in each. Emphasis on coastal environmental issues, including shoreline erosion and sea-level rise, coastal development, and marine pollution.

GES 331

MODERN SOLAR SYSTEM ASTRONOMY

3, 3/0

Prerequisite: GES 131 or equivalent. The sun and planets, their appearance, atmospheres, and surfaces. Planetary magnetic fields, asteroids, meteoroids, comets. Theories of the origin of the planetary system, the possibility of extraterrestrial life. Emphasis on recent problems in our understanding of the solar system.

Equivalent course: GES331W

GES 332

STELLAR AND GALACTIC ASTRONOMY

3, 3/0

Prerequisite: GES 131 or equivalent. How astronomers have determined the properties, energy, masses, and composition of stars, stellar evolution, the structure of the galaxy, and the movement of stars in the galaxy.

Equivalent course: GES332W

GES 335

METHODS OF OBSERVATIONAL ASTRONOMY

3, 4/0

Prerequisite: GES 131 or equivalent. Locating celestial objects in the night sky. Use of astronomical telescopes to locate, observe, and photograph stars, nebulae, and galaxies. Use of observing aids.

GES 339

ASTRONOMY AND COSMOLOGY

3, 3/0

Prerequisite: GES 131 or equivalent. Cosmology, the primeval fireball, quasars, pulsars, black holes, origin of the elements.

Equivalent course: GES339W

GES 350

ENVIRONMENTAL GEOCHEMISTRY

3, 3/0

Prerequisites: GES 101 and upper-division status. Chemical nature of the earth, emphasizing chemistry associated with the polluted environment.

GES 360

FORENSIC GEOSCIENCE

3, 2/2

Prerequisite: Upper-division status or permission of instructor. Application of the principles of earth science to the law. With a "hands-on" approach, and details from actual criminal cases, introduces a variety of geological subjects such as rock and mineral types, geological and topographical maps, fossils, sand and soil.

GES 401

IGNEOUS AND METAMORPHIC PETROLOGY

4, 3/2

Prerequisite: GES 303 or permission of instructor. Description, origin, and classification of igneous and metamorphic rocks.

Equivalent course: GES401W

GES 403

GLACIAL GEOLOGY

3, 4/0

Prerequisite: GES 307. Glacial processes, landforms, and landscapes, with emphasis on New York State. Develops a model for the sequence of glacial events and the causes of climate change. Field trips.

Equivalent course: GES403W

GES 404

FIELD GEOLOGY

3, 2/2

Prerequisites: GES 101, GES 303, and GES 308, or permission of instructor. Application of geological principles and techniques in the interpretation of earth features in the field.

Equivalent course: GES404W

GES 405

GEOLOGY OF NORTH AMERICA

3, 3/0

Prerequisites: GES 101 and GES 102. Major physical provinces of the United States and adjacent areas; their geologic history, structure, and topographic development.

GES 408

STRUCTURAL GEOLOGY

4, 3/2

Prerequisites: GES 101 and GES 103. Folds, faults, and other structural features in sedimentary and metamorphic terrains. Introduction to rock mechanics, regional tectonics.

Equivalent course: GES308

GES 409

FLUVIAL GEOMORPHOLOGY

3, 4/0

Prerequisite: GES 307. The variables that influence the behavior of water flowing on the surface of the earth. The effects of flowing water on the landscape. Emphasis on field and lab work.

Equivalent course: GES409W

GES 410

UNDERGRADUATE RESEARCH SEMINAR

1, 1/0

Prerequisites: GES 101, GES 103, and instructor permission. Common topics related to undergraduate research in the geosciences including research methods, handling data, making interpretations, preparing for oral and poster presentations, and preparing for graduate school and professional geology. Must be engaged in (or planning) research with an Earth Sciences faculty member. May be taken more than once.

GES 431

PLANETARIUM SEMINAR

3, 2/2

Prerequisites: Two semesters of astronomy. The celestial sphere; operating, maintaining, and administering the planetarium; audiovisual aids in the planetarium; planetarium programming; using the planetarium to teach. Includes supervised teaching experience.

Equivalent course: GES431W

GES 450

FIELD GEOLOGY

3, 2/2

Prerequisites: GES 101, GES 303, and GES 408, or permission of instructor. Application of geological principles and techniques in the interpretation of earth features in the field.

Equivalent courses: GES404W, GES450

GES 452

HYDROGEOLOGY

3, 3/0

Prerequisites: GES 101 or GEG 101 and at least one 300-level GES course. Fundamentals of the occurrence, movement, and management of our largest resource of readily available fresh water. Includes groundwater protection and remediation of already contaminated supplies to increase environmental awareness.

GES 460
ENVIRONMENTAL FIELD METHODS AND ANALYSIS
3, 2/2; OCIF
Prerequisites: GES 101, one 300-level GES course, and college algebra. GES 350 is strongly encouraged. Applied study of environmental contaminant migration and distribution with particular emphasis on sampling and detection methods. Discussion of federal and local environmental laws and regulations, classification of hazardous chemicals, and remediation approaches used by environmental professionals.

GES 465
TECTONICS
3, 3/0
Prerequisites: GES 101, GES 308W (or equivalent), upper-division status. Advanced principles, evidence and examples of the plate tectonics paradigm as the unifying theory of geology. Topics include kinematics of plates, the nature of plate boundaries and the analysis of theories involved in the current and historical design of the paradigm. Required term project and oral presentations.

GES 488
INTERNSHIP
3-12, 0/0
Prerequisites: Senior status as department major, 2.5 GPA overall. Requires department application and approval. Practical work on an individual basis with a participating organization.

GES 495
SPECIAL PROJECT
1-3, 0/0
Prerequisite: Approval of a faculty sponsor. Environment-, energy-, geology-, or astronomy -related areas.

GES 498
HONORS RESEARCH
1-3, 0/0
Prerequisite: Acceptance in geology or earth science honors program. Includes completion of honor's thesis and seminar. May be repeated for a maximum of 6 credit hours.

GES 499
INDEPENDENT STUDY
3-12, 0/0
Prerequisite: Faculty sponsor permission. Environment-, energy-, geology-, or astronomy-related areas.

GRK - GREEK

GRK 101
BEGINNING NEW TESTAMENT GREEK I
3, 3/0; FLA
Fundamentals of Koine Greek with emphasis on reading.

GRK 102
BEGINNING NEW TESTAMENT GREEK II
3, 3/0; FLA
Prerequisite: GRK 101. Continuation of GRK 101.

GST – GLOBAL STUDIES

GST 100
INTRODUCTION TO GLOBAL STUDIES
3, 3/0
Prerequisites: None. Introduction to key concepts, issues, and approaches used in Global Studies including social, political, historical, economic, and geographic perspectives. Topics include migrations, diasporas, the global image of the United States,
Equivalent course: IST100

GST 100
INTRODUCTION TO GLOBAL STUDIES
3, 3/0
Prerequisites: None. Introduction to key concepts, issues, and approaches used in Global Studies including social, political, historical, economic, and geographic perspectives. Topics include migrations, diasporas, the global image of the United States, intercultural conflicts, and study abroad programs. Required for Global Studies minor.

HEW - HEALTH AND WELLNESS

HEW 204
PERSONAL HEALTH
3, 3/0
The many problems and advances in medicine and public health as they affect the health status of the individual, family, school, and community. Equivalent course: HSC204

HEW 225
INTRODUCTION TO DISEASE PREVENTION
3, 3/0
Introduction to the general principles of disease. Etiology, signs, symptoms, treatment, and management of diseases that affect individual organs in the various body systems.

HEW 279
PHYSICAL ADAPTATION TO EXERCISE
3, 3/0
Prerequisite: BIO 100. Introduction to concepts of human anatomy and physiology as related to exercise and human performance. Includes, but not limited to, an introduction to the major systems of the body as they relate to exercise. Functions and purpose of the musculoskeletal system and cardiorespiratory system in healthy populations. Introduction to the roles of energy systems during physical activity and exercise.

HEW 301
KINESIOLOGY: APPLIED ANATOMY AND BIOMECHANICS
3, 3/0
Prerequisite: sophomore standing. Study of the skeletal, neural, and muscular systems and the biomechanical principles of human movement and their relationship to exercise, fitness, and athletic performance. Equivalent course: HPR301

HEW 302
EXERCISE PRINCIPLES
3, 3/0
Prerequisite: HEW 279. Exercise and its effects on the human body. Practical knowledge of the principles of fitness testing and exercise prescription and application of knowledge to improve fitness and athletic performance in healthy human populations. Equivalent course: HPR302

HEW 305
COMMUNITY HEALTH
3, 3/0
Prerequisite: HEW 225. Community health as it relates to world concerns, U.S. interests, and local community concerns. The interrelatedness of health care to various societal issues.

HEW 307
EXERCISE, FITNESS, AND NUTRITION
3, 3/0
Prerequisite: HEW 279. Basic concepts of nutrition and exercise training to improve fitness and athletic performance. The relationship of exercise and nutrition to the etiology and treatment of eating disorders and obesity. Equivalent course: HPR307

HEW 308
WOMEN'S HEALTH ISSUES
3, 3/0
Prerequisite: Upper-division status. Gender differences in health outcomes, health-care practices, and health behavior, with primary emphasis on women. Historical and current perspectives on women's health issues. Part of Women's study minor. Equivalent course: HPR308

HEW 310
HEALTH STANDARDS AND EMERGENCY CARE

3, 3/0
Prerequisites: BIO 100 or equivalent. Promotes health and safety standards and provides skills in advanced emergency care. Competencies in various areas of emergency medicine include bandaging, splinting, victim examination, bleeding/shock emergencies, and emergency childbirth. Includes competencies and proficiency in teaching OSHA safety standards for infectious agents.
Equivalent course: HSC310

HEW 312
METHODS AND MATERIALS IN HEALTH AND WELLNESS

3, 3/0
Prerequisite: HEW 204. Materials and instructional methodology necessary to create, select, and deliver health and wellness programs.
Equivalent course: HEW312W

HEW 320
PSYCHOACTIVE DRUGS AND HEALTH

3, 3/0
Prerequisite: Sophomore status. Widespread effects of drug abuse, its relationship to health and disease, and the implication and application for education and theory.
Equivalent course: HSC320

HEW 327
INTRODUCTION TO MEDICAL ANTHROPOLOGY

3, 3/0; NWIF
Prerequisite: ANT 100 or ANT 101 or permission of instructor. An overview of the history and development of concepts and practices of medicine worldwide. Theories and procedures in illness, sickness, health and well-being in and from a variety of cultural perspectives, historical and contemporary, East and West, Stone Age, folk, shaman, traditional Western and herbal medicine, including healing and religion, homeopathy, and anthropological study of health-care institutions.
Equivalent course: ANT327

HEW 345
WELLNESS, FITNESS, AND AGING

3, 3/0
Prerequisite: Upper-division status. Acquaints students of gerontology with the implications of exercise and physical fitness for the quality of life of older citizens. Covers the aging process and its relationship to physiological factors associated with exercise and fitness. Differences in capacities for exercise. Principles for guiding the selection, programming, and supervision of activities.
Equivalent course: HPR345

HEW 389
TOPICS COURSE

1-9, 0/0
Equivalent course: HPR389

HEW 401
ASSESSMENT AND EVALUATION IN HEALTH WELLNESS

3, 3/0
Prerequisite: Upper-division status. Introduction of concepts surrounding assessment and evaluation of health promotion programs. Topics include assessing genetic, social, personal behavioral, and environmental factors. Incorporates health promotion process and planning, such as needs assessment, evaluation measures, research design, and measurement evaluation.
Equivalent course: HPR401

HEW 411
CRITICAL ISSUES IN HEALTH AND WELLNESS

3, 3/0
Prerequisite: Upper-division status. Study of one's interaction with his or her many environments and the implications for health behaviors. Emphasis on current facts and attitudes important in confronting critical health issues.
Equivalent courses: HEW411W, HPR411

HEW 412
HEALTH/WELLNESS PROGRAMS

3, 3/0
Prerequisite: HEW 312. Provides an opportunity to use health/wellness concepts. Covers general principles used in the development of health-promotion programs. Specific procedures involved in a fitness profile analysis. Guidelines for implementing physical fitness, nutrition, and weight-control programs. Procedures for stress-management and smoking-cessation programs. Principles presented in class during practical health-planning experiences used.
Equivalent courses: HEW412W, HPR412

HEW 425
ALCOHOL PROBLEMS

3, 3/0
Prerequisite: Upper-division status. A seminar designed for students as prospective citizens, teachers, supervisors, and voluntary government personnel concerned with individual and community health problems. Emphasis on understanding the widespread effects of alcohol, its relationship to health and disease, and implications for health and therapy.
Equivalent courses: HEW425W, HSC425

HEW 488
INTERNSHIP

1-15, 0/0
Prerequisites: HEW 412W and application to the department. Additional prerequisites apply to selected areas of health/wellness; check with the Health and Wellness Department. The integration of theoretical knowledge with practical field experience in related areas of health and wellness.
Equivalent course: HPR488

HEW 495
SPECIAL PROJECT

1-3, 0/0
Equivalent courses: HPR495, HSC495

HEW 497
WORKSHOP

1-3, 0/0
Equivalent course: HPR497

HEW 499
INDEPENDENT STUDY

3-12, 0/0
Equivalent courses: HPR499, HSC499

HIS - HISTORY

HIS 106
HISTORY OF AMERICAN LIFE I

3, 3/0; AHIF
Exploration and colonization: the meeting of cultures; colonial America; shaping an identity; contest for the continent; prologue to independence; independence and the new nation; framing a constitution; religious, ethnic, and cultural diversity in the new nation; Jeffersonian Republicanism; nationalism and economic expansion; the emergence of social strains; Jacksonian democracy; religion and reform; expansion and sectional crisis; American life and culture in the mid-nineteenth century; a decade of crisis; the Civil War; aftermath of war.
Equivalent course: HIS106W

HIS 107
HISTORY OF AMERICAN LIFE II

3, 3/0; AHIF
The new South; reunion, readjustment, and constitutional freedoms; the West; the economic revolution; the urban society; politics in the Gilded Age; America's emergence as a world power; the Progressive Era; World War I and its aftermath; the 1920s; the New Deal; from isolationism to globalism; World War II; postwar adjustments; the Kennedy and Johnson years; resurgent Republicanism.
Equivalent courses: HIS101, HIS107W

HIS 115

FOUNDATIONS OF WESTERN CIVILIZATION

3, 3/0; WCIF

Major contributions of the Greek, Roman, and medieval civilizations to the creation of Western heritage in philosophy, art, literature, science, political structure, economy, and law.

Equivalent course: HIS115W

HIS 116

EUROPE SINCE 1500

3, 3/0; WCIF

Growing concern of man and his relation to his world. Development of nationalism. The concepts of freedom and democracy. Increasing attention to the spirit of inquiry. Scientific development and technology and their impact on society. The formulation of fascism, communism, socialism, and the concern for political ideology.

Equivalent course: HIS116W

HIS 117

TWENTIETH-CENTURY EUROPE

3, 3/0; WCIF

Political, social, cultural, and intellectual history of twentieth-century Europe. Factors contributing to World War I. The Versailles settlement. The Russian Revolution and the rise of communism. Collapse of collective security and the rise of fascism and national socialism. Western democracies between the wars. The road to World War II. Restoration of the Atlantic Community. The challenge of the nuclear age.

Equivalent course: HIS117W

HIS 120

HISTORY OF AMERICAN URBAN TECHNOLOGY

3, 3/0; TSIF

Development and interaction of technology and urban America, from Indian villages and colonial towns to high technology reindustrialization. American Indian and European traditions, early urban production and planning, industrialism and infrastructure, electricity's impact, reforms in housing and health, leisure and consumption technology, and technology as a competitive factor in national and international urban development.

HIS 189

TOPICS COURSE

1-9, 0/0

HIS 204

GLOBAL HISTORY OF THE TWENTIETH CENTURY

3, 3/0; GLOB, SS2B, SSGE

The history of the twentieth century, emphasizing the interrelationship of events and interaction of movements and ideas within a global context.

HIS 206

A HISTORY OF POLAND

3, 3/0

Major Polish historical and cultural achievements through the ages. The growth and development of the nation and state. Scientific, cultural, and religious forces in Polish life.

Equivalent course: HIS206W

HIS 210

HISTORY OF MODERN ASIA

3, 3/0

China, Japan, and Southeast Asia in modern times. Rise of nationalism, internal social and political conflict, response to Western powers. Impact of ideology and totalitarianism. Industry and technology. Problems of international wars.

Equivalent course: HIS210W

HIS 230

WORLD CIVILIZATIONS I

3, 3/0; NWIF

Origins, cultural achievements, and interrelationships of the various civilizations of the world to approximately 1500 C.E. Topics include the prehistoric era and the origins of human civilization; civilizations of the ancient Near East; early civilizations of Africa and the Americas; East Asian culture and civilization; Indian (South Asian) culture and civilization; Greek and Roman civilization; early civilizations of Southeast Asia; Islamic civilization; the Byzantine empire and medieval Europe.

HIS 231

WORLD CIVILIZATIONS II

3, 3/0; NWIF

Origins, cultural achievements, and interrelationships of the various civilizations of the world from approximately 1500 to 1914 (World War I). Topics include European culture and civilization from the Renaissance to World War I; Islamic civilization in Asia and the Middle East; East Asian culture and civilization in the late traditional era; African culture and politics in an era of European hegemony; colonial Latin American and the independent states of the postcolonial era; the U.S. and Canada; Western imperialism and global interactions in the modern era.

HIS 300

RESEARCH AND WRITING SEMINAR

3, 3/0

Prerequisites: CWP 101 and CWP 102. History and social studies education majors only. In-depth instruction on the historical methods of research and writing according to the standards of the profession. Students research, analyze, and interpret historical materials; provide documentation; and communicate lucidly and effectively in writing. Should be taken before enrolling in other upper-division history courses.

Equivalent courses: HIS300W, HIS400

HIS 302

HISTORY OF WOMEN IN AMERICA

3, 3/0; DIIF

The impact of women on American development from colonial times to the present. Effects of history on the roles and status of women. Changes in women's role in the family, economic contributions, legal status, struggle for equal rights. Women and demographic changes. Developing perceptions of women about society. Political growth and women. Society's regard for women in a historical context and the differences and/or similarities between women from various ethnic, racial, religious, and socioeconomic groups.

Equivalent course: HIS302W

HIS 304

EUROPE FROM NAPOLEON TO THE FIRST WORLD WAR

3, 3/0

Major influences in nineteenth-century Europe; nationalism, imperialism, Industrial Revolution, democracy, and socialism; causes of World War I.

Equivalent course: HIS304W

HIS 306

AFRICA TO 1800

3, 3/0; NWIF

Prerequisite: Upper-division status or instructor permission. African history from the Paleolithic period to 1800. Development of agriculture, ancient civilizations of Africa, iron working societies, the trans-Saharan trade, the impact of Islam and Christianity, traditional African political and social arrangements, the slave trade, and the European presence in early modern Africa.

Equivalent courses: AAS306, HIS306W

HIS 307

HISTORY OF INDIA

3, 3/0; NWIF

Prerequisite: Upper-division status. The history of India from ancient times to the present. Topics include the early Indus civilizations; religion and society in the Aryan age; the birth of Buddhism; Ashoka and the Mauryan Empire; classical Hinduism; Gupta civilization; the impact of Islam; the Mughal Empire; the era of British colonialism; the emergence of modern nationalism; independent India, Pakistan, and Bangladesh.

HIS 308

HISTORY OF EARLY CANADA

3, 3/0

The early history of Canada, from before the commencement of European exploration to the end of World War I. Topics include cultural and religious heritage of Canada's native peoples, histories of New France and British North America, the fight for responsible government, Canadian confederation, the challenges facing the new nation, and Canada in World War I.

Equivalent course: HIS308W

HIS 309

AMERICAN LEADERS

3, 3/0

Selected leaders in critical periods or areas of American civilization, such as Benjamin Franklin and revolutionary America; John Marshall and federal power; Booker T. Washington and W. E. B. DuBois; contrasting black leaders; Lincoln Steffens and the muckrakers; Henry Ford and mass production.

Equivalent course: HIS309W

HIS 310

HISTORY OF EAST ASIA: THE TRADITIONAL ERA

3, 3/0; NWIF

Prerequisite: Upper-division status. China, Korea, and Japan before the coming of the West. Traditional cultures, geography, political and religious institutions. Impact of Western ideas and colonialism.

Equivalent course: HIS310W

HIS 311

AMERICAN IMMIGRATION AND EMIGRATION

3, 3/0; DIIF

Immigration and ethnicity from the colonial period to the present. World population movements, shifts in governmental immigration policy, the changing meaning of ethnicity and race, and its impact on the immigrant experience. How and why immigrants came, degree of assimilation and alienation, work and leisure experiences, demographics, coping mechanisms, transmission of cultural traditions, and generational differences.

Equivalent course: HIS311W

HIS 312

HISTORY OF ITALY

3, 3/0

Classical and medieval foundation. Renaissance Italy. Prelude to unification. Italian nationalism, liberalism, and socialism. Italy under fascism. The Italian Republic, accomplishments and problems.

HIS 313

POLITICS AND HISTORY OF THE MIDDLE EAST

3, 3/0

Political culture and geographic settings. Historical development since the French invasion of Egypt. The disintegration of the Ottoman Empire and the rise of Western colonialism. Nationalist movements, independence, and turmoil. Post-World War II political evolution. Diversity and problems. Emphasis on the region's key industries.

Equivalent courses: HIS313W, PSC345

HIS 314

MODERN LATIN AMERICA

3, 3/0

Movements for independence; early political apprenticeship; age of dictators; nationalism and national development; Hispanic-American interrelations; growth of inter-American system; Latin America in world politics; revolution of rising expectations, guerrilla movements, turmoil in Central America; contemporary problems.

Equivalent course: HIS314W

HIS 315

HISTORY OF CLASSICAL AND MEDIEVAL THOUGHT

3, 3/0

Early Western intellectual tradition and the interaction of various modes and traditions of intellectual discourse (music, literature, history, philosophy, natural science) and their impact. Dynamics of cultural development and the influences that have shaped Western civilization.

HIS 316

HISTORY OF MODERN CANADA

3, 3/0

The history of Canada since Confederation in 1867. Topics include Canadian political and social history in the modern age, Canada's foreign policy since Confederation, Canada-U.S. relations, Quebec nationalism, twentieth-century Canadian cities, multiculturalism in modern Canada.

HIS 317

HISTORY OF RUSSIA TO 1917

3, 3/0

Social, political, and economic history of Russia from the Varangians state to the October 1917 Revolution. Effects of geographic locations. The

Mongol conquest. Retarded reorientation toward the West in the eighteenth and nineteenth centuries. Participation in world politics. Expansion in Europe and in the East. Participation in World War I.

Equivalent course: HIS317W

HIS 318

HISTORY OF THE FORMER SOVIET UNION

3, 3/0

Economic and historical forces behind the Communist Revolution of 1917. The governmental system and its political, social, and economic theories. The evolving economic system. Soviet foreign policy, impact of the Revolution, and World War II. The church, educational systems, and other cultural developments.

Equivalent course: HIS318W

HIS 319

COLONIAL HISTORY OF THE AMERICAN PEOPLE

3, 3/0

Establishment and development of English, Spanish, French, Dutch, and Swedish colonies in North America. American Revolutionary period. Colonial influence on early culture and institutions of the United States. Subsequent contributions to the American heritage.

Equivalent course: HIS319W

HIS 320

MODERN HISTORY OF JAPAN AND KOREA

3, 3/0; NWIF

History of Japan and Korea in the twentieth century. The rise of Japan as a modern nation. The rise and fall of the Japanese Empire. Japan under new democracy. Korea under Japanese control. The liberation and division of Korea. The problem of reunification of Korea.

Equivalent course: HIS320W

HIS 321

HISTORY OF MEDIEVAL EUROPE

3, 3/0; ESGC

Transition from Graeco-Roman to medieval civilization; Islam, Charlemagne, and feudal Europe; crusades; cultural, economic, and political revival of the twelfth-century medieval church and papacy; medieval intellectual synthesis; rise of monarchies, decline of papacy; decline of medieval civilization.

Equivalent course: HIS321W

HIS 322

AFRICAN AMERICAN HISTORY

3, 3/0; DIIF

Heritage of black Americans. African Americans' existence under slavery; their role in influencing historical events; activity in the Civil War period; freed men during reconstruction; migrations to the north and adjustment to urban life. African American leaders, institutions, and ideas, and their impact on modern America.

Equivalent courses: AAS322, HIS322W

HIS 323

CLASSICAL GREECE AND ROME

3, 3/0

Origins and development of ancient Greece, the Hellenistic world, and the Roman republic and empire. Emergence and growth of major cities, the evolution of social and political institutions, trade and economic development, technological innovation; philosophy and religion.

HIS 324

AMERICAN PRESIDENTS

3, 3/0

Biographical approach to the study of the presidency from Washington to the current era. Background and evolution of the office, and the roles of the best and worst presidents in shaping its powers.

Equivalent course: HIS324W

HIS 326

HISTORY OF THE GREAT LAKES REGION

3, 3/0

The history of the Great Lakes. Introduction to the variety of natural, social, and political factors that have shaped the region. Lectures, presentations, and applied research.

HIS 327
COLONIAL LATIN AMERICA
3, 3/0

Encounter between Europe and the New World; establishment of the political, social, cultural, and religious institutions of the Spanish and Portuguese in the Americas between 1492 and 1824. Role of the church, economic institutions, women, slaves, and Indians in further understanding the cultural and political heritage of the region.

HIS 330
U.S. ENVIRONMENTAL HISTORY
3, 3/0

The impact of Americans on their natural environment. The influence of the natural and developing social environment on Americans in the past. Aborigines and the earliest settlers. Establishment of patterns and institutions. Preservationists vs. conservationists, 1860-1940. The modern environmental movement, 1940-present.

Equivalent course: HIS330W

HIS 331
AMERICAN WESTWARD EXPANSION
3, 3/0

The gradual westward migration of Americans; their patterns of migration and settlement; the natural environment and peoples encountered; the influence of the frontier on the development of American institutions, thought, and the American personality.

Equivalent course: HIS331W

HIS 332
TECHNOLOGY AND U.S. HISTORY
3, 3/0; TSIF

Interaction of U.S. society with technology in the past, concentrating on the last 200 years. Background of Western technology; the agricultural revolution; industrial technology; technology and culture, labor, the home, medicine, government; postindustrial technology.

Equivalent course: HIS332W

HIS 334
MODERN IRELAND SINCE 1800
3, 3/0

Major factors that shaped Irish history in the nineteenth and twentieth centuries: the impact of the union with Britain; the struggle for Catholic emancipation; the Great Famine and its aftermath; revolutionary movements like Young Ireland, the Fenians, and Sinn Fein; cultural revival and religion in Victorian Ireland. Also the question of home rule and independence, the growth of the free state and the establishment of the Northern Ireland state, Ireland in World War II, and the emergence of contemporary Ireland in the context of the European economic community.

Equivalent course: HIS334W

HIS 335
HISTORY OF MEXICO
3, 3/0

Pre-Colombian Indian cultures, Spanish conquest of Mexico, Spanish colonial administration in the Viceroyalty of New Spain, the Enlightenment and Mexican independence, Early National period, the Mexican Revolution of 1910, Mexico today.

Equivalent course: HIS335W

HIS 336
HISTORY OF EARLY MODERN IRELAND
3, 3/0

A focus on the political, economic, and social histories of Ireland in the Early Modern period, ca.1485-1800. An overview of the development of the Irish state, its constituent communities, and relations with England and the British mainland up to the union of 1800. Emphasis is placed on what it meant to "be Irish" in the Early Modern period, and how varying definitions of "Irishness" have affected Ireland's cultural and political history. Reading primary sources and leading and participating in discussions are emphasized.

HIS 337
AFRICA SINCE 1800
3, 3/0; NWIF

African history since 1800. Abolition of the slave trade, pre-colonial culture and society, partition of Africa by European nations, impact of colonial regimes, African resistance movements, colonial nationalism,

world wars and decolonization, Apartheid in South Africa, impact of the Cold War, and neo-colonialism.

Equivalent course: HIS211

HIS 338
MODERN HISTORY OF CHINA
3, 3/0; NWIF

HIS 340
HISTORY OF THE BUFFALO NIAGARA REGION
3, 3/0

Equivalent courses: GEG340, HIS340W

HIS 341
AFRICAN AMERICANS AND CIVIL RIGHTS
3, 3/0

History of the landmark court decisions, laws, and governmental policies regarding the civil rights of African Americans. The course examines some of the historic relationships among race, racism, law, and public policy in America. Focuses on resistance, protest, and the quest for equality in America.

Equivalent courses: AAS341, HIS341W

HIS 342
ENGLISH LEGAL HISTORY
3, 3/0

Origins of English law to 1066, growth of medieval common law, common law and its rivals in sixteenth and seventeenth centuries, consolidation and reform of law and courts, relation of law and equity, criminal and civil jurisdiction and procedure, the legal profession, changing legal concepts and the modern state.

Equivalent course: HIS342W

HIS 344
EMERGENCE OF INDUSTRIAL AMERICA: 1877 TO 1919
3, 3/0

Conservative reaction to reconstruction, decline of the presidency, the triumph of capitalism and industry, populist protest, the end of westward movement, socialization of immigrants, progressive impulse and leadership, rural vs. urban conflict, the United States and the race for empire, and the role of America in World War I.

Equivalent course: HIS344W

HIS 345
HISTORY OF THE UNITED STATES SINCE 1941
3, 3/0

Political, diplomatic, social, and cultural history of contemporary America; World War II and the advent of the nuclear age; the Cold War and the policy of containment; the Korean War, McCarthyism, and domestic reform; the New Frontier and the Great Society; civil rights, civil disobedience, and the greening of America; war and peace in Southeast Asia; Watergate and the travail of liberalism.

Equivalent course: HIS345W

HIS 350
LEFT AND RIGHT IN EUROPEAN HISTORY
3, 3/0

Equivalent course: HIS350W

HIS 351
MODERN FRANCE
3, 3/0

Selected problems in French political, social, economic, and diplomatic history emphasizing historiography and interpretation of such periods as the restored monarch, the revolution of 1848, the Second Empire, the Third Republic, and its successors.

Equivalent course: HIS351W

HIS 354
HISTORY OF THE CARIBBEAN
3, 3/0

Spanish colonization of the Caribbean, pirates and the foreign threat, race relations and the development of colonial society, Cuba rebels against Spain, the Spanish-American War, Cuba and the United States, Castro's revolution, Puerto Rico under U.S. rule, the rise of Puerto Rican nationalism, Puerto Rico today.

Equivalent course: HIS354W

HIS 355

HISTORY AND CULTURE OF ARGENTINA

3, 3/0

History of Argentina from the time of colonial rule until the return of democracy in the 1980s. Cultural foundations of the nation; role of gauchos and caudillos; challenges of nation building in the nineteenth century. Rise and endurance of Peronism in Argentine politics. Military dictatorships of the 1970s and 1980s; transition to democracy in 1983.

HIS 356

WORLD WAR I

3, 3/0

The causes, conduct, and implications of the First World War. Through a thematic and narrative treatment, students will study the war and its implications for global society in the twentieth century.

HIS 357

WORLD WAR II

3, 3/0

The issues that led to the outbreak of the Second World War and its global dimensions. Campaigns, theaters of operations, as well as the process of decision making by Allied and Axis Powers. Also, the social dimensions of the war: experiences on the home fronts, the Holocaust, and the impact of the war on the modern world.

HIS 359

GERMANY AND CENTRAL EUROPE, 1618-1918

3, 3/0

History of Central Europe from the Thirty Years' War to the twentieth century. Political and cultural development of the modern German nation-state from nationalist dream to the Second Reich in the nineteenth century.

HIS 360

GERMANY AND HITLER

3, 3/0

Political, cultural, and social developments since the Reformation; Prussian kings and German emperors; nationalism and unification; Hitler's Austria; World War I; the challenge of democracy; the Nazi dictatorship; World War II; Germany after Hitler.
Equivalent course: HIS360W

HIS 363

AMERICAN IDENTITY IN TRANSITION: DIVERSITY AND PLURALISM IN THE UNITED STATES

3, 3/0; DIIF

Equivalent courses: SSE363, SST363

HIS 365

AMERICAN LABOR HISTORY

3, 3/0

Readings and bibliography on the role of workers in American life. Slaves, indentured servants, wage earners, and craftsmen. The rise of organized labor from colonial times. The history of the Knights of Labor, the American Federation of Labor, the Congress of Industrial Organizations, and independent unions, with related issues of immigration, radicalism and political action, and contemporary labor problems.
Equivalent course: HIS365W

HIS 366

MEDIEVAL AND EARLY MODERN BRITAIN

3, 3/0

HIS 367

MODERN BRITAIN

3, 3/0

HIS 370

AMERICAN DIPLOMATIC HISTORY TO 1898

3, 3/0

Independence from Britain and alliance with France; the Constitution and the formation of foreign policies; neutral rights and war with Britain; rise of manifest destiny, commercial and territorial expansion, diplomacy of slavery and the Civil War; diplomacy and isolationism in the post-Civil War period.
Equivalent course: HIS370W

HIS 371

AMERICAN DIPLOMATIC HISTORY SINCE 1898

3, 3/0

War with Spain and the rise to world power; inter-American and Far Eastern relations; diplomacy of World War I; retreat to isolationism; road to World War II; global war and its aftermath; leadership in the United Nations and the Cold War; inter-American and Far Eastern affairs.
Equivalent course: HIS371W

HIS 372

AMERICAN FOREIGN POLICY IN THE FAR EAST

3, 3/0

Dawn of America's Asiatic interests; early relations with China; opening of Japan; missionary activity and influence; war with Spain; America becomes a Pacific power; World War I and the rise of Chinese nationalism; American gunboat diplomacy; interwar naval conferences; Manchurian Incident; American-Japanese problems; road to war; Pearl Harbor and war in the Pacific; search for Pacific security; conflict in Korea; war and peace in Vietnam.

Equivalent course: HIS372W

HIS 373

VIETNAM AND THE VIETNAM WAR

3, 3/0; NWIF

Introduction to the major issues associated with the history of Vietnam and modern Vietnam's wars with France and the United States. Origins and historical development of Vietnamese society and culture; French colonialism and the emergence of modern Vietnamese nationalism; Vietnamese communism under Ho Chi Minh; the Franco-Vietminh War; the American war in Vietnam; and postwar reunification and consolidation under the Vietnamese Communist Party.

HIS 375

HISTORY OF BYZANTINE EUROPE

3, 3/0

The history of the Byzantine Empire. Its influence on intellectual and cultural progress in Western Europe and among the Eastern and Balkan Slavs with special emphasis on internal, social, economic, political, and cultural developments.

Equivalent course: HIS375W

HIS 379

MUSEUM AND CIVIC ENGAGEMENT

3, 3/0

In-depth study of how museums and cultural agencies define community identity. Internal operations of museums and cultural agencies. Minimum 20 hours in-service (fieldwork) activity required, with 15 percent of the grade dependent upon the resulting learning from that service.

HIS 380

INTRODUCTION TO THE MUSEUM

3, 3/0

History, theory, and practices of the historical agency or museum. Extensive reading, illustrated lectures, and exercises in museum and historical-agency problems. Field trips to area museums and agencies.

Equivalent course: HIS380W

HIS 381

THE ROLE OF THE HISTORY MUSEUM

3, 3/0

Theory and practice of historical investigation and publication. Uses and procedures of research in historical museums and agencies. Evaluation of source materials. Preparation of historical essays and exhibits.

Equivalent course: HIS381W

HIS 382

HISTORY OF CHRISTIANITY TO 1500

3, 3/0

Prerequisites: junior or senior status. Christianity in the East and the West from its origins to the dawning of the modern age. Development of Christianity, the Apostolic Era, the Patristic Era; Byzantine and medieval Latin Christianity until the fall of Constantinople and the Protestant Reformation. Political, intellectual and cultural significance of Christianity in world civilizations.

HIS 383
HISTORY OF CHRISTIANITY FROM 1500 - PRESENT
3, 3/0
Prerequisites: junior or senior status. Developments in Christianity in the Modern World from the collapse of the Byzantine Empire in the East and from the Protestant Reformation in the West through the twenty-first century. Challenges of Christianity with respect to the Scientific Revolution, the Enlightenment, liberalism, nationalism, socialism, capitalism and the Industrial Revolution, secularism, consumerism, and globalization.

HIS 385
AZTEC AND MAYA HISTORY
3, 3/0

HIS 386
HISTORY OF THE INCA EMPIRE
3, 3/0
The last great empire of the ancient Americans to fall under Spanish dominance, the Inca of Peru. The political, social, and economic functions of the Inca State. The foundations of the empire in earlier civilizations of the Andes. Inca system of governance; strategies for expansion and consolidation of empire; the importance of recordkeeping and the counting device known as quipu; the function of textiles and their production; the role of ancestors and myths in state formation and function; new perspectives on the Spanish conquest.

HIS 389
HISTORICAL PERSPECTIVES (TOPICS)
3, 0/0
Examination of themes and unique developments in history that stand apart from the normal pattern; analytical and historiographical approach to such topics and phenomena as reform and reaction in American life; impact of ideology in European relations; clash of tradition and modernization in Asia; rise of nationalism in Latin America; emergence of a third world. Emphasis on class discussion of assigned materials and oral and written reactions to readings.

HIS 401
TWENTIETH-CENTURY EUROPEAN DIPLOMACY
3, 3/0
Causes and diplomatic problems of World Wars I and II; the Paris Peace Conference and interwar diplomacy; peacemaking in the Cold War era; the European movement; Gaullism and its consequences.
Equivalent course: HIS401W

HIS 402
THE ITALIAN RENAISSANCE
3, 3/0
History, politics, culture, and thought of the Italian Renaissance, its achievements, and its impact on European and world civilizations. Development and contributions of humanism and on the distinctive cultural worlds of Florence, Milan, Naples, Venice, and Rome.

HIS 404
THE SOUTH SECTIONALISM, AND THE CIVIL WAR
3, 3/0
Equivalent course: HIS404W

HIS 405
REFORMATION
3, 3/0
Impact of the Renaissance and Reformation on intellectual, artistic, economic, and political development of Europe; social and religious problems; humanism, secularism, classicism, individualism in Italy and Northern Europe; Protestant reform and reformers; Catholic Reformation.
Equivalent course: HIS405W

HIS 406
THE FRENCH REVOLUTION AND NAPOLEON
3, 3/0
Political, social, economic, and intellectual fabric of the Old Regime; the Revolution; dictatorship of Napoleon and spread of revolutionary ideas; rise of modern nationalism.
Equivalent course: HIS406W

HIS 407
THE TEACHING OF HISTORY
3, 3/0
Equivalent courses: SSE407, SST407

HIS 408
HISTORY OF AMERICAN THOUGHT
3, 3/0
Equivalent course: HIS408W

HIS 412
HISTORY OF EAST CENTRAL EUROPE
3, 3/0

HIS 415
HISTORY AND GOVERNMENT OF NEW YORK STATE
3, 3/0
Aboriginal background; development of the colony; establishment of the state; rise of political parties; past and present structure and problems of New York State government; current economic and social growth.
Equivalent course: HIS415W

HIS 418
FOOD AND GLOBAL HISTORY
3, 3/0
How food has influenced human society from hunter-gatherer societies to the present. Food rituals, famines, food and spice trade, national identity. How cultures from Asia, Africa, Europe, and the Americas understood their relationship to food.

HIS 419
CURATORSHIP
3, 3/0
Principles and techniques of collection and care of museum collection: the library, collections, audiovisual materials, archives, iconography, and historic sites; development of professional expertise in curatorship.
Equivalent course: HIS419W

HIS 420
ADMINISTRATION OF THE HISTORICAL AGENCY OR ART MUSEUM
3, 3/0
Principles and practice of administration of museums. Problems of organization, collection, exhibition, public services, finance, special public relations, and trustee relations. Experience in the area of interpretation.
Equivalent course: HIS420W

HIS 422
TUDOR AND STUART ENGLAND
3, 3/0
Henry VII and the new dynasty; religion and politics under the early Tudors; the age of Elizabeth I; the Stuarts and the Puritan revolt; restoration and revolution; limiting the monarchy and establishing the empire.
Equivalent course: HIS422W

HIS 425
MUSEUM PRESERVATION AND PRACTICE
3, 3/0
Acquaints students who are non-conservation specialists with conservation principles of museum collections. Environmental, handling, and procedural issues; lecture, demonstrations, and practical work; examine exhibition and storage facilities at local institutions.

HIS 430
UNITED STATES: THE NEW NATION
3, 3/0
Equivalent course: HIS430W

HIS 440
THE HOLOCAUST
3, 3/0
Persecution and murder of Jews and other victims of Nazi genocide. Historical anti-Semitism, the personality of Adolf Hitler, the traumas of Weimar Germany, birth and rise of the Nazi party, persecution and extermination of Jews, non-Jewish victims, the death camps, Jewish resistance, and world reaction to Nazi policies.

HIS 445

HISTORY OF WOMEN AND GENDER IN THE MIDDLE EAST
3, 3/0

History of women and gender in the Middle East from Muhammad to present. Women and gender in the formation of Islam, medieval caliphates, and Islamic empires. Historical role of modernization, colonization on early Middle Eastern feminist movements. The end of empires and influence of nation-building on social relations.

HIS 450

MUSEUM INTERNSHIP
3-6, 3-15/0

For students interested in gaining practical experience in museum work. Assignment to a particular museum is based on a student's major-related disciplines. Students in areas such as history, anthropology, art history, education, and the natural sciences are eligible.
Equivalent course: MST450

HIS 460

PATTERNS OF HISTORY IN SOUTHEAST ASIA
3, 3/0

Examination of key topics in the social and political history of the principal regions of Southeast Asia. Primary emphasis on the cultural heritage and political origins of the major modern Southeast Asian nations. Myanmar (Burma), Thailand, Malaysia, Cambodia, Vietnam, Indonesia, Singapore, and the Philippines.

HIS 465

IMPERIALISM IN THE 19TH AND 20TH CENTURIES
3, 3/0; NWIF

Imperialism in Asia and Africa through decolonization. Political and economic motives for acquiring colonies. Historiography of imperialism. Colonial administration and economic exploitation. Role of missionaries. Colonial culture and society. Women and imperialism. Collaboration, complicity, and resistance among indigenous peoples. Colonial nationalism and decolonization.

HIS 468

READINGS IN AFRICAN AMERICAN HISTORY
3, 3/0

Equivalent courses: AAS468, HIS468W

HIS 469

BLACK PROTEST AND LEADERSHIP IN THE UNITED STATES IN THE TWENTIETH CENTURY
3, 3/0

Equivalent courses: AAS469, HIS469W

HIS 480

DIGITAL MUSEUM COLLECTIONS
3, 3/0

Digital technology enables museums to make their collections more accessible. Students investigate what is involved in digitizing museum objects through classroom instruction and a class project. To balance theory with practice, students work as a group to develop their own digital collection. Course is taught at Buffalo State College and a local cultural institution.

HIS 488

INTERNSHIP
1-12, 0/0

Background of courses or experience within the area of interest; 6 credit hours of lower-division major courses; 6 credit hours of history and social studies education coursework at the upper-division level; minimum cumulative GPA of 2.5 (overall and in major coursework); approval of student adviser and department chair. Internships provide students with guided, supervised field experiences that complement the academic program.
Equivalent course: SSE488

HIS 490

SENIOR SEMINAR IN HISTORIOGRAPHY
3, 3/0

Acquaints history and social studies education majors and others with great works of historic literature in the Western and other traditions. Introduction to the development of historical writing from ancient times to the present. Students are encouraged to assess sources that have been used

to record the past and to examine the various methodologies employed by historians in studying the past.

Equivalent courses: HIS399W, HIS490W

HIS 495

SPECIAL PROJECT
1-3, 0/0

HIS 497

SPECIAL WORKSHOP
1, 0/0

HIS 498

HONORS RESEARCH
0-9, 0/0

Prerequisite: Completion of 12 credit hours in the history honors program. An advanced research course for students in the history honors sequence.

HIS 499

INDEPENDENT STUDY
3, 0/0

HON - ALL COLLEGE HONORS PROGRAM

HON 100

ALL COLLEGE HONORS SEMINAR
3, 3/0

Prerequisite: Acceptance into All College Honors Program. Introductory course. Introduces students to faculty from across the disciplines. Includes discussion of specific fields of study and their contributions to the betterment of humankind. Promotes student appreciation, critical examination, and application of interrelated concepts and values as defined by works of literature, art, music, scientific endeavor, technology, historical research, pedagogy, and political theory.
Equivalent course: BSC101

HON 101

HUMANITIES SEMINAR
3, 3/0; HUIF

Prerequisite: Acceptance into All College Honors Program. Humanities core. Part of an integrated sequence of core courses. Focuses on great ideas and works of various cultures.

HON 102

NATURAL SCIENCE SEMINAR
3, 3/0; NSIF

Prerequisite: Acceptance into All College Honors Program. Natural science core. Part of an integrated sequence of core courses. Focuses on the role of science in contemporary society. Students enrolled in this course may not receive credit for SCI 100.
Equivalent course: SCII00

HON 103

ARTS SEMINAR
3, 3/0; ARIF

Prerequisite: Acceptance into All College Honors Program. Arts core. Part of an integrated sequence of core courses. Focuses on great ideas and significant works in the arts.

HON 202

SOCIAL SCIENCE SEMINAR
3, 3/0; SSIF

A social science core course designed for All-College Honor Students as part of an integrated sequence of core courses. This course focuses on the central ideas, epistemology, issues and significant works in and among the disciplines of the social sciences.
Equivalent course: HON302

HON 301

VALUES AND ETHICS IN THE PROFESSIONS
3, 3/0; TSIF

Prerequisite: Acceptance into All College Honors Program. Seminar. Theories of value development, value dilemmas. Implications of legal aspects of the ethical practice of human service, educational, and health-care professions from a personal and professional viewpoint.

HON 400
ALL COLLEGE HONORS COLLOQUIUM
3, 3/0

Prerequisite: Acceptance into All College Honors Program. Culminating activity. Students complete original works of scholarship and creativity and present their work in a colloquium forum to allow for the maximum exchange of ideas. Course provides closure to the objectives of the All College Honors Program.

Equivalent course: HON400W

HPR - COACHING AND PHYSICAL EDUCATION

HPR 100
SPECIAL PROJECT
1, 0/0

Limited for certain movement, exercise, and sport experiences. Completion of form and approval of program coordinator required. Forms available in the Coaching and Physical Education Office.

HPR 114
JOGGING FOR PHYSICAL FITNESS
1, 2/0
Equivalent course: HEW114

HPR 154
FITNESS THROUGH SWIMMING
1, 3/0
Prerequisite: Completion of HPR 153 or demonstration to the instructor of equivalent aquatic ability. Activity aquatic class to increase student's cardio-respiratory fitness level. Swimming skills, workout planning and participation.
Equivalent course: HEW154

HPR 180
PHYSICAL FITNESS FOR WOMEN
1, 2/0
Equivalent course: HEW180

HPR 198
STRENGTH FITNESS
1, 2/0
Equivalent course: HEW198

HPR 201
TECHNIQUES AND THEORIES OF COACHING SPECIALTY SPORTS
3, 3/0
Lecture and discussion analysis of athletic coaching. Supervised independent study of the requirements for coaching an approved specialty sport.
Equivalent course: HEW201

HPR 202
TECHNIQUES AND THEORIES OF SOCCER
3, 3/0
Analysis of soccer with emphasis on history, present status, rules, techniques, and theories.
Equivalent course: HEW202

HPR 203
TECHNIQUES AND THEORIES OF FOOTBALL
3, 3/0
Analysis of football with emphasis on history, present status, rules, techniques, and theories.

HPR 205
TECHNIQUES AND THEORIES OF TRACK AND FIELD
3, 3/0
Analysis of track and field with emphasis on history, present status, rules, techniques, and theories.

HPR 207
TECHNIQUES AND THEORIES OF BASEBALL/SOFTBALL
3, 3/0
Analysis of baseball with emphasis on history, present status, rules, techniques, and theories.
Equivalent course: HEW207

HPR 208
TECHNIQUES AND THEORIES OF SWIMMING
3, 3/0
Analysis of swimming with emphasis on history, present status, rules, techniques, and theories.
Equivalent course: HEW208

HPR 209
TECHNIQUES AND THEORIES OF BASKETBALL
3, 3/0
Analysis of basketball with emphasis on history, present status, rules, techniques, and theories.
Equivalent course: HEW209

HPR 300
PRINCIPLES, PHILOSOPHY AND ORGANIZATION OF ATHLETICS IN EDUCATION
3, 3/0
Prerequisite: Sophomore status. Philosophy and principles of athletics in education. Required to meet minimal state standards for coaching certification or to meet the requirements of the coaching minor.
Equivalent course: HEW300

HPR 301
KINESIOLOGY: APPLIED ANATOMY AND BIOMECHANICS
3, 3/0
Prerequisite: Sophomore status. Study of selected anatomical, physiological, and mechanical principles of movement and their application to human motion.
Equivalent course: HEW301

HPR 306
ORGANIZATION AND ADMINISTRATION OF INTRAMURAL SPORTS
3, 3/0
Prerequisite: Sophomore status. Critical analysis of the organization and administration of intramural and recreational sports programs.

HPR 309
HEALTH SCIENCES FOR COACHING
3, 3/0
Prerequisite: HEW 307 or HPR 301 or instructor permission. Interdisciplinary study of the health sciences as they apply to coaching interscholastic sports. Selected principles of anatomy, kinesiology, and physiology related to coaching; risk minimization; mixed competition; New York State Department of Education selection and classification of athletes; definition of age and maturity of athletes.

HPR 319
SOCIOLOGY OF SPORT
3, 3/0
Sport and related social phenomena of social status, norms, goals, values, and organizational network.
Equivalent courses: HEW319, SOC324

HPR 335
PREVENTION AND CARE OF ATHLETIC INJURIES
3, 3/0
Prerequisite: HPR 301 or instructor permission. The relationships among conditioning, performance, and injury prevention. Includes techniques and programs of body conditioning for specific sports, and the possible treatment of athletic injuries. A required course for students choosing either to meet minimal standards for coaching certification or to meet the requirements of the coaching minor.
Equivalent course: HEW335

HPR 389
TOPICS COURSE
3, 3/0

HPR 488
INTERNSHIP
1-15, 0/0
Prerequisites: Upper-division status and instructor permission. The integration of theoretical knowledge with practical field experience in coaching interscholastic sports.
Equivalent course: HEW488

HPR 495
SPECIAL PROJECT
1-3, 0/0
Equivalent course: HEW495

HPR 499
INDEPENDENT STUDY
3-9, 0/0

HTR - HOSPITALITY AND TOURISM

HTR 100
MULTICULTURAL FOODS
3, 3/0
Cultural overview of the foods and food habits of selected groups. Common foods, meal patterns, special-occasion foods, and the role of food in society. The impact of the groups on the American lifestyle.

HTR 110
INTRODUCTION TO HOSPITALITY AND TOURISM
3, 3/0
Overview of the hospitality-tourism industry: hotels, resorts, tourism and travel, convention management, casinos and gaming, food service (commercial and noncommercial), and culinary arts. Emerging trends in the industry and available career opportunities.

HTR 200
SANITATION AND SAFETY IN FOOD SERVICE
3, 3/0
Causes of and conditions leading to food-borne illnesses. Evaluation of potential hazards of food service operations and measures to control them. Students take the SERVSAFE sanitation certificate examination, offered by the National Restaurant Association's Educational Foundation, at the end of the course.

HTR 300
FOOD AND BEVERAGE MANAGEMENT
4, 1/6
Prerequisite: HTR 100. Students work at Campus House, the hospitality training facility. Students are required to apply various food production, purchasing, and sanitation principles while participating in labs. Emphasis on preparing high-quality products and providing high-quality service.
Equivalent course: NFS300

HTR 305
ADVANCED FOOD
3, 2/2
Prerequisite: HTR 100. Application of the principles of nutrition, quality food preparation, management, and consumer economics to family food purchase, preparation, and service.
Equivalent course: NFS305

HTR 318
CULTURAL TOURISM
3, 0/0
Prerequisite: HTR 110. A practical approach to understanding regional cultural attractions and the economic impact they have on the community. The course examines the historical context of cultural tourism and the structure of local cultural attractions through guided tours, guest presentations, and participation in the regional cultural tourism efforts.

HTR 330
FUNDAMENTALS OF BAKESHOP PRODUCTION
3, 1/4
Prerequisite: HTR 100. Designed to provide students with an overview of bakeshop concepts, which include knowledge base and production skills necessary to create fundamental bakery products.

HTR 335
WINE ESSENTIALS
3, 3/0
A presentation of the origins and history of wines. At the completion of the course, students will have had exposure to winemaking, wine service, and wine tasting. Students will learn to evaluate variations and quality of wines.

HTR 340
INDUSTRY EXPERIENCE
1-3, 1/9
Prerequisites: HTR 110; completion of writing competency requirement; major GPA of at least 2.0. Opportunity to integrate technical knowledge with industry experience in hospitality and tourism enterprises. Supervised field experience, meeting with instructor, and structured written assignments. May be taken for a maximum of six credits.
Equivalent courses: HTR340W, NFS340

HTR 348
TOURISM AND WORLD TRAVEL
3, 3/0
Overview of world tourism and travel and the impact of tourism on world trade, geopolitical understandings, and cultural exchange. Introduction to career opportunities in the industry.

HTR 350
COMPUTER APPLICATIONS FOR HOSPITALITY
3, 3/0
Prerequisites: Hospitality administration major, upper-division status. Focuses on computer technology and application in the hospitality industry. Emphasis on computer hardware, available software, and the impact technology has played in the industry. A thorough exploration of Web-based information will enhance real-world applications.
Equivalent course: NFS350

HTR 361
PRINCIPLES OF MANAGEMENT IN FOOD SERVICE
3, 3/0
Application of management principles in food service systems.
Equivalent courses: HTR361W, NFS361

HTR 365
MENU PLANNING
3, 3/0
Prerequisite: HTR 100. Principles of menu planning. Role of menu in the relationship to a food-service operation's success.
Equivalent course: NFS365

HTR 368
HOTEL OPERATIONS
3, 3/0
Prerequisite: HTR 110. Organization, function, and management of the rooms and divisions of hotels, resorts, and other lodging facilities; security; facilities management; front-office management.
Equivalent course: NFS368

HTR 370
COST CONTROLS IN HOSPITALITY
3, 3/0
Prerequisite: Successful completion of mathematics basic skills competency requirement. Relevant accounting and financial concepts and procedures. Interrelationships between costs and their impact on gross margins and net incomes. Strategies to control fixed and variable costs.
Equivalent course: NFS370

HTR 375
EVENTS MANAGEMENT
3, 2/0
The best practices in modern event management and the three dimensions of event leadership: event administration, an insider's vocabulary, and industry certification standards. An overview of event projects, new product developments, business meetings, seminars and conferences and exhibitions. Fieldwork opportunities, in special events on campus and off campus.

HTR 380
ADVANCED TRAINING IN HOSPITALITY
3, 3/0
Prerequisite: HTR 110. Review of training principles used to design, implement, and evaluate administrative programs for the hospitality industry. Application of theoretical concepts to hospitality-tourism related situations.
Equivalent course: NFS380

HTR 385
PRIVATE CLUB MANAGEMENT
3, 3/0
Prerequisite: HTR 110. This course is an in depth study of the private club industry. Emphasis is on club needs assessment, development of programs for members and other audiences, overcoming challenges that external and government agencies pose for managers, golf course maintenance, and capital improvement projects for club and resort facilities. Issues relative to finance and board governance and structure will also be analyzed.

HTR 389
TOPICS COURSE
3, 0/0

HTR 390
STRATEGIC MARKETING IN HOSPITALITY
3, 3/0
Prerequisite: HTR 110. Relevant principles and concepts of marketing; theories of market segmentation and positions; various theories will be discussed using the analysis approach. Students will be required to develop a marketing plan and analyze hospitality case studies. Price, promotion, and consumer behavior are discussed in detail.
Equivalent course: NFS390

HTR 400
CATERING MANAGEMENT
3, 1/4
Prerequisite: HTR 100. Provides students with an understanding of catering principles as well as management experiences through the execution of specially booked functions; opportunities to apprentice in planning, organizing, supervising, preparing, and serving food and beverage for planned catered events.

HTR 408
CONVENTIONS, MEETINGS, AND EXPOSITIONS
3, 3/0
Prerequisite: HTR 110. Introduction to the meeting, convention, and exposition industry. The basic framework for planning a meeting, convention, or exposition.
Equivalent course: NFS408

HTR 418
TOURISM MANAGEMENT
3, 3/0
Prerequisite: HTR 110. Tourism as a world export industry and its importance to the economy; tourist behavior, motivation, and decision making; the interrelationship of recreation and tourism; the system used to deliver tourism services; and the products and services of the tourism industry.
Equivalent course: NFS418

HTR 455
ADVANCED HUMAN RESOURCE MANAGEMENT IN HOSPITALITY
3, 3/0
Prerequisites: HTR 110 and HTR 380. Strategies used by the hospitality manager to create a more effective work environment; application of advanced human resource concepts useful in problem solving and decision making in the diverse and competitive hospitality-tourism industry.
Equivalent courses: HTR455W, NFS455

HTR 468
HOTEL MANAGEMENT
3, 3/0
Prerequisites: HTR 110 and HTR 368. An in-depth look at duties, responsibilities, problems, and opportunities encountered by top management in the lodging industry. This course emphasizes current global issues facing hotel management today, linking advanced theory with real-world prob-

lems and solutions. Explores the diversity in management through cultural differences and leadership styles.

HTR 470
LEGAL ISSUES IN HOSPITALITY
3, 3/0
Prerequisites: HTR 110, HTR 380, and HTR 390. Overview of local, state, and federal laws and regulations that promote policies for effective hospitality organizations. Case-study analysis.
Equivalent course: NFS470

HTR 480
PRACTICUM IN HOSPITALITY OPERATIONS
4, 1/6
Prerequisites: HTR 300 and senior status. Culminating experience in hospitality administration at Campus House requiring students to apply various theories and concepts learned in previous courses. Students develop marketing, strategic, and financial plans.
Equivalent course: NFS480

HTR 485
SEMINAR IN HOSPITALITY
1, 1/0
Prerequisite: Senior status. Investigation of contemporary issues relevant to the hospitality industry. Students research and present topics of their choice and participate in career-related activities.
Equivalent course: NFS485

HTR 495
SPECIAL PROJECT
1-3, 0/0
Prerequisite: Instructor and department chair permission, using department forms available in Caudell Hall 207.

HTR 499
INDEPENDENT STUDY
3-12, 0/0
Prerequisite: Instructor and department chair permission, using department forms available in Caudell Hall 207.

HUM - HUMANITIES

HUM 100
INTRODUCTION TO HUMANITIES
3, 0/0; HU1F
Introduction to some central topics in the humanities. Humans' attempts to give meaning to their lives through literary, philosophical, and creative expression.

HUM 490
SENIOR SEMINAR
3, 3/0
Prerequisites: HUM 100, HUM 300, and upper-division status. Research methodologies and examples of research in the humanities. Students may choose to research and develop their own articulated areas of engagement in the humanities by taking HUM 495 concurrently with this culminating-experience course. Senior-level course; required for humanities majors.
Equivalent course: HUM490W

HUM 495
SPECIAL PROJECT
3, 0/0

HUM 499
INDEPENDENT STUDY
3, 0/0

IDE - INTERIOR DESIGN

IDE 101

INTRODUCTION TO INTERIOR DESIGN

3, 3/0

Introductory survey of the theory and practice of interior design. Emphasis is given to the impact of interior space upon the physical, social, psychological, and aesthetic needs of people.

Equivalent course: DES260

IDE 151

MECHANICAL AND PERSPECTIVE DRAWING

3, 1/4

Prerequisites: IDE 101, IDE 102, DES 101. Corequisites: IDE 152, IDE 153. Studio exploration of architectural drafting conventions and the methods to produce mechanically generated descriptive drawings, including orthographic, isometric, and perspective drawings. Skills are utilized in practical application and collaboration with the IDE 151 and IDE 153 studios.

Equivalent course: DES309

IDE 152

INTRODUCTION TO COLOR RENDERING

3, 1/4

Prerequisites: IDE 101, IDE 102, DES 101. Corequisites: IDE 151, IDE 153. Studio introduction to interior design problem-solving processes, design analysis techniques, conceptual ideation, and spatial studies utilizing communication methods in various two-dimensional media.

IDE 153

SPATIAL EXPLORATIONS AND MODEL BUILDING

3, 1/4

A series of small experimental projects introduce, explore, and apply three-dimensional design elements and principles to the creation and representation of the built environment and interior design problems. Different media methods of building sketch, study, and scale models are introduced as tools for designing and producing spatial representations.

IDE 201

INTERIOR DESIGN I

3, 1/4

Prerequisites: IDE 151, IDE 152, IDE 153, and successful completion of the skills competency exam. Corequisite: IDE 202. A series of small experimental projects explores how two-dimensional and three-dimensional design elements and principles are applied specifically to interior design problems. Concept design, development, and articulation are emphasized and represented through the use of sketches, mechanical drawings, and perspective tools, as well as models. Skills and knowledge are utilized in practical application and collaboration with IDE 202.

Equivalent course: DES310

IDE 202

CONSTRUCTION FUNDAMENTALS I

3, 3/0

Corequisite: IDE 201. Investigation of basic construction systems and materials related to the built environment. Covers the principles of structure and behavior (engineering principles) and enclosures and aesthetics (architectural design principles). With increasing specificity, material properties affecting installation and appearance are observed and knowledge is utilized in collaborative projects with IDE 301. Materials that are examined include wood, concrete, stone, metal, synthetics, and glass.

Equivalent course: DES364

IDE 203

FURNITURE THEORY AND APPLICATION

3, 3/0

Corequisites: IDE 251, IDE 252. Exploration of the furniture elements found within interior design; the interrelation of construction, strength of materials, and styles; and how modern-day furniture, theory, and applications have been influenced by and have evolved due to mass production, material development, and ergonomics.

Equivalent courses: DES363, IDE253

IDE 204

MATERIALS AND COLOR

3, 3/0

Corequisites: IDE 101, IDE 103. The study of interior finishes, materials, products, and color used for floors, walls, windows, ceilings, and various interior components as they apply to commercial and residential interior spaces.

Equivalent course: IDE102

IDE 251

INTERIOR DESIGN II

3, 1/4

Prerequisite: IDE 201. Corequisites: IDE 252, IDE 253. Small- to medium-scale residential projects facilitate the exploration of functional criteria inherent in the design of interior spaces. Problem analysis, identification of client and user needs, selection of interior finishes and materials; a detailed, developed layout plus selection of furniture, fixtures, and equipment are emphasized.

Equivalent course: DES360

IDE 252

CONSTRUCTION FUNDAMENTALS II

3, 3/0

Prerequisite: IDE 202. Corequisite: IDE 251. Exploration of advanced construction techniques and materials used in the built environment, with specific emphasis on building systems. Illustrates the principles and philosophy of current building systems and how they relate to appearance, composition, and installation. Knowledge is utilized in practical application and collaboration with the IDE 251 studio course.

IDE 301

INTERIOR DESIGN III

3, 1/4

Prerequisite: IDE 251. Corequisites: IDE 302, IDE 303. Medium-scale design projects are used to explore the principles of retail design and merchandising, focusing on the translation of clearly stated program goals and objectives into unique spatial solutions.

Equivalent course: DES361

IDE 302

INTERIOR DESIGN COMPUTER APPLICATIONS

3, 1/4

Corequisites: IDE 301 and IDE 303. Intermediate-level course. Integrates computer presentation software to augment concurrent Interior Design studio, professional practice, and stand-alone projects. Digital 3-D modeling and 2-D presentation tools, in conjunction with computer-aided design (CAD) software, are used to translate students' fundamental manual presentation techniques to digital drawing, modeling, and layout.

IDE 303

INTERIOR DETAILING

3, 1/4

Prerequisite: IDE 251. Corequisites: IDE 301, IDE 302. Interior designs are taken from concept to construction via micro-design projects. Emphasis on the exploration and marriage of materials, construction techniques, prototype modeling, and drawing conventions as professional communication tools. Material interfaces and transitions are designed; lighting is integrated; notes, reference marks, and key tag conventions are implemented; and professional project sets are completed. Course includes manual and computer-aided drafting techniques.

Equivalent course: DES369

IDE 351

INTERIOR DESIGN IV

3, 1/4

Prerequisite: IDE 301 or DES361. Corequisites: IDE 352, IDE 353. Information-gathering research and analysis is the basis to solve the functional and spatial requirements of complex public buildings, such as museums, libraries, health-care facilities, and cinemas. Special emphasis is placed on adjacencies, circulation, articulation, and the shaping of space.

Equivalent course: DES460

IDE 352

AUTOCAD FOR INTERIOR DESIGNERS

3, 1/4

Corequisites: IDE 351, IDE 353. Introductory through intermediate level of instruction on Autodesk's Architectural Desktop, with an emphasis on

the production and efficiency implications of computer-aided drafting in interior design. The use and exploration of increasingly complex commands, both in 2D and 3D, and their application reinforces basic drafting conventions and enhances the project design communication and construction document creation necessary in the practice of interior design. Equivalent course: DES262

IDE 353
INTERIOR DESIGN PROFESSIONAL PRACTICE AND SPECIFICATIONS
3, 3/0

Corequisites: IDE 351, IDE 352. Introduction to the business principles, practices, and ethics of the interior design profession. Emphasizes regional standards, codes, means, methods, and client interaction. Professional specification creation guidelines cover product performance, code restrictions, and environmental concerns. Curriculum includes an integrated service-learning community service component. Equivalent course: DES367

IDE 354
GLOBAL DESIGN STUDY TOUR
3, 2/0

Prerequisites: open for visual arts sophomores, juniors, and seniors with a cumulative GPA of 2.5 or better, instructor permission required. The Global Design Study Tour provides an opportunity to travel and experience a wide range of different cultural and geographical settings and their impact on interior design, art and architecture. Students will study exemplary global designs with an awareness and respect for cultural and social diversity.

IDE 389
TOPICS COURSE
3, 3/0

IDE 401
INTERIOR DESIGN V
1-3, 1/4

Prerequisite: IDE 351. Corequisite: IDE 402. Large-scale office planning design projects are used to explore the functional and aesthetic requirements of complex administrative buildings. Anthropometric requirements; physical, sociological, and psychological needs; and the research, analysis, and programming skills needed for designing interior work-spheres are emphasized. Equivalent course: DES461

IDE 402
LIGHTING DESIGN
3, 1/4

The study of illumination principles, design criteria, specifications, and systems applied to public and private interiors. Hands-on experience using a lighting lab and three-dimensional projects reinforce lecture material in a studio setting. Equivalent course: DES368

IDE 451
INTERIOR DESIGN VI THESIS STUDIO
3, 1/4

Prerequisite: IDE 401. Constitutes the final studio experience prior to graduation and features one major design project. Students focus their design initiative with increased objectivity and adopt a comprehensive approach to the interior design process utilizing proposal, research, schematic design, construction documentation, material selections, specifications, technical writing, and presentation.

IDE 488
INTERIOR DESIGN INTERNSHIP
3, 3/0

Guided and supervised exposure to professional interior design operations through on-the-job work experience in an authorized design firm, department, studio, or showroom. To earn 3 credit hours, students must complete 135 contract hours with the firm, provide a written report of the work experience, and receive a written evaluation from the employer. Equivalent course: DES488

INS - INDIVIDUALIZED STUDIES

INS 300
ASSESSMENT OF EXPERIENTIAL LEARNING
3, 3/0

Prerequisite: Permission of instructor, matriculated students only. Designed for students who consider previous learning experiences as college-level creditable. Analysis of experiences that may qualify for college credit, and preparation of a portfolio to inventory college-level learning gained outside of college. Not for second-semester seniors. Equivalent courses: AEL300, INS300W

INS 495
PROJECT
0-3, 0/0

INS 497
WORKSHOP
2-12, 3/0
Equivalent course: GSS497

INS 499
INDEPENDENT STUDY
3-12, 0/0

IST - INTERNATIONAL STUDIES

IST 100
INTRODUCTION TO INTERNATIONAL STUDIES
3, 3/0

An introduction to key issues and perspectives in the field of International Studies. This course will explore the interconnected nature of global political, economic, and socio-cultural practices, as well as how the United States affects - and is affected by - other nations and cultures. Equivalent course: GST200

ITA - ITALIAN

ITA 101
BEGINNING ITALIAN I
3, 3/0; FLA
Fundamentals of Italian with emphasis on listening and speaking.

ITA 102
BEGINNING ITALIAN II
3, 3/0; FLA
Prerequisite: ITA 101. Continuation of ITA 101.

ITA 201
INTERMEDIATE ITALIAN I
3, 3/0
Prerequisite: ITA 102. Further development of basic skills with emphasis on reading and writing.

ITA 202
INTERMEDIATE ITALIAN II
3, 3/0
Prerequisite: ITA 201. Continuation of ITA 201.

ITA 301
ITALIAN CONVERSATION AND COMPOSITION
3, 3/0
Prerequisite: ITA 202. Practice in written and spoken Italian.

ITA 302
ITALIAN CONVERSATION AND COMPOSITION
3, 3/0
Prerequisite: ITA 202. Practice in written and spoken Italian.

ITA 307
SURVEY OF ITALIAN LITERATURE

3, 3/0

Prerequisite: ITA 202. Readings and discussions of major works from the origins through the cinquecento.

ITA 308
SURVEY OF ITALIAN LITERATURE

3, 3/0

Prerequisite: ITA 202. Readings and discussions of major works from the seicento to the ottocento.

ITA 410
MODERN ITALIAN LITERATURE

3, 3/0

Prerequisite: One upper-division Italian course. Readings and discussions of representative novels and short stories of the twentieth century.

ITA 450
DIRECTED READINGS I

3, 3/0

Prerequisite: Permission of instructor. Variable topics.

ITA 451
DIRECTED READINGS II

3, 3/0

Prerequisite: Permission of instructor. Variable topics.

LAT - LATIN

LAT 101
BEGINNING LATIN I

3, 3/0; FLA

Fundamentals of Latin with emphasis on reading.

LAT 102
BEGINNING LATIN II

3, 3/0; FLA

Prerequisite: LAT 101. Continuation of LAT 101.

LIB - LIBRARY

LIB 100
INTRODUCTION TO LIBRARY RESEARCH METHODS

1, 1/0

Overview of library collections and services to maximize research efficiency. Research strategies and tools, including the online library catalog, periodical and reference databases, and Web resources. Open to all students. Recommended for freshmen and sophomores.

LIB 300
ADVANCED LIBRARY RESEARCH METHODS

3, 3/0

Advanced library research strategies with critical thinking and evaluation skills. Emphasizes selecting and using appropriate print and online sources to conduct specialized research. Recommended for students with upper-division status and those planning to pursue graduate studies.

LIB 495
SPECIAL PROJECT

1-3, 0/0

SPECIAL PROJECT

LIB 499
INDEPENDENT STUDY

3-12, 0/0

MAT - MATHEMATICS

MAT 097
BASIC MATHEMATICS

0, 3/0

Provides the necessary mathematics background needed to pass college-level algebra; covers polynomials, rational expressions, exponents and roots, solving equations and inequalities.

MAT 098
BASIC MATHEMATICS

0, 0/0

Computer-based instruction presentation. Information is presented primarily by computer program with instructor intervention. Instructor interacts with the program by evaluating pre-tests and placing students appropriately in the course continuum. Students are encouraged to complete the entire course of study, but may exit the course when they achieve a score at or above the minimum competency exam. One hour per week attendance is required.

MAT 103
INTRODUCTION TO MATHEMATICS

3, 3/0; MQIF

Some of the greatest achievements of mathematical thought, highlighting the beauty and creativity of these ideas. Topics include Fibonacci numbers; the golden rectangle; estimation; comparing infinities; fractals; the Pythagorean Theorem; the five platonic solids; and selected topics from probability and statistics. Designed for liberal arts majors who do not plan to take further math courses.

Equivalent course: MAT103W

MAT 114
FUNCTIONS AND MODELING

3, 3/0; MQIF

Prerequisite: 3 years high school mathematics or equivalent. Describe and explore real-world functions, data, and phenomena through graphic, numeric, symbolic, and verbal representations. Use elementary functions (linear, polynomial, power, and exponential) to investigate and analyze applied problems (supported by the use of appropriate technology).

MAT 121
ELEMENTARY MATHEMATICS FROM AN ADVANCED STANDPOINT I

3, 3/0

Prerequisite: Three years of Regents high school mathematics or equivalent. Problem solving; elementary set theory; whole numbers; introductory probability; beginning geometry; number theory; using computers.

MAT 122
ELEMENTARY MATHEMATICS FROM AN ADVANCED STANDPOINT II

3, 3/0; MQIF

Prerequisite: MAT 121. Real numbers; logic, relations, and functions; probability and statistics; geometry; Logo.

MAT 124
FUNCTIONS AND MODELING II

3, 3/0

Prerequisite: MAT 114 with a minimum grade of C, or equivalent. A precalculus course designed for students who have completed a minimum of three years of New York State Regents high school mathematics or the equivalent. Topics include analysis of polynomial, rational, exponential, logarithmic, and trigonometric functions from graphical, symbolic, numerical, and verbal perspectives with an emphasis on modeling and applications of those functions in real-world contexts. No credit given to students who have previously completed MAT 126 or MAT 161 or equivalent.

MAT 126
APPLIED CALCULUS I

4, 4/0; MQIF

Prerequisite: MAT 124 or four years of Regents high school mathematics. Intuitive introduction to differential and integral calculus. Analysis of functions, derivatives of algebraic, exponential, and logarithmic functions, applications of the derivative, anti-derivatives of simple algebraic, expo-

ponential and logarithmic functions, area and the fundamental theorem of calculus. Graphical, symbolic, numerical, and verbal representations are used for all topics. Designed for students majoring in disciplines that use calculus as a tool. No credit given to students who have previously completed MAT 161 or equivalent.
Equivalent course: MAT161

MAT 127
APPLIED CALCULUS II
4, 4/0

Prerequisite: MAT 126 with a minimum grade of C, or equivalent. Continuation of MAT 126. Techniques of integration; applications of integration; introduction to differential equations including separation of variables, first order linear equations, and their applications; Taylor polynomials; Newton's method; partial derivatives; and optimization of functions of two and three variables. Graphical, symbolic, numerical, and verbal representations are used for all topics. Designed for students majoring in disciplines that use calculus as a tool. Credit issued for either MAT 127 or MAT 162 (or equivalents), but not for both.
Equivalent course: MAT162

MAT 161
CALCULUS I
4, 4/0; MQIF

Prerequisite: MAT 124 or four years of Regents high school mathematics. Corequisite: MAT 163. Graphic, symbolic, and numeric representation and analysis of functions; limits; continuity; derivatives and antiderivatives of algebraic, trigonometric, exponential, and logarithmic functions; applications of the derivative and antiderivative. Appropriate for math majors and students in partner disciplines requiring understanding of fundamental principles of calculus with emphasis on deductive reasoning and proof.

MAT 162
CALCULUS II
4, 4/0

Prerequisite: MAT 161. Corequisite: MAT 164. A continuation of MAT 161. Area accumulation functions; definition of the definite integral; fundamental theorem of calculus; integration techniques; applications of integrals; improper integrals; sequences and series; function approximation. Graphic, symbolic, and numeric representations are used throughout the course. Appropriate for math majors and students in partner disciplines requiring understanding of fundamental principles of calculus with emphasis on deductive reasoning and proof.

MAT 163
USING TECHNOLOGY TO EXPLORE CALCULUS I
1, 1/0

Prerequisite or corequisite: MAT 161 or equivalent. Exploration of Calculus I using a programmable graphing calculator.

MAT 164
USING TECHNOLOGY TO EXPLORE CALCULUS II
1, 1/0

Prerequisite or corequisite: MAT 162 or equivalent. Exploration of Calculus II, using a computer algebra system.

MAT 202
INTRODUCTION TO LINEAR ALGEBRA
3, 3/0

Prerequisite: MAT 161 or MAT 126. Vectors and vector spaces; linear dependence, basis and dimension; matrices and determinants; linear systems; linear transformations; eigenvectors; invariant subspaces.

MAT 241
COMPUTATIONAL TOOLS FOR APPLIED MATHEMATICIANS I
3, 3/0

Prerequisite: MAT 161 and MAT 163 or equivalent or permission of instructor. Fundamental concepts of problem solving by computer as applied to mathematics. Computer organization, operations and functions, algorithm development, programming techniques. Numerical methods as used in calculus, linear algebra, geometry, etc. Uses a computer language to be applied in this and other mathematics classes.
Equivalent course: MAT141

MAT 263
CALCULUS III
3, 3/0

Prerequisite: MAT 162. Corequisite: MAT 264. Vectors, partial differentiation, multiple integrals, and infinite series. Applications studied through algorithmic techniques and/or computer usage.

MAT 264
USING TECHNOLOGY TO EXPLORE CALCULUS III
1, 1/0

Prerequisite: MAT 164. Prerequisite or corequisite: MAT 263. Exploration of Calculus III using a Computer Algebra System.

MAT 270
DISCRETE MATHEMATICS I
3, 3/0

Prerequisite: MAT 161 or MAT 126. Introduction to the noncontinuous side of mathematics; proof, logic, sets, relations, functions, and counting methods.

MAT 300
TECHNIQUES OF PROOF
3, 3/0

Prerequisite: MAT 162. A gateway to upper-division mathematics with an emphasis on mathematical structures, techniques of proof, and the effective written and oral communication of mathematical ideas. Designed to ease the transition from lower-division mathematics to more theoretical courses such as abstract algebra and real analysis. Students are required to submit written work and make oral presentations.

MAT 301
FUNDAMENTALS OF ABSTRACT ALGEBRA
3, 3/0

Prerequisite: MAT 202 and MAT 270. Fundamental concepts of abstract algebra: sets, mappings, binary operations, relations; algebraic structures of groups, rings, fields, and applications.
Equivalent course: MAT301W

MAT 302
ABSTRACT ALGEBRA II
3, 3/0

Prerequisite: MAT 301. Quotient fields of integral domains, polynomials, rings; Euclidean domains, ideals, and factorization; finite fields, extension fields, splitting fields. Applications to geometric constructions and solvability chosen from contemporary areas of coding theory, block designs, etc.
Equivalent course: MAT302W

MAT 304
GAMES AND LINEAR PROGRAMMING
3, 3/0

Prerequisite: Three years of Regents high school mathematics. Elementary techniques for finding optimal choices among game strategies and in linear programming problems using the fundamental minimax theorem and the simplex method. Applications in such areas as business, industry, economics, social sciences, and behavioral sciences. Not open to 0718, 0719, or 0721 majors.

MAT 309
DISCRETE MATHEMATICS II
3, 3/0

Prerequisite: MAT 270. Automata, modules, group codes, linear machines, polynomial rings, cyclic codes, minimum polynomials, context-free grammars, tree automata, polish notation, pushdown automata.

MAT 311
INTRODUCTORY PROBABILITY AND STATISTICS
3, 3/0; MQIF

Prerequisite: Three years of Regents high school mathematics. Descriptive statistics; probability and random variables; binomial, normal, and t distributions; estimation and tests of hypotheses concerning means, proportions, and differences between means and proportions. Does not count toward the 0718, 0719, 0721 majors.
Equivalent course: MAT111

MAT 315

DIFFERENTIAL EQUATIONS

3, 3/0

Prerequisite: MAT 263 or permission of instructor. Preliminary ideas on order, degree, and solutions; formation of differential equations; differential equations of first-order linear equations with constant coefficients; special high-order equations; simultaneous equations; linear equations of the second order; series solutions.

MAT 316

INTERMEDIATE DIFFERENTIAL EQUATIONS

3, 3/0

Prerequisite: MAT 315. Laplace transform; inverse Laplace transform and applications; partial differential equations; Fourier series; boundary value problems; transform methods application.

MAT 318

MATHEMATICAL MODELING

3, 3/0

Prerequisites: MAT 162 and MAT 202. Construction, interpretation and application of mathematical models; various modeling paradigms such as deterministic, probabilistic, discrete and continuous modeling. Models which provide valuable insights into contemporary topics from different fields that may include bio-medical applications, financial mathematics, cellular automata models, mathematical methods for data collection and analysis in geology, mathematical tools for GIS, and weather prediction.

MAT 319

MATHEMATICAL BIOLOGY

3, 3/0

Prerequisites: MAT 161 with a minimum grade of C, or equivalent. A project-oriented, introductory mathematical modeling course with an emphasis on the construction and analysis of mathematical models of biological events and phenomena. Mathematical topics include matrix algebra, difference and differential equations. Biological topics include population dynamics, dynamics of infectious disease and models of molecular evolution.

MAT 322

MODERN GEOMETRY

3, 3/0

Prerequisite: MAT 270. Euclidean constructions; theorems of Menelaus and Ceva; cross-ratio; harmonic points; orthogonal circles; isometrics and similarities in the plane; introduction of projective geometry. Equivalent course: MAT322W

MAT 325

PROBABILITY AND STATISTICS

3, 3/0

Prerequisites: MAT 127 or MAT 162 and MAT 270, and MAT 311 or permission of instructor. Probability (graphic representations, descriptions of probabilistic events, combinatorics and combinatorial probability); discrete and continuous probability distributions; descriptive statistics; estimation and tests of hypotheses concerning means, proportions, variance and standard deviation and differences between means and proportions.

MAT 351

ELEMENTARY THEORY OF NUMBERS

3, 3/0

Prerequisite: Four years of Regents high school mathematics. Divisibility; Euclid's algorithm; numbers; prime factorization theorem; Euler's phi-function; Diophantine analysis; congruence; theorems of Fermat, Euler, and Wilson.

MAT 366

COMPUTATIONAL TOOLS FOR APPLIED MATHEMATICIANS II

3, 3/0

Prerequisites: MAT 164, MAT 241, and MAT 270; or permission of instructor. Structured programming, verification of program validity, data structures, combinatorial problems, flow network, algorithms, random number generators, simulation of random and nonrandom processes.

MAT 370

APPLIED NETWORKS

3, 3/0

Prerequisites: MAT 202 and MAT 270. Introduction to network and graph theoretic concepts. Properties with application in computational mathematics, social science, decision making, and physical science.

MAT 381

PROBABILITY THEORY

3, 3/0

Prerequisites: MAT 270 and either MAT 127 or MAT 162. Probability models; discrete and continuous random variables and their distributions or densities; multivariate distributions; mathematical expectation; special distributions and densities.

Equivalent course: MAT111

MAT 382

MATHEMATICAL STATISTICS

3, 3/0

Prerequisites: MAT 263 and MAT 381. Sampling distributions; central-limit theorem; point and interval estimation; tests of hypotheses.

MAT 383

APPLIED STATISTICS I

3, 2/1

Prerequisites: MAT 382 or MAT 325 or MAT 311 and MAT 381. Categorical data analysis; simple linear regression and correlation; multiple linear regression; experimental design models (one, two or more factors); nonparametric statistics.

MAT 390

INTRODUCTION TO OPERATIONS RESEARCH

3, 3/0

Prerequisites: MAT 202 and MAT 270. Optimization of real-world problems modeled by linear objective functions subject to systems of linear inequalities and solved by either the two-phase revised simplex method or by the network simplex method. Mathematics behind these methods. Applications in diverse areas such as business management, industry, economics, finance, game theory, geometry, and networks.

MAT 401

INTRODUCTION TO TURING MACHINES AND ABSTRACT COMPUTABILITY

3, 3/0

Prerequisites: MAT 270 and either MAT 301 or MAT 351. Introduction to topics in finite automata and Turing machines, including universal Turing machines and abstract computability.

MAT 404

APPLICATIONS OF LINEAR ALGEBRA

3, 3/0

Prerequisites: MAT 202, MAT 263, and MAT 264. Eigenvalue problems; diagonalizing matrices; linear programming; simplex method; applications to areas such as business, industry, economics, social sciences, and behavioral sciences.

MAT 411

COMPLEX VARIABLES

3, 3/0

Prerequisite: MAT 263. Complex numbers; analytic functions; elementary functions; contour integration; integral theorems; Taylor series; Laurent series; uniform convergence; calculus of residues; mappings and applications.

MAT 417

INTRODUCTION TO REAL ANALYSIS I

3, 3/0

Prerequisite: MAT 263. Elementary real analysis, including properties and axioms of the real number system; relations and functions; sequences; continuity; differentiation; infinite series; power series; Riemann integral.

MAT 418

INTRODUCTION TO REAL ANALYSIS II

3, 3/0

Prerequisite: MAT 417 or equivalent. Continuation of MAT 417 with topics chosen from: Riemann-Stieltjes integration; improper integrals;

infinite series; series of functions; partial differentiation; Jacobians; implicit function; multiple integrals; Fubini's Theorem.

MAT 431
MATHEMATICAL LOGIC
3, 3/0

Prerequisites: MAT 270 and MAT 202. Validity, deductibility, and completeness in propositional and predicate logics; first-order formal theories and informal theories in the context of set theory.

MAT 461
NUMERICAL ANALYSIS
3, 3/0

Prerequisites: MAT 202, MAT 263, and MAT 264. Numerical solutions (and error analysis) to linear and nonlinear equations; interpolation; curve fitting; function approximation; numerical differentiation and integration; differential equations.

MAT 471
INTRODUCTION TO TOPOLOGY
3, 3/0

Prerequisites: MAT 270 and either MAT 301 or MAT 417. Introduction to topology: sets and functions; metric spaces; topological spaces; connectedness; compactness; separation.

MAT 481
STOCHASTIC PROCESSES
3, 3/0

Prerequisite: MAT 325 or MAT 381. Random walks, Brownian motion, Markov chains and applications, continuous-time processes including exponential distribution and Poisson processes, software applications.

MAT 484
APPLIED STATISTICS II
3, 3/0
Prerequisite: MAT 383. Logistic regression, survival analysis, time series analysis.

MAT 490
SEMINAR
1-3, 3/0
Prerequisite: Senior mathematics major or permission of instructor. Investigation of topics of current interest to mathematicians, such as group theory; game theory; differential geometry; measure theory; sampling theory. Emphasis on oral presentations and discussions.

MAT 491
CAPSTONE RESEARCH IN MATHEMATICS
3, 3/0; OCIF
Prerequisites: MAT 301 or MAT 417 and senior status; or permission of instructor. Independent research under the direction of the instructor. Composition of a research paper and presentation of results at a seminar for faculty and students.

MAT 495
SPECIAL PROJECT
1-3, 0/0
Equivalent course: AMT495

MAT 499
INDEPENDENT STUDY
3-12, 0/0

MCL - MODERN AND CLASSICAL LANGUAGES

MCL 100
ITALIAN CINEMA I
3, 3/0; HUIF
Masterpieces of Italian cinema 1940-1970s. Taught in English.

MCL 189
TOPICS COURSE
1-9, 0/0

MCL 337
GREEK AND ROMAN MYTHOLOGY
3, 3/0

Prerequisite: One college-level literature course. Stories of the gods, goddesses, and heroes of Greece and Rome as presented in Greek and Roman literature. Emphasis upon determining possible origins and meanings of the myths studied.

Equivalent courses: FLA337, MCL337W

MCL 488
INTERNSHIP
0, 0/0

Prerequisite: Upper-division status and permission of instructor and department chair. Overall 2.5 GPA and 2.5 GPA in upper-division courses in specific language area. Guided and supervised field experiences (experiential learning) of degree programs. Supervised on-site activities for qualified students; training sessions, seminars and reports.

MCL 495
SPECIAL PROJECT
3, 0/0

Prerequisite: Permission of instructor.

MCL 499
INDEPENDENT STUDY
3-12, 0/0

Prerequisite: Permission of instructor.

MED - MATHEMATICS EDUCATION

MED 200
FIELD EXPERIENCE IN SECONDARY EDUCATION MATHEMATICS
3, 1/0

Classroom and field experience designed to help students contemplating careers in secondary mathematics education; provides important background for students' roles as citizens and as parents. Required for secondary education mathematics majors.

Equivalent course: SED200

MED 300
FIELD EXPERIENCE: METHODS IN THE TEACHING OF
SECONDARY SCHOOL MATHEMATICS
1, 0/0

Corequisite: MED 308. Supervised field experience at the middle and/or high school level. Emphasis on classroom implementation of knowledge, understanding, and practice consistent with state and national mathematics teaching standards discussed in MED 308.

MED 307
USES OF TECHNOLOGY IN THE TEACHING OF MATHEMATICS
3, 3/0

Prerequisites: Upper division status and permission of instructor. Equipment and software available for use in the mathematics classroom. Effective use of technology in exploration and development of concepts, problem solving, development of lessons, and assessment of educational potential of current and new technologies. Production and evaluation of projects for use in the mathematics classroom.

Equivalent course: SED307

MED 308
METHODS IN THE TEACHING OF SECONDARY SCHOOL
MATHEMATICS
3, 3/0

Prerequisites: For 0721, 30 credit hours of MAT courses with minimum GPA of 2.5, 6 credit hours of professional courses and MED 200 with minimum GPA of 2.5 and permission of instructor. For 0524, minimum of 24 hours of MAT courses with a GPA of 2.5, minimum of 6 hours of professional courses with a GPA of 2.5, at least 75 hours completed, and permission of instructor. Corequisite: MED 300. Introduction to the theory and practice of classroom teaching for the prospective secondary mathematics teacher. Experiences in classroom discipline, planning for instructor, curricular issues, evaluation and testing, and special learning techniques. Lectures, peer presentations, construction and critique of lesson plans, use of media, and research of teaching strategies.

Equivalent courses: MED308W, SED308

MED 309
FIELD EXPERIENCE: METHODS IN TEACHING OF SECONDARY
SCHOOL MATHEMATICS
3, 3/0

Prerequisites: Must be enrolled in 0524; a minimum of 24 hours of the math concentration completed with a GPA of 2.5 or higher; a minimum of 6 hours of professional education courses completed with a GPA of 2.5 or higher; permission of instructor. Corequisite: MED 308. Preparation to teach mathematics in grades 5-9. Includes techniques and models used to teach mathematics at the middle-school level in the context of current research on how children learn mathematics.

MED 383
LEARNING AND TEACHING PROBLEM SOLVING
3, 3/0

Prerequisites: MAT 162, MAT 127, MAT 270, and upper-division status. Experiences in mathematical problem solving; learning through problem solving; consideration of diverse perspectives and problem-solving approaches; strategies for teaching the use of a problem-based approach; the historical and current roles of problem solving in secondary mathematics. Equivalent course: MED383W

MED 406
STUDENT TEACHING OF MATHEMATICS IN THE LOWER MIDDLE
GRADES 5-6
6, 0/6

Prerequisites: Completion of MED 200, MED 307, MED 309, MED 383W, EDF 303, all required mathematics courses, and 6 credit hours of upper-division mathematics courses; minimum GPA of 2.5 in all mathematics and education coursework; senior status. Lower middle school laboratory experiences, goals of lower middle school education, psychological influences, teaching models, assessment techniques, classroom management, total involvement in lower middle school activities, practicum.

MED 407
STUDENT TEACHING OF MATHEMATICS IN JUNIOR
HIGH/MIDDLE SCHOOL
6, 0/0; OCIF

Prerequisites: Completion of MED 308 and MED 300 or MED 309 with a minimum grade of C; completion of all mathematics coursework; minimum cumulative GPA of 2.5 in all major mathematics courses; completion of all education courses with a minimum cumulative GPA of 2.5; senior status; and instructor permission. Supervised teaching experience five full days a week for approximately eight consecutive weeks in an early secondary mathematics classroom. Effective demonstration of content knowledge, pedagogical preparation, instructional delivery, classroom management, knowledge of student development, collaboration with school professionals, and reflectivity of practice required. Equivalent course: SED407

MED 408
STUDENT TEACHING OF MATHEMATICS IN HIGH SCHOOL
6, 0/0; OCIF

Prerequisites: MTS major; completion of MED 308 and MED 300 with a minimum grade of C; completion of all mathematics degree coursework; minimum cumulative GPA of 2.5 in all major mathematics courses; completion of all education courses with a minimum cumulative GPA of 2.5; senior status; and instructor permission. Supervised teaching experience five full days a week for approximately eight consecutive weeks in an early secondary mathematics classroom. Effective demonstration of content knowledge, pedagogical preparation, instructional delivery, classroom management, knowledge of student development, collaboration with school professionals, and reflectivity of practice required. Equivalent course: SED408

MED 499
INDEPENDENT STUDY
3-12, 0/0

MST – MUSEUM STUDIES

MST 450
MUSEUM INTERNSHIP
3-6, 3-6/0

Prerequisites: Upper-division status and permission of instructor. For students interested in gaining practical experience in museum work. Assignment to a particular museum is based on a student's major-related disciplines. Students in areas such as history, anthropology, art history, education, and the natural sciences are eligible. Equivalent course: HIS450

MST 488
INTERNSHIP
3-15, 3/0

Prerequisite: Approval of the faculty supervisor. Supervised field experience in a variety of settings to supplement classroom instruction.

MST 495
SPECIAL PROJECT
1-3, 0/0

Prerequisite: Faculty supervisor permission. Research conducted under the supervision of a faculty member.

MST 499
INDEPENDENT STUDY
3-12, 0/0

Prerequisite: Faculty adviser permission.

MST 498
HONORS RESEARCH
3, 0/0

MUS - MUSIC

MUS 110
ACCOMPANIST COACHING SESSION
1, 0/2

Corequisites: MUS 112 or MUS 171; applied lessons. Provides students enrolled in the applied music lesson sequence the opportunity to meet and rehearse privately with a staff piano accompanist and have an accompanist present in their applied lesson. Emphasis on memorization techniques, solo and ensemble performance techniques, and musical interpretation. Includes solo or chamber repertoire currently under preparation for collegium, jury, or recital performance.

MUS 111
ACCOMPANYING FOR PIANISTS
1, 1/0

Prerequisite: Music Majors Only. For piano students who wish to gain experience accompanying. Students assigned a vocalist or instrumentalist, and will be required to attend their soloist's weekly applied lesson as well as a coaching/masterclass session with the piano instructor.

MUS 112
APPLIED MUSIC
1, 1/0

Prerequisites: Permission of instructor; previous performance experience; audition and BSC Ensemble participation required. Individual lessons for voice or instrument. Voice students work with a vocal coach to prepare and perform vocal repertoire, with focus on the basic technical aspects of singing. Private lesson fee possible.

MUS 113
BRASS TECHNIQUES
1, 1/0

Prerequisite: Music education majors. Pre-professional training in performing and teaching methodologies for trumpet, horn, trombone, baritone, and tuba. Laboratory teaching exposure to Buffalo Public School music students.

MUS 114
PERCUSSION TECHNIQUES
1, 1/0

Prerequisite: Music education majors. Preprofessional training in performing and teaching methodologies for percussion instruments. Laboratory teaching exposure to Buffalo Public School music students.

MUS 115
STRING TECHNIQUES
1, 1/0

Prerequisite: Music education majors. Preprofessional training in performing and teaching methodologies for violin, viola, violoncello, and contrabass.

MUS 116
WOODWIND TECHNIQUES
1, 1/0

Prerequisite: Music education majors. Preprofessional training in performing and teaching methodologies for flute, clarinet, oboe, bassoon, and saxophone. Laboratory teaching exposure to Buffalo Public School music students.

MUS 119
VOCAL PEDAGOGY
1, 0/0

Develops knowledge and techniques for the teaching of voice, including posture, breathing, diction, repertoire selection at all levels, as well as the pedagogical processes for teaching secondary vocal students. Repeatable.

MUS 122
INTRODUCTION TO MUSIC STUDIES AND CAREERS
2, 3/0

Provides historical, philosophical, and practical foundations needed for a career in music. Experiences that integrate library, research, teacher observation and analysis, reading, and writing skills with regard to the profession will be utilized to assist students' exploration and confirmation of his or her decision to enter the field.

MUS 161
CLASS PIANO I
1, 0/2

This is the first in a sequence of four group piano courses designed for those music students who need to improve their piano skills. The first two semesters focus on developing general musicianship skills, such as sight reading from the grand staff, melody harmonization, technique, improvisation, ensemble performance, practicing, and use of basic theory skills at the keyboard.

MUS 162
CLASS PIANO II
1, 0/2

Prerequisite: C or better in MUS 161 or audition. Continuation of the skills acquired in MUS 161.

MUS 171
APPLIED MUSIC
1-2, 1/0

Prerequisite: Audition. Individual lessons for voice or instrument. Required for music majors. Private lesson fee possible. Concert attendance required.

MUS 173
APPLIED MUSIC
1-2, 1/0

Prerequisite: Audition. Individual lessons for voice or instrument. Required for music majors. Private lesson fee possible. Concert attendance required.

MUS 201
SURVEY OF WESTERN MUSIC HISTORY
3, 3/0; ARIF

Introduction to music from the Middle Ages to the present; study of forms and styles, composers and performers, cultural and social backgrounds, and parallel developments in other arts. Lecturer and listening assignments. Concert attendance required.

Equivalent courses: MUS201W, MUS301, MUS329

MUS 206
FOUNDATIONS OF AMERICAN POPULAR MUSIC
3, 3/0; ARIF, DIIF

This survey course studies the historical developments that helped formulate today's popular music, including the roots of blues, jazz, and rock music in America.

MUS 208
SURVEY OF WORLD MUSIC CULTURES
3, 3/0; ARIF

Survey of representative art and popular music cultures of Africa, Asia, the Middle East, and Latin America. Lectures and listening assignments. Concert attendance required.

MUS 209
SUB-SAHARAN AFRICAN MUSIC AND CULTURES
3, 3/0; NWIF

Study of the cultures of sub-Saharan Africa focused on the histories and musics from four specific regions. Two-thirds of class time is in lecture format; one-third is dedicated to learning and performing African rhythms on percussion instruments.

MUS 210
MUSIC THEORY FOR NON-MAJORS
3, 3/0; ARIF

Music notation, aural and written. Scales, intervals, triads, seventh chords, rhythms, simple and compound meters, elementary recitation, dictation, analysis, and composition.

MUS 218
AURAL PERCEPTION I
1, 0/3

Corequisite: MUS 230. Laboratory course for those with basic music-reading skills. Reinforces theoretical music concepts in the form of sight singing, rhythmic, melodic dictation, and basic musicianship. A diagnostic test is given at the beginning of the semester. Required for music majors.

MUS 219
AURAL PERCEPTION II
1, 0/3

Prerequisites: MUS 218 and MUS 230. Corequisite: MUS 231. Continuation and development of the melodic, rhythmic, and musicianship skills acquired in MUS 218. Required for music majors.

MUS 220
TECHNOLOGY APPLICATIONS FOR MUSIC EDUCATION
2, 2/0

Prerequisites: MUS 230 and MUS 231, or permission of instructor. Students gain knowledge of current technology applications suitable for music instruction, including administrative applications, software for notation and composition, and MIDI-based sequencing, as well as teaching methods and strategies for using technology in music classrooms and ensembles; incorporates extensive hands-on activities.

MUS 224
MUSIC AND POLITICAL ACTION
3, 3/0; WCIF

Prerequisites: CWP 101 and CWP 102. Chronological overview of significant political, social, military, and religious events and the music associated with those events. Various composers, musical styles, musical forms, and musical selections as they directly relate to historically significant circumstances, events, and movements within world and American history. Previous musical experience helpful but not required.

MUS 230
MUSIC THEORY I
3, 3/0

Prerequisite: Basic music-reading skills. Corequisite: MUS 218. Fundamentals of music, including notation, scales, modes, tonality, key signatures, intervals, basic chords, basic harmony, voice leading, melodic structures, and the general stylistic features of the various epochs of Western music.

MUS 231
MUSIC THEORY II
3, 3/0

Prerequisites: MUS 230 and MUS 218. Corequisite: MUS 219. Continuation of the fundamentals of music, with emphasis on harmony, voice leading, and simple formal structures within the contexts of the various historical periods of Western music. Required for music majors.

MUS 261
CLASS PIANO III
1, 0/2

Prerequisite: C or better in MUS 162 or audition. This course and MUS 262 are designed for music students who are working toward successful completion of the piano proficiency exam. The skills developed are those used by music educators in the elementary or secondary classroom: Sight reading, melody harmonization, accompanying, score reading, and improvisation.

MUS 262
CLASS PIANO IV
1, 0/2

Prerequisite: C or better in MUS 261 or audition. Continuation of the skills acquired in MUS 261.

MUS 271
APPLIED MUSIC
1-2, 1/0

Prerequisite: Audition. Individual lessons for voice or instrument. Required for music majors. Private lesson fee possible. Concert attendance required.

MUS 273
APPLIED MUSIC
1-2, 1/0

Prerequisite: Audition. Individual lessons for voice or instrument. Required for music majors. Private lesson fee possible. Concert attendance required.

MUS 290
PHILHARMONIA ORCHESTRA
1, 1/0; ARIF

Prerequisite: Audition. Participation in the Buffalo State College Philharmonia Orchestra, a college-community ensemble composed of qualified Buffalo State student musicians and experienced community musicians. The orchestra serves as the principal vehicle for increasing students' awareness of symphonic repertoire, orchestral excerpts, and performance protocol as directly related to an orchestral ensemble. Repertoire is planned and organized to provide students with a diverse exposure to important classical, pops, and seasonal programming. May be taken more than once.

MUS 302
MUSIC HISTORY: ANTIQUITY THROUGH BAROQUE
3, 3/0

Prerequisite: One theory course or permission of instructor. Listening, identification, analysis, and study of musicological and sociohistorical trends in the medieval, Renaissance, and Baroque style periods. Equivalent course: MUS302W

MUS 303
MUSIC HISTORY: CLASSIC THROUGH MODERN
3, 3/0

Prerequisite: MUS 302. Listening, identification, analysis, and study of musicological and socio-historical trends, with focus on the eighteenth, nineteenth, twentieth, and twenty-first centuries, including opera, oratorio, solo song, chamber music, symphony, and contemporary forms. Equivalent course: MUS303W

MUS 305
MODERN JAZZ
3, 3/0

Prerequisite: MUS 206. History and development of modern jazz from 1941 to the present. Equivalent courses: AAS304, MUS305W

MUS 306
URBAN BLUES AND ROCK
3, 3/0

Prerequisite: MUS 206. Sources and development of the idioms, style, and sound media of this music. Equivalent course: MUS306W

MUS 313
CHAMBER CHOIR
1, 1/0

Prerequisite: Audition. A select vocal ensemble of mixed voices that studies and performs art music from the medieval through modern genres.

MUS 313
WIND ENSEMBLE
1, 0/3

Prerequisite: Some prior performance experience on a wind or percussion instrument used in standard band instrumentation. Rehearsals and performances include historical and contemporary wind and percussion literature from around the world as well as transcriptions and arrangements of masterpieces from the Renaissance to the present. Open enrollment. Placement determined by audition during first week of class. May be repeated.

MUS 318
AURAL PERCEPTION III
1, 0/3

Prerequisites: MUS 219 and MUS 231. Corequisite: MUS 330. Continuation and development of the melodic, rhythmic, and musicianship skills acquired in MUS 219. Introduction to harmonic dictation. For advanced music students. Required for music majors.

MUS 319
AURAL PERCEPTION IV
1, 0/3

Prerequisites: MUS 330 and MUS 318. Corequisite: MUS 331. Continuation and development of the harmonic, melodic, rhythmic, and musicianship skills acquired in MUS 318. For advanced music students. Required for music majors. Equivalent course: MUS319W

MUS 321
COMPOSITION, IMPROVISATION AND ARRANGING
2, 3/0

Prerequisite: MUS 330. Corequisite: MUS 331. Class instruction and supervised training in basic instrumental and vocal improvisation, with study of associated notation styles for composition and group performance. Introduction to arranging and standard notation for choir, band, and orchestra.

MUS 322
INSTRUMENTAL CONDUCTING
2, 2/0

Prerequisite: Upper-level music major or equivalent. Introduction to the musical and technical aspects of directing and developing an instrumental ensemble. Use of baton, score reading, and observation. Ensemble work.

MUS 326
JAZZ ENSEMBLE
1-12, 0/0

Prerequisite: Audition. Training and supervised performance in jazz and dance band combination. May be repeated.

MUS 330
MUSIC THEORY III
3, 0/0

Prerequisite: MUS 231. Corequisite: MUS 318. Analysis and theoretical understanding of compositional techniques of Western art music of the late seventeenth, eighteenth, and nineteenth centuries. Required for music majors.

MUS 331
MUSIC THEORY IV
3, 3/3

Prerequisites: MUS 318 and MUS 330. Corequisite: MUS 319. Analysis and theoretical understanding of compositional techniques of Western art music of the twentieth century. Required for music majors.

MUS 333
CHORAL CONDUCTING
2, 0/2
Prerequisites: MUS 219 and MUS 119. Corequisite: MUS 335 or MUS 313. Fundamentals of rehearsing, developing, and conducting choirs for students with choral and vocal background. May require observation of off-site choral ensemble rehearsals and performances. Required for music education majors.

MUS 334
PERCUSSION ENSEMBLE
1, 1/0
Prerequisite: Audition or permission of instructor. An exploration of sophisticated percussion literature by modern composers or transcriptions of other works for percussion instruments. The ensemble performs on standard percussion instruments, such as timpani, marimba, vibraphone, snare drum, tom toms, and other struck objects. Repeatable.

MUS 335
BUFFALO STATE COLLEGE CHORALE
1, 0/2
Rehearsal and performance of representative choral music from a diverse repertoire including classical, pop, gospel, spirituals, jazz, folk, and show music. Presentation of the fundamentals of choral singing. May be repeated.

MUS 337
STRING ENSEMBLE
1, 1/0
Prerequisite: Audition or permission of instructor. A performing ensemble surveying standard chamber music repertoire for string instruments, such as quartet, quintet, or piano trios. Repeatable.

MUS 338
BRASS ENSEMBLE
1, 1/0
Prerequisite: Audition or permission of instructor. Chamber group consisting of trumpets, trombones, French horns, euphoniums, baritones and tubas. Explores body of chamber music written or transcribed for brass instruments. Repeatable.

MUS 339
WOODWIND ENSEMBLE
1, 1/0
Prerequisite: Audition or permission of instructor. Chamber group consisting of combinations of woodwind instruments, including clarinet choir, flute quartet, saxophone quartet, mixed trios, quartets, quintets, or larger. Explores body of chamber music written or transcribed for woodwind instruments. Repeatable.

MUS 345
ELEMENTARY MUSIC METHODS
3, 3/0
Prerequisites: Permission of instructor; music education interview. Gain knowledge and skills in the areas of teaching methods and strategies for elementary music education; extensive hands-on and writing activities.

MUS 346
FIELD EXPERIENCE IN ELEMENTARY MUSIC
1, 0/0
Corequisite: MUS 345. Observation and application of instructional procedures learned in MUS 345 through on-site participation in local schools.

MUS 347
THE HISTORY OF PSALMODY
3, 3/0
Prerequisites: None. A comprehensive survey of music based on the texts of the Biblical Book of Psalms. Analyses of the origins, literary structures, content and organization of the psalms; the development of various music performance practices; the tracing of the historical musical development of their settings; and the past and continuing influence of this repertoire on the cultural development of Western Civilization.

MUS 349
WEST AFRICAN DRUMMING ENSEMBLE
1, 1/0
Prerequisite: Instructor permission. Prerequisite or corequisite: MUS 209 or prior musical experience. Introduction to traditional West African rhythms on djembes, dundun drums, and iron bells. Students explore cultural contexts and learn to give and respond to rhythmic signals, learn to play different rhythms simultaneously, and learn culturally and rhythmically appropriate improvisation techniques.

MUS 351
THE AMERICAN MUSICAL
3, 3/0
Historical study of the American musical focusing on the interrelationship between the disciplines of music, theater and dance.
Equivalent course: MUS351

MUS 353
FIELD EXPERIENCE IN MUSIC FOR EXCEPTIONAL LEARNERS
1, 0/0
Corequisite: MUS 345. Observation and application of adaptations and instructional procedures appropriate for music with exceptional learners through on-site participation in local schools.

MUS 360
SECONDARY INSTRUMENTAL MUSIC METHODS
3, 3/0
Prerequisites: MUS 345, MUS 362. Knowledge and skills in the areas of teaching methods and strategies for secondary instrumental music education; includes extensive hands-on and writing activities.

MUS 361
FIELD EXPERIENCE IN SECONDARY INSTRUMENTAL MUSIC
1, 0/0
Prerequisite: MUS 362 or permission of instructor. Corequisite: MUS 360. Observation and application of instructional procedures learned in MUS 360 through on-site participation in local schools.

MUS 362
SECONDARY CHORAL METHODS
3, 3/0
Prerequisite: MUS 345 or permission of instructor. Corequisite: MUS 363. Gain knowledge and skills in the areas of teaching methods and strategies for secondary choral music education; extensive hands-on and writing activities.

MUS 363
FIELD EXPERIENCE IN SECONDARY CHORAL MUSIC
1, 0/0
Prerequisite: MUS 345 or permission of instructor. Corequisite: MUS 362. Observation and application of instructional procedures learned in MUS 362 through on-site participation in local schools.

MUS 371
APPLIED MUSIC
1-2, 1/0
Prerequisite: Audition. Individual lessons for voice or instrument. Required for music majors. Private lesson fee possible. Concert attendance required.

MUS 373
APPLIED MUSIC
1-2, 1/0; EAGC
Individual lessons for voice or instrument. Required for music majors. Private lesson fee possible. Concert attendance required.

MUS 410
RECITAL ACCOMPANIST
1, 0/1
Co-requisites: MUS 110 and MUS 171-473 applied lessons. For students enrolled in the applied music lesson sequence and preparing for a recital. Meet and rehearse privately with a staff piano accompanist. Emphasis on preparation for performance, solo and ensemble performance techniques, and musical interpretation.

MUS 440
ETHNOMUSICOLOGY
3, 3/0; OCIF

Prerequisites: MUS 302 and MUS 303 or permission of instructor. Lectures, readings, recordings, and hands-on participation in class, with emphasis on understanding the theories and methodologies used to study music as an aspect of human culture. Examination and discussion of case studies from different regions of the world, as well as independent field-work research. Required for music majors.
Equivalent courses: MUS340, MUS340W, MUS440W

MUS 457
STUDENT TEACHING IN ELEMENTARY MUSIC
5, 0/0

Prerequisites: Successful completion of all music coursework, including 100 documented observation hours, the piano proficiency exam, the Music Department Student Teaching Application, and Criteria for Student Teaching. Corequisites: MUS 458 and MUS 460. Supervised full-time teaching internship for a half semester in an elementary school setting. Required culminating experience for music education majors seeking New York State certification.

MUS 458
STUDENT TEACHING IN SECONDARY MUSIC
5, 0/0

Prerequisites: Successful completion of all music coursework, including 100 documented observation hours, the piano proficiency exam, the Music Department Student Teaching Application, and Criteria for Student Teaching. Corequisites: MUS 457 and MUS 460. Supervised full-time teaching internship for a half semester in a middle or high school setting. Required culminating experience for music education majors seeking New York State certification.

MUS 460
STUDENT TEACHING SEMINAR
2, 2/0

Prerequisites: Permission of instructor. Corequisites: MUS 457 and MUS 458. Study of current issues in music education and the challenges of the beginning teaching experience. Students will participate in weekly discussions centered on such topics as music education philosophy in action; curriculum development and evaluation; assessment of musical behaviors; discipline (prevention and intervention); time management; and meeting state and national standards in music.

MUS 471
APPLIED MUSIC
1-2, 1/0

Prerequisite: Audition. Individual lessons for voice or instrument. Required for music majors. Private lesson fee possible. Concert attendance required.

MUS 473
APPLIED MUSIC
1, 1/0

Prerequisite: Audition. Individual lessons for voice or instrument. Required for music majors. Private lesson fee possible. Concert attendance required.

MUS 488
INTERNSHIP
1-6, 0/0

Prerequisites: Permission of Internship Coordinator; Minimum 2.5 GPA in Major, Minimum 2.0 GPA Overall. Guided and supervised exposure to professional artistic administration and/or operations through on-the-job work experience in an authorized administrative, business, or performance setting. Will write a written report of the work experience based on journal entries, and receive written evaluations from the Internship Site Supervisor and Internship Coordinator.

MUS 495
SPECIAL PROJECT
1-3, 0/0

Prerequisite: Permission of instructor. Required for B.A. music students in the final semester of study. For current music B.A. capstone guidelines, please visit www.buffalostate.edu/music/documents/capstoneproposaldraft.pdf.

MUS 499
INDEPENDENT STUDY
3-12, 0/0

NFS - DIETETICS AND NUTRITION

NFS 100
INTRODUCTION TO FOOD PREPARATION
3, 2/2

A study of the composition of food and scientific principles of food preparation and cookery. Students learn food selection, storage, and preparation skills.

NFS 102
INTRODUCTORY NUTRITION
3, 3/0; NSIF

A basic science in human nutrition focuses on knowledge of chemical structure, dietary sources, requirements, functions, digestion, absorption, transportation, utilization, and excretion of essential nutrients and other substances.

NFS 105
FOOD AND PEOPLE
3, 3/0; TSIF

The use of technology and science for food production, preservation, processing, and safety profoundly influences nutritional, economic, social, ethical, legal, and personal issues. Concerns about the impact of technology on environment, health, culture, and hunger/malnutrition are addressed. Course prepares students to understand the concepts of food, nutrition, food culture, and food safety for optimal health.

NFS 108
FOOD CULTURE AND CIVILIZATION IN THE FAR EAST
3, 3/0; NWIF

A study of food culture in context with civilizations of the Far East. Focuses on the relationship between the development of food habits/culture and civilization as influenced by political, socioeconomic and cultural factors, and international relations.

NFS 110
APPLIED PRINCIPLES OF MANAGEMENT IN DIETETICS/FOOD SERVICES
3, 3/0

Management principles and concepts explored through class assignments that simulate real-world situations and prepare students for advanced study and application in management.
Equivalent course: NFS361

NFS 200
APPLIED FOOD CHEMISTRY
3, 2/2

Prerequisites: NFS 100, 2 semesters of Inorganic Chemistry. A study of the structure, properties, and analysis techniques of food components: carbohydrates, fats, proteins, color, flavor, toxins, additives and evaluation of commercial food products and their role in the diet.

NFS 210
FOOD SERVICE SYSTEMS MANAGEMENT IN HEALTH CARE
3, 3/0

Prerequisite: NFS 110. In-depth analysis of the procurement process, menu development, food production and delivery, quality standards, and financial management of food service systems and related subsystems.

NFS 230
INTRODUCTION TO DIETETICS
1, 0/2

Overview of the dietetics profession: career options, professional development, professional organization, code of ethics, standards of practice, professional values, creativity, American Dietetic Association position papers, introduction to the legislative process, professional issues and trends and professional references and resources.

NFS 280

INTRODUCTION TO COMPLEMENTARY AND ALTERNATIVE
MEDICINE

3, 3/0

An overview of complementary and alternative medicine (CAM) that includes alternative medical systems, complementary use of CAM therapies, mind-body interventions, and biologically-based therapies such as herbal and natural products and physical therapies. Provides the opportunity to get acquainted with major types of CAM modalities and the regulatory and legal policies on CAM for safe use of the therapies. Students will learn how to search evidence-based information and scientific data on CAM and become familiar with the general topics on the subject.

NFS 300

FOOD PROCESSING I

2, 2/0

Prerequisite: NFS 200. A study of the commercial food preservation and packing techniques, storage, food safety and food laws, and genetic engineering.

NFS 302

ADVANCED NUTRITION

3, 3/0

Prerequisite: NFS 102, CHE 112, BIO 100 or BIO 211. This course lays the foundation for medical nutrition therapy courses and includes in-depth study of macronutrient intermediary metabolism with applications to practice; the study of macronutrients involved in bone metabolism, red blood cell information, antioxidant functions, and water and electrolyte balance; and evaluation of functional foods and their role in health.
Equivalent course: NFS440

NFS 310

PERSONNEL MANAGEMENT IN DIETETICS/FOOD SERVICES

3, 3/0

Prerequisite: NFS 210. Management concepts and practices consistent with the management of human resources in a health care organizational setting. The application of operational strategy in terms of fulfilling the mission of an organization competing in today's market.

NFS 315

LIFE CYCLE AND COMMUNITY NUTRITION I

3, 3/0

Prerequisite: NFS 102. A study of the physiological changes during pregnancy, lactation, and growth and development during infancy, preschool, school age, and adolescence; food and nutritional needs; specific nutritional concerns; community nutrition services and programs.

NFS 316

LIFE CYCLE AND COMMUNITY NUTRITION II

2, 2/0

Prerequisite: NFS 315. A study of nutritional issues and chronic-disease prevention in adult life; physiological changes in the older adult; nutritional needs and specific nutritional concerns of the older adult; community nutrition services and programs for the adult and older adult.

NFS 330

SEMINAR ON COMPLEMENTARY AND ALTERNATIVE NUTRITION

1, 1/0

Prerequisites: NFS 102 or NFS 334 or equivalent, and upper-division status or permission of instructor. Introduction to dietary supplements, functional foods, nutraceuticals/ phytochemicals, and herbal therapies. Emphasizes implications for dietetic practice.

NFS 334

CONTEMPORARY NUTRITION

3, 3/0

Explanation of nutrition. The functions, requirements, food sources, and results of deficiency and excess for each nutrient. Topics of current interest, such as weight control. Food fads and government nutrition policies. Not open to dietetics majors.

NFS 389

TOPICS COURSE

3, 0/0

NFS 401

MEDICAL NUTRITIONAL THERAPY I

3, 2/2

Prerequisites: NFS 302, CHE 322, BIO 308, BIO 309. Corequisites for students in Coordinated Program in Dietetics: NFS 419 and NFS 445. First of a three-course sequence examining the interrelationships of physiology, biochemistry, and nutrition as related to medical nutritional therapy (MNT). Emphasizes general nutritional status assessment and the role of nutrition in preventing and treating diseases/disorders: malnutrition, obesity, disordered eating, anemia, cardiovascular disease, chemical dependency, psychiatric disorders, drug-nutrient interactions.

NFS 402

MEDICAL NUTRITIONAL THERAPY II

3, 2/2

Prerequisite: NFS 401, Corequisite for students in Coordinated Program in Dietetics: NFS 446. Second of a three-course sequence examining the interrelationships of physiology, biochemistry, and nutrition as related to medical nutritional therapy. Emphasizes the role of nutrition in preventing and treating disease/disorders: diabetes mellitus, hypoglycemia, renal, liver, biliary, neurological, and dysphagia.
Equivalent course: NFS442

NFS 403

MEDICAL NUTRITIONAL THERAPY III

3, 2/2

Prerequisite: NFS 402. Third of a three-course sequence examining the interrelationships of physiology, biochemistry, and nutrition as related to medical nutritional therapy. Addresses cancer, upper and lower gastrointestinal (GI) disorders, exocrine pancreas, pulmonary disease, metabolic stress, acquired immune deficiency syndrome (AIDS), rheumatic disorders, transplantation, parenteral and enteral nutrition. Explores the relationship between MNT and immunity and genetics.

NFS 405

PRINCIPLES OF NUTRITION EDUCATION

2, 1/2

Prerequisites: NFS 316 and NFS 401. Theories and methods of learning, communication, and counseling as they apply to nutrition education and counseling settings; development, implementation, and assessment of an instructional unit using various forms of multimedia.

NFS 419

INTRODUCTION TO CLINICAL PRACTICE

2, 2/0

Introduction to medical terminology and abbreviations, use of medical records, medical-record documentation, applying principles of interviewing and counseling to clinical practice, usual hospital diets, and reimbursement for nutritional therapy.

NFS 420

DIETETIC FIELD EXPERIENCE

2, 1/0

Prerequisites: NFS 403 and NFS 419. Formalized observation and experience in a variety of health-care settings, such as clinical, community, food service, or regulatory agencies.

NFS 430

INTRODUCTION TO NUTRITION RESEARCH

2, 2/0

Prerequisite: Statistics course; NFS 402. Students explore various research designs and characteristics of quantitative nutrition studies. Emphasis on the process of critiquing and interpreting randomized clinical trials.

NFS 445

NUTRITIONAL CARE A

3, 0/9

Prerequisites: NFS 302 and NFS 315. Corequisites: NFS 401 and NFS 419. First in a series of nutritional care courses promoting professional development for dietetic practice. Emphasis on basic skills for a professional role and application of normal nutrition knowledge. Interviewing skills, use of dietary tools and techniques, and planning and teaching nutrition education classes are fostered through observation and practice. Clinical experiences with well individuals throughout the life span provide opportunities for learning and self-evaluation. Clinical dress code required.

NFS 446
NUTRITIONAL CARE B

4, 0/12

Prerequisite: NFS 445. Corequisite: NFS 402. Students are assigned patients in acute-care settings to correlate with Applied Nutrition II theory. Students assess nutritional status, define nutritional needs, plan for nutritional care, and implement care on a beginning level after establishing criteria for evaluation of care for selected patients. Clinical dress code required.

NFS 447
NUTRITIONAL CARE C

5, 0/15

Prerequisite: NFS 446. Corequisite: NFS 403. Students refine and apply knowledge and skills in providing nutritional care for individuals (adults and children) with acute and chronic nutritional problems or diseases. Clinical dress code required.

NFS 448
NUTRITIONAL CARE D

5, 0/10

Prerequisites: NFS 403 and NFS 447. Establish priorities among required activities to provide care for patients in an assigned hospital unit; provide nutritional care to groups of patients; integrate pertinent information about individual patients with theoretical knowledge to develop appropriate nutritional-care plans; make appropriate use of available resources; develop appropriate levels of nutritional care to patients independently and in concert with existing nutritional-care systems. Clinical dress code required.

NFS 449
NUTRITIONAL CARE E (NUTRITIONAL CARE OF LONG-TERM PATIENTS)

2, 0/0

Prerequisites: NFS 316, NFS 403, and NFS 447. Long-term care as a health delivery system; provide nutritional care to chronically ill patients in a long-term care facility. Clinical dress code required.

NFS 450
SENIOR PRACTICUM IN DIETETICS

4, 0/0

Prerequisites: NFS 447 and clinical faculty permission. Supervised planning, implementation, and evaluation of professional practice goals in a selected area of dietetic practice, such as acute care, long-term care, nutrition education, or community-service programs; minimal supervision. Clinical dress code required.
Equivalent course: NFS450W

NFS 451
SPECIALTY PRACTICE

1, 0/3

Prerequisites: NFS 403 and NFS 447. Participation in dietetic practice for a selected area. Clinical dress code required.

NFS 471
EXPERIENCES IN HEALTH CARE FOOD SERVICE SYSTEMS

3, 3/0

Prerequisite: NFS 310. Permission of instructor. Application of knowledge and principles of food systems management in a health care facility. Emphasis on functions of a food service system, human resource management, quality assurance program, and cost analysis activities. Clinical dress code required.

NFS 499
INDEPENDENT STUDY

3-12, 0/0

PHI - PHILOSOPHY

PHI 101
INTRODUCTION TO PHILOSOPHY

3, 3/0; HUIF

Introduction to the literature and problems of philosophy.

PHI 102
INTRODUCTION TO ETHICS

3, 3/0; HUIF

Various views of how we ought to live and how society should be organized, considered in the context of discussions about the "good" life and the "good" society.

Equivalent course: PHI102W

PHI 103
INTRODUCTION TO LOGIC

3, 3/0

Introduction to practical reasoning and argument relevant to everyday life; uses of language, informal fallacies, elementary deductive arguments, and the nature of scientific thinking.

PHI 107
INTRODUCTION TO MATHEMATICAL LOGIC

3, 3/0; MQIF

Prerequisite: Basic proficiency in mathematics as specified by the requirements for the Mathematics and Quantitative Reasoning component of Intellectual Foundations. Introduction to two types of mathematical models for assessing the correctness of reasoning. Venn diagrams discussed as geometric mathematical models for assessing categorical syllogisms. Sentential logic and monadic predicate logic discussed as systems of algebraic mathematical models for assessing the reasoning associated with these systems.

PHI 110
THE MEANING OF LIFE

3, 3/0; HUIF

Exploration of a number of fundamental philosophical questions that make their way into everyday life, specifically related to the question, "What is the meaning of (my) life?" or its Socratic equivalent, "How ought I to live?" Critical analysis of classical and contemporary works-philosophical and autobiographical-to develop clearer, more informed, and better-reasoned views about the questions, if not the answers.

PHI 204
PHILOSOPHY OF RELIGION

3, 3/0

Critical analysis of the philosophical assumptions that support religious belief. Focus on problems arising from philosophical assumptions such as the existence of God, omnipotence, omniscience, foreknowledge, and the existence of evil.

PHI 207
PHILOSOPHY IN LITERATURE

3, 3/0

The relationship of philosophy to literature through a consideration of the nature of language, the methods of language analysis, the relation of knowledge to fiction, and the function of myth and metaphor in presenting philosophical ideas.

Equivalent course: PHI207W

PHI 210
EXISTENTIALISM

3, 3/0

The problem of the meaning and value of life considered in a context of various philosophical and literary works of religious and nonreligious existentialists, including Kierkegaard, Nietzsche, Heidegger, and Sartre.

Equivalent course: PHI210W

PHI 300
PROBLEMS OF PHILOSOPHY

3, 3/0

Selected problems in epistemology, metaphysics, ethics, and certain movements in contemporary philosophy.

Equivalent course: PHI300W

PHI 301
HISTORY OF POLITICAL PHILOSOPHY

3, 3/0; WCIF

Prerequisite: Upper-division status or one course in philosophy. Examination of moral presuppositions and justifications of forms of government and economic systems, as well as interrelations between government and economics.

Equivalent course: PHI301W

PHI 302
PHILOSOPHY OF ART AND BEAUTY
3, 3/0
Prerequisite: Upper-division status or one course in philosophy. The basic concepts presupposed in any critical examination of the arts, including painting, literature, and music.
Equivalent course: PHI302W

PHI 304
PHILOSOPHY OF LAW
3, 3/0
Prerequisite: Upper-division status or one course in philosophy. The nature and justification of legal institutions; emphasis on the problem of legal punishment and on the legal enforcement of morality.
Equivalent course: PHI304W

PHI 305
PHILOSOPHY OF LANGUAGE
3, 3/0
Prerequisite: Upper-division status or one course in philosophy. Recent works by analytical philosophers in the foundations of language; meaning, reference, and necessity.

PHI 307
SYMBOLIC LOGIC
3, 3/0
Prerequisites: Upper-division status or one course in philosophy. First-order logic as a system for understanding argumentation in ordinary language. Covers the structure and use of truth-functional logic and quantification theory, including identity.

PHI 308
PHILOSOPHY OF LOVE AND SEX
3, 3/0
Prerequisites: Upper-division status or one course in philosophy. Classic and contemporary philosophic theories of the nature, value, and purpose of human love and sexuality; discussions of Plato, Aquinas, Ortega, Sartre, and Kierkegaard; value judgments implicit in the concepts of "super-vision," "good sex," and "true love," as well as problems encountered in finding clear definitions for such terms; considers certain moral arguments found in such areas as abortion and marital intercourse.
Equivalent course: PHI308W

PHI 309
KNOWLEDGE AND JUSTIFICATION
3, 3/0
Prerequisite: Upper-division status or one course in philosophy. The nature, variety, and requirements of knowledge. May include the natures of belief and perception; knowledge of necessary truths of mathematics; perception and memory as good sources of evidence; knowing what another person thinks or believes.
Equivalent course: PHI309W

PHI 310
HISTORY OF ETHICS
3, 3/0; WCIF
Prerequisite: Upper-division status or one course in philosophy. Historical study of the writings of great Western philosophers as they examine ethical questions about self-interest, freedom, duty, and happiness in regard to the moral life. Includes Plato, Aristotle, Kant, Mill, and Hume.
Equivalent course: PHI310W

PHI 312
PHILOSOPHY OF MIND
3, 3/0
Prerequisite: Upper-division status or one course in philosophy. Recent work by analytic philosophers in the philosophy of mind.

PHI 314
CONTEMPORARY ETHICS
3, 3/0
Prerequisite: Upper-division status or one course in philosophy. Historical and analytical study of important developments in twentieth-century ethical theory; naturalism, noncognitivism, prescriptivism, rationalism; the ideas of Rawls, Nozick, Gauthier, and Gewirth.
Equivalent course: PHI314W

PHI 317
THE HISTORY OF PHILOSOPHY I: THE GREEKS
3, 3/0
Prerequisites: Upper-division status or one course in philosophy. Readings in selected original texts of the leading philosophers of ancient Greece, specifically: Heraclitus, Parmenides, Plato, Socrates, and Aristotle, and focus on the original visionary contribution of each thinker to the intellectual development of Western thought.

PHI 318
THE HISTORY OF PHILOSOPHY II: THE SEVENTEENTH AND EIGHTEENTH CENTURIES
3, 3/0
Prerequisite: Upper-division status or one course in philosophy. Readings in selected original texts from Hobbes, Locke, Berkeley, Hume, Descartes, and Kant; focus on the original visionary contribution of each thinker to the intellectual development of Western thought; learning to read a philosophical work.
Equivalent course: PHI318W

PHI 324
ZEN BUDDHISM
3, 3/0
Prerequisite: Upper-division status or one course in philosophy. Zen as a paradoxical method by which suffering of existence is transformed into everyday enlightenment; contemporary practices of Zen and its historical origins in Buddha's "complete and unexcelled" enlightenment and in Lao-tzu's living in harmony with the Tao.
Equivalent course: PHI324W

PHI 333
PHILOSOPHY OF NATURAL SCIENCES
3, 3/0
Prerequisites: CWP 102. The structure and nature of science. Epistemological and ontological implications of scientific theories (e.g. quantum mechanics, evolutionary biology). The role of evidence, confirmation, falsification in science.

PHI 334
PHILOSOPHY OF SOCIAL SCIENCES
3, 3/0
Prerequisites: CWP 102. The structure and nature of the social sciences. Epistemological and ontological implications of social scientific theories. Analysis of socially constructed facts and institutions. Rational-choice and decision-theory models of explanation.

PHI 339
FRIENDSHIP
3, 3/0
Prerequisite: Upper-division status or one course in philosophy. Conceptions of friendship, its value to the friends and to others, its moral justification, and the legitimacy of preferring friends to others.
Equivalent courses: HUM339, PHI339W

PHI 347
WESTERN THOUGHT: HOMER TO ALEXANDER
3, 3/0; WCIF
Prerequisites: CWP 101 and CWP 102. The development of Hellenic and Hellenistic thought and its influence on the modern world. Examination of tensions between naturalistic, conventional, and religious worldviews. Special emphasis on the role such tensions played in the development of philosophy.

PHI 351
ETHICS BOWL
3, 3/0; OCIF
Prerequisite: One PHI course or instructor permission. Preparation for a competition in which students are judged on their ability to deploy intricate ethical reasoning in addressing case studies from practical and professional ethics. Students develop well-informed opinions about ethically complex, everyday scenarios, orally present these opinions and supporting arguments, and provide critical oral responses to the opinions and arguments of other students and judges. Some students compete in the regional and/or national Intercollegiate Ethics Bowl, others in the Buffalo State Ethics Bowl.

PHI 401
PROBLEMS IN PHILOSOPHY SEMINAR
3, 3/0
Prerequisite: Upper-division status or one course in philosophy. Intensive analysis of selected topics in philosophy.
Equivalent course: PHI401W

PHI 402
SEMINAR IN HISTORY OF PHILOSOPHY
3, 3/0
Prerequisites: Fulfillment of English composition/ basic communication requirement, PHI 317, and PHI 318. Figures and periods in the history of Western and Eastern philosophy.
Equivalent course: PHI402W

PHI 495
SPECIAL PROJECT
1-3, 0/0

PHI 498
HONORS RESEARCH
1-3, 0/0

PHI 499
INDEPENDENT STUDY
3-12, 0/0

PHY - PHYSICS

PHY 100
PHYSICS FOR NON-SCIENCE MAJORS
3, 3/0; NSIF
A non-mathematical consideration of historical world views in physics and their relevance to society. May not be substituted for PHY 107, PHY 108, PHY 111, or PHY 112. Not open to physics majors.

PHY 103
UNDERSTANDING SOUND
3, 2/2; NSIF
The basics of sound, intended for non-science majors. Wave characteristics and behavior, applied to sonic phenomena. Interfaces of sound with humans and society (music, hearing, sound production and recording).

PHY 104
PHYSICS FOR K-8 TEACHERS
3, 2/2; NSIF
Prerequisite: Acceptance to Pre-K-8 teaching majors or pre-majors. High school algebra and writing. Nature of science, energy transfer, force interactions, systems, Newton's Laws, magnetic, gravitational, light, and thermal interactions, conservation of energy, and simple circuits as appropriate for teachers of K-8 science. Meets National Science Education Standards S (NRC, 1996) and the New York State Education Department (NYSED, 1996) learning standards for Math Science and Technology and elementary and intermediate physical standards (Standard 4). Inquiry-based classroom co-mingles laboratory with lecture.

PHY 105
INTRODUCTION TO PHYSICS
3, 2/1
Builds skills commonly used in physics classes. Class activities designed to help students learn problem-solving skills using mathematical formulations, observation, data taking, data analysis, and theoretical interpretation in the context of physics.

PHY 107
GENERAL PHYSICS I
4, 3/2; NSIF
Algebra-based study of mechanics, measurement, kinematics, Newton's laws, gravity, conservation of energy and momentum, and rotation; laboratory.

PHY 108
GENERAL PHYSICS II
4, 3/2
Prerequisite: PHY 107. Algebra-based study of electricity and magnetism: static electricity (including electric fields and potential), current electricity and circuits, magnetism and electromagnetic interactions; laboratory.

PHY 111
UNIVERSITY PHYSICS I
5, 4/2; NSIF
Calculus-based treatment for science majors of particle motion, kinematics, mechanics, Newtonian dynamics, energy transformation, conservation laws of energy and momentum, gravitation, and rotation; laboratory.
Required for majors.

PHY 112
UNIVERSITY PHYSICS II
5, 3/2
Prerequisite: PHY 111 or equivalent. Continuation of PHY 111. Calculus-based introduction to heat, electricity, magnetism, and optics; laboratory.
Required for majors.

PHY 189
TOPICS COURSE
1-3, 0/0

PHY 213
UNIVERSITY PHYSICS III
3, 3/0
Prerequisites: PHY 111 and PHY 112 or equivalent; calculus. Continuation of PHY 111 and PHY 112. Calculus-based introduction to physical optics, kinetic theory, classical wave motion, and interference phenomena; introduction to special relativity. Required for physics majors.

PHY 304
OPTICS AND VISION FOR TEACHERS AND ARTISTS
3, 2/2; TSIF
Prerequisites: Any college or high school introductory physics course; CWP101; any first-year MAT or instructor permission. Phenomena of light, vision, color, and photography, as appropriate for teachers of science and visual arts majors. Meets the National Science Education Standards S (NRC, 1996) and the New York State Education Department (NYSED, 1996) learning standards for Math Science and Technology and elementary and intermediate physical setting standards (Standard 4). Inquiry-based classroom co-mingles laboratory with lecture using hand-held apparatus and demonstrations in the lecture theater and take-home laboratory activities using everyday materials. Can be used as a sequence with PHY 104.

PHY 305
MODERN PHYSICS I
3, 3/0
Prerequisites: PHY 111, PHY 112, PHY 213, and MAT 263 or equivalent. Principles of relativity; concepts of waves, particles, atomic structure; introduction to quantum theory. Required for physics majors.

PHY 306
MODERN PHYSICS II
3, 0/0
Prerequisite: PHY 305. Molecular structure; solid state; nuclear physics.

PHY 308
OPTICS
3, 3/0
Prerequisites: PHY 111 and PHY 112 or equivalent; calculus. Fundamentals of geometrical and physical optics; the nature and propagation of light; Fraunhofer and Fresnel diffraction, polarization; single, double slit and grating diffraction, lasers, and holography.

PHY 310
COMPUTATIONAL PHYSICS LABORATORY
2, 0/4
Prerequisites: PHY 111 and PHY 112. Corequisite: PHY 213. Introduction to basic computational techniques using physics material from intermediate-level courses. Required for physics majors.

PHY 315
HEAT AND THERMODYNAMICS
3, 3/0

Prerequisites: PHY 111 and PHY 112 or equivalent; calculus. First, second laws; entropy; chemical potential; enthalpy; free energy; Gibbs function; Maxwell relations; phase transitions; and statistical mechanics of classical and quantum distributions.

PHY 320
INTRODUCTION TO THEORETICAL PHYSICS
4, 4/0

Prerequisites: PHY 111, PHY 112, and MAT 263. Introduction to advanced mathematical applications: partial differential equations, complex numbers, special functions, boundary value problems, orthogonal functions and expansions, matrices, and integral transform techniques. Required for physics majors.

PHY 323
STATICS
3, 3/0

Prerequisites: PHY 111 and PHY 112. Application of mechanics to the study of static equilibrium of rigid and elastic bodies. Includes composition and resolution of forces; moments and couples; equivalent force systems, free-body diagrams; equilibrium of particles and rigid bodies; forces in trusses and beams; friction forces; first and second moments of area; moments and product of inertia; methods of virtual work and total potential energy.

PHY 324
ELECTRIC CIRCUIT ANALYSIS
3, 2/2

Prerequisites: PHY 213 and MAT 263. Calculus-based treatment of DC and AC circuits with introduction to commonly used analysis methods; laboratory.

Equivalent course: PHY324W

PHY 410
ADVANCED PHYSICS LABORATORY
3, 0/6; OCIF

Prerequisite: PHY 305 or equivalent. Selected advanced experiments chosen from the areas of mechanics, thermal physics, sound, optics, electricity and magnetism, and modern physics.

Equivalent course: PHY410W

PHY 412
PHYSICS SEMINAR
1-3, 0/0

Prerequisites: 15 credit hours in physics and MAT 162 or equivalent. Readings, reports, and discussion of current job opportunities and/or problems and research in physics. May be repeated up to three times.

PHY 425
CLASSICAL MECHANICS
4, 4/0

Prerequisite: PHY 320 or equivalent. Vectorial particle mechanics in one, two, and three dimensions; rigid body motions in three dimensions; motion in central force fields; moving reference frames; forced harmonic oscillators; and introduction to mechanics in Lagrangian and Hamiltonian formulation.

PHY 435
INTRODUCTION TO QUANTUM MECHANICS
3, 3/0

Prerequisite: PHY 305, PHY 320, or equivalent. Postulates of quantum mechanics with selected examples; uncertainty principle; operator formalisms; Heisenberg and Schrodinger representations; angular momentum; spin.

PHY 440
ELECTRICITY AND MAGNETISM I
3, 3/0

Prerequisite: PHY 320, MAT 263, or equivalent. Coulomb forces; electric fields and potentials; Laplace equation; boundary value problems and dielectrics; multipole distributions; magnetic induction; introduction to Maxwell's equations.

PHY 441
ELECTRICITY AND MAGNETISM II
3, 3/0

Prerequisite: PHY 440. Continuation of PHY 440. Vector potentials; Faraday's law; magnetism; electromagnetic wave propagation; radiation.

PHY 445
NUCLEAR PHYSICS
3, 3/0

Prerequisite: PHY 305, PHY 320, or equivalent. Nucleons and nuclei; radioactivity; detectors; interaction of nuclear radiation with matter; nuclear reactions; nuclear models and gamma emissions; introduction to high-energy physics.

PHY 448
INTRODUCTION TO SOLID STATE PHYSICS
3, 3/0

Prerequisite: PHY 320 or equivalent. Theory of the structure of solids: unit cell, lattice dynamics and phonons, specific heats, band theory, superconductivity, electron dynamics, and statistics.

PHY 450
SUPERVISED PHYSICS LABORATORY TEACHING
1-2, 0/0

Prerequisites: Physics major; upper-division status; minimum cumulative GPA of 3.0, 3.25 in major coursework; physics faculty permission based on academic performance, maturity, and potential. Supervised in-classroom introduction to college laboratory teaching techniques and procedures for selected upper-division physics majors.

PHY 495
SPECIAL PROJECT
1-3, 0/0

Prerequisite: Faculty sponsor approval. Physics and physics-related areas.

PHY 499
INDEPENDENT STUDY
3, 0/0

Prerequisite: Faculty sponsor approval. Physics and physics-related areas.

PLN - PLANNING

PLN 310
URBAN TRANSPORTATION PLANNING
3, 3/0

Prerequisite: GEG 309 or PLN 315. Comparative study of the modes of transportation, transportation planning, and the benefits and effects of transportation. Emphasis on application to urban transportation. The importance of accessibility to the development of a modern metropolitan transportation system.

Equivalent course: GEG310

PLN 315
PRINCIPLES OF URBAN AND REGIONAL PLANNING
3, 3/0

Introduction to community planning, historical survey, origin and growth of city-planning movement; role of various levels of government in community planning; factors currently involved in community planning theory and practice.

PLN 325
REMOTE SENSING AND MAPPING
3, 3/0

Prerequisite: GEG 101 or GEG 307 or GES 101. Fundamental elements of maps, air photographs, and satellite images and the methodology of interpreting them. Spatial data sources, data presentation, globe and map grids, and the use of maps, air photos, satellite images, and global positioning system (GPS) to identify, present, and study spatial phenomena.

Equivalent course: GEG325

PLN 330

LAND RESOURCE ANALYSIS AND PLANNING

3, 0/0

Prerequisite: PLN 315. Principles of land resource management with emphasis on land-use patterns, controls and policies. Attention to urban, suburban and rural land-use situations.

Equivalent course: GEG330

PLN 340

FUNDAMENTALS OF ZONING

3, 3/0

Prerequisite: PLN 315. Zoning as a method to implement comprehensive land use plans; process for adopting and amending zoning ordinances, legislative and legal constraints, and general content of a zoning ordinance; operation of zoning board appeals emphasized in class exercise and fieldwork.

PLN 341

HOUSING AND REAL ESTATE

3, 3/0

Prerequisite: PLN 315. Housing elements relevant to the professional practice of planning, including the considerations of consumers in selecting communities, neighborhoods and sites; the description, conveyance, and marketable rights associated with real property, forms of home ownership, less conventional housing choices; government policy affecting housing. Investigation of local housing stock, both from the perspective of potential purchaser and historic preservationist.

PLN 360

ENVIRONMENTAL IMPACT ASSESSMENT

3, 3/0

Prerequisites: Upper-division status and minimum of 9 credit hours in geography, planning, earth science, biology, or related environmental discipline. Introduction to the legislation and technical procedures involved with the development of Environmental Impact Statements (EIS) and Environmental Assessments (EA); emphasizes practical experience in conducting an EA and writing an EIS. Field trip.

PLN 370

WATER RESOURCE PLANNING

3, 3/0

Prerequisite: GEG 375 or GES 452. Introduction to water resource planning in the United States. Emphasis on project management and planning processes used by federal water resources agencies. Field trip and group project required.

PLN 390

QUANTITATIVE METHODS IN GEOGRAPHY AND PLANNING

3, 3/0

Prerequisites: Upper-division status and GEG 199. Introduction to statistical methods with a focus on spatial and time-series data analysis in geography and planning applications. Statistical theory is reinforced through application of commonly used computer software to solve real world problems.

Equivalent course: GEG390

PLN 396

RESEARCH METHODS

3, 3/0

Prerequisites: GEG 199, GEG 390, and 6 upper division credits in GEG/PLN courses. Research theories, designs, and methods relevant to conducting research in geography and planning. Research designs and methodologies for approaches with human subjects, human/social geography, physical geography, field-based research, and planning projects. Development of a research project proposal.

Equivalent courses: GEG396W, PLN396

PLN 401

COMPREHENSIVE PLANNING STRATEGIES

3, 3/0

Prerequisites: Upper-division status and PLN 315. The overarching role of comprehensive planning as it influences future patterns of municipal land use in both the natural and built environments; techniques for identifying primary issues; reaching consensus on goals and objectives for future physical development patterns within a community; recognizing basic comprehensive plan content and procedures for adoption.

PLN 412

COMMUNITY PLANNING AGENCIES AND ISSUES

3, 3/0

Prerequisite: PLN 315. The role of the professional planner in a range of government and private agencies; introduction to the tools needed by the professional planner; discussion of planning techniques and issues. Emphasis on professional ethics and the function of staff in a variety of planning agencies.

PLN 415

SEMINAR IN PLANNING

3, 3/0

Prerequisite: PLN 315. Investigation, discussion, and research of topics of current interest in planning or economic development; techniques and methods of analysis used in planning process. Topics vary each semester.

PLN 430

SENIOR THESIS

3, 3/0

Prerequisites: SOC 300 or PSC 203; GEG 390 and senior geography or planning major. Seminar to do research in geography or planning and presentation of selected research-related topics by the department faculty. Required for geography majors and urban-regional analysis and planning majors.

Equivalent courses: GEG430, PLN430W

PLN 488

INTERNSHIP

1-15, 0/0

Prerequisites: PLN 315, 6 credit hours of geography or planning coursework at the upper-division level, minimum cumulative GPA of 2.5, background of courses or experience within area of interest, adviser and department chair permission. Guided, supervised field experiences that complement the academic program.

PLN 495

SPECIAL PROJECT

3, 0/0

PLN 499

INDEPENDENT STUDY

3, 0/0

PSC - POLITICAL SCIENCE

PSC 101

INTRODUCTION TO GOVERNMENT AND POLITICS

3, 3/0; SSIF

The nature and scope of political science; ideological foundations of politics; comparative study of the governments of constitutional, totalitarian, and developing systems; the dynamics of politics and functions of political institutions.

PSC 102

INTRODUCTION TO AMERICAN GOVERNMENT AND POLITICS

3, 3/0; AHIF

Historical development of American government and politics. Conceptual studies of the key transformative phases of institutions (U.S. Constitution, federalism, Congress, the courts, the presidency), politics (political parties, interest groups, media, social movements), political economy (regulation, federal bureaucracy) and political culture (citizenship and identity, public opinion, political behavior).

PSC 103

GREAT POLITICAL ISSUES

3, 3/0; SSIF

Examines great political issues such as civic engagement, civil disobedience, democracy, freedom, equality, ideology, identity, law, morality, and political obligation and discusses them in light of their various historical contexts and political implications.

PSC 203
POLITICAL ANALYSIS
3, 3/0

Prerequisite: PSC 102. Design, execution, and interpretation of research in the field of political science including quantitative and qualitative research methods, theory building, and constructing and testing hypotheses; data collection techniques including survey research methods.
Equivalent courses: PSC203W, PSC300

PSC 204
POLITICAL STATISTICS
3, 3/0

Prerequisite: PSC 102 and PSC 203. Introduction to quantitative political science research methods, univariate and bivariate analysis, statistical inference, sampling, hypothesis testing, measures of association and tests of statistical significance.
Equivalent course: PSC301

PSC 210
THE AMERICAN PRESIDENCY
3, 3/0

The contemporary presidency, constitutional roles, political powers and the factor of personality, the executive and other political and social institutions, problems and prospects for the presidency.
Equivalent course: PSC210W

PSC 215
URBAN GOVERNMENT
3, 3/0

Introduction to the political economy of urban areas in the United States; focus on explanation of current urban public policies; public vs. private political power, bureaucracy, citizen organization.
Equivalent course: PSC215W

PSC 218
AFRICAN AMERICAN POLITICAL CULTURE
3, 3/0

Political beliefs, attitudes, and practices that pertain to African American politics in a cultural context; causality and linkage inherent in the reciprocal relationship between African Americans and the American political system.
Equivalent courses: AAS218, PSC218W

PSC 225
WOMEN IN AMERICAN POLITICS
3, 3/0; DIIF

Influences of female participation in the American political system; the political behavior of American women; the implications of these influences and behaviors.

PSC 230
INTERNATIONAL RELATIONS
3, 3/0; SSIF

Elements of national power, religion, global balance of power and collective security systems; instruments of international politics: diplomacy, propaganda, and war; forces of nationalism.

PSC 240
EUROPEAN POLITICAL SYSTEMS
3, 3/0

The structure and dynamics of politics in major European countries with emphasis on political behavior and political processes; issues of economic and political integration.

PSC 250
INTRODUCTION TO LAW
3, 3/0

Basics of law, the judicial system, courtroom procedures, distinctions between different kinds of law, and the importance of these distinctions. Constitution and rights defined in the Constitution. Responsibilities of attorneys in the judicial system and to their clients. Skills involved in learning and practicing law; writing legal briefs; oral presentation of legal arguments.
Equivalent course: PSC350

PSC 305
ENVIRONMENTAL POLICY
3, 3/0

Prereqs: PSC102 or PSC230. International public-policy responses to environmental challenges; viewpoints on ecological limits, regulatory responses, and the role of business. Population growth, international climate change, sustainable development, cap-and-trade approaches to pollution reduction, and the correlation between violent conflict and environmental stress.

PSC 306
POLITICS OF ENERGY
3, 3/0

The energy situation in both the United States and the international community from political viewpoints; U.S. energy policy, process, and strategies within their economic, physical, and political settings; conflict and cooperation among nations over the rational use of energy resources.

PSC 308
INTERNATIONAL ORGANIZATIONS AND INTERNATIONAL LAW
3, 3/0

Prerequisite: Junior or senior standing or instructor permission. Political and legal viewpoints of international organizations; political and administrative concepts and theories concerning international organizations and law such as roles and effects of international organizations and law in foreign policy making, international cooperation, and competition.

PSC 309
INTERNATIONAL POLITICAL ECONOMY
3, 3/0

Prerequisite: PSC 101 or PSC 102. A political perspective of dynamic global economy. Emphasis on analyzing and examining theoretical traditions of international political economy to study contemporary international economic issues such as international trade, international monetary policy, foreign aid, energy crises, and the impact of international financial organizations.
Equivalent course: PSC309

PSC 310
AMERICAN POLITICAL PARTIES
3, 3/0

The American two-party system; suffrage rules and the electoral process; shifting patterns of organization, nomination, and finance; the role of party in government; and parties in the future of American politics.

PSC 311
INTEREST GROUPS
3, 3/0

Introduction to the democratic political process, methods and operations of various interest groups; roles of citizens groups.

PSC 312
LEGISLATIVE PROCESS
3, 3/0

State and national legislatures with emphasis on the determinants of legislative decision making, the committee system, and the policy outputs of the legislative branch.
Equivalent course: PSC312W

PSC 315
STATE AND LOCAL GOVERNMENT AND POLITICS
3, 3/0

Functions of state and local governments, parties, interest groups, and elections; constitutional and governmental structures; intergovernmental relations; decision making, effects of metropolitanization; contemporary issues and problems; future trends and prospects.

PSC 316
URBAN ETHNIC POLITICS
3, 3/0

The development of ethnic politics in urban areas of the United States. Political development and conflict among major ethnic, racial, and religious groups, including African Americans, Irish, Italian, Jews, Latinos, Native Americans, and Polish. Contemporary patterns of organization, leadership, strategy, political mobilization; key issues examined, such as affirmative action, school desegregation, and welfare reform.

PSC 317

U.S. CONSTITUTIONAL LAW

3, 3/0

Prerequisite: Junior or senior standing or instructor permission. Foundations of American Constitutionalism; judicial review and its use throughout history; the Supreme Court's interaction with Congress, the president, and the states; evolving concepts of federalism; development of governmental regulation of private property and contracts; the evolution of the principles of constitutional due process and equal protection.
Equivalent courses: PSC220, PSC317W

PSC 318

DEMOCRACY AND PEACE: PRINCIPLES AND PRACTICES IN THE URBAN EXPERIENCE

3, 3/0

Prerequisite: PSC 101 or PSC 102 or PSC 103. Development of politics, democracy, and justice from the experience of urban communities, particularly in light of economics, peace, and race issues.

PSC 320

U.S. CIVIL LIBERTIES

3, 3/0

Legal principles influencing the origin and development of our criminal laws and the way these principles have evolved by court interpretation to accommodate social change and attitudes; the Bill of Rights and due process clause of the United States Constitution.
Equivalent course: PSC320W

PSC 325

POLITICS OF WELFARE

3, 3/0

America's mixed system of capitalism and socialism. Major welfare programs including social security, veterans' benefits, tax expenditures, food stamps, subsidized education, and military retirement; the costs and benefits of America's welfare system.

PSC 326

POLITICS AND MEDIA

3, 3/0

The relationship between the mass media and contemporary American politics, its impact on voting behavior, and the role of the media in the presidential and congressional elections.

PSC 327

PRACTICAL POLITICS

3, 3/0

Classroom and extra-classroom experience and interaction with political practitioners; participation in quasi-political organizing, campaigns and elections, and day-to-day operations of government and politics.

PSC 330

AMERICAN FOREIGN POLICY

3, 3/0

Prereq: PSC102. Basic ideas that shape American foreign policy; isolationism, domestic and international pressures, cold war, peaceful coexistence and détente, major problems.
Equivalent course: PSC330W

PSC 333

AFRICAN INTERNATIONAL RELATIONS

3, 3/0

African international politics vis-à-vis international relations theory, models, and concepts; power; multipolarity; bipolarity; pan-Africanism; North-South debate; approaches to international politics; and state and international organizations as international actors.

PSC 335

INTERNATIONAL RELATIONS OF THE MIDDLE EAST

3, 3/0

Patterns of interaction within the Middle East and with other states; problems of security and peace in the region; ideology, nationalism, and economic interests as factors influencing the behavior of the states.
Equivalent course: PSC335W

PSC 336

LATIN AMERICA IN WORLD POLITICS

3, 3/0

Prereq.: Jr./Sr. Status. Politics in the region of Latin America within the context of international relations theory. Development of the Latin American subsystem; major actors and movements within the region, including human rights and democratization; globalization and free trade; the influence of the United States; and the legacy of colonialism and the Cold War.

PSC 337

THE POLITICS OF GLOBALIZATION

3, 3/0

Prerequisite: Upper-division status. Interdependent global political economy; complex process by which governments, corporations, individuals, and information technology are integrated and interconnected on a global scale; costs vs. benefits of globalization.

PSC 340

POLITICS OF DEVELOPING COUNTRIES

3, 3/0; NWIF

Prerequisite: PSC 101 or PSC 230. Problems of developing countries, political process, and its relation to societal transformation; the role of the army and bureaucracy in political development; problems of nation-building and democracy in developing countries; and globalization.

PSC 341

GOVERNMENT, POLITICS, AND POLICIES OF THE EUROPEAN UNION

3, 3/0

Prerequisite: Upper-division status. Government, politics, and policies of the European Union. Origins and development of European integration, European identity, theories of economic and political integration, treaties and law-making, institutions and decision-making, internal and external policies and policy-making.
Equivalent course: PSC341

PSC 342

RUSSIAN POLITICS

3, 3/0

Prerequisite: PSC 101 or instructor permission. Theory and practice of Russian political institutions and processes in light of Russian history; Soviet efforts to redirect that history; current political, social, and economic changes in Russia today.

PSC 345

POLITICS AND HISTORY OF THE MIDDLE EAST

3, 3/0

Geographic, cultural, and political settings; historical development since the nineteenth century; the disintegration of the Ottoman Empire and Western colonialism; nationalism, independence, and turmoil; Arab-Israeli question; oil and its impact and problems; great power and inter-area politics.
Equivalent courses: HIS313, PSC345W

PSC 351

HISTORY OF POLITICAL THOUGHT I

3, 3/0; WCIF

Prereq: PSC101 or PSC103. Main problems of political theory examined through the writings of major political thinkers from Plato to Aquinas.
Equivalent course: PSC351W

PSC 352

HISTORY OF POLITICAL THOUGHT II

3, 3/0; WCIF

Prereq: PSC101 or PSC103. Main problems of political theory examined through the writings of major political thinkers from Machiavelli to Rawls.
Equivalent course: PSC352W

PSC 355

AMERICAN POLITICAL THOUGHT

3, 3/0

American political thought from colonial to contemporary time; the development of persistent political values and beliefs, how interpretations and applications of these values and beliefs have changed through differ-

ent periods; the roots of contemporary American political culture and ideology.

PSC 360
PUBLIC ADMINISTRATION
3, 3/0

Introduction to public administration: analysis of government administration in its social, economic, and political settings; the role of public administration in formulating public policy; organization and management in public services; personnel and financial management.

PSC 364
AMERICAN PUBLIC POLICY
3, 3/0

Governmental policy with emphasis on the sources of policy, the policy-making process in national political institutions, and the social impact of policy choices.

PSC 368
COMPARATIVE PUBLIC ADMINISTRATION
3, 3/0

Introduction to cross-cultural, cross-national, or cross-institutional study of public administration institutions and practices; the administrative systems of European countries and the processes of administrative change in developing countries; the evolution of bureaucracy.

PSC 370
CANADIAN PUBLIC ADMINISTRATION
3, 3/0

Canadian public administration institutions and processes and the development of public policy; the federal level; secondary attention to provincial and local administration and policy; similarities and differences with other administrative systems, especially the United States.

PSC 375
RACE, SEX, AND POLITICS OF MYTH AND STORY
3, 1/2

Prerequisites: Upper-division status and successful completion of English basic skills competency requirement. The institutional and human force of story in race/sex/politics; legitimizing myths of the U.S. political system; limits to the achievement of consensus in group values and politics; standpoints of race/sex/political privilege and disadvantage; difficulties posed to the regime by the refusal of consent; and the transformation and assumption by citizens of self-government.
Equivalent course: PSC375W

PSC 389
TOPICS IN POLITICAL SCIENCE
3, 0/0

In-depth study of current issues of substantial political significance, such as: public personnel administration, defense policy, computers and political science, environmental policy, political communication, health policy, and human rights.

PSC 390
THE ITALIAN-AMERICAN EXPERIENCE: POLITICS, SOCIETY, & IDENTITY
3, 3/0; DIIF

Examination of the experience of Italians in the United States from an interdisciplinary perspective beginning with the peak years of emigration (1870-1920) including the culture, society, economy, and government of Italy (push factors) and the promise of America (pull factors). Identity, citizenship, worldview, family structure, expressive culture, politics, economics, crime, and social relations in the Italian-American community.

PSC 399
RESEARCH SKILLS
1, 1/0

Prerequisites: PSC 203, PSC 204, and junior or senior standing; or instructor permission. Preparation to study selected topics in political science through in-depth examination and analysis.

PSC 410
POLITICAL BEHAVIOR AND PUBLIC OPINION
3, 3/0

Conditions of democratic political behavior, opinion formulation in democratic systems, voting behavior and party affiliation in the United States, mass political behavior and governmental institutions, mass political behavior in selected western European societies.
Equivalent courses: SOC406, SOC440

PSC 415
URBAN PUBLIC POLICY
3, 3/0

Prerequisite: Upper-division status. Urban problems and government policy responses to them; economic development, poverty, and crime; roles of all levels of government; policy analysis.

PSC 420
CONTEMPORARY CONSTITUTIONAL ISSUES
3, 3/0

Recent developments in American constitutional law; comparison of the Warren, Burger, Rehnquist, and Roberts courts; First Amendment liberties and rights; the rights of the accused and criminal due process; equal protection and African Americans; reapportionment and representation; the president and national security.
Equivalent course: PSC420W

PSC 450
CONTEMPORARY POLITICAL THOUGHT
3, 3/0

Central problems of political philosophy (such as equality, freedom, justice, and political obligation) as discussed by contemporary philosophers.
Equivalent course: PSC450W

PSC 470
SENIOR SEMINAR
3, 3/0; OCIF

Prerequisites: PSC 203, PSC 204, PSC 399, and junior or senior standing; or instructor permission. Selected topics in political science examined and analyzed in depth.
Equivalent course: PSC470W

PSC 485
MOOT COURT
3, 3/0; OCIF

Prerequisite: Upper-division status or permission of instructor. Simulation of a trial court or appellate court proceeding involving teams of students acting as prosecutors/plaintiffs' attorneys, defense attorneys, and witnesses. Students develop case strategy, analyze evidence, integrate legal precedent, prepare a written brief, question witnesses, and present oral arguments to the court in opening and closing statements. Final project is a mock trial presentation held in a formal courtroom setting.
Equivalent courses: CRJ485, SOC485

PSC 488
INTERNSHIP
1-15, 0/0

Prerequisites: PSC 203, 204, and 399. Field experiences that supplement departmental academic offerings; geared to students' interests. Faculty intern supervisor and department chair permission necessary.

PSC 495
SPECIAL PROJECT
1-3, 0/0

PSC 497
WASHINGTON SEMESTER
1-16, 0/0

State University of New York's Washington semester program. Class work, seminars, and internship work; selection based on college-wide competition; contact Political Science Department chair for information and application forms.

PSC 499
INDEPENDENT STUDY
3-12, 0/0

PSY - PSYCHOLOGY

PSY 101

INTRODUCTION TO PSYCHOLOGY

3, 3/0; SSIF

Introduction to the scientific study of psychology; research methodology; genetic, biological, cultural, and environmental influences on behavior; perception, learning; memory; intelligence; maturation; motivation; emotion; stress and coping; personality; social processes and psychopathology. Required for psychology majors.

PSY 205

INDEPENDENT READING

1, 1/0

Prerequisites: PSY 101 and permission of instructor. Supervised readings on a specific topic in psychology chosen mutually by the student and faculty supervisor at the time of registration.

PSY 304

LEARNING: THEORY AND RESEARCH

3, 3/1

Prerequisite: PSY 101. Theories of learning and the scientific investigation of the learning process; the psychological correlates of learning, memory and attention, empirical laws and principles and their derivation from research on humans and animals; theoretical explanations of the learning process.

PSY 306

STATISTICS IN PSYCHOLOGICAL RESEARCH

3, 3/1

Prerequisite: PSY 101. Intensive study of the major descriptive and inferential statistics used in psychological research; graphic and tabular presentation of data, measures of central tendency and dispersion, probability theory, t-tests, analysis of variance, chi-square, correlation techniques; experimental design. Required for psychology majors.

PSY 308

SENSATION AND PERCEPTION

3, 3/0

Prerequisite: PSY 101. Major facets of perceptual functioning, from sensory processes to complex perceptual integrative processes. Emphasis on basic concepts such as physiological correlates of perception, empirical laws and principles, and theoretical explanation of perceptual processes and their determinants.

PSY 311

PERSONALITY: THEORY AND RESEARCH

3, 3/0

Prerequisite: PSY 101. Theoretical problems, methods, and empirical findings related to the development of an adequate theory of personality development and function; problems of theory construction, major theoretical approaches, personality determinants, and personality assessment; empirical research.

PSY 321

COMPARATIVE ANIMAL BEHAVIOR

3, 3/0

Prerequisite: PSY 101. The study of animal behavior from a psychological perspective; current theoretical models; evolution and adaptive functions of sexuality, predator-prey interactions, evolution of social organization, territoriality, dominance, aggression, learning, and instinct.

PSY 325

SOCIAL BEHAVIOR

3, 3/0

Prerequisite: PSY 101. Theoretical and empirical examination of the role of social factors on an individual's behavior; attitude formation and change, affiliation, attribution process, interpersonal attraction, small-group dynamics, aggression, conformity, leadership, and competition.

PSY 327

ADULT DEVELOPMENT AND AGING I

3, 3/0

Prerequisite: PSY 101. Introduction to human development and change throughout early, middle, and late adulthood; current psychological theory

and empirical evidence on patterns of aging, problems of aging, and benefits of aging; social, psychological, and biological determinants of adult development; cognitive change; personality change; family relations; life satisfaction; the stigma of old age.

Equivalent course: PSY327W

PSY 330

THE PSYCHOLOGICAL POWER OF LANGUAGE

3, 3/0

Prerequisites: PSY 101. Study of language from a psychological science standpoint. Properties of human languages; how language is represented in mind and brain; how it is acquired; whether it is specific to humans; relationship between language and culture; verbal and non-verbal aspects of how language is used to communicate.

PSY 340

COGNITIVE PSYCHOLOGY

3, 3/0

Prerequisite: PSY 101. Introduction to research and theoretical issues in cognitive psychology; history of memory and thought, acquisition of information, attention, short-term and long-term memory, pattern recognition, speech perception, space perception, and higher-order mental processes.

PSY 355

LIFESPAN DEVELOPMENTAL PSYCHOLOGY

3, 3/0

Prerequisite: PSY 101. Psychological, biological, and social factors that affect psychological development throughout the lifespan; physical development, language acquisition, cognitive development, social development, personality development, morality and changing life tasks; genetic, cultural, and experiential determinants of development.

PSY 356

CHILD DEVELOPMENT

3, 3/0

Prerequisite: PSY 101. Psychological, social, and biological factors that affect development from conception through preadolescence; comprehensive exposure to research findings and theories in child development. Physical development, language acquisition, cognitive development, social and emotional development, and moral development; mechanisms of developmental change such as genetic, cultural, historical, and experiential influences.

PSY 357

ADOLESCENT AND YOUNG ADULT DEVELOPMENT

3, 3/0

Prerequisite: PSY 101. Current theoretical and empirical understandings of the transitions from early adolescence to young adulthood; multidisciplinary approach; biological, psychological, and social factors emphasized. Biological, cognitive, interpersonal, self-concept, family, academic, and career transitions as well as psychosocial problems encountered.

PSY 365

PSYCHOLOGY IN THE WORKPLACE

3, 3/0

Prerequisite: PSY 101. Theory and research in industrial/organizational psychology emphasizing personnel selection, classification, placement, training, and development; work motivation, job satisfaction, factors that influence productivity, leadership, and organizational theory.

PSY 367

ORGANIZATIONAL BEHAVIOR

3, 3/0

Prerequisite: PSY 101. Organizational behavior from a psychological perspective; theories of and methods in organizational behavior and research; behavioral research in organizational settings, motivation, leadership, group dynamics, communication, and organization analysis and development.

PSY 370

ENVIRONMENTAL PSYCHOLOGY I

3, 3/0

Prerequisite: PSY 101. Environmental psychology and the role of physical environment on behavior; physical environment-behavior relations, research methods, territoriality, privacy, crowding, environmental perception and attitudes, pollution and behavior, buildings and behavior.

PSY 375
FORENSIC PSYCHOLOGY
3, 3/0

Prerequisite: PSY 101. Application of psychological knowledge to the civil and criminal justice systems; research endeavors that examine aspects of human behavior as well as the professional practice of psychology within the legal system; clinical, applied and research activities of psychology and law.

PSY 376
HEALTH PSYCHOLOGY
3, 3/0

Prerequisite: PSY 101. Theory and empirical research in the psychology of stress, coping, and health; health psychology, major physiological systems, components of stress, relationship of stress to health, physical and psychological consequences of stress, social support systems, coping with life crises, relaxation techniques, psychological intervention and treatment, and the holistic health model.

PSY 381
PSYCHOLOGY OF CULTURE
3, 3/0

Prerequisite: PSY 101. Similarities and differences in behavior cross-culturally; the dimensions along which individuals vary between cultures; the issues involved in conducting cross-cultural research; differences and similarities between cultures in the areas of the self and personality, conformity, obedience, aggression, attachment and child-rearing; abnormal psychology and culture-bound syndromes, and interpersonal and group relations.

PSY 382
PSYCHOLOGY OF THE CONSUMER
3, 3/0

Prerequisite: PSY 101. Psychology of consumer behavior; psychological theory and measurement techniques as tools for understanding consumer behavior. Relevant material from learning, perception, attitude formation, personality, and motivation literature as it describes consumer decision making.

PSY 383
THE PSYCHOLOGY OF HUMAN SEXUAL BEHAVIOR
3, 3/0

Prerequisite: PSY 101. Psychosexual aspects of human sexuality; historical views of human sexuality; sex research; physiology of sex; gender identity; puberty; early learning of sexuality; heterosexuality, homosexuality, and bisexuality; ways of sex; sexual minorities; social and legal issues of sex; portrayal and handling of sex in the media; sexual difficulties; eroticism; social-psychological attitudes toward sex; future trends of sexuality.

PSY 384
PSYCHOLOGY OF AGGRESSION AND VIOLENCE
3, 3/0

Prerequisite: PSY 101. Reasons for aggression; biological vs. environmental causes of aggression; definitions and scientific study of aggression; methods to control aggression.

PSY 387
PSYCHOLOGY OF GENDER
3, 3/0; DIIF

Prerequisite: PSY 101. Empirical and theoretical issues of the psychology of gender issues; differences in female and male behavior in terms of such social factors as conformity to societal pressures, sex-role stereotyping, and gender-specific socialization patterns; biological influences on gender differences; development of sex differences; gender-role development; sex differences in cognition, personality, achievement, and leadership.

PSY 388
PSYCHOLOGY OF DEATH AND DYING
3, 3/0

Prerequisite: PSY 101. Objective coverage of the relevant issues pertaining to death and dying; the stages of dying, counseling the dying person, attitudes of and reactions to death, psychological needs served by funeral and burial rituals, suicide, grief, bereavement, the child and death, effect of death on survivors, euthanasia, and medical and legal definitions of death.

PSY 411
ABNORMAL PSYCHOLOGY
3, 3/0

Prerequisites: PSY 101 and PSY 311. Dimensions, theories, and empirical findings in psychopathology. Concept of abnormality, problems and schemes of classification, theories of neurosis and psychosis, etiology, and classification and treatment for selected disorders.

PSY 412
COMMUNITY PSYCHOLOGY
3, 3/0

Prerequisites: PSY 101 and 3 credit hours of psychology; PSY 411 recommended. Theoretical and empirical literature regarding community mental health. Historical perspectives on the community mental health movement, assessment of psychological dysfunction, levels of evaluating institutional change, consultation, and program evaluation.

PSY 415
THE COMPETENT INFANT
3, 3/0

Prerequisites: PSY 101, and PSY 355 or PSY 356. The psychological world of the normal human infant. Primary empirical research and theoretical problems relating to the field of infant development; biological processes of development, prenatal development, birth, characteristics of the neonate, speech and language, cognition and learning, interactions and socialization, sex differences in behavior, theoretical models of early development.

PSY 416
ABNORMAL CHILD PSYCHOLOGY
3, 3/0

Prerequisites: PSY 101 and PSY 355 or PSY 356; PSY 411 recommended. Significant issues and problems related to child psychopathology. Taxonomy of childhood behavior disorders, role of the family, assessment of psychopathology in children, mental retardation, aggressive behavior, poverty and psychopathology, learning disorders, neurosis and psychosis in children, developmental disorders, therapeutic approaches.

PSY 417
THE ATYPICAL INFANT
3, 3/3

Prerequisites: PSY 101 and PSY 355 or PSY 356. The psychological effects of developmental delay in infants. Screening, assessment, and intervention of high-risk infants; definition of at-risk and high-risk infants, biological traumas and defects, prenatal traumas, birth and perinatal traumas, psychological crises in infancy, psychological assessment of developmental delay in newborns and infants, early intervention for high-risk infants and their families, psychological issues of parenting the high-risk infant.

PSY 421
PHYSIOLOGICAL PSYCHOLOGY
3, 2/2

Prerequisites: PSY 101 and 3 credit hours of psychology. The brain and nervous, endocrine, and immune systems, and their relationship to animal and human behavior; psychosurgery, physiological basis of language, intelligence, emotion, motivation, learning, sexuality, abnormal behavior, perception, and motor behavior.

PSY 427
ADULT DEVELOPMENT AND AGING II
3, 3/0

Prerequisites: PSY 101 and PSY 327. Complex psychological issues pertaining to late-life development and adjustment; theoretical and applied issues, research methodologies, empirical data in relation to cognitive processes, personality, self-conceptions, social contexts, clinical assessment and intervention, and cultural influences on the behavior of older adults.

PSY 430
PSYCHOLINGUISTICS
3, 3/0

Prerequisites: PSY 330 or PSY 340. Empirical approach to how we produce and understand language. Major theories, looking at language sounds, words, sentences, conversation, and discourse. Integrates lan-

guage representation and processing into the general framework of cognitive science. Includes laboratory exercises and final project.

PSY 432
HUMAN MOTIVATION AND EMOTION
3, 3/0

Prerequisites: PSY 101 and PSY 304 or PSY376. Motivation and the fundamental, empirical, and logical basis for its postulation and use in psychological explanations of animal and human behavior; motivation and how motivational processes interact with other psychological processes.

PSY 440
ADDICTIVE BEHAVIORS
3, 3/0

Prerequisites: PSY 101 and PSY 311; PSY 411 recommended. Etiology, prevention, and treatment of addictive behaviors, emphasizing biological, psychological, and social factors; dependence on alcohol, nicotine, and other drugs, as well as gambling, eating disorders, and compulsive sexual behavior.

PSY 441
INTRODUCTION TO NEUROPSYCHOLOGY
3, 0/3

Prerequisites: PSY 101 and 3 credit hours of psychology. The relationship between human brain function and behavior; functional anatomy of the brain; experimental and clinical techniques employed by neuropsychologists to uncover brain-behavior relationships.

PSY 450
RESEARCH METHODS IN PSYCHOLOGY I: INTRODUCTION TO RESEARCH METHODS
3, 2/2

Prerequisites: PSY 101; PSY 306 with a grade of C or better, and 3 credit hours of psychology. Laboratory investigation in the behavioral sciences; higher-order correlational and parametric statistics, various approaches to research, and the interpretation and communication of research findings. Laboratory experiences to illustrate course content. Requires minimum of five laboratory exercises and reports. Required for psychology majors. Equivalent course: PSY450W

PSY 458
EXPERIMENTAL PSYCHOLOGY II: METHODS IN DEVELOPMENTAL PSYCHOLOGY
3, 4/0

Prerequisite: PSY 450; PSY 355 recommended. Continuation of PSY 450. Focus on research methods used in studying developmental psychology. Includes methods used in studying lifespan development in the areas of perception, learning, personality, cognition, and attention. Requires minimum of four research exercises and reports, including the formulation of at least one original experimental design. Equivalent course: PSY458W

PSY 460
ADVANCED LEGAL PSYCHOLOGY
3, 3/0

Prerequisites: PSY 101 and PSY 375 or PSY325. How behavior in legal contexts is influenced by social psychological, cognitive, and developmental processes. Social and cognitive influences on eyewitness testimony and memory, false confessions, jurors' decision making and evaluation of trial evidence, social influence among jury members, children's participation in the legal system, and discrimination in the legal system.

PSY 466
PERSONNEL PSYCHOLOGY
3, 3/0

Prerequisites: PSY 101 and PSY 365 or PSY 367. Problems, tools, and strategies involved in applying psychological principles to personnel selection, placement, training, and assessment in organizations; the roles of personnel psychologists, job analysis, developing performance criteria for jobs, performance appraisal, interviewing, the uses of employment testing, predicting job success, training programs, and social and ethical issues in personnel psychology.

PSY 471
HISTORY AND SYSTEMS OF PSYCHOLOGY
3, 3/0

Prerequisites: PSY 101 and 6 credit hours of psychology. History of the emergence of modern psychology from pre-Socratic thought to the present. Emphasis on systematic examination of psychology's historical roots as expressed in contemporary theories and models. Required for psychology majors.

Equivalent course: PSY445

PSY 472
SEMINAR ON PSYCHOLOGY
3, 3/0; OCIF

Prerequisites: PSY 101, PSY 306, PSY 450, and 6 credit hours of psychology. Topic areas for each course vary and are announced prior to student enrollment. Coursework involves the study of basic theoretical principles and empirical laws of different psychology content areas; individual presentations on relevant topics. Required for psychology majors. Equivalent course: PSY472W

PSY 480
PSYCHOTHERAPY: THEORY, RESEARCH, AND PROCEDURES
3, 3/0

Prerequisites: PSY 101 and PSY 311; PSY 411 recommended. The contribution of psychology to the practice of psychotherapy; theory, research, and clinical applications; the scientist-practitioner model; major theories of psychotherapy; the social impact of therapy; research support for major therapy systems; ethical issues.

PSY 481
PSYCHOLOGICAL TESTS AND MEASUREMENTS
3, 4/0

Prerequisites: PSY 101 and PSY 306. Issues and problems surrounding psychological testing. Test reliability, validity, construction, administration, norms, and interpretation; commonly used intelligence, personality, neuropsychological, and personnel-assessment techniques. Provides limited practicum experiences.

PSY 488
INTERNSHIP
3-15, 3/0

Prerequisite: Approval of the faculty supervisor. Supervised field experience in a variety of settings to supplement classroom instruction.

PSY 495
SPECIAL PROJECT
1-3, 0/0

Prerequisite: Faculty supervisor permission. Research conducted under the supervision of a faculty member.

PSY 496
HONORS THESIS I
3, 0/0

Prerequisites: PSY 450, 72 credit hours, and permission of instructor. Honors psychology students initiate research that is formally presented in thesis form. Formal research proposals (oral and written) presented to supervisors and honors thesis committee. Extensive library research. Required for students in the departmental honors program.

PSY 498
HONORS THESIS II
3, 0/0

Prerequisites: PSY 496 with a minimum grade of B and permission of instructor. Honors psychology students conduct research proposed in PSY 496 and submit a formal thesis in written form. Oral defense of work before faculty supervisor, thesis committee, and interested faculty members. Required for students in the departmental honors program.

PSY 499
INDEPENDENT STUDY
3-12, 0/0

Prerequisite: Faculty adviser permission.

REL - RELIGIOUS STUDIES

REL 104
INTRODUCTION TO RELIGIOUS STUDIES
3, 0/0; HUIF
Introduction to the rational study of religion, including religious practices and philosophies and concepts basic to religious experience.
Equivalent course: PHI104

REL 105
INTRODUCTION TO CHRISTIAN THOUGHT
3, 3/0; WCIF
A study of Christian thought from its origins to the present, and its influence on the literature, art, architecture, music, government, education, and lifestyle of Western civilization.
Equivalent course: PHI105

REL 121
INTRODUCTION TO JEWISH THOUGHT
3, 3/0; WCIF
Examination of basic Judaism, major trends in Jewish thought, the Bible, and its influence on Western Civilization; Jewish ideas of God, time, Messiah, and history and their influence on Western Civilization.
Equivalent course: PHI121

REL 205
INTRODUCTION TO THE OLD TESTAMENT
3, 3/0; HUIF
The Old Testament, the backgrounds and cultures from which it grew, and the philosophies and literature it contains.

REL 206
INTRODUCTION TO THE NEW TESTAMENT
3, 3/0; HUIF
Introduction to the New Testament, with emphasis on its literary content, the society from which it emerged, the structures and varieties of its literary contemporaries, and the tools necessary for understanding it.
Equivalent course: REL326

REL 303
WOMEN IN GLOBAL RELIGIONS
3, 3/0; NWIF
A study of women in world religions, with special attention to the effects of patriarchal religious institutions and religious myths that influence their lives. Feminist contributions to global religious thought and practice, and their effects upon the developing world.

REL 306
WRITINGS OF JOHN
3, 3/0
Historical and literary background of St. John's Gospel, the letters of John, and the Book of Revelation; the content of the gospel, its major theological themes, and its distinctive contributions to Christian thought.
Equivalent course: REL306W

REL 321
WORLD RELIGIONS
3, 3/0; NWIF
A study of various world religions, such as Hinduism, Buddhism, Taoism, Confucianism, Shinto, Judaism, Christianity, and Islam, along with Native American, traditional African, and other oral religions.
Equivalent course: REL321W

REL 329
CONTEMPORARY CHRISTIAN THOUGHT
3, 3/0
Prerequisite: Upper-division status or one course in religion. Worship, ministry, and theology of various Christian traditions and the context in which they developed, from the sixteenth to the twentieth centuries; contemporary challenges to Christianity.

REL 332
MYSTICISM
3, 3/0
Prerequisite: Upper-division status or one course in religion. Introduction to some of the major mystical disciplines of the world, such as Zen, Christian, Jewish, Sufi, European, Far Eastern, African, and Native American mysticism; their underlying philosophies.

REL 488
INTERNSHIP
1-12, 0/0
Prerequisites: Upper-division status; minimum cumulative GPA of 2.5, with at least one-third of philosophy major or religious studies minor coursework completed. Supervised field experience (experiential learning) consisting of supervised on-site activities and an academic component consisting of training sessions, seminars, and reports.

REL 499
INDEPENDENT STUDY
3-12, 0/0
Prerequisites: Sophomore, junior, or senior status and minimum cumulative GPA of 2.5 (overall, previous semester, and in major courses). Studies arranged and meeting hours undertaken individually with instructor.

SAF - SAFETY STUDIES

SAF 305
FUNDAMENTALS OF SAFETY
3, 3/0
Fundamentals of accident prevention as applied to areas of living, with consideration of human and environmental factors, legal aspects, and home and fire safety.
Equivalent course: SAF400

SAF 310
PERSONAL SAFETY AND FIRST AID
3, 3/0
Personal accident-prevention skills and techniques. Basic instruction in emergency medical care. Emphasis on recreational, occupational, industrial, and daily-life routines. Standard first aid and personal safety certificate awarded upon successful completion.

SAF 320
PRODUCT SAFETY
3, 3/0
Product safety, agencies that control the manufacture and distribution of dangerous products, product safety laws and legal liability, product-injury data, evaluative criteria, product testing, determining standards for safety.

SAF 333
OCCUPATIONAL SAFETY
3, 3/0
Hazards in the workplace, with emphasis on various accident-prevention methods and techniques for employees and management; The Occupational Safety and Health Act (OSHA) of 1970.

SAF 340
COMMUNITY SAFETY
3, 3/0
Human and environmental factors affecting community safety, accident prevention and control principles, agencies and organizations, safety laws and ordinances, standards and codes, legal liability and insurance, disaster and emergency medical care, safety in places of public assembly, recreational facilities, transportation systems. Required for safety minors.

SAF 360
INDUSTRIAL HYGIENE
3, 3/0
Introduction to industrial hygiene; detection, recognition, evaluation, and control of factors emanating from a workplace that may impair health, cause discomfort, illness, or disease, and/or reduce efficiency of workers and the community.

SAF 431
ORGANIZATION, ADMINISTRATION, AND SUPERVISION OF INDUSTRIAL ACCIDENT PREVENTION PROGRAMS
3, 3/0
Prerequisite: SAF 430 (R). Methods and techniques of efficient industrial accident-prevention programs; corporate responsibility, employee responsibility, and complex psychological relationships that affect the typical program.

SAF 450
MOTOR FLEET SAFETY MANAGEMENT
3, 3/0
Fleet management techniques and their application; scope and functions of the motor fleet safety supervisor; federal, state, and local laws and regulations; selection and maintenance of equipment; customs and public relations.

SAF 499
INDEPENDENT STUDY
3, 0/0

SCI - SCIENCE

SCI 100
CONTEMPORARY SCIENCE
3, 3/0; NSIF
Introduction to the role of science in contemporary society. Emphasis on the process of science for solving problems and organizing information to understand science and technology. Contemporary issues and case studies illustrate the methods of science.
Equivalent course: HON102

SCI 105
PHYSICAL SCIENCE FOR NONSCIENCE STUDENTS
3, 3/0; NSIF
Activity-centered approach to the physical sciences. Extensive use of materials designed for students interested in a non-technical analysis of the nature and procedures of science.

SCI 125
INTRODUCTION TO COLLEGE SCIENCE AND MATHEMATICS
3, 2/2
Prerequisite: Participate in the Math Science Upward Bound Regional Center Program. Six-week residential program in which high school students are initiated into a college-level learning community. Introduces scientific inquiry in the context of three college-level disciplines: aquatic ecology, physics, and mathematics. Data collection and presentation, scientific writing, and research techniques.

SCI 231
POLLUTION, THE ENVIRONMENT, AND SOCIETY
3, 3/0; NSIF, TSIF
Scientific and societal implications of present-day global environmental problems, such as ecology, global warming, population, and pesticides. Causes and effects of, and possible solutions to, worldwide environmental problems, with implications from conservation, chemistry, health, and society. Option in environmental major
Equivalent course: SCI231W

SCI 232
ENERGY, ENVIRONMENT, AND SOCIETY
3, 3/0; NSIF
Regional and global energy use and issues; environmental, economic, individual, and societal perspectives; major energy alternatives.
Equivalent course: SCI232W

SCI 311
PROBLEM SOLVING IN PHYSICAL SCIENCE
3, 3/0
Prerequisites: A college-level course in a science other than biology; upper-division status Inquiry-based course for elementary preservice candidates. Investigation of the physical sciences through problem solving, laboratory activities, simulations, and explorations. Option in elementary education science concentration.

SCI 312
PROBLEM SOLVING IN LIFE SCIENCE
3, 3/0
Prerequisites: A college-level course in biology; upper-division status. Inquiry-based course for elementary pre-service candidates. Investigation of the life sciences through problem solving, laboratory activities, simulations, and explorations. Option in elementary education science concentration.

SCI 313
PROBLEM SOLVING IN EARTH SCIENCE
3, 3/0
Prerequisites: A college-level course in earth science; upper-division status. Inquiry-based course for elementary pre-service candidates. Investigation of the earth sciences through problem solving, laboratory activities, simulations, and explorations. Option in elementary education science concentration.

SCI 323
SCIENCE AS INQUIRY
3, 3/0
The procedures of science as a search for knowledge of natural phenomena; comparison with other methods of inquiry; implications for nonscientists. Option in elementary education science concentration. Required for 5-6 extension.
Equivalent course: SCI323W

SCI 335
OUTDOOR SCIENCE EDUCATION
3, 2/2; EMGC
Prerequisite: One introductory environmental science course. Interdisciplinary approach to outdoor science education; basic concepts of natural history in classroom and field; extended field trips to the college camp. Option in environmental science major.

SCI 340
SCIENTIFIC STUDIES IN ENVIRONMENTAL POLLUTION
3, 3/0
Prerequisites: 9 credit hours of science and 3 credit hours of environmental science, or permission of instructor. In-depth examination of various types of environmental pollution. A field-based project is used to illustrate data-collection techniques. Option in environmental science minor.
Equivalent course: SCI340W

SCI 445
LITERACY FOR TEACHING SCIENCE
3, 2/2
Prerequisites: SED 200, EDF 303, EDU 416, and accepted into a teacher certification program. Study of literacy related to secondary science. Candidates will practice promotion of literacy, conduct an action research project on identifying literacy levels of students, and plan literacy activities based on data collection.

SCI 495
PROJECT
1-3, 0/0
Prerequisite: Faculty sponsor permission. Environment, energy, science, society, and science education- related areas.

SCI 499
INDEPENDENT STUDY
3, 0/0
Prerequisite: Faculty sponsor permission. Environment, energy, science, society, and science education- related areas.

SED - SCIENCE EDUCATION

SED 200
FIELD EXPERIENCE IN SECONDARY SCIENCE EDUCATION
3, 2/2
Classroom and field experience designed to help students make a better-informed decision if they are contemplating a career in secondary science education. A 30-hour field component is required for each student enrolled. Required for all secondary science education majors.
Equivalent courses: FLE200, MED200

SED 310
TEACHING SCIENCE IN THE MIDDLE SCHOOL
3, 2/2

Prerequisites: SED 200 or equivalent, enrollment in an elementary or secondary education program, junior standing. Interaction with middle school interdisciplinary teams of teachers and their students, other members of the middle school, college faculty, and invited speakers. Stakeholders work together to facilitate learning about diverse learners and their preferred learning styles; develop a management plan and prepare a variety of assessments, develop an appreciation for the components of the middle school community, including interdisciplinary teams, finding and using community resources, and the school as a community. Field experience at the middle school level.

SED 401
TECHNIQUES FOR TEACHING LABORATORY ACTIVITIES IN THE
SECONDARY SCIENCE CLASSROOM
3, 0/6

Prerequisites: SED 200 (not to be taken concurrently), EXE 372 or concurrently, EDF 303, and two required courses in each of the cognate sciences (lab based); second course in sequence may be taken concurrently. Science education majors learn selected laboratory techniques necessary to teach New York State Regents secondary science classes. Topics include designing cognate science area lab activities, ordering and maintaining supplies /equipment, storage, safety, preparation of materials, lab set-up, and measurement techniques. Exploration of external influences and pressures in education. A field component of 30 science laboratory contact hours is required for each student enrolled.

SED 405
METHODS AND MATERIALS IN TEACHING SECONDARY
SCHOOL SCIENCE
3, 2/2

Prerequisites: Minimum 2.75 GPA in science major (3.0 in earth sciences); SED 401, EDU 417 (may be concurrent). The components of an effective teaching-learning situation in a science (grades 7-12) classroom. Interrelationships of secondary science programs; micro-teaching experience and 40 hours of fieldwork.
Equivalent courses: FLE405, SED405W

SED 407
PRACTICE TEACHING SCIENCE IN THE MIDDLE SCHOOL
6, 0/30; OCIF

Prerequisites: SED 405 (minimum grade of B), minimum cumulative 2.75 grade point average in major coursework (3.0 in the earth sciences), completion of the NYSTCE LAST exam, successful completion of English and mathematics basic skills competency. If referred, satisfactory completion, or exemption from, SLA 100, Student Speech Clinic. Teaching under supervision at least five days a week for one quarter in a middle school science classroom; individual and group instruction; planning unit teaching; classroom management and routine classroom procedures; audiovisual aids, computer technology, evaluation and assessment of student progress; participation in total school program. A series of student teaching seminars.
Equivalent courses: FLE407, MED407

SED 408
PRACTICE TEACHING SCIENCE IN THE HIGH SCHOOL
6, 0/30; OCIF

Prerequisites: SED 405 (minimum grade of B), minimum cumulative 2.75 grade point average in coursework (3.0 in earth science), completion of the NYSTCE LAST exam, successful completion of English and mathematics basic skills competency. If referred, satisfactory completion, or exemption from SLA 100 Student Speech Clinic. Teaching under supervision at least five days a week for one quarter in the high school science classroom; individual and group instruction; planning unit teaching; classroom management and routine classroom procedures; audiovisual aids, computer technology, evaluation and assessment of student progress; participation in total school program. A series of student teaching seminars.
Equivalent courses: FLE408, MED408

SED 409
SEMINAR IN SECONDARY SCIENCE EDUCATION
3, 2/2

Prerequisites: SED 405 (minimum grade of B), 2.75 GPA in science major coursework (3.0 in earth sciences), secondary majors SED 407 and SED 408 concurrently; elementary science extension SED 407 concurrently. Assist student teachers in analysis of their "real" classroom experiences—from management issues to content presentation. Conflicting philosophies in current education. Portfolio development and ongoing development of personal teaching philosophy and practices. Develop interview techniques and make application for NYS teacher certification. Taken concurrently with SED 407 and SED 408.

SED 488
INTERNSHIP
1-6, 0/1

Prerequisites: Minimum 2.75 GPA and a background of courses or experience within the area of interest. Faculty adviser and department chair permission. Provides guided and supervised field experiences to complement the academic program.

SLP - SPEECH LANGUAGE PATHOLOGY

SLP 100
STUDENT SPEECH CLINIC
1, 0/0

Complete diagnostic evaluation and intervention services for students with speech, language, hearing, fluency, or voice disorders. Accent-reduction services also available. Open to all students. Hours by arrangement.
Equivalent course: SLA100

SLP 101
AMERICAN SIGN LANGUAGE I
3, 3/0

Fundamentals of American Sign Language (ASL), including basic grammatical features, language functions, and finger spelling. Designed to give students adequate receptive and expressive skills for communicating with deaf individuals using ASL. Supplemental lectures focus on issues related to deafness, deaf culture, and signed languages.

SLP 102
AMERICAN SIGN LANGUAGE II
3, 3/0

Prerequisite: SLP 101. Continuation of SLP 101, designed to give students additional knowledge of American Sign Language (ASL) and the deaf community, and to increase competence in ASL conversational skills.

SLP 206
LANGUAGE DEVELOPMENT
3, 3/0; SSIF

Analysis of language and its development; children's acquisition of language, speech sounds, words, sentence structure, and meaning; factors that influence language development. Not open to speech-language pathology majors except by advisement.
Equivalent course: SLA206

SLP 220
INTRODUCTION TO COMMUNICATION DISORDERS
3, 3/0; NSIF

Classification and causes of speech, language, and hearing disorders in children and adults; methods of treatment for communication disorders and suggestions for prevention; basic information on normal and abnormal speech, language, and hearing development; videotaped observation of individuals presenting various communication disorders. Not open to speech-language pathology majors except by advisement.
Equivalent course: SLA220

SLP 302
CLINICAL PHONETICS
3, 3/0

Production, acoustic analysis, and representation of English (American) speech sounds; application of phonetics to deviations in speech.
Equivalent course: SLA302

SLP 303
LANGUAGE ACQUISITION
3, 3/0
Prerequisite: SLP 302. Corequisite: SLP 329. Children's acquisition of phonology, morphology, syntax, semantics, and pragmatics; structure, function of language of normal children at different levels of development; comparison and contrast of theories of language acquisition.
Equivalent course: SLA303

SLP 304
ANATOMY AND PHYSIOLOGY OF SPEECH AND HEARING MECHANISMS
3, 3/0
Anatomy and physiology of normal speech and hearing mechanisms; possible deviations; embryonic development; neurology associated with production and reception of oral language.
Equivalent course: SLA304

SLP 305
COMMUNICATION DISORDERS I
3, 3/0
Prerequisites: SLP 302, SLP 304. Designed to provide students with knowledge of the scope and responsibilities of the field of speech-language pathology, and the basic knowledge concerning etiology, assessment, and intervention techniques related to articulation, phonology, phonemic awareness in reading and writing, craniofacial anomalies, and fluency disorders, including bilingual and dialectal considerations.
Equivalent course: SLA305

SLP 314
AUDIOLOGY
3, 0/0
Hearing and hearing disorders for speech-language pathologists. Anatomy and physiology of the ear and pathologies of the auditory mechanism, decibel notation, and pure-tone audiometry and tympanometry.

SLP 328
AUDIOLOGY LAB
1, 0/2
Operation and listening check of the pure-tone audiometer, pure-tone air-conduction threshold testing, screening, otoscopy, tympanometry, and reporting test results.

SLP 329
LANGUAGE ACQUISITION LAB
1, 0/2
Observation of language used by typical children. Practice with procedures to collect and analyze typical language.

SLP 389
TOPICS COURSE
1-3, 0/0

SLP 400
LANGUAGE AND LITERACY FOR SPEECH-LANGUAGE PATHOLOGISTS
3, 3/0
Prerequisites: SLP 303 and 329. Connection between language and literacy; role of the speech-language pathologist as it pertains to working with children with language-based literacy impairments; similarities and differences between spoken and written language; linguistic components required for spoken and written literacy.

SLP 405
COMMUNICATION DISORDERS II
3, 3/0
Prerequisites: SLP 302, SLP 303, SLP 304, SLP 305 SLP 412. Provides basic etiology, assessment, and intervention techniques related to voice disorders, developmental and acquired motor speech disorders, aphasia, traumatic brain injury, dysphagia, and augmentative communication.

SLP 411
LANGUAGE DIAGNOSIS AND REMEDIATION
3, 3/0
Prerequisite: SLP 303. Introduction to childhood language disorders, including the demographics and characteristics features of language disorders.
Equivalent course: SLA411

SLP 412
SPEECH ACOUSTICS AND PERCEPTION
3, 3/0
Prerequisites: SLP 302, SLP 304, SLP 314. Corequisite: SLP 428. A study of the scientific principles underlying the physiology, acoustics, and perception of normal speech production as a basis for subsequent understanding of disordered speech. Topics include basic concepts of sound, motor and acoustic theories of speech production, speech perception, instrumentation used to measure speech processes, and application to speech pathology.
Equivalent course: SLP312

SLP 424
ORGANIZATION AND ADMINISTRATION OF SCHOOL SPEECH AND LANGUAGE PROGRAMS
3, 3/0
Organization of school speech-language programs, including laws and regulations, case selection, caseload, scheduling, records, and facilities.
Equivalent course: SLA424

SLP 428
ACOUSTICS LAB
1, 0/2
Corequisite: SLP 412. Direct and guided use of special instrumentation essential to the collection, measurement, and/or analysis of the acoustic components of speech sounds. Focus areas are respiration, phonation, articulation, and resonance.

SLP 429
CLINICAL ACTIVITY
1, 0/3
Observation, evaluation, and treatment sessions in speech-language pathology.
Equivalent course: SLA429

SLP 495
SPECIAL PROJECT
1-3, 0/0

SLP 497
WORKSHOP
1-3, 0/0

SLP 499
INDEPENDENT STUDY
3, 0/0

SOC - SOCIOLOGY

SOC 100
INTRODUCTION TO SOCIOLOGY
3, 3/0; SSIF
An introduction to the study of human society, its culture, institutions, processes, and change, including an examination of socialization, and relationships between and among individuals and groups in society. A prerequisite for all other undergraduate courses in sociology (except SOC 240, SOC 310, SOC 312, and SOC 320), and is required of all sociology majors. Useful for students planning careers in which they must interact with people of varying social and economic statuses.

SOC 199
INTRODUCTION TO COMPUTER USE IN THE SOCIAL SCIENCES
3, 0/0
Hands-on introduction to the application of computers to applied social research problems, including a review of past practices, current uses, and future trends; computer analysis of data to develop insights into the ways applied sociologists use computers in their work.

Equivalent courses: GEG199, SST199

SOC 208
SOCIOLOGY OF CONTEMPORARY CHINA
3, 3/0

Contemporary China from various sociological perspectives; brief history of China; recent developments of social structure, cultural values and norms in China; comparison of China and Western societies; practical outcomes of China studies.

SOC 240
ANALYZING SOCIAL PROBLEMS
3, 3/0; DIIF, SSIF

Analysis of several major social problems selected according to faculty and student needs and interests; a variety of approaches, techniques, and theories will be used.

SOC 250
SOCIOLOGY OF BUFFALO, NEW YORK
3, 3/0

Prerequisite: SOC 100. The city of Buffalo from the perspectives of socio-historical development, socioeconomic conditions, environmental conditions, and neighborhood development. Use of secondary data and field experiences to better understand the condition of the city and its neighborhoods. Includes a field component as part of regular class time and outside assignments. Students complete term papers based on readings, research, and field work.

SOC 300
METHODS IN SOCIAL RESEARCH
3, 3/0

Prerequisite: SOC 100. The nature of scientific evidence, induction, and deduction; the application of scientific methods to sociological data; the use of statistics and other means of data collection; case histories, narrative and descriptive methods; methods of writing for publication; use of social materials from journals and books as illustrative material.
Equivalent course: SOC300W

SOC 301
SOCIAL STATISTICS
4, 4/0

Prerequisite: SOC 100. Statistical methods and reasoning will be used to analyze and clarify sociological information; Also, operationalizing variables; database management; probability; descriptive statistics; inferential statistics; and data presentation. Software applications, specifically SPSS and SAS, familiarize students with recent and powerful technology in the field.

SOC 302
APPLIED SOCIAL RESEARCH
3, 3/0

Prerequisite: SOC 100. Explores the relationship between applied social research and policy/ decision making in organizations, agencies, and with individuals; applied research techniques will be presented and analyzed according to their utility in a variety of settings.
Equivalent course: SOC302W

SOC 310
SOCIOLOGY OF SEX AND GENDER
3, 3/0; DIIF

Critical examination of the roles women and men play in society; social statuses of women and men will be analyzed historically, comparatively, demographically, theoretically, and biologically; sociological implications of sex inequality in the economy and political systems, marriage, family relationships, and other social roles.

SOC 312
WOMEN IN SOCIETY
3, 3/0; DIIF

Multifaceted analysis of women in society; women's issues in relation to the social and natural sciences; critical examination of modern societies in light of women's perspectives.
Equivalent course: SOC210

SOC 320
SOCIOLOGY OF THE FAMILY
3, 3/0

Prerequisite: SOC 100. The family as a social institution, its historical development, function and structure, and interaction with other institutions; cross-cultural comparisons are made. The current status of the family, diversity in contemporary American families, as well as stability and change in the life course of families.
Equivalent course: SOC320W

SOC 321
THE AFRICAN AMERICAN FAMILY
3, 3/0; DIIF

Prerequisite: SOC 100. The relationship of American social institutions and the African American family; familial relations within the African American family. Useful for students who will interact with a diverse population in their careers, e.g., education and service occupations.
Equivalent course: AAS321

SOC 322
SOCIOLOGY OF CHILDHOOD AND YOUTH
3, 3/0

Prerequisite: SOC 100. The social construction of childhood and adolescence; interactive nature of the socialization process; children's production of peer culture; global social problems faced by children and youth.

SOC 323
SOCIOLOGY OF EDUCATION
3, 3/0

Prerequisite: SOC 100. The social organization of education in the U.S. and elsewhere, and schools as social institutions reflecting and influencing society; roles and behaviors of participants in the educational system, including educational goals, theories, philosophies, and methods; educational achievements, historical developments, and future trends.
Equivalent course: SSE323

SOC 324
SOCIOLOGY OF SPORT
3, 3/0

Presents an application of the sociological perspective to sport; focuses on the social organization of sports-related activities; the norms, goals, and values of sport using theoretical frameworks and empirical tools of the social sciences.
Equivalent courses: HEW319, HPR319

SOC 328
SOCIOLOGY OF RELIGION
3, 3/0

Prerequisite: SOC 100. Theories in the sociology of religion will be examined. Emphasis is upon religion and social change; religion in society; church and sect; social class and religion; the role of the minister, priest and rabbi.
Equivalent course: SOC420

SOC 330
SOCIAL PSYCHOLOGY
3, 3/0

Prerequisite: SOC 100. Human motivation and the nature of attitudes, including attitude change and stability; social phenomena, such as interpersonal perception and behavior, role prescriptions and role conflict, prejudice, and conflict resolution.

SOC 331
SOCIOLOGY OF GROUP DYNAMICS
3, 3/0

Prerequisite: SOC 100. The social structure and social dynamics of social groups, including the division of labor, types of leadership, communication and authority structures, social conflict, and social control mechanisms. The relationship of the individual to the group; comparisons of different types of "natural" groups such as family, peers, work groups; and the use of "experimental" groups to investigate various aspects of group life.
Equivalent course: AAS331

SOC 333

SOCIOLOGY OF SOCIAL MOVEMENTS

3, 3/0; DIIF

Prerequisite: SOC 100. Social movements, their character, development, dynamics, and consequences; the relationship between discontent at the individual and wider social levels. Selected social movements and sociological theories.

SOC 340

SOCIOLOGY OF THE CITY

3, 3/0

Prerequisite: SOC 100. The social organization of urban life in the U.S. and elsewhere, with emphasis on the growth and development of cities and metropolitan areas; lifestyle in the city and suburbs; the relationship of power and social control to urban stratification and the distribution of wealth; racial and ethnic distribution and relationships in urban settings; such urban problems as poverty, blight, crime and violence; and urban planning and redevelopment.

SOC 350

POWER, CLASS, AND INEQUALITY

3, 3/0; DIIF

Prerequisite: SOC 100. Historical and contemporary dimensions of social inequality and power differentials in the United States and globally; contrasting theoretical interpretations of the origins and significance of social inequality, including the intersectional relationship between inequality on the basis of gender, race, ethnicity, and class; current trends and projected transformations in social inequality.

SOC 351

SOCIOLOGY OF RACE AND ETHNICITY

3, 3/0; DIIF

Prerequisite: SOC 100. The study of racial and ethnic groups in American and other societies; focuses on forms, causes, and effects of prejudice and ethnic conflicts, and the changing relationships of these groups to the larger society. Possible solutions to social problems involving issues of race and ethnicity are also explored.

Equivalent course: AAS351

SOC 353

ENVIRONMENT AND SOCIETY

3, 3/0

Prerequisite: SOC 100 or 6 credit hours of sociology. Analyzes the relationship of society and the natural environment (global, national, and local levels) using empirical and theoretical methods. Specific topics include the "toxics crisis," Central America, work, and environmental racism. Interprets societal structures and processes that lead to ecological crises and responses to them.

SOC 360

SOCIOLOGY OF WORK

3, 3/0

Prerequisite: SOC 100. The social relations surrounding the world of work as the contours of modern urban-industrial society emerge, mature, and begin to decline; typical forms of work in industry; the functions of work organizations; changing of structures of social class; patterns of labor relations; the transfer of these forms to non-industrial and government contexts; how these factors influence the interest and meaning workers find in their work; the consequences for social action and social change.

SOC 370

SOCIOLOGY OF DEVIANT BEHAVIOR

3, 3/0

Prerequisite: SOC 100. Deviant behavior in American society; its nature, theoretical perspectives, and societal reactions; deviance as both an interactive and political process, with special attention paid to the development of deviant identities; specific behaviors may include substance abuse, sexual deviance, crime and delinquency, mental illness, and social protest.

SOC 380

SOCIOLOGY OF CRIME

3, 3/0

Prerequisite: SOC 100. Crime, its nature, variation, and causation; social responses to crime; methods of crime prevention, punishment, and treatment of offenders. Theoretical perspectives and controversies are presented in social and historical context.

SOC 382

SOCIOLOGY OF LAW

3, 3/0

Prerequisite: SOC 100. The numerous ways in which law permeates all forms of social behavior; focuses on the law itself and the social context within which it has been created and exists; dominant theoretical perspectives and sociological methods used to explain the interrelationships between law and society, including types and purposes of law, major legal organizations, the lawmaking process, law and social control, law and dispute resolution, law and social change, and the legal profession.

SOC 383

SOCIOLOGY OF PUNISHMENT AND CORRECTIONS

3, 3/0

Prerequisite: SOC 100. Recent theories and research findings regarding correctional practice; offender typologies, the nature and forms of treatment, and obstacles to treatment.

SOC 390

SOCIOLOGY OF JUVENILE DELINQUENCY

3, 3/0

Prerequisite: SOC 100. Juvenile delinquency; description, extent, and sociological theories of explanation; institutions and agencies dealing with and/or attempting to prevent delinquency, including courts, law enforcement agencies, social service agencies, and educational institutions; development of data.

SOC 391

SOCIOLOGY OF ADDICTION

3, 3/0

Prerequisite: SOC 100. Alcohol and drug abuse as a social problem and a sociological phenomenon; nature of drug and alcohol abuse, the situations in which this behavior occurs, and the characteristics of users; legal, medical, and other efforts made to influence addicts.

SOC 392

SOCIOLOGY OF SEXUAL BEHAVIOR

3, 3/0

Prerequisite: SOC 100. Recent sociological findings concerning sexual behavior as a social process; the nature of various sexual practices, such as homosexuality and sadomasochism in light of sociological theory; sociological literature concerning sexual behavior with special emphasis on the interactionist approach.

SOC 393

SOCIOLOGY OF MENTAL ILLNESS

3, 3/0

Prerequisite: SOC 100. Sociological perspectives on mental health and illness, including their social histories; includes evaluation of social factors and processes involved in modern approaches to the causes and treatment of mental illness; problems of definition and diagnosis; recent research findings in areas of epidemiology, institutional care and control of the mentally ill, the care of mental patients, and social issues.

SOC 400

FOUNDATIONS OF SOCIOLOGICAL THOUGHT

3, 3/0

Prerequisites: SOC 100 and 6 additional credit hours in sociology. Ideas developed by the early founders of sociology, including Karl Marx, Max Weber, Emile Durkheim, and their contemporaries.

Equivalent course: SOC400W

SOC 408

CONTEMPORARY SOCIOLOGICAL THEORY

3, 3/0

Prerequisites: SOC 100 and 6 additional credit hours of sociology. The significance and uses of sociological theory; includes the major current approaches to understanding society and social life, such as contemporary Marxism, conflict theory, functionalism, and the interpretive theories, such as symbolic interactionism, phenomenological sociology, and ethnomethodology; and theories of rational choice such as behavioral sociology and exchange theory. Newly developing perspectives such as feminist theory and postmodernism.

Equivalent course: SOC408W

SOC 430
SOCIOLOGY OF INTERNATIONAL DEVELOPMENT AND
UNDERDEVELOPMENT

3, 3/0

Prerequisites: SOC 100 and upper-division status. Societal development and change on an international level, with emphasis on the third world; topics include the major sociological theoretical models, conceptual frameworks and assumptions of development; the emergence and dynamics of the world system; the international division of labor; the interplay of development with gender, race, and ethnicity; social policy alternatives and strategies of social change and liberation.

SOC 484
PRACTICUM IN TEACHING SOCIOLOGY

3, 3/0

Prerequisites: SOC 100 and 15 additional credit hours in Sociology; 3.0 GPA and 3.0 in Sociology. How sociology classes are constructed and administered. Instruction in lecture development, exam construction, and record keeping. Experience in mentoring and helping to prepare students for exams. Required journal and analysis paper.

SOC 485
MOOT COURT

3, 3/0; OCIF

Prerequisite: Upper-division standing or permission of instructor. Simulation of a trial court or appellate court proceeding involving teams of students acting as prosecutor/plaintiffs' attorneys, defense attorneys, and witnesses. Students develop case strategy, analyze evidence, integrate legal precedent, prepare a written brief, question witnesses, and present oral arguments to the court in opening and closing statements. Final project is a mock trial presentation held in a formal courtroom setting. Equivalent courses: CRJ485, PSC485

SOC 486
PRACTICUM IN APPLIED SOCIOLOGY

3, 3/0

Prerequisite: SOC 100. The study of field research techniques in the classroom, subsequently applied during the completion of 75 hours of field experience working with an agency or organization in the community.

SOC 488
INTERNSHIP IN SOCIOLOGY

1-15, 0/0

Prerequisites: SOC 486; Faculty intern supervisor permission. Supervised fieldwork in appropriate agencies where students expand their knowledge of sociology and establish interactive ties in the job market. Academic components include orientation, training sessions, ongoing conferences with faculty/ agency supervisor, log/journal of the field experiences, and final report.

SOC 490
SEMINAR IN SOCIOLOGY

3, 3/0

Prerequisites: SOC 100 and SOC 300. Research in selected area(s) of sociology. Required for B.A. sociology majors with senior status. Equivalent course: SOC490W

SOC 491
3, 3/0

Prerequisites: SOC 100, 6 credit hours of sociology in a related field, and permission of instructor. In-depth special problems in sociology. Interested students should contact a member of the sociology faculty, who will secure approval from the Sociology Department. The course is then listed in the master schedule with a subtitle indicating the area of special concentration.

SOC 495
SPECIAL PROJECT

1-3, 0/0

SOC 499
INDEPENDENT STUDY

3-12, 0/0

SPA - SPANISH

SPA 101
BEGINNING SPANISH I

3, 3/0; FLA

Fundamentals of Spanish with emphasis on the spoken and written language.

SPA 102
BEGINNING SPANISH II

3, 3/0; FLA

Prerequisite: SPA 101. Continuation of SPA 101.

SPA 201
INTERMEDIATE SPANISH I

3, 3/0

Prerequisite: SPA 102. Further development of basic skills with emphasis on reading and writing.

Equivalent course: SPA204

SPA 202
INTERMEDIATE SPANISH II

3, 3/0

Prerequisite: SPA 201. Continuation of SPA 201.

Equivalent course: SPA205

SPA 301
SPANISH CONVERSATION AND COMPOSITION

3, 3/0

Prerequisite: SPA 202. Practice in spoken and written Spanish with emphasis on the written language.

SPA 302
SPANISH CONVERSATION AND COMPOSITION

3, 3/0

Prerequisite: SPA 202. Practice in spoken and written Spanish with emphasis on the spoken language.

SPA 304
SPANISH FOR SPANISH SPEAKERS

3, 3/0

Prerequisites: Placement test for Spanish speakers. An overview of those aspects of Spanish grammar that will enhance bilingual students' effectiveness in oral and written communication in Spanish. Special attention will be given to Anglicisms.

SPA 305
SPANISH PHONETICS

3, 0/0

Prerequisites: SPA 301 and SPA 302. The speech sounds of Spanish. Comprehension and pronunciation difficulties caused by differences in the sound systems of English and Spanish. Exercises aimed at improvement of pronunciation and intonation.

SPA 306
THE CIVILIZATION OF SPAIN

3, 3/0

Prerequisite: SPA 301 or SPA 302. Culture of the Spanish people. Focus on their achievements, customs, and way of life as affected by geographic, historical, political, and economic factors.

SPA 307
SURVEY OF SPANISH LITERATURE

3, 3/0

Prerequisite: SPA 301 or SPA 302. The Middle Ages through the golden age.

SPA 308
SURVEY OF SPANISH LITERATURE

3, 3/0

Prerequisite: SPA 301, SPA 302. The eighteenth century to the present.

SPA 309
THE CIVILIZATION OF LATIN AMERICA
3, 3/0
Prerequisite: SPA 301 or SPA 302. Culture of the Latin American people. Focus on their achievements, customs, and way of life as affected by geographic, historical, political, and economic factors.

SPA 310
SURVEY OF SPANISH AMERICAN LITERATURE
3, 3/0
Prerequisite: SPA 301 or SPA 302. The colonial period through romanticism.

SPA 311
SURVEY OF SPANISH AMERICAN LITERATURE
3, 3/0
Prerequisite: SPA 301 or SPA 302. Realism to the present.

SPA 317
BUSINESS SPANISH
3, 3/0
Prerequisite: SPA 301, SPA 302, or equivalent. Introduction to Spanish commercial language. Extensive practice in translating and composing Spanish business communiqués.

SPA 389
TOPICS COURSE
3, 0/0

SPA 404
CERVANTES
3, 3/0
Prerequisite: SPA 307. Reading and analysis of Don Quixote or the Novelas Exemplares.

SPA 411
SPANISH AMERICAN LITERATURE OF THE NINETEENTH AND TWENTIETH CENTURIES: NOVEL, SHORT STORY, AND ESSAY
3, 3/0
Prerequisite: SPA 310 or SPA 311. Major trends in these genres in the context of the cultural diversity of the hemisphere.

SPA 415
ADVANCED GRAMMAR AND COMPOSITION
3, 3/0
Prerequisites: SPA 301 and SPA 302. Elements of stylistics and selected grammar topics. Special attention given to common errors of English speakers.

SPA 416
ADVANCED CONVERSATION
3, 3/0
Prerequisite: SPA 415 and upper-division status, or permission of instructor. Development of speaking and aural comprehension at the advanced level. Required for secondary education majors.

SPA 495
SPECIAL PROJECT
1-3, 0/0

SPA 496
SEMINAR I
3, 3/0
Prerequisite: Permission of instructor. Topic chosen by instructor.

SPA 497
SEMINAR II
3, 3/0
Prerequisite: Permission of instructor. Topic chosen by instructor.

SPA 499
INDEPENDENT STUDY
3, 0/0

SPC - SPEECH COMMUNICATION

SPC 103
INTRODUCTION TO HUMAN COMMUNICATION
3, 3/0; HUIF
Exploration of communication as the basis for personal and social interaction; focuses on roles of both consumers and producers of messages; investigation of various modes of communication.
Equivalent course: COM103

SPC 205
INTRODUCTION TO ORAL COMMUNICATION
3, 3/0; OCIF
Basics of oral communication; examining the principles and contexts of communication; focus on the communication process, interviewing, public discussion, group problem solving, public speaking, and criticism of public messages.
Equivalent course: COM205

SPC 306
PUBLIC SPEAKING
3, 0/0
Prerequisite: SPC 205. Organization, delivery, and evaluation of public speech from a performance and analytical framework for professional, social, public, and small group situations.
Equivalent course: COM306

SPC 307
GROUP COMMUNICATION
3, 0/0
Prerequisite: SPC 205. Interdisciplinary approach to examination of the theoretical and practical dimensions of communication in small-group decision-making and problem-solving situations.
Equivalent course: COM307

SPC 309
PERSUASION AND PROPAGANDA
3, 3/0
Theory and practice of persuasion in various media contexts; analysis of social implications, ethical base, and impact of persuasive messages; analysis of contemporary propaganda in media contexts.

SPC 311
INTERCULTURAL COMMUNICATION
3, 3/0; DIIF
Prerequisite: Upper-division status. Examination of theory and practice of intercultural communication; exploration of ways to bridge differences based on culture, ethnicity, religion, gender, age, and other potential social barriers.

SPC 315
MEDIA PERFORMANCE
3, 3/3
Prerequisite: SPC205. Principles and theories of voice performance for radio and other forms of media technology; techniques for marking and reading written scripts; focus on body language and vocal nuance; application to animation, storytelling, and commercial voiceovers.

SPC 321
RHETORICAL CRITICISM
3, 3/0
Prerequisite: Upper-division status. Critical analysis of persuasive messages and strategies used by public persuaders; focus on social/ political speeches, commercial advertising, music lyrics, and other forms of purposeful communication.
Equivalent course: SPC321W

SPC 333
MINORITIES AND THE MEDIA
3, 0/0; DIIF
Prerequisite: Upper-division status. Critical analysis of media representation of traditionally underrepresented groups (such as women, African Americans, Native American, Arabs and Muslims, and/or gays and lesbians).
Equivalent course: COM333

SPC 407
ORGANIZATIONAL COMMUNICATION
3, 3/0

Prerequisite: Upper-division status. Theory and practice of communication within task-oriented organizations; focus on the interaction of structure, behavior, and message; role of communication in organizational change.

Equivalent courses: COM407, JBS407

SPC 422
MEDIA CRITICISM
3, 0/0

Prerequisite: Upper-division status. Critical analysis of mass media, including print, broadcast, and digital; application to news, documentaries, entertainment programming, and advertising; focus on social, cultural, and political impact of media messages from a rhetorical perspective.

Equivalent course: COM422

SPC 424
SPECIAL TOPICS IN MEDIA CRITICISM
3, 3/0

Prerequisite: Upper-division status. Critical analysis of mass media, including print broadcast, and digital; focus on the role of media in a particular context (such as electoral politics or war).

SSE - SOCIAL STUDIES EDUCATION

SSE 102
PROBLEM SOLVING IN THE SOCIAL STUDIES
3, 3/0

The methods of interdisciplinary problem solving and emphasis on the application to selected contemporary problems.

Equivalent course: SST102

SSE 199
INTRODUCTION TO COMPUTER USE IN THE SOCIAL SCIENCES
3, 3/0

Prerequisite: CIS 101 or equivalent, or permission of instructor. Hands-on introduction to the application of computers to applied social research problems, including a review of past practices, current uses, and future trends; computer analysis of data to develop insight into the ways social scientists use computers in their work.

Equivalent course: SST199

SSE 200
INTRODUCTION TO SECONDARY TEACHING
3, 3/0

Classroom and field experiences designed to help students make better-informed decisions regarding careers in secondary social studies education. For the general student, provides important background for their roles as citizens and as parents. Required for social studies education majors

Equivalent course: SST200

SSE 303
METHODS AND MATERIALS IN TEACHING MIDDLE SCHOOL
SOCIAL STUDIES
3, 3/0

Prerequisites: 6 credit hours of professional education courses, SST 200, cumulative 2.75 GPA (overall and in major coursework), and achieve acceptable evaluations on the PRAXIS II: Subject Assessment in Social Studies Content Knowledge exam. May not be taken concurrently with SSE 309. Focuses on the problems of the teacher; techniques for teaching; analyzing classroom behavior; self-evaluation; and peer evaluation of teaching practices.

Equivalent course: SST303

SSE 309
METHODS AND MATERIALS IN TEACHING HIGH SCHOOL
SOCIAL STUDIES
3, 3/0

Prerequisites: Upper-division status, SST 200, minimum cumulative GPA of 2.75 (overall and in major coursework), and achieve acceptable evaluations on the PRAXIS II: Subject Assessment in Social Studies Content exam. May not be taken concurrently with SSE 303. The purposes, goals,

curricular materials, methodologies, and instructional techniques of social studies education; students develop competency in designing and practicing instructional strategies drawn from methodologies and of the curricular materials of social studies education and the disciplines of history and the social sciences.

SSE 323
SOCIOLOGY OF EDUCATION
3, 3/0

Prerequisite: SOC 100. The social organization of education in the United States and elsewhere; education's role in preserving and changing our culture; the school as a social system; non-school factors that influence educational aspirations and achievement; the role of teachers, student subcultures, and administrative behavior patterns on student performance in school; changing and alternative educational forms; changing relationships in colleges and universities.

Equivalent course: SOC323

SSE 350
THE TRADITIONS OF THE PEOPLE OF THE LONGHOUSE (THE HO
DE NO SAU NEE)
3, 3/0

An introduction to the traditions of the People of the Longhouse (The Ho De No Sau Nee); pre-Columbian founding of the League, clan system, early colonial relationships, role in American Revolution, state of the Nations, and primary current issues.

Equivalent course: SST350

SSE 363
AMERICAN IDENTITY IN TRANSITION: DIVERSITY AND PLURALISM
IN THE UNITED STATES
3, 3/0; DIIF

Prerequisite: Upper-division status. The diverse, pluralistic makeup of American society; roots of pluralism and what it means for the daily experience of living in America; themes of diversity explored through history and literature; the activities of four major underrepresented groups in their struggle for liberation: African Americans, Native Americans, Latinos, and Asians.

Equivalent courses: HIS363, SST363

SSE 370
COMPUTER TECHNOLOGY IN THE SOCIAL STUDIES
CLASSROOM
3, 3/0

Prerequisite: History and social studies education major. Familiarizes students with relevant software and methodology for its use in the social studies classroom. All students have the opportunity to participate on the microcomputer.

Equivalent course: SST370

SSE 402
HISTORICAL AND PHILOSOPHICAL FOUNDATIONS OF SOCIAL
EDUCATION
3, 3/0

Prerequisite: Upper-division status. The development of the social studies curriculum in relation to the larger social, economic, educational, and political forces operating in American society; enduring philosophical issues as to what is the "good" society, the "good" citizen, and the best curriculum and instructional methods to create them.

SSE 404
SEMINAR IN ELEMENTARY SOCIAL STUDIES
3, 3/0

Prerequisites: EDU 210 and EDU 352. Students learn to more effectively utilize their social science preparation for early secondary and elementary social studies instruction; make decisions concerning their tentative positions on the function of the school and society, the purpose of social studies, and the available alternatives to teachers in the areas of methodology, psychology, and curriculum.

SSE 407
THE TEACHING OF HISTORY
3, 3/0

Prerequisite: Upper-division status. The curriculum and practice of teaching history, the historical role of history in the social studies, the political uses of the teaching discipline; provides a research foundation as to how historical meaning is constructed as a base for instructional practice;

serves as a link between the material presented in content and pedagogical courses in the program.

Equivalent courses: HIS407, SST407

SSE 409
STUDENT TEACHING OF SOCIAL STUDIES IN THE MIDDLE SCHOOL

6, 0/0; OCIF

Prerequisites: Minimum cumulative GPA of 2.75 (overall and in major coursework), grade of C or higher in SSE 303 and SSE 309, successful completion of English composition/basic communication and mathematics competency requirements. Supervised teaching experience five full days a week for approximately seven consecutive weeks. Effective demonstration of content knowledge, pedagogical preparation, instructional delivery, classroom management, knowledge of student development, collaboration with school professionals, and reflectivity of practice required.

SSE 410
STUDENT TEACHING OF SOCIAL STUDIES IN SENIOR HIGH SCHOOL

6, 0/0; OCIF

Prerequisites: Minimum cumulative GPA of 2.75 (overall and in major coursework), grade of C or higher in SSE 303 and SSE 309, successful completion of English composition/basic communication and mathematics competency requirements. Supervised teaching experience five full days a week for approximately seven consecutive weeks. Effective demonstration of content knowledge, pedagogical preparation, instructional delivery, classroom management, knowledge of student development, collaboration with school professionals, and reflectivity of practice required.

SSE 488
INTERNSHIP

1-12, 0/0

Prerequisites: Sophomore, junior, or senior status; background of courses or experience within the area of interest; 6 credit hours of lower-division major coursework; 6 credit hours of history and social studies education coursework at the upper-division level; minimum cumulative GPA of 2.5 (overall and in major coursework); Student adviser and department chair permission. Guided, supervised field experiences that complement the academic program.

Equivalent course: HIS488

SSE 495
SPECIAL PROJECT

3, 0/0

SSE 497
WORKSHOP

1-2, 0/0

SSE 499
INDEPENDENT STUDY

3, 0/0

SWA - SWAHILI

SWA 101
BEGINNING SWAHILI I

3, 3/0; FLA

Fundamentals of Swahili with emphasis on the spoken and written language.

Equivalent course: AAS101

SWA 102
BEGINNING SWAHILI II

3, 3/0; FLA

Prerequisite: SWA/AAS 101. Continuation of SWA/AAS 101.

Equivalent course: AAS102

SWA 201
INTERMEDIATE SWAHILI I

3, 3/0

Prerequisite: SWA/AAS 102. Further development of basic skills, with emphasis on reading and writing.

Equivalent course: AAS201

SWA 202
INTERMEDIATE SWAHILI II

3, 3/0

Prerequisite: SWA/AAS 201. Continuation of SWA/AAS 201.

Equivalent course: AAS202

SWK - SOCIAL WORK

SWK 105
INTERPERSONAL RELATIONS

3, 3/0

The impact of societal, cultural, and professional values on interpersonal relationships; increased awareness of interpersonal skills and examination of ways to overcome barriers to healthy interpersonal relationships.

SWK 220
INTRODUCTION TO SOCIAL WORK

3, 3/0

Introduction to the social welfare institution and to social work; social work knowledge, skills, sanctions, values, and ethics; generalist practice in social work. Requires 40 hours of volunteer work in addition to coursework.

SWK 307
HUMAN BEHAVIOR AND THE SOCIAL ENVIRONMENT I

3, 3/0

Development of the individual in the family from prebirth through adolescence; theories and issues that provide a knowledge base for social work. Restricted to social work majors.

Equivalent course: SWK307W

SWK 308
HUMAN BEHAVIOR AND THE SOCIAL ENVIRONMENT II

3, 3/3

Prerequisite: SWK 307. Continuation of SWK 307. Development of the individual in the family from young adulthood through middle and old age; knowledge base for social work. Restricted to social work majors.

Equivalent course: SWK308W

SWK 317
RESEARCH IN SOCIAL WORK

3, 3/0

Prerequisites: SWK 307 and successful completion of English composition/basic communication and mathematics competency requirements. Application of research methodologies and evaluative techniques to the field of social work. Restricted to social work majors.

Equivalent course: SWK317W

SWK 319
DYNAMICS OF POVERTY

3, 3/0; DIIF

Predominant theories, policies, and programs dealing with poverty in America; the historical treatment of the poor; views of poverty; poverty's effects on individuals, families, and communities; class, race, gender, and age; strategies of social change. Requires 20 hours of volunteer work in addition to coursework.

Equivalent course: SWK319W

SWK 320
SOCIAL SERVICES ORGANIZATIONS

3, 3/0

Prerequisite: SWK 220. Purposes, types, management, staffing, and funding of organizations that deliver social services; roles of the social work professional in such organizations; selected social work fields of practice and services for specialized populations. Required for social work majors.

Equivalent course: SWK320W

SWK 335
MENTAL HEALTH AND SOCIAL WORK
3, 3/0

Prerequisite: SWK 307. Theoretical perspectives concerning mental health and mental illness; history of the mental health movement; institutional and community mental health services; roles and functions of social workers and other personnel in the mental health system.

SWK 419
SOCIAL WELFARE POLICY
3, 3/0

Prerequisite: SWK 320. Concurrent with field education. Institutional response of the American welfare state to individual and societal issues, problems; current social welfare issues, policies, and programs in their historic and philosophic context, with emphasis on critical thinking and policy practice. Restricted to social work majors.
Equivalent course: SWK419W

SWK 422
INTERVENTIVE METHODS I
3, 3/0

Prerequisites: SWK 220 and SWK 307. Fundamental skills of social work practice; communication and assessment skills with individuals and families. Restricted to social work majors.
Equivalent course: SWK422W

SWK 423
INTERVENTIVE METHODS II
3, 3/0

Prerequisites: SWK 308 and SWK 422. Continuation of SWK 422. Focus on models and strategies of intervention, resistances to change, and termination. Restricted to social work majors.
Equivalent course: SWK423W

SWK 424
INTERVENTIVE METHODS III
3, 3/0

Prerequisite: SWK 422. Continuation of SWK 422 and SWK 423. Intervention with groups and communities; models of group work practice and phases of group intervention; major spheres of macro practice and methods to effect change at large- systems level. Restricted to social work majors.
Equivalent course: SWK424W

SWK 485
SENIOR SEMINAR
3, 3/0
Intensive analysis of selected topics in social work.

SWK 493
FIELD INSTRUCTION
6, 6/0

Prerequisite: SWK 422. First semester of supervised field experience in a professional social work setting. Concurrent weekly on-campus integrative seminar. Restricted to social work majors.

SWK 494
FIELD INSTRUCTION
6, 6/0

Prerequisites: SWK 493, SWK 423, SWK 317. Second semester of supervised field experience in a professional social work setting. Concurrent weekly on-campus integrative seminar. Restricted to social work majors.

SWK 495
SPECIAL PROJECT
1-3, 0/0

SWK 499
INDEPENDENT STUDY
3-9, 0/0

TEC - TECHNOLOGY

TEC 101
TECHNICAL DRAWING
3, 2/3

Projection theory; multiview projection; special relationships and visualization of point, lines, planes, and solids; size and shape description through sketching and CAD drafting; industrial applications, standards, and conventions; auxiliary views, revolutions, developments, and intersections.

TEC 150
TECHNOLOGY IN EVERYDAY LIFE
3, 3/0; TSIF

The applied physics and technology involved in everyday life in order to gain an understanding of basic science and engineering principles; Newton's laws of motion as they apply to an ice skater and bumper cars; principles of fluid mechanics like water flowing from a garden hose and the buoyancy of ships; heat transfer and phase transitions like water in its three phases and home heating systems; thermodynamic efficiency of automobile engines as well as air conditioners; resonance and mechanical waves developed by music instruments; basic electricity and its many applications from how it is produced by water and wind to how it is used to produce light; light and optics, for example, splitting the colors of sunlight to focusing light in a camera lens.

TEC 200
TOTAL QUALITY MANAGEMENT
3, 3/0

Prerequisite: Sophomore status. Fundamental concepts of total quality management; managerial commitment; organization mission and structure; quality problem-solving tools; variation, quality costs; vendor-customer relationships; quality evaluation techniques; quality philosophies of Deming, Crosby, and others.
Equivalent course: TEC200W

TEC 201
MATERIALS PROCESSING
3, 2/3

Prerequisite: TEC 101. Processes and problems associated with the conversion of materials into useful forms and goods; laboratory activities exemplify the major processes studied.

TEC 260
DEVELOPMENT OF TECHNOLOGY
3, 3/0; TSIF

The history of science and technology; the evolution of technology and its effects on humanity, for example, advances in agriculture and health care; era-specific technology such as weapons developed for defense and building processes to construct small communities and large cities; evolution of energy and power leading to current alternatives such as solar energy, wind power, hydroelectric power, fuel cells, and biomass energy; how technology has affected and been affected by ecology, climatology, health care, ethics, war, and politics.
Equivalent course: TEC260W

TEC 301
MATERIALS PROCESSING II
3, 2/3

Prerequisite: TEC 201. Continuation of TEC 201. Emphasis on numerical controlled and computerized numerical controlled materials processing.

TEC 302
CAD/CAM (COMPUTER AIDED DRAFTING/COMPUTER AIDED MANUFACTURING)
3, 2/3

Prerequisites: TEC 101 and TEC 201. Using computers to facilitate the production processes of designing, drafting, production planning, cost estimating, and materials processing; using CAD software to create the database for part geometry, material selection, and process requirements; using CAM software to control machines, directly or indirectly, to produce the product.

TEC 311
MATERIALS SCIENCE AND TESTING
3, 2/3
The origin of composition of industrial materials: metals and their alloys, woods, fuels, lubricants, cutting fluids, solvents, protective compounds or coatings, inks, adhesives, plastics, and ceramics; applications of testing procedures for identification and determination of physical and chemical properties suitable for specific industrial uses.

TEC 312
MATERIALS MANAGEMENT
3, 2/3
Prerequisite: TEC 201. Production planning and control functions in industry; techniques and procedures of production planning, scheduling, dispatching, and control. Required for industrial technology majors.

TEC 313
STATISTICAL QUALITY CONTROL
3, 3/0
Fundamentals of probability; sample space, events, probability distributions; binomial, Poisson, and normal distributions; application of probability in quality control; variable and attribute control charts; process capability studies; acceptance sampling; standard tables for sampling plans.

TEC 314
ELECTROMECHANICS
3, 2/3
Fundamental laws of electric circuits; DC and AC circuits, application to electric power systems and electronics industry; fundamentals of electrical machinery, introduction to three-phase systems; laboratory experiments with electrical circuits and devices.

TEC 319
TECHNOLOGY AND VALUES
3, 3/0; TSIF
Prerequisite: Upper-division status. Social and ethical impacts of technology; the often conflicting roles of historical and current creators and users of technology; examination of selected current technical-ethical issues of societal importance.
Equivalent course: TEC319W

TEC 321
MEASUREMENT SYSTEMS
3, 3/0
Prerequisite: TEC 313. Theory and application of measurement; tolerancing, variable, and attribute measurement devices; gauge variation, automated measurement input equipment, and gauge control systems.

TEC 323
QUALITY IMPROVEMENT THROUGH DESIGN OF EXPERIMENTS
3, 3/0
Prerequisite: TEC 313. Various experimental designs applied to a manufacturing environment. One-, two-, and three-factor factorial designs; nested, partially nested, and repeated designs; simple and multiple linear regression techniques presented to enhance quality problem-solving ability.

TEC 351
ENERGY SYSTEMS
3, 0/0
Prerequisites: MAT 124 and PHY 107. Energy and power from sources through conversion systems and mechanisms to the application of power for manufacturing.
Equivalent course: TEC351W

TEC 400
MARKETING
3, 3/0
Prerequisite: Upper-division status. Conceptual framework for marketing; the movement of goods and services through channels from source to consumer; product formulation; market research; prudent pricing; distribution channels; promotion systems. Industrial technology (manufacturing option) majors.
Equivalent course: TEC400W

TEC 402
ERGONOMICS
3, 3/0
Prerequisite: Upper-division status. The interaction of people and machines; development and use of human factors information including sensory, cognitive, and psychomotor processes as they influence the design of displays, controls, and work space; environment and safety considerations necessary to achieve desired machine outputs.

TEC 403
SYSTEMS ANALYSIS
3, 3/0
Prerequisite: Upper-division status. Fundamental concepts and analytical techniques of systems analysis; trends related to modeling, computer technology, feedback, and information systems; quantitative methods and their use in decision making in practical situations involving industrial, managerial, and technological settings.
Equivalent course: TEC403W

TEC 404
INDUSTRIAL SYSTEMS APPLICATIONS
3, 2/3
Prerequisite: Upper-division status. Investigation of management science and communication principles leading to a series of hands-on laboratory projects, case studies, and group problem-solving/decision-making activities; building positive management communications abilities as applied to the components of contemporary work settings; cultivation and personalization of leadership behaviors such as team building, coaching, and conflict resolution.
Equivalent course: TEC404W

TEC 405
MANUFACTURING TECHNOLOGY
3, 2/3
Prerequisites: TEC 312 and final semester senior status. Hands-on experience in the manufacturing cycle of a product from the engineering drawing stage through project and processing planning, prototype manufacture and testing; experience in setting time standards and taking time studies.
Equivalent course: TEC405W

TEC 465
SAFETY MANAGEMENT
3, 3/0
Prerequisite: Upper-division status. Development of the industrial safety movement; psychology in accident prevention; appraisal of accident cost factors, severity, and frequency; job safety analysis and corrective measures; plant inspection and preventive maintenance; storage and handling of materials; fire prevention; education and training of employees.
Equivalent course: TEC465W

TEC 488
QUALITY INTERNSHIP
1-12, 3/0
Prerequisite: Completion of 12 credit hours in quality minor or all TEC-prefixed courses in industrial technology quality option. Analysis of a quality problem at a local manufacturing/ service organization on or off campus; evaluation is based on a formal written and oral report presentation.
Equivalent course: TEC488W

TEC 495
SPECIAL PROJECT
1-3, 0/0

TEC 497
WORKSHOP
3, 0/0

TEC 499
INDEPENDENT STUDY
3, 0/0

TED - TECHNOLOGY EDUCATION

TED 100

INTRODUCTION TO TECHNOLOGY EDUCATION

3, 3/0

Prerequisite: Major status. An introduction to technology education for students considering a career as a public school technology teacher; provides information relating to core issues such as New York State Learning Standards, contemporary ideas and practices in the technology classroom; introduces and prepares students for the field service requirement.

TED 101

RAPID VISUALIZATION

3, 2/3

Basic conceptual and technical skills in technical drawing and illustration; basic drawing techniques from sketching and rapid visualization to rendering and 3-D computer modeling; lectures, demonstration, and practice; intended as a technology foundation course and as a pre-mechanical drawing and pre-CAD course.

Equivalent course: TEC100

TED 123

PRINCIPLES OF MANUFACTURING

3, 2/3

Operative principles common to the majority of manufacturing industries; research and development, manufacturing, organization and management; industrial relations; engineering; production; labor; financial control; marketing; quality control. Presentations by leading industrialists.

Equivalent course: TEC123

TED 253

FUNDAMENTALS OF BOAT BUILDING

3, 0/6

Prerequisite: DES 105. Fundamentals of boat design, lofting, and construction through lectures, demonstrations, and the construction of a small boat.

Equivalent course: TEC253

TED 300

CONSTRUCTION SYSTEMS

3, 2/3

Exploration of habitable structures through hands-on laboratory experiences. For technology education majors and those who wish to meet certification requirements of New York for teaching technology education in the state's public schools.

Equivalent course: TEC300

TED 320

HISTORY AND THEORY OF WATERCRAFT DESIGN

3, 3/0

Prerequisite: DES 215 or permission of instructor. A survey of the history and theory of naval architecture and watercraft design with special attention to the development of design solutions within specific cultural contexts; special emphasis on American small craft and local traditional designs.

Equivalent course: DES319

TED 349

COMMUNICATIONS SYSTEMS

3, 2/3

Review of communication techniques throughout history; current techniques and modern communications programs and materials; broad spectrum of experiences with conversion and transfer of information from one form to another.

Equivalent course: TEC349

TED 360

TECHNOLOGY EDUCATION METHODS AND EVALUATION

3, 3/0

Prerequisites: OEC 301, OEC 302, and EDF 303. Basic principles and methods of teaching technology education subjects; strategies utilized in planning for instruction; strategies utilized in evaluating students, course content, and overall program; teaching and evaluating students with special needs; preparation of instructional materials.

Equivalent course: TED360W

TED 361

TRANSPORTATION SYSTEMS

3, 2/3

Energy/transportation systems focusing on the moving of people, materials, and products; types of transportation vehicles, energy and power, controls, careers; the effects of transportation systems on the environment and society. Course meets guidelines of the national and state professional associations regarding the systems approach to the technology education discipline.

Equivalent course: TEC361

TED 450

PROFESSIONAL SEMESTER

6, 0/0

Prerequisites: EDF 303, BME 301 or CTE 301, BME 302 or CTE 302, and TED 360, EXE 372, EDU 416; minimum cumulative GPA of 2.5. Full-time assignment in a junior and/or senior high school as a student-teaching intern working with a supervising teacher and a college supervisor; seminars on campus and in public schools to study teaching techniques, organization, management, and other aspects of teaching; technology education, guided full-time teaching experience including the use of videotape to analyze teaching; participation in school and professional activities. Students must have completed a minimum of 105 credit hours, including all 33 credit hours of approved technology core courses applicable for the technology education certification program. Students must be prepared to accept assignment at any center and may not enroll for any other college courses.

Equivalent course: TED450W

TED 451

PROFESSIONAL SEMESTER II

6, 0/0

Prerequisites: EDF 303, BME 301 or CTE 301, BME 302 or CTE 302, and TED 360, EXE 372, EDU 416; minimum GPA of 2.5 in major coursework. Full-time assignment in a senior high school as a student-teaching intern working with a supervising teacher and a college supervisor; seminars on campus and in public schools to study teaching techniques, organization, management, and other aspects of teaching; full-time teaching experience including the use of videotape to analyze instructional performance; participation in schools and professional activities. Students must have completed a minimum of 105 credit hours, including all 33 credit hours of required technology core courses. Students must be prepared to accept assignment at any facility and may not enroll in any other college courses.

Equivalent course: TED451W

TED 453

WOOD/EPOXY BOATBUILDING

3, 2/0

Prerequisite: DES 251. Theory and application of wood/epoxy boatbuilding materials and techniques through the construction of a wood/epoxy skiff.

Equivalent course: DES453

TED 495

SPECIAL PROJECT

1-3, 0/0

TED 497

WORKSHOP

3, 3/2

TED 499

INDEPENDENT STUDY

3-12, 0/0

TFA - TELEVISION AND FILM ARTS

TFA 189

TOPIC COURSE

3, 3/0

Topic course.

TFA 201
INTRODUCTION TO TELEVISION AND FILM ARTS
3, 3/0
Introduction to the history of storytelling and the various ways in which stories can be told today. Emphasis on television, film, theater, and other visual media.
Equivalent course: TVA201

TFA 301
TV AND FILM CRITICISM
3, 3/0
Students study great directors and the screenplays they have produced, focusing on analyzing story structure, characters, and theme of screenplays that compose the established canon. Directors include Spielberg, Kubrick, Hitchcock, Wilder, Allen and Tarantino.
Equivalent course: TVA301

TFA 304
WRITING FOR TELEVISION ARTS
3, 3/0
Students practice writing techniques for television, film, and other visual media by crafting a series of commercials, documentaries, scenes and narrative scripts.
Equivalent courses: TFA304W, TVA304

TFA 389
TOPIC COURSE
3, 3/0
TOIC COURSE

TFA 401
PRODUCING SHORT FILMS I
3, 3/0
Prerequisites: TFA 301, TFA 304 and TFA 329. Students form virtual video production companies and work collaboratively with other students, alternately assuming the roles of writer, producer, director, and production crew. In the process, students develop the ability to assess their strengths, weaknesses, and interests.
Equivalent course: TVA401

TFA 420
PRODUCING SHORT FILMS II
3, 3/0
Students function as true "auteurs" using advanced techniques to write, produce, direct, and edit their own single-camera short video project. Emphasis on the effectiveness of the story rather than production quality. Critiques from peers and instructors focus on developing storytelling skills.

TFA 450
SENIOR PROJECT
3, 3/0
Prerequisite: TFA 420. Students write a short script, partner with other students (for acting and production services) and faculty, and bring their short scripts to life in a professional, multi-camera studio production. Final projects are shown in a public forum.
Equivalent course: TVA450

TFA 460
ADAPTATION
3, 3/0
Students adapt literature for television or film. They choose a short story, poem, or other piece of literature and translate it into a short script.
Equivalent course: TVA460

TFA 480
ADVANCED DIRECTING/PRODUCING I
3, 3/0
Students focus on directing the actor for a single-camera production. Each student directs short scenes from selected plays, then shoots a scene (single camera) as a final project. The class and students from other departments act as the "Acting Company."
Equivalent course: TVA480

TFA 481
ADVANCED DIRECTING/PRODUCING II
3, 3/0
Prerequisite: TFA 480. Students direct a scene or series of scenes from a previously produced film, television program, or play and shoot it (multi-camera) as a final project. The class and students from other departments act as the "Acting Company" and "Production Company."
Equivalent course: TVA481

TFA 495
SPECIAL PROJECT
1-3, 0/0
Equivalent course: TVA495

TFA 499
INDEPENDENT STUDY
3, 0/0

THA - THEATER ARTS

THA 106
INTRODUCTION TO THEATER ARTS
3, 3/0; ARIF
Introduction to the art of theater from the process of creating to the elements of production, history, genres, and styles of the art form. Attendance at live theater performance is required.

THA 107
THEATER PERFORMANCE FOR NON-MAJORS
3, 2/2
Prerequisite: Instructor permission. Participation in the rehearsal and performance of a Buffalo State College Theater Department production.

THA 189
TOPICS COURSE
1-3, 0/0

THA 200
VOICE I
3, 2/2
Introduction to basic voice and speech practice. Develop skills and knowledge associated with freeing the natural voice and extending vocal range and physical capacity for sound, and develop awareness of the potential for articulate, precise, and expansive vocal and physical presence.

THA 216
THEATER FUNDAMENTALS
3, 3/0; ARIF
Introduction to the art of theater for department majors. Examines elements of production, history, genres, and styles of theater. Attendance at live theater performance required.

THA 218
SCRIPT ANALYSIS I: PLAY READING
3, 3/0
Prerequisite: THA 216 or instructor permission. Pivotal plays, classic and modern, that have had an impact on theater. Play structure will be examined and analyzed. Attendance of live performances is required.

THA 222
MOVEMENT I
3, 2/2
Prerequisite: Successful completion of THA 200. Introduction to basic movement for actors. Develop skills and knowledge associated with organic physical practice and the range and physical capacity of the moving body, and develop awareness of the potential for precise and expansive actor presence.
Equivalent course: THA260

THA 226
ACTING I
3, 2/2
Introduction to the fundamental demands of the acting process. Student actors will engage in focus and concentration development; improvisa-

tion, scene work, and performance as they identify and develop themselves in the artistic process of acting.

THA 227
ACTING II: SCENE STUDY
3, 2/2

Prerequisite: THA 226. The fundamental demands of preparing, rehearsing, and performing scenes from contemporary plays. Student actors will focus on character development, research, and script analysis as they synthesize concepts from THA 226. Apply previously learned acting skills to the preparation, rehearsal, and performance scenes. Students will further identify themselves as young theater artists and their personal place in the creative process of making theater.
Equivalent course: THA326

THA 230
THEATER PRACTICUM I
1, 0/3

Laboratory experience in the preparation of costumes, scenery, lighting, or props for departmental theater production.

THA 231
THEATER PRACTICUM II
1, 0/3

Laboratory experience as a run-crew member for a departmental theater production.

THA 234
THEATER DESIGN AND TECHNOLOGY
3, 1/4

Technical elements of costume, scenery, and lighting design; participation in at least one preparation or run-crew for performing arts production.
Equivalent course: THA208

THA 235
COSTUME CONSTRUCTION I
3, 2/2

Prerequisite: THA 234. The foundation of costume construction. Basic costuming from the ground up with emphasis on period construction, theatrical techniques, and nonconventional methods used in theater, dance, and screen through vocabulary, demonstration, and hands-on production.

THA 300
VOICE AND MOVEMENT II
3, 2/2

Prerequisite: Successful completion of THA 222, THA 227. Intermediate voice and movement course for actors. Begins to integrate previously learned voice and movement vocabularies. Students strengthen skills and knowledge associated with articulate, precise, and expansive vocal and physical presence.
Equivalent course: THA320

THA 316
SCRIPT ANALYSIS
3, 3/0

Scripts as unique forms of writing for public communication and theatrical production.

THA 317
THEATRE HISTORY: ANCIENT TO BAROQUE
3, 3/0

Origins and development of physical theater and theater literature from the ancient period to the baroque period; its function in society and its historical context in both Western and global civilizations. Students examine how theater as an art form is a reflection of or reaction to the socioeconomic, scientific, political, philosophical, and other artistic forms of its surroundings. Students attend live performance.
Equivalent course: THA317W

THA 318
THEATER HISTORY: BAROQUE TO MODERN
3, 3/0; WCIF

The origins and development of physical theater and theater literature from the baroque period to contemporary theater; its function in society and its historical context in both Western and global civilizations. Students read plays and examine how theater as an art form is a reflection of

or reaction to the socioeconomic, scientific, political, philosophical, and other artistic forms of its surroundings. Students attend live performances.

THA 325
THE BUSINESS OF PERFORMING ARTS
3, 3/0

Comprehensive overview of the numerous aspects of business relating to the performing arts of drama, dance and music.
Equivalent course: PAR325

THA 327
ACTING III: ADVANCED SCENE STUDY
3, 2/2

Prerequisite: Successful completion of THA 227. Apply previously learned acting skills to a variety of acting styles in a variety of environments. Student actors will specifically address the demands of physically, intellectually, and emotionally adapting their acting and artistic process. Student actors will also be expected to further define and identify themselves in each new style.

THA 329
ACTING IV: SOLO SHOW
3, 2/2

Prerequisite: Successful completion of THA 327, THA 350, or permission of instructor. Advanced acting course. Introduction to and participation in the process of creating and performing a solo show. Students apply and integrate previous theater training by exploring creative writing processes, including basic principles and research involved in the development, rehearsal, and performance of a 10-minute solo script.

THA 330
THEATER PRACTICUM III
1, 0/3

Laboratory experience as a crew leader for a departmental theater production.

THA 331
THEATER PRACTICUM IV
1, 0/3

Laboratory experience in the student's area of specialization for a departmental theater production.

THA 332
PERIOD STYLES FOR THE THEATER
3, 3/0; WCIF

Prerequisite: Any THA course. Survey of architecture, décor, and fashion from pre-civilization to the early twentieth century. Students analyze the effects of nature, technology, politics, religion, and aesthetics on style. Provides vocabulary and identification of period style necessary to examine and evaluate the translation of a period style to the stage or screen.
Equivalent course: THA315

THA 333
SCENE PAINTING
3, 2/2

Prerequisite: College-level arts course or upper-division status. Basic scene-painting techniques applicable to theater, film, and video production; hands-on exploration; creating full-scale painted scenery from scaled drawings; paint mixing; faux finishes, including marble, wood grain, brick, and stone; and specialty paint finishes.

THA 334
COSTUME CONSTRUCTION II
3, 2/2

Prerequisite: THA 235. Continuation of Costume Construction I. Advanced costuming techniques emphasizing dyeing, painting, footwear/hosiery, undergarments, accessories, and hat and wig construction as they apply to theater, dance, opera, film, and television.

THA 335
COSTUME DESIGN FOR THEATER
3, 2/2

Hands-on introduction to costume construction and design; design theory, script analysis, fabric selection; studio sessions on shop equipment; costume construction for theater arts productions.
Equivalent course: THA311

THA 336
LIGHTING TECHNIQUES
3, 2/2

Introduction to lighting design for theater, dance, studio, and industrial applications; principles of optical systems, stage lighting equipment, color media, electricity, control systems, stage lighting, history, and the McCandless stage lighting system; assigned practical experience required. Equivalent course: THA312

THA 337
SET DESIGN I
3, 2/2

Prerequisite: One theater or design course, or upper-division status. Introduction to theatrical set design: basic design components of line, form, mass, composition, balance, color, and texture as they relate to set design; script analysis, research, color theory, drafting techniques, and mechanical perspective drawing. Equivalent course: DES318

THA 340
PLAYWRITING
3, 3/0

Prerequisite: THA 106, THA 216, or permission of instructor. Development of critical capacities; productive work in playwriting. Equivalent courses: THA319, THA340W

THA 350
DIRECTING I
3, 3/0; OCIF

Prerequisites: THA 226 and THA 234, or permission of instructor. Examination of the theater director's craft and responsibilities through lecture and hands-on projects.

THA 370
STAGE MAKEUP
3, 3/0

Prerequisite: THA 226. Principles and techniques of theatrical makeup application and design.

THA 400
VOICE AND MOVEMENT III
3, 2/2

Prerequisite: Successful completion of THA 300. Students will deepen movement and vocal practice, and integrate previously learned voice, movement, and acting vocabularies. Students will strengthen skills and knowledge associated with articulate, precise, and expansive vocal and physical presence. The students will deepen the application of movement and vocal practice to the acting process, acting styles, and character development. The students will deepen their physical, intellectual, and emotional investment in what they are saying and doing and develop the skills required to consistently achieve a full, articulate, and compelling vocal and physical presence. Equivalent course: THA322

THA 416
SEMINAR IN THEATER ARTS
1, 1/0

Prerequisite: 24 credit hours in theater arts. Development of skills including defining professional and personal goals, sharpening of critical capacities, and creating and sharing a portfolio or audition presentation.

THA 421
BLACK DRAMA IN AMERICA
3, 3/0

Thematic and technical development of black American drama.

THA 426
ADVANCED ACTING
3, 3/0

Prerequisite: THA 326. Styles, periods, and methods of acting.

THA 435
ADVANCED COSTUME DESIGN FOR THEATER
3, 3/0

Prerequisite: THA 335 or permission of instructor. Advanced studies in costume design and rendering techniques; drawing skills necessary. Design and construction project for performing arts production required. Equivalent course: THA411

THA 437
SET DESIGN II
3, 2/2

Prerequisites: DES 318/THA 337 or permission of instructor. Continuation of DES 318/THA 337. Intensive exploration of advanced set-design techniques; continued development of set design skills, with concentration on different performance venues, model building techniques, portfolio-quality work, and presentation styles; advanced scenic considerations with the limits of budget, stage space, and technical support.

THA 450
DIRECTING II
3, 2/2

Prerequisite: THA 350. Practical application of directing theory and technique through class scenes and the public performance of a one-act play.

THA 470
ENSEMBLE THEATER
1-3, 6/0

Prerequisite: Audition. Examination of ensemble theatrical production through preparation and performance of plays. Equivalent course: THA407

THA 488
INTERNSHIP
1-12, 0/0

Prerequisites: Upper-division status and permission of instructor. Supervised field experience in a professional setting for students who have completed extensive academic preparation in the discipline; 50 hours of fieldwork in theater per credit.

THA 495
SPECIAL PROJECT
1-3, 0/0

THA 499
INDEPENDENT STUDY
3-12, 0/0

UNC - UNIVERSITY COLLEGE

UNC 100
MASTERING THE ACADEMIC ENVIRONMENT
3, 3/0

Strategies and skills for academic success at Buffalo State. Overview of the structure and benefits of a liberal arts education. Introduction to critical thinking. Application of critical thinking skills to various dimensions of college life to develop skills and increase likelihood of success. Equivalent courses: EDF207, INS207

UNC 101
LEARNING COMMUNITY INTEGRATED HOUR
1, 1/0

Integral aspect of each learning community; provides students the framework to see connections among seemingly disparate courses and to make connections across disciplines. Faculty and students explore the theme of the learning community, integrate course material, and relate both to their lives outside of the classroom. Equivalent course: INS101

UNC 111
CAREER PLANNING IN THEORY AND PRACTICE
1, 1/0

Multiple theories of career decision making processes. Includes lecture, discussion, and small-group activities. Students construct long- and short-term goals to assist them in the career-planning process.

UNC 120
READING AND STUDY STRATEGIES
1-3, 3/0
Competency-based course designed to improve students' college reading and study skills. Includes lecture and laboratory work.

UNC 150
ADVANCED READING AND STUDY STRATEGIES
3, 3/0
Strategies for effective learning; study, note-taking, and examination strategies; time management; preparing research papers.
Equivalent course: EDU150

UNC 189
TOPIC COURSE
1-9, 0/0
TOPIC COURSE

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FACULTY

SUNY Distinguished Teaching Professors

Date indicates year award received.

Andrea Guiati, Ph.D., Honors Program Director, Modern and Classical Languages Department (2009)

George T. Hole, Ph.D., Philosophy and Humanities Department (1997)

Dan A. Kushel, M.A., Art Conservation Department (1998)

SUNY Distinguished Service Professors

Betty J. Cappella, Ph.D., Educational Foundations Department (2002)

David A. Carson, Ph.D., History and Social Studies Education Department (2010)

Edward O. Smith Jr., Ph.D., History and Social Studies Education Department (1999)

Date indicates year award received.

Anthropology Department

Lisa Anselmi, Ph.D., *University of Toronto*, Chair and Associate Professor (2004)

Lydia M. Fish, Ph.D., *Indiana University*, Professor (1967)

Dennis L. Gaffin, Ph.D., *University at Buffalo*, Associate Professor (1989)

Kimberly L. Hart, Ph.D., *Indiana University*, Assistant Professor (2007)

Susan E. Maguire, Ph.D., *University at Buffalo*, Assistant Professor (2007)

Julie A. Wieczkowski, Ph.D., *University of Georgia*, Assistant Professor (2008)

Art Conservation Department

Patrick C. Ravines, M.L.S., *Columbia University*, Director and Associate Professor (2010)

James F. Hamm, M.A., *SUNY Oneonta*, Professor (1986)

Dan A. Kushel, M.A., *Columbia University*, SUNY Distinguished Teaching Professor (1983)

Corina E. Rogge, Ph.D., *Yale University*, Andrew W. Mellon Professorship (2010)

Aaron N. Shugar, Ph.D., *University College London*, Associate Professor (2006)

Jonathan L. Thornton, M.A., *SUNY Oneonta*, Professor (1983)

Judith C. Walsh, M.A., *SUNY Oneonta*, Professor (2005)

Art Education Department

Shirley Hayes, Ph.D., *Pennsylvania State University*, Chair and Associate Professor (2005)

Lucy Andrus, M.S.Ed., *Buffalo State College*, Professor (1982)

Michelle S. Bae, Ph.D., *University of Illinois*, Assistant Professor (2010)

Cheryl M. Hamilton, Ph.D., *University of Wisconsin-Milwaukee*, Associate Professor (1999)

Katherine B. Hartman, M.A., *University at Buffalo*, Associate Professor, SUNY Chancellor's Award for Excellence in Teaching (1980)

Candace P. Masters, M.F.A., *Catholic University of America*, Assistant Professor (2008)

Michael E. Parks, Ed.D., *Ball State University*, Professor (1981)

Alice C. Pennisi, Ed.D., *Teachers College-Columbia University*, Assistant Professor (2005)

Joseph R. Piccillo, M.S., *Buffalo State College*, Professor (1967)

John F. Siskar, Ph.D., *University at Buffalo*, Associate Professor and Interim Director, Center for Excellence in Urban and Rural Education (1992)

Biology Department

Gregory J. Wadsworth, Ph.D., *North Carolina State University*, Chair and Associate Professor (1992)

Douglas P. Easton, Ph.D., *University of Iowa*, Professor (1977)

Amy M. McMillan, Ph.D., *University of Kansas*, Associate Professor (2003)

Christopher M. Pennuto, Ph.D., *University of Kansas*, Professor (2003)

Alicia Perez-Fuentetaja, Ph.D., *SUNY Environmental Science and Forestry*, Associate Professor (2006)

Gary W. Pettibone, Ph.D., *Bowling Green State University*, Professor (1986)

Daniel L. Potts, Ph.D., *University of Arizona*, Assistant Professor (2007)

Howard P. Riessen, Ph.D., *Yale University*, Professor (1988)

I. Martha Skerrett, Ph.D., *Flinders University*, Assistant Professor (2005)

Randal J. Snyder, Ph.D., *University of California, Davis*, Associate Professor (1990)

Edward A. Standora, Ph.D., *University of Georgia*, Professor (1985)

Thomas D. White, Ph.D., *University of California, Los Angeles*, Professor (1991)

Business Department

John L. DeNisco, M.B.A., *Canisius College*, Interim Chair and Associate Professor (1982)

Solochidi oL Ahiaerah, Ph.D., *University of Pittsburgh*, Associate Professor (1990)

Theodore E. Davis Jr., Ph.D., *Southern Illinois University*, Assistant Professor (2009)

Daniel E. Gaygen, Ph.D., *University at Buffalo*, Assistant Professor (2009)

Uma G. Gupta, Ph.D., *University of Central Florida*, Professor (2007)

Joseph M. Kelly, J.D., *Northern Illinois University*, Professor (1990)

Christine A. Lai, Ph.D., *University at Buffalo*, Assistant Professor (2007)

Michael J. Littman, Ph.D., *Ohio State University*, Associate Professor (1986)

Edward J. Marecki, M.S., *Canisius College*, Lecturer (2005)

- S. Diane McFarland, Ph.D., *University at Buffalo*, Associate Professor (2002)
- Daniel S. Ricigliano, M.B.A., *University at Buffalo*, Assistant Professor (1979)
- Benjamin D. Sackmary, Ph.D., *University of Massachusetts*, Professor (1988)
- Lynne M. Scalia, M.B.A., *Niagara University*, Associate Professor (1983)

Center for Excellence in Urban and Rural Education

- John F. Siskar, Ph.D., *University at Buffalo*, Interim Director and Associate Professor (1992)
- Paul G. Theobald, Ph.D., *University of Illinois at Chicago*, Woods-Beals Endowed Chair and Professor and Interim Dean, School of Education (2004)
- Kathy L. Wood, Ph.D., *University at Buffalo*, Associate Professor and Interim Associate Dean, School of Education (2001)

Center for Health and Social Research

- William F. Wieczorek, Ph.D., *University at Buffalo*, Director and Professor, SUNY Chancellor's Award for Excellence in Scholarship and Creative Activities (1997)

Chemistry Department

- M. Scott Goodman, Ph.D., *Arizona State University*, Chair and Associate Professor (1996)
- Zeki Al-Saigh, Ph.D., *University of Birmingham*, Professor (2002)
- Kimberly A. Bagley, Ph.D., *University of Illinois at Urbana-Champaign*, Professor (1993)
- William S. Durfee, Ph.D., *Case Western Reserve University*, Associate Professor (1995)
- Gregory W. Ebert, Ph.D., *University of Nebraska*, Professor (1985)
- Jinseok Heo, Ph.D., *Texas A & M University*, Assistant Professor (2009)
- Kenneth F. Jonmaire, M.S., *Canisius College*, Lecturer (1996)
- Stanley Kardonsky, Ph.D., *City University of New York*, Professor and Vice President for Finance and Management (1993)
- Joonyeong Kim, Ph.D., *Texas A & M University*, Assistant Professor (2005)
- Alexander Y. Nazarenko, Ph.D., *Kiev State University*, Associate Professor (2000)
- Maria D. Pacheco, Ph.D., *University of Puerto Rico*, Associate Professor (1985)
- Mark W. Severson, Ph.D., *University of Minnesota*, Professor and Dean, School of Natural and Social Sciences (2008)

Coaching and Physical Education

- Stephen E. Schwartz, Ph.D., *Ohio State University*, Professor (1974)

Communication Department

- Joseph J. Marren Jr., M.A., *St. Bonaventure University*, Interim Chair and Associate Professor (1997)
- Bruce G. Bryski, Ph.D., *Pennsylvania State University*, Associate Professor (1983)
- Paul J. DeWald, M.A., *University at Buffalo*, Associate Professor (1967)
- Annemarie Franczyk, Ed.D., *D'Youville College*, Assistant Professor (1992)
- Marguerite E. Knowles, M.F.A., *Temple University*, Assistant Professor (2006)
- Hsiang A. Liao, Ph.D., *University at Buffalo*, Assistant Professor (2008)
- Thomas R. McCray, M.A., *University at Buffalo*, Associate Professor (1980)

- Michael I. Niman, Ph.D., *University at Buffalo*, Associate Professor (2002)
- Ronald L. Rabin, Ph.D., *Northwestern University*, Associate Professor (1976)
- William E. Raffel, J.D., Ph.D., *University at Buffalo*, Associate Professor (1997)
- Louis V. Rera, M.A., *University at Buffalo*, Assistant Professor (1999)
- Deborah A. Silverman, Ph.D., *University at Buffalo*, Assistant Professor (2005)
- Ronald D. Smith, M.S., *Syracuse University*, Professor and Interim Associate Dean, School of Arts and Humanities (1990)

Computer Information Systems Department

- William Lin, Ph.D., *University at Buffalo*, Chair and Associate Professor (1984)
- Sarbani Banerjee, Ph.D., *University at Buffalo*, Associate Professor (2000)
- Robert A. Barone, Ph.D., *University at Buffalo*, Associate Professor (2000)
- Michael P. Barry, M.S., *Nova Southeastern University*, Lecturer (2002)
- John T. Favata, Ph.D., *University at Buffalo*, Associate Professor (1997)
- Steven E. Gareau, Ph.D., *Mississippi State University*, Associate Professor (2005)
- Ruth X. Guo, Ph.D., *University of British Columbia*, Assistant Professor (2007)
- Neal M. Mazur, Ph.D., *Arizona State University*, Associate Professor (2002)
- Ramona R. Santa Maria, Ph.D., *University at Buffalo*, Assistant Professor (1999)
- Lawrence W. Scott, Ph.D., *University at Buffalo*, Associate Professor (1977)
- Barbara Ann Sherman, Ph.D., *University at Buffalo*, Assistant Professor (2007)

Criminal Justice Department

- Elizabeth Szockyj, Ph.D., *University of California, Irvine*, Chair and Associate Professor (2004)
- Michael A. Cretacci, Ph.D., *University at Albany*, Associate Professor (2006)
- Jill M. D'Angelo, Ph.D., *American University*, Assistant Professor (2007)
- Shashi M. Gayadeen, M.A., *John Jay College*, Lecturer (2005)
- James R. Gillham, Ph.D., *University of Illinois at Urbana-Champaign*, Professor (1977)
- Scott L. Johnson, Ph.D., *Pennsylvania State University*, Associate Professor and Dean, University College (1994)
- Scott W. Phillips, Ph.D., *University at Albany*, Associate Professor (2001)
- Geoffrey R. Skoll, Ph.D., *University of Wisconsin, Milwaukee*, Associate Professor (2005)
- James J. Sobol, Ph.D., *University at Albany*, Assistant Professor (2008)
- John H. L. Song, Ph.D., *University of California, Irvine*, Professor (1988)
- JawJeong Wu, Ph.D., *University of Nebraska*, Assistant Professor (2009)

Design Department

- Robert L. Wood, M.F.A., *Indiana State University*, Chair and Professor (1987)
- James P. Astrella, M.F.A., *Syracuse University*, Associate Professor (1983)
- Jozef Bajus, M.F.A., *Academy of Fine Arts and Design, Bratislava (Slovakia)*, Associate Professor (2002)
- Stanley K. Friesen, M.F.A., *Fort Hays State University*, Associate Professor (2000)

Darien O. Johnson, M.F.A., *Arizona State University*, Assistant Professor (2010)
Sun Hwa Kim, M.F.A., *Savannah College of Art and Design*, Assistant Professor (2008)
Tara J. Nahabetian, M.F.A., *Kent State University*, Associate Professor (2002)
Richard J. Ross, M.F.A., *University of Connecticut*, Associate Professor (1995)
Stephen F. Saracino, M.F.A., *Kent State University*, Professor (1981)
Carol A. Townsend, M.F.A., *Ohio University*, Associate Professor (2000)

Dietetics and Nutrition Department

Suk Y. Oh, Ph.D., *Colorado State University*, Chair and Professor (1995)
Tina M. Colaizzo-Anas, Ph.D., *University at Buffalo*, Assistant Professor (1997)
Carol A. DeNysschen, Ph.D., *University at Buffalo*, Assistant Professor (2008)
Donna M. Hayes, M.S., *Ohio State University*, Assistant Professor and Coordinated Program Director (1982)
Dennis K. Ponton, Ph.D., *West Virginia University*, Professor and Provost of Buffalo State College (1977)
Tejaswini Rao, Ph.D., *Pennsylvania State University*, Associate Professor and Didactic Program Director (1976)

Earth Sciences and Science Education Department

Gary S. Solar, Ph.D., *University of Maryland*, Chair and Associate Professor, SUNY Chancellor's Award for Excellence in Teaching (2000)
Richard J. Batt, Ph.D., *University of Colorado*, Associate Professor (1989)
Elisa T. Bergslien, Ph.D., *University at Buffalo*, Associate Professor (2002)
Dara J. Dorsey, M.Ed., *University at Buffalo*, Lecturer (2000)
Robin Lee Harris, Ph.D., *University of Iowa*, Associate Professor (1997)
Catherine Lange, Ph.D., *University at Buffalo*, Assistant Professor (2007)
Jude S. Sabato, Ph.D., *University of Chicago*, Assistant Professor (2008)
Jill K. Singer, Ph.D., *Rice University*, Professor and Director of Undergraduate Research, SUNY Chancellor's Award for Excellence in Scholarship and Creative Activities (1986)
Kevin K. Williams, Ph.D., *Arizona State University*, Assistant Professor (2006)
Joseph L. Zawicki, Ph.D., *University at Buffalo*, Associate Professor (2002)

Economics and Finance Department

Theodore F. Byrley, Ph.D., *University of Cincinnati*, Chair and Associate Professor, SUNY Chancellor's Award for Excellence in Teaching (1984)
Susan M. Davis, Ph.D., *New School for Social Research*, Associate Professor (1985)
Bruce L. Fisher, J.D., *University at Buffalo*, Visiting Professor and Director, Center for Economic and Policy Studies (2008)
Frederick G. Floss, Ph.D., *University at Buffalo*, Professor (1983)
William T. Ganley, Ph.D., *University of California*, Berkeley, Professor (1972)
Curtis Haynes Jr., Ph.D., *University of Massachusetts*, Associate Professor (1993)
Tae-Hee Jo, Ph.D., *University of Missouri*, Assistant Professor (2007)
Victor Kasper Jr., Ph.D., *Rutgers University*, Associate Professor (2001)
Yung-Mo Kim, J.D./Ph.D., *University at Buffalo*, Professor (1968)
Joelle J. Leclaire, Ph.D., *University of Missouri*, Associate Professor (2004)

Xingwang Qian, Ph.D., *University of California*, Santa Cruz, Assistant Professor (2008)
Ted P. Schmidt, Ph.D., *University of California*, Riverside, Associate Professor (1990)
John L. Wilcox, M.B.A., *University at Buffalo*, Lecturer (2005)

Career and Technical Education

N. John Popovich, Ed.D., *Wayne State University*, Chair and Associate Professor (1974)
Keith Schmidli, Ph.D., *University at Buffalo*, Assistant Professor (1999)

E. H. Butler Library

Maryruth F. Glogowski, M.L.S., *University at Buffalo*, Librarian and Assistant Vice President for Library and Instructional Technology (1975)
Marc D. Bayer, M.L.S., *University at Buffalo*, Information Systems Librarian (2007)
Donna J. Davidoff, M.L.S., *University at Buffalo*, Associate Librarian and Assistant Director, Information Commons (1987)
Daniel M. Dilandro, M.L.S., *Buffalo State College*, College Archivist (2006)
Marianne Foley, M.L.S., *University at Buffalo*, Associate Librarian (2001)
Lisa A. Forrest, M.L.S., *University at Buffalo*, Senior Assistant Librarian (2004)
Ken Fujiuchi, M.L.S., *University at Buffalo*, Senior Assistant Librarian (2005)
Constance C. Hsu, M.L.S., *Emporia State University*, Associate Librarian (1966)
Maureen A. Lindstrom, M.L.S., *University at Buffalo*, Librarian and Associate Director, Information Commons, SUNY Chancellor's Award for Excellence in Librarianship (1986)
Gail M. Marinaccio, M.L.S., *University at Buffalo*, Librarian and Associate Director for Technical Services (1972)
Mark F. McBride, M.L.S., *University at Buffalo*, Information Commons Librarian (2007)
Marianne D. Muha, M.L.S., *University at Buffalo*, Associate Librarian (2001)
George C. Newman, Ph.D., *University of Michigan at Ann Arbor*, Librarian, SUNY Chancellor's Award for Excellence in Librarianship (1982)
Albert F. Riess, M.L.S., *University at Buffalo*, Librarian, SUNY Chancellor's Award for Excellence in Librarianship (1979)
Amy D. Rockwell, M.L.S., *University at Buffalo*, Associate Librarian (1986)
Wanda M. Slawinska, M.L.S., *Syracuse University*, Associate Librarian (1973)
Barbara J. Vaughan, M.L.S., *University at Buffalo*, Associate Librarian (1982)

Elementary Education and Reading Department

Nancy A. Chicola, Ph.D., *University of Colorado*, Chair and Associate Professor (2000)
Rosemary Arioli-Leibowitz, M.S., *SUNY Brockport*, Lecturer (1999)
Maria A. Ceprano, Ph.D., *University at Buffalo*, Professor (1997)
Mary C. Cummings, M.A., *University of Redlands*, Lecturer (2006)
Leslie K. Day, M.S.Ed., *Buffalo State College*, Lecturer (1990)
Pixita M. del Prado Hill, Ed.D., *Harvard University*, Associate Professor (1999)
Carla M. DiChristina, M.S., *Buffalo State College*, Lecturer (1999)
Lloyd M. Elm, Ph.D., *Pennsylvania State University*, Associate Professor (2005)
Kathleen A. Falconer, M.S.Ed., *Purdue University*, Lecturer (2002)

Ellen S. Friedland, Ph.D., *University at Buffalo*, Associate Professor (2000)

Keli Garas-York, Ph.D., *University at Buffalo*, Assistant Professor (2006)

David R. Henry, Ph.D., *University at Buffalo*, Associate Professor (1999)

Jevon D. Hunter, Ph.D., *University of California*, Los Angeles, Assistant Professor (2010)

Laura J. Klenk, Ph.D., *University of Michigan*, Assistant Professor (2009)

Peter W. Loehr, Ph.D., *Kent State University*, Associate Professor (1996)

Dianne S. McCarthy, Ed.D., *University at Buffalo*, Assistant Professor (2005)

Wendy McLeish, M.S.Ed., *Wheelock College*, Lecturer (2001)

Thomas J. Sadowski, M.S.Ed., *Buffalo State College*, Lecturer (1998)

Hebajene Shandomo, Ph.D., *Andrews University*, Associate Professor (2000)

Coralee S. Smith, Ph.D., *University of Missouri*, Associate Professor (1999)

Christine L. Tredo, M.S., *Buffalo State College*, Lecturer (2002)

Kim S. Truesdell, Ed.D., *University at Buffalo*, Associate Professor (2002)

Myrtle I. Welch, Ph.D., *New Mexico State University*, Assistant Professor (2008)

Jing Zhang, Ph.D., *University of Toronto*, Assistant Professor (2010)

English Department

Ralph L. Wahlstrom, Ph.D., *Michigan Technological University*, Chair and Associate Professor (1997)

Barish Ali, Ph.D., *University at Buffalo*, Visiting Assistant Professor (2006)

Charles R. Bachman, Ph.D., *Indiana University*, Professor (1965)

David N. Ben-Merre, Ph.D., *Brown University*, Assistant Professor (2008)

Lisa Berglund, Ph.D., *University of Virginia*, Associate Professor (2001)

Barbara T. Bontempo, Ed.D., *Indiana University*, Professor, SUNY Chancellor's Award for Excellence in Teaching (1988)

Kim K. Chinquee, M.F.A., *University of Illinois at Urbana*, Assistant Professor (2008)

Ann C. Colley, Ph.D., *University of Chicago*, SUNY Distinguished Professor (1985)

Adrienne M. Costello, Ph.D., *University at Buffalo*, Assistant Professor (2006)

Heidi E. Dietz Faletti, Ph.D., *University of California*, Berkeley, Associate Professor (1984)

Mark K. Fulk, Ph.D., *Miami University of Ohio*, Associate Professor (2001)

Theresa A. Harris-Tigg, Ph.D., *University at Buffalo*, Assistant Professor and Coordinator of English Education (2006)

Elizabeth L. Kelley, Ph.D., *SUNY Binghamton*, Assistant Professor (2005)

Terrence R. McDonald, M.F.A., *Southern Methodist University*, Associate Professor and CADET Co-Director (1972)

Lorna L. Perez, Ph.D., *University at Buffalo*, Assistant Professor (2008)

Kevin Railey, Ph.D., *SUNY Stony Brook*, Professor and Associate Provost and Dean, Graduate School, SUNY Chancellor's Award for Excellence in Scholarship and Creative Activities (1991)

Peter J. Ramos, Ph.D., *University at Buffalo*, Assistant Professor (2005)

Jennifer D. Ryan, Ph.D., *University of Iowa*, Associate Professor (2005)

Karen Sands-O'Connor, Ph.D., *University of Wales*, Associate Professor (1997)

Dana M. Symons, Ph.D., *University of Rochester*, Assistant Professor (2007)

Aimable Twagilimana, Ph.D., *University at Buffalo*, Professor (1995)

Craig G. Werner, Ph.D., *Harvard University*, Associate Professor (1984)

Exceptional Education Department

Kevin J. Miller, Ed.D., *West Virginia University*, Chair and Associate Professor (2006)

Shannon E. Budin, Ph.D., *Pennsylvania State University*, Associate Professor (2005)

Warren L. Gleckel, Ph.D., *Syracuse University*, Associate Professor (1975)

Theresa M. Janczak, Ph.D., *University at Buffalo*, Assistant Professor (2005)

Michaelene M. Meger, Ph.D., *University at Buffalo*, Associate Professor (1993)

David J. Pomerantz, Ph.D., *University of Illinois at Urbana-Champaign*, Associate Professor (1977)

Mark P. Posluszny, Ed.D., *University of Kentucky*, Associate Professor (1985)

Lisa A. Rafferty, Ph.D., *University at Buffalo*, Assistant Professor (2007)

Sharon L. Raimondi, Ph.D., *American University*, Professor (1990)

Awilda Ramos Zagarrigo, Ph.D., *University at Buffalo*, Assistant Professor (2008)

Raquel J. Schmidt, Ph.D., *University at Buffalo*, Associate Professor (2001)

Erica C. Simon, Ph.D., *University of Texas at Austin*, Assistant Professor (2009)

Jennifer M. Westover, Ph.D., *University of Oregon*, Assistant Professor (2010)

Fine Arts Department

Philip B. Ogle, M.F.A., *Maryland Institute College of Art*, Chair and Professor (2010)

Sylvia D. Bakos, Ph.D., *Rutgers University*, Associate Professor (1990)

Harriet Blitzer, Ph.D., *Indiana University*, Professor (1997)

Frances M. Gage, Ph.D., *Johns Hopkins University*, Assistant Professor (2008)

Anthony P. Gorny, M.F.A., *Yale University*, Associate Professor (2001)

Sarah B. Hinderliter, Ph.D., *Columbia University*, Assistant Professor (2008)

Lin Xia Jiang, M.F.A., *University of Utah*, Professor (1995)

Leslie R. Krims, M.F.A., *Pratt Institute*, Professor (1969)

Elena M. Lourenco, M.F.A., *Arizona State University*, Assistant Professor (2008)

Joseph A. Miller, M.F.A., *Southern Illinois University*, Associate Professor (1997)

Constance L. Payne, M.F.A., *University of Wisconsin-Madison*, Associate Professor (1985)

Kenneth P. Payne, M.F.A., *University of Wisconsin-Milwaukee*, Professor (1990)

Geography and Planning Department

Kelly M. Frothingham, Ph.D., *University of Illinois at Urbana-Champaign*, Chair and Associate Professor (2000)

Camille A. Holmgren, Ph.D., *University of Arizona*, Assistant Professor (2007)

Kimberley N. Irvine, Ph.D., *McMaster University*, Professor (1988)

Wende A. Mix, Ph.D., *University at Buffalo*, Associate Professor (2004)

Charlotte L. Roehm, Ph.D., *McGill University*, Assistant Professor (2008)

Tao Tang, Ph.D., *University of Wisconsin-Milwaukee*, Associate Professor (1998)

Vida Vanchan, Ph.D., *University at Buffalo*, Assistant Professor (2006)

Stephen J. Vermette, Ph.D., *McMaster University*, Professor (1993)

Veryan G. Vermette, M.S., *McMaster University*, Lecturer (1993)

William F. Wieczorek, Ph.D., *University at Buffalo*, Professor and Director, Center for Health and Social Research, SUNY Chancellor's Award of Excellence in Scholarship (1997)

Health and Wellness Department

Scott W. Roberts, Ed.D., *Brigham Young University*, Chair and Professor (1986)

Susan M. Baldwin, Ph.D., *Kent State University*, Assistant Professor (2002)

Kristina M. Garcia, M.S., *Florida State University*, Assistant Professor (2011)

History and Social Studies Education Department

David A. Carson, Ph.D., *Texas Christian University*, Chair and Professor, SUNY Chancellor's Award for Excellence in Teaching (1983)

John D. Abromeit, Ph.D., *University of California*, Berkeley, Assistant Professor (2009)

Felix L. Armfield, Ph.D., *Michigan State University*, Professor (2000)

Daniel M. Blum, M.A., *University at Buffalo*, Lecturer (2002)

Bridget M. Chesterton, Ph.D., *SUNY Stony Brook*, Assistant Professor (2007)

Cynthia A. Conides, Ph.D., *Columbia University*, Associate Professor (2000)

Martin F. Ederer, Ph.D., *University at Buffalo*, Assistant Professor (1998)

Jill M. Gradwell, Ph.D., *University at Buffalo*, Associate Professor (2004)

Donald R. Hetzner, Ed.D., *University at Buffalo*, Professor (1970)

Michael C. Lazich, Ph.D., *University at Buffalo*, Associate Professor (1997)

Gary Marotta, Ph.D., *New York University*, Professor (2000)

Kenneth S. Mernitz, Ph.D., *University of Missouri*, Associate Professor (1985)

Albert L. Michaels, Ph.D., *University of Pennsylvania*, Professor (2009)

William I. Mitchell, Ph.D., *University of Missouri*, Associate Professor (1991)

Andrew D. Nicholls, Ph.D., *University of Guelph*, Professor (1996)

York A. Norman, Ph.D., *Georgetown University*, Assistant Professor (2007)

Gerald A. Oczek, M.A.T., *Niagara University*, Lecturer (2002)

Kenneth J. Orosz, Ph.D., *SUNY Binghamton*, Assistant Professor (2008)

Jean E. Richardson, Ph.D., *University at Buffalo*, Associate Professor (1995)

Misty D. Rodeheaver, Ed.D., *West Virginia University*, Assistant Professor (2010)

Edward O. Smith Jr., Ph.D., *Lehigh University*, SUNY Distinguished Service Professor and Director, Monroe Fordham Regional History Center (1963)

Hospitality and Tourism Department

Rebecca Dowsey, M.S.Ed., *Niagara University*, Interim Chair and Lecturer (2002)

Stephen C. Burgeson, Ed.M., *University at Buffalo*, Lecturer (1996)

Chenchen Huang, Ph.D., *University of Florida*, Assistant Professor (2008)

Kevin F. Mulcahy, Ed.D., *University of California*, Los Angeles, Associate Professor and Interim Dean, School of the Professions (1992)

Kathleen M. O'Brien, Ed.M., *University at Buffalo*, Lecturer and Campus House Director (1989)

Lori L. Till, Ed.D., *University at Buffalo*, Associate Professor (1985)

Interior Design Department

Terry Postero, M.F.A., *University of Georgia*, Chair and Professor (1993)

Thomas P. Breen, M.A., *University at Buffalo*, Assistant Professor (2009)

Jorg Schnier, M.A., *Dresden University of Technology*, Associate Professor (2002)

Bhakti Sharma, M.S., *Arizona State University*, Assistant Professor (2009)

Barry Yavener, M.F.A., *Rochester Institute of Technology*, Professor (1985)

International Center for Studies in Creativity

Gerard J. Puccio, Ph.D., *University of Manchester Institute of Science and Technology*, Chair and Professor (1990)

Cynthia Burnett, Ph.D., *University of Toronto*, Assistant Professor (2000)

John F. Cabra, Ph.D., *University of Manchester*, Assistant Professor (2005)

Jon Michael Fox, M.S., *Buffalo State College*, Lecturer (1997)

Susan M. Keller-Mathers, Ed.D., *Argosy University*, Associate Professor (1990)

Jeffrey D. Smith, Ed.D., *Seattle University*, Assistant Professor (2008)

Mathematics Department

David C. Wilson, Ph.D., *University at Buffalo*, Chair and Associate Professor (2002)

Saziye Bayram, Ph.D., *University at Buffalo*, Assistant Professor (2006)

Valentin E. Brimkov, Ph.D., *University of Sofia*, Bulgaria, Professor (2005)

Joaquin O. Carbonara, Ph.D., *University of California*, San Diego, Professor (1992)

Christina L. Carter, M.S., *California State University*, Lecturer (2004)

Daniel W. Cunningham, Ph.D., *University of California*, Los Angeles, Professor (1991)

Jane R. Cushman, Ph.D., *University of Texas at Austin*, Assistant Professor (2006)

Kelly A. Delp, Ph.D., *University of California*, Santa Barbara, Assistant Professor (2007)

Chaitali Ghosh, Ph.D., *University at Buffalo*, Associate Professor (2000)

Tom M. Giambone, Ed.D., *University at Buffalo*, Professor (1990)

Jodelle S. W. Magner, Ph.D., *University of Maryland*, Associate Professor (2000)

Susan E. McMillen, Ph.D., *University at Buffalo*, Professor and Director of Faculty Development (2000)

Peter R. Mercer, Ph.D., *University of Toronto*, Professor (1997)

Nirmala Nutakki, Ed.M., *University at Buffalo*, Lecturer (2009)

Robin Sue O'Dell, Ph.D., *University at Buffalo*, Assistant Professor (2007)

Robin Sue Sanders, Ph.D., *University of Illinois at Urbana-Champaign*, Associate Professor (1997)

Margaret Sherman, Ph.D., *North Dakota State University*, Lecturer (2002)

Hongliang Xu, Ph.D., *University at Buffalo*, Assistant Professor (2009)

Modern and Classical Languages Department

William L. White, Ed.D., *West Virginia University*, Interim Chair and Assistant Professor (2007)

Lee Ann Grace, Ph.D., *University at Buffalo*, Associate Professor and Assistant Dean, International and Exchange Programs (1973)

Andrea Guiati, Ph.D., *Rutgers University*, SUNY Distinguished Teaching Professor, Honors Program Director, SUNY Chancellor's Award for Excellence in Teaching (1985)

Deborah L. Hovland, Ph.D., *University of Minnesota*, Associate Professor (1992)

Michael Johnson, Ph.D., *University at Buffalo*, Associate Professor, SUNY Chancellor's Award for Excellence in Teaching (1975)

Carol B. Kirby, Ph.D., *University of Kentucky*, Professor (1985)

Rafika Merini, Ph.D., *SUNY Binghamton*, Associate Professor (1990)
Barbara D. Miller, Ph.D., *University at Buffalo*, Associate Professor (2001)
Raul F. Neira, Ph.D., *University of Texas at Austin*, Associate Professor (1991)
A. Michael Vermy, Ph.D., *University of California*, Los Angeles, Assistant Professor (2009)
Mark K. Warford, Ph.D., *University of Tennessee*, Associate Professor (2000)

Music Department

Bradley J. Fuster, D.M.A., *University of Southern California*, Chair and Associate Professor (2005)
Ho Eui Holly Bewlay, M.M., *University of Rochester*, Assistant Professor (2005)
Bryan W. Boyce, D.M.A., *Eastman School of Music*, Assistant Professor (2005)
Benjamin C. Christy, A.Mus.D., *University of Michigan*, Professor and Dean, School of Arts and Humanities (2007)
Ricky L. Fleming, D.M.A., *Florida State University*, Associate Professor (2001)
Victoria J. Furby, Ph.D., *Ohio State University*, Assistant Professor (2008)
Carolyn Guzski, Ph.D., *City University of New York*, Assistant Professor (2009)
J. Tomas Henriques, Ph.D., *University at Buffalo*, Assistant Professor (2009)
Lisa R. Hunter, Ph.D., *University of Arizona*, Associate Professor and Assistant Dean, Intellectual Foundations (2006)
Charles Mancuso, M.A., *University at Buffalo*, Professor (1976)
Crystal H. Reinoso, D.M.A., *University of Michigan at Ann Arbor*, Professor (1989)
Thomas E. Witakowski, D.M.A., *Indiana University*, Associate Professor (1992)

Philosophy and Humanities Department

Kimberly A. Blessing, Ph.D., *University at Buffalo*, Chair and Associate Professor (2004)
Julian C. Cole, Ph.D., *Ohio State University*, Assistant Professor (2008)
John D. Draeger, Ph.D., *Syracuse University*, Associate Professor and Coordinator, CASTL (2005)
Marianne C. Ferguson, Ph.D., *McMaster University*, Professor (1971)
Jason D. Grinnell, Ph.D., *Bowling Green State University*, Assistant Professor (2007)
George T. Hole, Ph.D., *University of Rochester*, SUNY Distinguished Teaching Professor (1965)
Gerald M. Nosich, Ph.D., *University of Illinois*, Professor (2006)
Allen H. Podet, Ph.D., *University of Washington*; D.H.L., Hebrew Union College, Professor (1974)

Physics Department

Michael J. De Marco, Ph.D., *University of Cincinnati*, Chair and Professor (1981)
Dermot Coffey, Ph.D., *University of Illinois at Chicago*, Associate Professor (2002)
David J. Etestad, Ph.D., *Cornell University*, Associate Professor (1986)
Luanna S. Gomez, Ph.D., *University of Washington*, Assistant Professor (2007)
Daniel L. MacIsaac, Ph.D., *Purdue University*, Associate Professor (2002)
Ram C. Rai, Ph.D., *University of Kentucky*, Assistant Professor (2007)

Political Science Department

Laurie A. Buonanno, Ph.D., *Johns Hopkins University*, Chair and Professor, SUNY Chancellor's Award for Excellence in Teaching (2006)
Kyeonghi Baek, Ph.D., *University of Mississippi*, Assistant Professor (2008)
Lawrence G. Flood, Ph.D., *University of North Carolina at Chapel Hill*, Professor (1977)
Keith M. Henderson, D.P.A., *University of Southern California*, Professor (1969)
Jon J. Lines, M.U.P., *University at Buffalo*, Lecturer (1998)
Patrick J. McGovern, Ph.D., *University of Arizona*, Assistant Professor (2006)
Anthony T. Neal, Ph.D., *Clark Atlanta University*, Associate Professor (1988)
Michael S. Pendleton, D.A., *Idaho State University*, Associate Professor (1979)
Peter R. Yacobucci, Ph.D., *University of Arizona*, Assistant Professor (2010)

Psychology Department

Jurgis Karuza Jr., Ph.D., *Wayne State University*, Chair and Professor (1978)
Jerry F. Cataldo, Ph.D., *University at Buffalo*, Professor (1969)
Robert P. Delprino, Ph.D., *Old Dominion University*, Associate Professor (1992)
Jean M. DiPirro, Ph.D., *University at Buffalo*, Associate Professor (1999)
Stephani M. Foraker, Ph.D., *New York University*, Assistant Professor (2008)
Gary W. Heiman, Ph.D., *Bowling Green State University*, Professor (1976)
Dwight A. Hennessy, Ph.D., *York University*, Associate Professor (2000)
Jennifer S. Hunt, Ph.D., *University of Minnesota-Crookston*, Associate Professor (2007)
Michael G. MacLean, Ph.D., *Arizona State University*, Associate Professor (1997)
Jill M. Norvilitis, Ph.D., *Wayne State University*, Professor, SUNY Chancellor's Award for Excellence in Teaching (1997)
R. Karen O'Quin, Ph.D., *Michigan State University*, Professor and Associate Dean, School of Natural and Social Sciences (1982)
Howard M. Reid, Ph.D., *University of Maine at Orono*, Professor, SUNY Chancellor's Award for Excellence in Teaching, SUNY Chancellor's Award for Excellence in Faculty Service (1977)
Pamela Schuetze-Pizarro, Ph.D., *Virginia Polytechnic Institute and State University*, Professor (1996)
Michael J. Zborowski, Ph.D., *Ohio University*, Associate Professor (1991)

Social Work Department

Carolyn M. Hilarski, Ph.D., *University at Buffalo*, Chair and Professor (2006)
Christopher B. Aviles, Ph.D., *University at Albany*, Associate Professor (1985)
Louis A. Colca, M.S.W., *University at Buffalo*, Associate Professor (1977)
J. Patrick Dexter, M.S.W., *University at Buffalo*, Associate Professor (1977)
Barbara A. Huddleston-Mattai, D.S.W., *University of California*, Los Angeles, Professor (1990)
Ronnie E. Mahler, Ph.D., *University at Buffalo*, Associate Professor (1977)
Phyllis B. Pomerantz, M.S.W., *University of Illinois at Urbana-Champaign*, Associate Professor (1977)
Deborah K. Renzi, M.S.W., *SUNY Stony Brook*, Coordinator, Field Education, Social Work Department (1982)

Kimberly M. Zittel-Palamara, Ph.D., *Buffalo State College*, Assistant Professor (2005)

Sociology Department

Gary S. Welborn, Ph.D., *University at Buffalo*, Chair and Associate Professor (1993)

Gerhard J. Falk, Ed.D., *University at Buffalo*, Professor, SUNY Chancellor's Award for Excellence in Teaching (1957)

Virginia E. Grabiner, Ph.D., *University of California*, Berkeley, Associate Professor, SUNY Chancellor's Award for Excellence in Teaching (1975)

Eric J. Krieg, Ph.D., *Simmons College*, Associate Professor (1997)

Rosalyn A. Lindner, Ph.D., *University of Minnesota*, Professor and Associate Vice President, Assessment and Curriculum (1974)

Timothy A. McCorry, M.A., *St. John's University*, Assistant Professor (1998)

Staci Newmahr, Ph.D., *SUNY Stony Brook*, Assistant Professor (2008)

Allen C. Shelton, Ph.D., *University of Georgia*, Associate Professor (1998)

Ron Stewart, Ph.D., *Howard University*, Professor (1990)

Amitra A. Wall, Ph.D., *Texas Women's University*, Associate Professor, SUNY Chancellor's Award for Excellence in Teaching (2000)

Thomas S. Weinberg, Ph.D., *University of Connecticut*, Professor, SUNY Chancellor's Award for Excellence in Teaching (1969)

Jie Zhang, Ph.D., *Brigham Young University*, Professor and Director, Center for China Studies, SUNY Chancellor's Award for Excellence in Faculty Service (1997)

Speech-Language Pathology Department

Constance Dean Qualls, Ph.D., *University of Memphis*, Chair and Professor (2005)

Sally A. Arnold, Ph.D., *Northwestern University*, Associate Professor (1995)

Deborah M. Insalaco, Ph.D., *University of Arizona*, Associate Professor (2000)

Christine M. Scott, Ph.D., *Wichita State University*, Assistant Professor (2006)

Barbara Weitzner-Lin, Ph.D., *University at Buffalo*, Associate Professor (1985)

Student Personnel Administration

Timothy L. Gallineau, D.Ed., *University of Akron*, Interim Chair and Associate Professor (1992)

Betty J. Cappella, Ph.D., *University at Buffalo*, SUNY Distinguished Service Professor (1983)

Wanda M. Davis, Ph.D., *Pennsylvania State University*, Professor (1995)

Richard J. Herdlein III, Ph.D., *University of Pittsburgh*, Associate Professor (2001)

Kimberly A. Kline, Ph.D., *Indiana University*, Associate Professor (2007)

Technology Department

Richard A. Butz, M.F.A., *Alfred State College*, Chair and Associate Professor (1985)

Liza K. Abraham, Ph.D., *Iowa State University*, Assistant Professor (1997)

Stephen N. Andre, Ph.D., *Syracuse University*, Associate Professor (1979)

D. Steven Barker, Ph.D., *University of Wyoming*, Associate Professor (1995)

Lynn M. Boorady, Ph.D., *University of Missouri*, Associate Professor (2010)

David A. Brinson, M.S., *Cornell University*, Lecturer (1995)

Mohan S. Devgun, Ph.D., *Birmingham University*, Professor (1990)

John J. Earshen, Ph.D., *University at Buffalo*, Associate Professor (1980)

Emine Ercan, Ph.D., *Ege University*, Associate Professor (2006)

Slade Gellin, Ph.D., *Harvard University*, Professor (1999)

Stephanie R. Goldberg, Ph.D., *University at Buffalo*, Professor (1990)

Clarke W. Greene, M.S.Ed., *Buffalo State College*, Lecturer (2000)

Ilya Y. Grinberg, Ph.D., *Moscow Civil Engineering Institute*, Professor (1995)

Anthony J. Hotchkiss, Ph.D., *Southampton University at England*, Professor (1994)

David J. Kukulka, Ph.D., *University at Buffalo*, Professor (1982)

Steve M. Macho, Ed.D., *West Virginia University*, Assistant Professor (2006)

James Mayrose, Ph.D., *University at Buffalo*, Associate Professor (1999)

Keun Young Oh, Ph.D., *Iowa State University*, Assistant Professor (2008)

Elaine M. Polvinen, M.F.A., *Rochester Institute of Technology*, Professor (1991)

Cherry M. Searle, Ph.D., *Kansas State University*, Associate Professor (1994)

James M. Shea, M.S.Ed., *University at Buffalo*, Associate Professor (1967)

Richard A. Stempniak, Ph.D., *University at Buffalo*, Associate Professor (1974)

Television and Film Arts Program

Jeffrey N. Hirschberg, M.A., *Syracuse University*, Associate Professor and Director (2006)

Theater Department

Drew J. Kahn, M.F.A., *Southern Methodist University*, Chair and Professor (2000)

Carol Y. Beckley, M.F.A., *Southern Methodist University*, Associate Professor (1994)

Ann R. Emo, M.F.A., *New York University*, Assistant Professor (2006)

Joy A. Guarino, M.F.A., *Temple University*, Assistant Professor (2004)

Carlos R. A. Jones, M.F.A., *University of California*, Irvine, Assistant Professor (2007)

Joseph P. Price, M.F.A., *Southern Methodist University*, Professor (2008)

Janet Reed, M.A., *University at Buffalo*, Associate Professor (1993)

Shannon T. Schweitzer, M.F.A., *Michigan State University*, Assistant Professor (2007)

Donn M. Youngstrom, M.F.A., *Brooklyn College*, Associate Professor (1994)

Writing Program

Michele Ninacs, Ph.D., *Indiana University of Pennsylvania*, Director and Assistant Professor (2001)

Janice A. Carello, M.A., *SUNY Brockport*, Lecturer (2007)

John M. McKinnis, M.A., *University at Buffalo*, Lecturer (1987)

Wendy Scott, M.A., *University at Buffalo*, Lecturer (1990)

Irene S. Sipos, M.A., *University at Buffalo*, Lecturer (1999)

STAFF

This list is compiled from records of the Buffalo State College Human Resource Management Office and was current as of April 2011.

SUNY Chancellor's Awards for Excellence in Professional Service Recipients

Date indicates year award received.

Scot R. Eckert, A.A.S. (1997)

Roswell Park IV, Ph.D. (1981)

Rebecca J. Schenk, M.B.A. (2003)

Steven E. Shaffer, M.A. (1996)

Stephanie B. Zuckerman-Aviles, M.Ed. (2002)

Date indicates year hired at Buffalo State.

David S. Abbott, Ph.D., *North Carolina State University*, Instructional Support Specialist, Physics Department (2006)

Josephine P. Adamo, M.Ed., *University at Buffalo*, Coordinator, First-Year Initiatives, University College (1995)

Chima Dennis Aharanwa, B.A., *Buffalo State College*, Lead Programmer/Analyst, Information Technology Exchange Center (1998)

Modupe A. Akin-Deko, Ph.D., *University of Ibadan*, Associate Director and Clinical Coordinator, Counseling Center (1997)

Patricia A. Alessandra, B.A., *Buffalo State College*, Senior Staff Associate, Academic Affairs Office (1991)

Jon M. Alessandrello, B.S., *SUNY Institute of Technology*, Programmer/Analyst (UNIX), Information Technology Exchange Center (2008)

David P. Alessi, Manager, Payroll Office (1998)

Ali A. Alhobabi, B.S., *Buffalo State College*, Desktop Systems Technician, Computing and Technology Services (2008)

Ashley S. Allen, B.S., *Buffalo State College*, Assistant for Mandated Programs, Weigel Health Center (2007)

Michael J. Anderson, B.S., *Buffalo State College*, Director, Technical and Information Processing, Institutional Advancement Office (1988)

Cara L. Angie, B.F.A., *Buffalo State College*, Staff Assistant, Professional Development Office (2005)

Fajri Ansari, M.S., *SUNY Brockport*, Head Varsity Basketball Coach, Intercollegiate Athletics (1981)

Jane A. Armbruster, M.P.H., *University of Michigan*, Associate Vice President for Development, Institutional Advancement Office (2008)

Lisa A. August, M.S., *Canisius College*, Associate Director, Career Development Center (2001)

Phillip Auman, M.S., *Buffalo State College*, Senior Career Counselor, Career Development Center (1999)

Karen E. Bailey-Jones, M.A., *University at Buffalo*, Clinic Director, Speech-Language Pathology (1992)

Salvatore S. Ballachino, M.Ed., *University at Buffalo*, Head Athletics Trainer, Intercollegiate Athletics (2002)

Margaret A. Banak, Manager, Student Computing Services, Computing and Technology Services (1983)

Paul J. Bardak, Senior Programmer/Analyst, Information Technology Exchange Center (1986)

Barbara J. Barone, M.L.S., *University at Buffalo*, Reference Librarian, E.H. Butler Library (1995)

Judith B. Basinski, M.B.A., *University at Buffalo*, Associate Vice President, Computing and Technology Services (1981)

Paul D. Bauer, A.A.S., *Erie Community College*, Instructional Support Associate, Instructional Resources (2001)

Robert L. Baumet, M.S.Ed., *Buffalo State College*, Director, Accounts Payable and Travel Services (1991)

Mark T. Bausili, M.S., *Buffalo State College*, Registrar, Registrar's Office (1985)

Landrum W. Beard, B.A., *University at Buffalo*, Assistant Director, Alumni Affairs Office (2010)

Clifford Bell, Senior Business Advisor, Small Business Development Center (1996)

William J. Benfanti, M.A., *University of Maryland*, Associate Vice President, Government Relations, Institutional Advancement Office (2007)

Elizabeth M. Benson, M.S., *Niagara University*, Assistant to the Vice President, Institutional Advancement Office (2008)

Paul J. Bentkowski, M.S.Ed., *Buffalo State College*, Senior Systems Programmer, Computing and Technology Services (1982)

Todd R. Benzin, B.A., *Canisius College*, Classroom Support Supervisor, Instructional Resources (2007)

Sherrie H. Bernat, D.N.S., *University at Buffalo*, Nurse Practitioner, Weigel Health Center (1989)

Terence D. Bitka, M.S., *Buffalo State College*, Assistant Football Coach, Intercollegiate Athletics (1992)

Daniel S. Blachanec, B.S., *Buffalo State College*, Assistant Director, Systems Administration, Computing and Technology Services (1994)

Jennifer P. Blanchard, Ph.D., *College of William and Mary*, Assistant to the President, President's Office (2009)

John P. Bleech, B.S., *University at Buffalo*, Environmental Programs Coordinator, Environmental Health and Safety Office (2007)

Josh S. Blumberg, B.S., *Buffalo State College*, General Manager, Campus House, Hospitality and Tourism Department (2002)

Marie E. Bogner, M.L.S., *University at Buffalo*, Visual Resources Curator, Fine Arts Department (2004)

Michael V. Bonfante, B.ARCH, *University at Buffalo*, Facilities Project Manager, Facilities Planning Office (2010)

Michelle J. Bonn, B.A., *University at Buffalo*, Associate for Institutional Research, Institutional Research Office (2002)

Kelly G. Boos, B.A., *Buffalo State College*, Assistant to the Dean, School of Natural and Social Sciences (1990)

Barbara A. Boquard, M.S., *Buffalo State College*, Business Manager, Information Technology Exchange Center (1988)

Christopher L. Bordeleau, Lead Programmer/Analyst, Information Technology Exchange Center (2000)

Jerry S. Boyes, M.S., *Ithaca College*, Director and Head Football Coach, Intercollegiate Athletics (1986)

- Kelly S. Brace, B.S., *Rochester Institute of Technology*, Production Control Manager, Information Technology Exchange Center (2003)
- Joseph L. Brandy, Ph.D., *Union Institute and University*, Coordinator for Community Education, Continuing Professional Studies Office (1998)
- Curtis L. Brickhouse, M.A., *Indiana University of Pennsylvania*, Associate Director, Residence Life Office (1989)
- Maria B. Brickhouse, M.A., *Indiana University of Pennsylvania*, Coordinator, Academic Resource Center, Educational Opportunity Program (2004)
- Daniel W. Brint, B.A., *Brock University*, Supervising Analyst for Administrative Services, Information Technology Exchange Center (2001)
- Deepa Brown, M.A., *English and Foreign Languages University*, Lead/Programmer Analyst, Information Technology Exchange Center (2008)
- Jerome Brown, B.S., *SUNY Empire State College*, Financial Analyst, Budget Office (1998)
- Sandra Brown, M.S., *University at Buffalo*, Nurse Practitioner, Weigel Health Center (1994)
- Carolyn E. Brunner, M.S., *Union College*, Director, International Graduate Programs (1997)
- Robert W. Burke, B.A., *SUNY Fredonia*, Women's Ice Hockey Coach, Intercollegiate Athletics (2006)
- Sandra L. Burnham, M.L.S., *University at Buffalo*, Senior Admissions Advisor, Admissions Office (2000)
- David J. Burns, BSEE, *University of Dayton*, Electrical Designer, Facilities Planning Office (2009)
- Edward L. Burton, B.S., *University at Albany*, Lead Programmer/Analyst, Information Technology Exchange Center (2007)
- Cheryl L. Byer, B.S., *Buffalo State College*, Coordinator, Business Systems, Campus Services Office (1989)
- Christine A. Cali, M.S., *Buffalo State College*, Director, Special Programs Office (2005)
- Colleen R. Callahan, M.S., *Syracuse University*, Associate Director, Web Community and Development, College Relations Office (2009)
- Peter M. Carey, J.D., *University at Buffalo*, Chief of Police, University Police (1980)
- Renee M. Carlineo, M.S., *Ithaca College*, Strength and Conditioning Coordinator, Intercollegiate Athletics (2007)
- Nicholas R. Carriere, B.S., *Niagara University*, Head Men's Ice Hockey Coach, Intercollegiate Athletics (2005)
- Shannon M. Casterline, B.A., *SUNY Cobleskill*, Instructional Support Technician, Biology Department (2000)
- Kristen J. Catalano, M.S., *Buffalo State College*, Assistant Director, Student Life Office (2007)
- Jeffrey D. Caughel, B.S., *SUNY Brockport*, Programmer/Analyst, Information Technology Exchange Center (2006)
- Andrew B. Chambers, B.A., *University at Buffalo*, Information Commons Technology Administrator, E.H. Butler Library (2007)
- Anthony J.W. Chase, Ph.D., *University at Buffalo*, Assistant Dean, School of Arts and Humanities (1988)
- Ralph A. Chille, B.S., *Niagara University*, Project Manager, Information Technology Exchange Center (2010)
- Linda A. Chilson, M.S., *Buffalo State College*, Interim Associate Director, Financial Aid Office (1981)
- Kim M. Chmielewicz, B.S., *University at Buffalo*, Documentation Specialist, Information Technology Exchange Center (2010)
- Mark D. Clapsadl, M.S., *College of Environmental Sciences*, Field Station Manager, Great Lakes Center (2008)
- Luke L. Clutter, B.S., *Lock Haven University of Pennsylvania*, Lead Programmer/Analyst, Information Technology Exchange Center (2003)
- Peter J. Coates, B.A., *SUNY Oswego*, Community Relations Assistant, Events Management Office (1999)
- Thomas E. Coates, B.A., *Buffalo State College*, Director, Events Management Office (1987)
- Claire Collier, M.A., *University of Wisconsin*, Development Assistant, Institutional Advancement Office (1995)
- Leon Collins, B.A., *Buffalo State College*, Lead Programmer/Analyst, Information Technology Exchange Center (1999)
- Renee E. Conners-Wilkins, M.A., *University at Buffalo*, Transfer and Articulation Advisor, Admissions Office (2008)
- Sean F. Connors, M.S.Ed., *Buffalo State College*, Distance Learning Coordinator, Continuing Professional Studies Office (2010)
- Krista A. Constantino, B.S., *Buffalo State College*, Guest Services Manager, Campus House, Hospitality and Tourism Department (2008)
- Connie F. Cooke, M.S., *Buffalo State College*, Director, Financial Aid Office (2011)
- Lauren A. Copeland, M.S., *Buffalo State College*, Academic Tutor, Academic Support Programs (1998)
- William J. Cran, B.S., *Buffalo State College*, Instructional Support Assistant, Instructional Resources (1995)
- Nancy A. Crown, M.S., *Niagara University*, Nurse Practitioner, Weigel Health Center (2000)
- Michelle R. Curtis, M.S., *Buffalo State College*, NYC Regional Representative, Admissions Office (2007)
- Jerod T. Dahlgren, M.P.A., *Park University*, Interim Public Relations Director, College Relations Office (2007)
- Kari A. D'Amico, B.S., *Ohio State University Agricultural Technical Institute*, Technical Support Specialist, Computing and Technology Services (2002)
- Robert C. Dege, B.S., *University at Buffalo*, Systems Programmer, Computing and Technology Services (2006)
- Nicholas A. DeMarsh, B.F.A., *Buffalo State College*, Women's Soccer Coach, Intercollegiate Athletics (2001)
- Paula J. Devereaux, M.A., *Buffalo State College*, Senior Development Officer, Institutional Advancement Office (2000)
- Julie A. DeWind, M.Ed., *University at Buffalo*, Programmer/Analyst, Computing and Technology Services (2008)
- Patrick T. DeWind, B.S., *Buffalo State College*, Senior Programmer/Analyst, Computing and Technology Services (1998)
- Leslie D. Dixie-Smith, M.S., *Buffalo State College*, Interim Associate Director, Student Accounts Office (1990)
- Ivan Docenko Jr., B.F.A., *University at Buffalo*, Accompanist, Music Department (1992)
- Lynda H. Donati, B.F.A., *University at Buffalo*, Art Director, College Relations Office (2000)
- Rock D. Doyle, M.S.Ed., *Buffalo State College*, Assistant Director, Medical Systems, Weigel Health Center (1997)
- Robert J. Dray, B.S., *Buffalo State College*, Instructional Support Technician, Design Department (1992)
- Brian D. Dubenion, M.S., *Buffalo State College*, Complex Director, Residence Life Office (2010)
- Bonita R. Durand, Ph.D., *University at Buffalo*, Chief of Staff, President's Office (1996)
- Mary A. Durlak, M.A., *University at Buffalo*, College Relations Senior Writer, College Relations Office (2001)
- Mary E. Dwyer, M.A., *University of Michigan*, Director, Corporate and Foundation Relations, Institutional Advancement Office (2010)
- Jessica L. Eagan, B.S., *Pennsylvania State University*, Admissions Advisor, Admissions Office (2007)
- Susan J. Earshen, M.B.A., *University at Buffalo*, Associate Vice President, Human Resource Management Office (1973)
- Scot R. Eckert, A.A.S., *Niagara County Community College*, Associate Director, Campus Services Office (1981)
- Timothy R. Ecklund, Ph.D., *University at Buffalo*, Associate Vice President, Campus Life Office (1997)
- Cynthia D. Eggleston, M.S.Ed., *Buffalo State College*, Senior Staff Associate, Elementary Education and Reading Department (1979)
- Richard B. Engelhardt Jr., B.S., *Buffalo State College*, Assistant Director, Computing Support Services, Computing and Technology Services (1996)
- Cynthia M. Fasla, M.S.W., *University at Buffalo*, Associate Registrar, Registrar's Office (2005)

- Jiu Feng, M.S., *Rochester Institute of Technology*, Lead Programmer/Analyst (DBA), Information Technology Exchange Center (2004)
- Kelly M. Ferguson, B.A., *Buffalo State College*, Director, IFR Recharge Accounting Office (2006)
- Nicholi R. Fernandez, B.S., *Buffalo State College*, Senior Desktop Systems Technician, Computing and Technology Services (2004)
- Marie M. Ferraro, M.S., *Buffalo State College*, Coordinator, Academic Advisement Center (2000)
- Robert H. Filighera, Assistant Ice Arena Manager, Intercollegiate Athletics (2002)
- Mary C. Finger, M.S., *Buffalo State College*, Admissions Advisor, Admissions Office (2004)
- Erica S. Fire, B.A., *Bennington College*, Costume Director/Shop Manager, Theater Department (2008)
- Wynnie L. Fisher, M.S.Ed., *Buffalo State College*, Senior Staff Assistant, English Department (2000)
- Ellie E. Fleetwood, B.S., *Buffalo State College*, Research Administrator, Center for Health and Social Research (1997)
- Charlene M. Fontana, SSJ, M.S., *Buffalo State College*, Assistant to the Director, Student Life Office (2005)
- Brent D. Ford, B.S., *Buffalo State College*, Athletics Facilities Manager, Intercollegiate Athletics (1999)
- James C. Fowler, B.A., *SUNY Fredonia*, Ice Rink Manager/Interim Budget Manager, Intercollegiate Athletics (1996)
- Bruce A. Fox, B.F.A., *SUNY Fredonia*, Photography and Graphics Coordinator, Instructional Resources (2004)
- Elea M. Fox, M.O.P., *University at Buffalo*, Development Officer, Institutional Advancement Office (2010)
- Keith A. Fulcher, M.S., *Buffalo State College*, Academic Tutor, Academic Support Programs (2002)
- Carolyn S. Fusco, B.A., *University at Buffalo*, Executive Assistant to the Dean, School of Arts and Humanities (1989)
- Yves M. Gachette, M.S., *Buffalo State College*, Director, Institutional Research Office (1993)
- Alfred C. Galone, M.A., *Buffalo State College*, Assistant Manager, Payroll Office (2000)
- Maria I. Garrett, B.A., *University of Puerto Rico*, Senior Staff Assistant, Modern and Classical Languages Department (1991)
- Andrew T. Garrity, B.A., *Buffalo State College*, Programmer/Analyst, Computing and Technology Services (2001)
- Maria C. Garrity, M.S.Ed., *Buffalo State College*, Systems Programmer, Computing and Technology Services (2000)
- Latoria D. Gaston-Marsh, J.D., *Queens College*, Director, Judicial Affairs, Dean of Students Office (2005)
- Khaleel M. Gathers, B.S., *Buffalo State College*, Assistant Director, Web Technologies, Computing and Technology Services (1994)
- Catherine A. George, M.S., *Buffalo State College*, Academic Tutor, Academic Support Programs (2003)
- Ronald A. George, M.S., *Niagara University*, Case Manager and AOD Coordinator, Counseling Center (1986)
- Tracey S. Gernatt, B.S., *Rochester Institute of Technology*, Programmer/Analyst, Information Technology Exchange Center (2004)
- Patricia D. Ghee, M.S., *University at Buffalo*, Academic Advisement Associate, Academic Support Programs (1993)
- Kenneth C. Giangreco, B.A., *Buffalo State College*, Multimedia Specialist, Instructional Resources (2000)
- Jason F. Gilliland, B.S., *Buffalo State College*, Coordinator for Veteran Services, Continuing Professional Studies Office (2011)
- Christa J. Glassman, M.B.A., *SUNY Binghamton*, Project Manager, Information Technology Exchange Center (2010)
- Anne Marie E. Golaszewski, M.S., *Buffalo State College*, Academic Tutor, Academic Support Programs (1998)
- Heather J. Goltz, B.A., *Buffalo State College*, Instructional Support Assistant, Copy Center (2007)
- Jean F. Gounard, Ph.D., *University of Bordeaux*, Director, International Student Affairs Office (1978)
- Lee Ann Grace, Ph.D., *University at Buffalo*, Associate Professor and Assistant Dean, International and Exchange Programs, Modern and Classical Languages Department (1973)
- Mary Jo Graham, B.A., *University at Buffalo*, Manager, User Account Services, Computing and Technology Services (2001)
- Michele A. Graves, A.S., *Empire College School of Business*, Partnership Associate, College and Community Partnerships Office (2006)
- Thomas P. Gray, M.L.S., *University at Buffalo*, Reference Librarian, E.H. Butler Library (1993)
- Gary V. Grecco, B.S., *Buffalo State College*, Programmer/Analyst, Computing and Technology Services (2006)
- Pamela J. Grieco, A.O.S., *Bryant And Stratton College*, Programmer/Analyst, Computing and Technology Services (2006)
- William E. Grieshober, M.Ed., *Pennsylvania State University*, Advisor, Small Business Development Center (1999)
- Jeanne M. Guzy, M.B.A., *Canisius College*, Data Specialist, University College (1990)
- Churchill M. Gwan, M.B.A., *Canisius College*, Programmer/Analyst, Computing and Technology Services (2006)
- Thomas J. Gwitt, M.P.A., *SUNY Binghamton*, Secretary to the President, President's Office (2007)
- Abdollah Hajikandi, M.A., *University at Buffalo*, Assistant Director, Academic Services, Educational Opportunity Program (1990)
- Jeffrey R. Hammer, B.S., *Buffalo State College*, Radiation Safety Officer, Environmental Health and Safety Office (2000)
- Terry M. Harding, B.A., *Buffalo State College*, Director, Campus Services Office (1977)
- Richard A. Harris, M.S., *Buffalo State College*, Assistant Director, Student Life Office (2010)
- Monica L. Heavey, B.S., *University at Buffalo*, Computer Lab Manager, Academic Skills Center (2000)
- Paul J. Hebert, M.S.Ed., *Medaille College*, Senior Programmer/Analyst (DBA), Information Technology Exchange Center (2003)
- Michael A. Heflin, M.S., *Buffalo State College*, Associate Director, Residence Life Office (2007)
- Tami R. Heflin, M.S., *Buffalo State College*, EOP Counselor, Educational Opportunity Program (2007)
- Jennifer L. Heisey, M.Ed., *Wright State University*, Director, Alumni Affairs Office (2010)
- Mark F. Henning, A.O.S., *Northwest Mississippi Community College*, Senior Desktop Systems Technician, Computing and Technology Services (1981)
- Daniel R. Herr, B.S., *Bradley University*, Engineering Manager, Facilities Planning Office (1998)
- Christopher M. Heximer, M.A., *University at Buffalo*, Clinic Supervisor, Speech-Language Pathology (2002)
- Ronald P. Hicks, B.S., *Buffalo State College*, Programmer/Analyst, Computing and Technology Services (2001)
- Emmanuel J. Hillery, M.S., *University at Buffalo*, Associate Director, Human Resource Management Office (1985)
- Sandra L. Hollander, M.S., *Canisius College*, Senior Women Administrator, Intercollegiate Athletics (1985)
- Joseph R. Hoot, B.S., *Buffalo State College*, Lead Programmer/Analyst (UNIX), Information Technology Exchange Center (2004)
- Tamara H. Horstman-Riphahn, M.Ed., *University of Wisconsin*, Executive Assistant to the Dean, School of Education (2007)
- Imon T. Hossain, B.S., *Southeast Missouri State University*, Programmer/Analyst, Residence Life Office (2006)
- Timothy G. Hoyle, B.S., *Buffalo State College*, Instructional Support Assistant, Copy Center (1996)
- Sean D. Hudson, B.S., *Buffalo State College*, Assistant Registrar, Registrar's Office (2002)
- Lisa R. Hunter, Ph.D., *University of Arizona*, Associate Professor and Assistant Dean, Intellectual Foundations, Music Department (2006)

Debra A. Hurley, M.Arch., *Arizona State University*, Assistant Design and Construction Coordinator, Facilities Planning Office (2006)

Kim M. Jablonski, M.S.W., *University at Buffalo*, Assistant Director for Mandated Programs, Weigel Health Center (2004)

Jennifer D. Jackson, B.S., *North Carolina State University*, Instructional Support Associate, Biology Department (2010)

Kimberly J. Jackson, M.S., *University at Buffalo*, Assistant Dean, Strategic and Enrollment Planning, Graduate School (2005)

Jude A. Jayatilleke, M.S., *Buffalo State College*, EOP Counselor, Educational Opportunity Program (2004)

Yanick H. Jenkins, M.S., *SUNY Brockport*, Director, Educational Opportunity Program (2001)

Florence D. Johnson, M.S.Ed., *Buffalo State College*, Director, Student Support Services Program (1968)

Suzanne K. Johnson, M.S.W., *University at Buffalo*, Senior Counselor, Counseling Center (2006)

Tracy P. Johnson, Ph.D., *University at Buffalo*, EOP Counselor, Educational Opportunity Program (2006)

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INDEX

A

AAS - African and African American Studies.....	137, 187
Academic Advisement.....	31
Academic Advisement Center.....	10
Academic Calendar.....	32
Academic Clemency.....	33
Academic Intervention.....	7
Academic Levels (Class Level).....	36
Academic Minors.....	50
Academic Opportunities Cluster.....	7
Academic Organization.....	47
Academic Policies.....	31
Academic Probation and Dismissal ..	38
Academic Skills Center.....	10
Academic Standards and Intervention	7
Academic Standards Office.....	7
Academic Support Programs.....	10
Accreditations.....	4
Activity Fee.....	21
Adding or Dropping Courses.....	33
Additional Degree Requirements.....	49
Administration.....	238
Admission Procedures.....	19
Admissions.....	17
AED - Art Education.....	138
Aid for Students with Disabilities.....	29
All College Honors Program.....	7, 38
ALT - Arts and Letters.....	139
Alternative Methods of Earning College Credit.....	40
AMT - Applied Mathematics.....	139
ANT - Anthropology.....	139
Anthropology (B.A.).....	57
Anthropology, Department of.....	240
Application Procedures.....	24
Art (B.A.).....	57
Art Conservation Department.....	240
Art Education (K–12, B.S.).....	58
Art Education (K–12, PTCP).....	59
Art Education Department.....	240
Art History (B.A.).....	59
Arthur O. Eve Educational Opportunity Program (EOP).....	29
Arts and Letters (B.A.).....	59
Assessment.....	46
Athletic Fee.....	21

ATS - Art Therapy Studies.....	142
Attendance.....	32
Auditing Courses.....	33
Award Notification.....	30

B

Barnes & Noble at Buffalo State Bookstore.....	7
Basic Writing Requirement.....	36, 49
BIO - Biology.....	142
Biology (B.A.).....	60
Biology Department.....	240
Biology Education (7–12, 5–6 Extension, B.S.).....	61
Biology Education (7–12, 5–6 Extension, PTCP).....	62
Biology Education (7–12, B.S.).....	61
Biology Education (7–12, PTCP).....	62
BME - Business and Marketing Education.....	144
Board Charge Refunds.....	23
Board of Trustees.....	238
BSC - University College.....	145
Buffalo State College.....	5, 238
Buffalo State College Housing Residency Requirement.....	13
Buffalo State College Undergraduate Catalog 2011–2012.....	1
Buffalo State College Undergraduate Programs.....	3
Burchfield Penney Art Center at Buffalo State College.....	7
BUS - Business.....	145
Business Administration (B.S.).....	63
Business and Marketing Education (B.S.).....	64
Business and Marketing Education (PTCP).....	64
Business Department.....	240

C

Campbell Student Union.....	8
Campus Academy for the Scholarship of Teaching and Learning (CASTL).....	7
Campus Dining Services.....	8
Career and Technical Education.....	242
Career and Technical Education	

(B.S.)*.....	65
Career and Technical Education (PTCP)*.....	65
Career Development Center.....	8
Categories and Credit Distribution...	48
Center for China Studies.....	11
Center for Excellence in Urban and Rural Education.....	8, 241
Center for Health and Social Research.....	241
Center for Studies in Creative S.....	156
Ceramics (B.F.A.).....	66
Ceramics (B.S.).....	67
Change of Grade.....	35
Changing a Major.....	36
CHE - Chemistry.....	147
Chemistry (B.A.).....	67
Chemistry Department.....	241
Chemistry Education (7–12, 5–6 Extension, B.S.).....	69
Chemistry Education (7–12, 5–6 Extension, PTCP).....	70
Chemistry Education (7–12, B.S.)... ..	68
Chemistry Education (7–12, PTCP). ..	70
CHI - Chinese.....	149
Child Care Center (Buffalo State College Child Care Center).....	8
Childhood and Early Childhood Education (Birth - Grade 6, Combined Program).....	71
Childhood Education (Grades 1–6, B.S.).....	72
Childhood Education and English Extension (Grades 1–6 and 7-9 English Extension, B.S.).....	73
Childhood Education and French Extension (Grades 1–6 and 7-9 French Extension, B.S.).....	74
Childhood Education and Italian Extension (Grades 1–6 and 7-9 Italian Extension, B.S.).....	75
Childhood Education and Mathematics Extension (Grades 1–6 and 7-9 Mathematics Extension, B.S.).....	76
Childhood Education and Social Studies Extension (Grades 1–6 and 7-9 Social Studies Extension, B.S.).....	77

Childhood Education and Spanish Extension (Grades 1–6 and 7-9 Spanish Extension, B.S.)	78	Early Admission.....	17	Federal Financial Aid Sources	27
CIS - Computer Information System	150	Early Childhood Education (Birth - Grade 2, B.S.).....	84	Fibers (B.F.A.).....	95
Coaching and Physical Education ...	79, 241	Early Decision.....	17	Fibers (B.S.).....	96
College Council.....	238	Earth Science Education (7–12, 5–6 Extension, B.S.).....	86	FIN - Finance.....	177
College Fee.....	21	Earth Science Education (7–12, 5–6 Extension, PTCP).....	87	Finances	21
College Writing Program	8	Earth Science Education (7–12, B.S.)	85	Financial Aid	24
Collegewide Degree Requirements for Baccalaureate Degrees	48	Earth Science Education (7–12, PTCP)	86	Fine Arts	96
Collegiate Science and Technology Entry (C-STEP) Program.....	10	Earth Sciences (B.S.).....	87	Fine Arts Department.....	243
COM - Communication	151	Earth Sciences and Science Education Department	242	First-Year and Academic Support Programs	10
Commencement Ceremony	37	ECO - Economics.....	161	First-Year Programs.....	10
Communication Design (B.F.A.).....	79	Economics (B.A.).....	88	FLE - Foreign Language Education	177
Communication Programs	79	Economics (B.S.)	89	FOR - Forensic Science	178
Communication Studies (B.A.)	80	Economics and Finance Department	242	Foreign Language	52
Communication, Department of	241	EDF - Educational Foundations	163	Foreign Language Requirement.....	49
Computer Information Systems (B.S.)*	81	EDU - Education.....	164	Forensic Chemistry (B.S.)	96
Computer Information Systems Department	241	Educational Opportunity Program ...	10, 17	FRE - French.....	178
Computing and Technology Services.	9	Electives	49	French Education (7–12, B.S.)	97
Continuing Professional Studies... 9,	47	Electrical Engineering Technology (Electronics) (B.S.)*.....	89	French Education (7–12, PTCP).....	98
Counseling Center	9	Electrical Engineering Technology (Power and Machines) (B.S.)*.....	90	French Language and Literature (B.A.)	99
Course Coding System	49	Elementary Education and Reading Department	242	Freshman Admission	17
Course Listings.....	136	Eligibility for Aid for Part-Time Study	29	FTT - Fashion and Textile Technology	179
Course Load	32	Eligibility for Federal Financial Aid	24	G	
Credit for Experiential Learning.....	10	Eligibility for Native Americans	30	GEG - Geography	181
Crime Statistics Availability.....	15	Eligibility for New York State Financial Aid	28	Geography (B.A.)	99
Criminal Justice (B.S.)	81	Eligibility for Special Programs	30	Geography and Planning Department	243
Criminal Justice, Department of.....	241	Eligibility for Summer Aid	30	Geology (B.A.)	100
CRJ - Criminal Justice.....	153	ENG - English.....	166	GER - German	184
CTE - Career and Technical Education	156	English (B.A.)	90	GES - Geosciences.....	185
Cumulative GPA	35	English Education (7–12, B.S.).....	91	Global Studies (minor program)	11
CWP - College Writing Program....	157	English Education (7–12, PTCP)	92	Grading	34
D		English Programs	90	Graduate Courses.....	40
DAN - Dance.....	157	English, Department of	243	Graduate Programs of Study.....	40
Dean of Students and Student Judicial Affairs	9	ENS - Environmental Science.....	170	Graduation Requirements	37
Dean's Honor List.....	38	ENT - Engineering Technology	170	Great Lakes Center	10
Declaring an Academic Major.....	36	Evening Study	20	GRK - Greek.....	187
Degree Audit System.....	31	Exceptional Education (B.S.Ed.).....	93	H	
Department (Major) Requirements... 49		Exceptional Education Department.....	243	Health and Wellness (B.S.).....	100
DES - Design.....	158	Exceptions to Freshmen and Sophomore Parking Rules	14	Health and Wellness Department... 244	
Design.....	82	EXE - Exceptional Education	173	Health Fee	21
Design Department.....	241	Explanation of Terms.....	21	HEW - Health and Wellness	187
Dietetics and Nutrition Department	242	F		HIS - History.....	188
Dietetics- Coordinated Program (B.S.)	83	Facilities, Services, and Special Programs.....	7	History (B.A.)	101
Dietetics- Didactic Program (B.S.)..	83	Faculty.....	240	History and Social Studies Education Department.....	244
Disability Services Office.....	9	FAR - Fine Arts.....	173	HON - All College Honors Program	194
DMP - Digital Music Production....	161	Fashion and Textile Technology (B.S.)	93	Honor Societies.....	4
Dual Admission Programs.....	18			Honors Convocation	38
Dual Baccalaureate Degrees.....	36			Honors in Majors	38
E				Hospitality Administration (B.S.)... 101	
E. H. Butler Library.....	242			Hospitality and Tourism Department	244

I	Modern and Classical Languages	Refund Policies	22
IDE - Interior Design	Department	Registration Information	32
Individualized Studies (B.S.)*	MUS - Music	REL - Religious Studies	221
Industrial Technology (B.S.)*	Music (B.A.)	Repeating Courses	35
INS - Individualized Studies	Music Department	Reserve Officer Training Corps	13
Instructional Design Office	Music Education (Pre-K–12, B.Mus.)	Residence Life Office (On-Campus Housing)	13
Intellectual Foundations	Role of Students and Faculty in the Advisement Process	31
Intellectual Foundations Courses	N	Room and Board	22
Intellectual Foundations Program Requirements	National Student Exchange	Room Rental Refunds	23
Interior Design (B.F.A.)	NFS - Dietetics and Nutrition	S	
Interior Design Department	Non-degree Status	SAF - Safety Studies	221
International and Exchange Programs	Notification of Rights under the Family Educational Rights and Privacy Act (FERPA)	Satisfactory Academic Progress (Federal)	26
International Center for Studies in Creativity	O	Satisfactory Academic Progress (State)	29
International Education Office	Office of the Chancellor	Scholarships	28
International Graduate Programs for Educators	Orientation and New Student Programs Office	School of Arts and Humanities	47
International Student Affairs Office	Overawards	School of Education	47
International Student Health Insurance	P	School of Natural and Social Sciences	47
International Students	Painting (B.F.A.)	School of the Professions	47
IST - International Studies	Parking Fee	SCI - Science	222
ITA - Italian	Parking Information for Freshmen and Sophomore Resident Students	Sculpture (B.F.A.)	121
J	Parking Rules and Regulations	Second Major, Single Degree	36
Journalism (B.A.)	Performing Arts Center	Second Majors and Minors	49
L	PHI - Philosophy	SED - Science Education	222
LAT - Latin	Philosophy (B.A.)	SLP - Speech Language Pathology	223
Leadership	Philosophy and Humanities Department	SOC - Sociology	224
Learning Communities	Photography (B.F.A.)	Social Studies Education (7–12, 5–6 Extension, B.S.)	123
Leave of Absence, Medical Leave of Absence, Withdrawal from College	PHY - Physics	Social Studies Education (7–12, 5–6 Extension, PTCP)	125
LIB - Library	Physics (B.A.)	Social Studies Education (7–12, B.S.)	121
Library (E. H. Butler Library)	Physics (B.S.)	Social Studies Education (7–12, PTCP)	124
M	Physics Department	Social Work (B.S.)*	126
Mandatory Student Health Insurance	Physics Education (7–12, 5–6 Extension, B.S.)	Social Work, Department of	245
MAT - Mathematics	Physics Education (7–12, 5–6 Extension, PTCP)	Sociology (B.A.)	126
Mathematics (B.A.)	Physics Education (7–12, B.S.)	Sociology, Department of	246
Mathematics Education (7–12, 5–6 Extension, B.S.)	Physics Education (7–12, PTCP)	Sociology—Applied (B.S.)	127
Mathematics Education (7–12, B.S.)	PLN - Planning	SPA - Spanish	204, 227
Mathematics Education (7–12, PTCP)	Political Science (B.A.)	Spanish Education (7–12, B.S.)	127
Mathematics, Department of	Political Science Department	Spanish Education (7–12, PTCP)	128
Mathematics—Applied (B.S.)	Pre-Law Advisement	Spanish Language and Literature (B.A.)	129
MCL - Modern and Classical Languages	Pre-Medical and Pre-Health Professional Advisement	SPC - Speech Communication	228
Mechanical Engineering Technology (B.S.)*	Printmaking (B.F.A.)	Special Credit	18
MED - Mathematics Education	PSC - Political Science	Special Programs Office	12
Media Production (B.A.)	PSY - Psychology	Speech-Language Pathology (B.S.)	130
Metals/Jewelry (B.F.A.)	Psychology (B.A.)	Speech-Language Pathology Department	246
Metals/Jewelry (B.S.)	Psychology (B.S.)	Speech-Language-Hearing Clinic	14
Miscellaneous Expenses	Psychology, Department of	SSE - Social Studies Education	229
Mission of the Intellectual Foundations Program	Mathematics Education (7–12, 5–6 Extension)	Staff	247
	Public Communication (B.A.)	State University of New York	238
	R	State University of New York Transfer Guarantee	18
	Readmission	Student Complaints, Grievances, and	

Appeals	44
Student Government (United Students Government)	14
Student Life Office	14
Student Personnel Administration ..	246
Student Retention	20
Students Unable to Attend Classes on Certain Days Because of Religious Beliefs	46
Summer Session	20
Summer Session Tuition and Fees....	22
SUNY Distinguished Service Professors	240
SUNY Distinguished Teaching Professors	240
SWA - Swahili	230
SWK - Social Work	230

T

TAP Academic Eligibility Chart***	29
Teacher Certification Office	43
TEC - Technology	231
Technology Department	246
Technology Education (B.S.)	130
Technology Education (PTCP)	131
Technology Fee	21
TED - Technology Education	233
Television and Film Arts (B.A.)	131
Television and Film Arts Program .	246
TFA - Television and Film Arts	233
THA - Theater Arts	234
Theater (B.A.)	132
Theater Department	246
Time Payment Plan	22
Transcript of Academic Record	42
Transfer Students	18, 43
Transportation Fee	21
Transportation to Off-Campus Instructional Sites	43
Tuition	21
Tuition Refunds	22

U

UNC - University College	236
Undergraduate Major Programs at a Glance	53
Undergraduate Minor Programs at a Glance	55
Undergraduate Programs	53
Undergraduate Research Office	7
Unit of Credit (Credit Hour)	35
University College	47
University Police	14
Upper-Division Course Requirement	49
Urban and Regional Analysis and Planning (B.S.)*	132

V

Veterans Benefits	29
Veterans Services/Certification Office	15
Visiting Student Program	12

W

Waiver for Off-Site Distance-Education Students	21
Weigel Health Center	15
Whitworth Ferguson Planetarium	16
Withdrawal from Classes	25
Withdrawal from Courses	33
Wood/Furniture (B.F.A.)	133
Wood/Furniture (B.S.)	134
Writing (B.A.)	134
Writing Across the Curriculum	52
Writing Across the Curriculum Requirement	49
Writing Program	246